Comprehensive Exhibit List for Entry into Hearing Record

Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description	Entered
STAFF				
1	Staff	Exhibit List	Comprehensive Exhibit List	
FPL (DIRECT)				
2	G. Yupp	GJY-1	Description of Units	
3	G. Yupp	GJY-2	February 2008 Schedule A4 Heat Rate Data	
4	G. Yupp	GJY-3	February 2008 Schedule A4 Fuel Cost Data	
5	G. Yupp	GJY-4	February 2008 Schedule A4 Fuel Consumption Data	
6	G. Yupp	GJY-5	Blended Fuel Cost Calculation	
7	G. Yupp	GJY-6	Peaking Units Production Cost Calculation	
8	G. Yupp	GJY-7	System Average Cost Adjustment Calculation	
9	G. Yupp	GJY-8	Total Fuel Cost Utilizing Adjusted System Average Cost	
10	G. Yupp	GJY-9	Purchased Power Cost	
OPC (DIRECT)				
11	D. Dismukes	DED-1	CV of David E. Dismukes, Ph.D.	

DOCUMENT NUMBER-DATE
02284 MAR 30 ≌
FPSC-COMMISSION CLERK

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 1
COMPANY Florida Public Service Commission Staff
WITNESS Comprehensive Exhibit List
DATE 03/17/10

Comprehensive Exhibit List for Entry into Hearing Record				
Hearing I.D. #	**Witness**	**I.D. # As Filed**	**Exhibit Description**	**Entered**
12	D. Dismukes	DED-2	Order approving Stipulation and Consent Agreement	
13	D. Dismukes	DED-3	Proposed Resolution of Issues	
14	D. Dismukes	DED-4	Hypothetical Example	
15	D. Dismukes	DED-5	FPL Peaking Cost Calculation	
16	D. Dismukes	DED-6	FPL Replacement Cost Estimate	
17	D. Dismukes	DED-7	First Alternative RPC Calculation	
18	D. Dismukes	DED-8	Second Alternative RPC Calculation	
19	D. Dismukes	DED-9	FPL RPC Estimate	
20	D. Dismukes	DED-10	Comparison of Non-Fuel Base Rates	
21	D. Dismukes	DED-11	Nuclear Investment of Disallowances and Overruns	
22	D. Dismukes	DED-12	Nuclear Legislation and Regulation	
FPL (REBUTTAL)				
23	G. Yupp	GJY-10	Turkey Point Fuel Savings (1990-2009)	
24	G. Yupp	GJY-11	48 Hour RPC Calculation vs. System Average Cost	

Comprehensive Exhibit List for Entry into Hearing Record				
Hearing I.D. #	**Witness**	**I.D. # As Filed**	**Exhibit Description**	**Entered**
25	G. Yupp	GJY-12	48 Hour RPC Calculation vs. Nuclear Fuel Cost	
STAFF				
26	Staff		FPL's Responses to Staff's Fifth Set of Interrogatories in Docket No. 080001-EI (Nos. 66-70) *[Bates Nos. 000001-0000009]*	
27	Staff		FPL's Responses to Staff's First Set of Interrogatories in Docket No. 090505-EI (Nos. 1-15, 17-18, 20, 23-24, and 26-42) *[Bates Nos. 000010-0000324]*	
28	Staff		FPL's Responses to Staff's Second Set of Interrogatories in Docket No. 090505-EI (Nos. 43-55) *[Bates Nos. 000325-000345]*	
29	Staff		OPC's Responses to Staff's First Set of Interrogatories in Docket No. 090505-EI (Nos. 1-2) *[Bates Nos. 000346-000348]*	
30	Staff		FPL's Responses to Staff's First Request for Production of Documents in Docket No. 090505-EI (No. 2) *[Bates Nos. 000349-000350]*	
31	Staff		FPL's Responses to OPC's Sixth Request for Production of Documents in Docket No. 090505-EI (Nos. 29-31, and 33-35) *[Bates Nos. 000351-0000491]*	

Comprehensive Exhibit List for Entry into Hearing Record				
Hearing I.D. #	**Witness**	**I.D. # As Filed**	**Exhibit Description**	**Entered**
32	Staff		Deposition of J. A. Stall in Docket No. 090505-EI, including late-filed exhibit 1 *[Bates Nos. 000492-0000533]*	
33	Staff		Deposition of Gerard J. Yupp in Docket No. 090505-EI, including late-filed exhibits 1, 2, and 3 *[Bates Nos. 000534-0000612]*	

Unit	Description
LG1	Site 1 – Fort Lauderdale Gas Turbines Units 1-12 (28.5 MW per Unit)
LG2	Site 2 – Fort Lauderdale Gas Turbines Units 13-24 (28.5 MW per Unit)
PGT	Site 3 – Port Everglades Gas Turbines Units 1-12 (28.5 MW per Unit)
FGT	Fort Myers Gas Turbines Units 1-12 (46 MW per Unit)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 2
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-1)
DATE 03/17/10

Unit	Heat Rate (MMBtu/MWh)
LG1 HR	17.716
LG2 HR	16.450
PGT HR	17.727
FGT HR	13.265

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 3
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-2)
DATE 03/17/10

Unit	Nat Gas ($/MMBtu)	#2 Oil ($/MMBtu)
LG1	9.94	14.33
LG2	9.94	14.33
PGT	9.94	12.10
FGT	Not Applicable	13.25

Unit	Nat Gas MMBtu	#2 Oil MMBtu	Total MMBtu	Nat Gas %	#2 Oil %
LG1	86,334	714	87,048	99.2	0.8
LG2	52,402	3,444	55,846	93.8	6.2
PGT	42,141	111	42,252	99.7	0.3

Nat Gas % = Nat Gas MMBtu / Total MMBtu
#2 Oil % = #2 Oil MMBtu / Total MMBtu

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 5
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-4)
DATE 03/17/10

Unit	Formula	Blended Fuel Cost ($/MMBtu)
LG1 BFC	(.992 * 9.94) + (0.008 * 14.33)	9.98
LG2 BFC	(.938 * 9.94) + (0.062 * 14.33)	10.21
PGT BFC	(.997 * 9.94) + (0.003 * 12.10)	9.95
FGT FC	Not Applicable	Not Applicable

Fuel Cost (FC) = (Nat Gas % * Nat Gas Cost) + (#2 Oil % + #2 Oil Cost)

Hourly Unit Production Cost

Unit	Formula	Production Cost ($/MWh)
LG1	LG1 HR * LG1 BFC	176.81
LG2	LG2 HR * LG2 BFC	167.95
PGT	PGT HR * PGT BFC	176.38
FGT	FGT HR * FGT FC	175.76

Hourly MWh Production

Hour Ending	LG1 MWh	LG2 MWh	PGT MWh	FGT MWh	Total MWh
1400	173	178	180	532	1,063
1500	262	321	302	559	1,444
1600	267	335	307	550	1,459
1700	270	338	309	559	1,476
1800	276	347	305	559	1,487
1900	289	356	305	550	1,500
2000	292	357	308	550	1,507
2100	287	297	169	485	1,238
2200	59	72	13	112	256
Total	**2,175**	**2,601**	**2,198**	**4,456**	**11,430**

Total Peaking Unit Production Cost

Unit	MWh	$/MWh	Cost ($)
LG1 ($)	2,175	176.81	384,562
LG2 ($)	2,601	167.95	436,838
PGT ($)	2,198	176.38	387,683
FGT ($)	4,456	175.76	783,187
Total	**11,430**	**Not Applicable**	**1,992,270**

LG1 ($) = LG1 MWh * LG1 $/MWh
LG2 ($) = LG2 MWh * LG2 $/MWh
PGT ($) = PGT MWh * PGT $/MWh
FGT ($) = FGT MWh * FGT $/MWh

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 7
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-6)
DATE 03/17/10

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	22,902,013	222,625	102.87
Light Oil	840,820	4,699	178.94
Coal	12,010,604	517,794	23.20
Natural Gas	308,188,667	4,052,626	76.05
Nuclear	8,430,238	1,898,820	4.44
Total	**352,372,341**	**6,696,564**	**52.62**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	222,625	5.20%
Light Oil	4,699	0.11%
Natural Gas	4,052,626	94.69%
Total	**4,279,950**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	102.87	.0520	5.35
Light Oil	178.94	.0011	0.20
Natural Gas	76.05	.9469	72.00
		Total	**77.55**

Cost Impact Calculation

Total February Turkey Point Units 3 and 4 Lost Production in MWh (717 MW per Unit)
1,434 MW * 82 hours-50 minutes = 118,783 MWh

Total Fuel Cost = 77.55 $/MWh * 118,783 MWh = $9,211,622

Fuel Cost for Turkey Point Units 3 and 4 = 118,783 MWh * 4.44 $/MWh = $527,397

Net Cost Impact Compared to Nuclear Units = $9,211,622 - $527,397 = **$8,684,225**

Adjusted System Average Cost

Original A3 Fuel Cost – Net Cost Impact Compared to Nuclear Units = Adjusted Total Fuel Cost
$352,372,341 - $8,684,225 = $343,688,116

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$343,688,116 / 6,696,564 MWh = $51.32/MWh

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 8
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-7)
DATE 03/17/10

Total Fuel Cost Utilizing Adjusted System Average Cost

11,430 MWh * $51.32/MWh = $586,588

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 9
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-8)
DATE 03/17/10

Transaction No.	Begin Time	End Time	Volume (MWh)	Total Cost	$/MWh
1	1400	2100	1,350	169,700.00	125.70
2	1500	2000	863	117,890.00	136.60
3	1400	1800	650	127,100.00	195.54
4	1500	2100	625	186,250.00	298.00
5	1400	2100	1,661	265,672.64	159.95
6	1500	2000	65	19,322.55	297.27
		Total	**5,214**	**885,935.19**	**169.91**

Note: Transaction No. 5 includes a capacity payment based on highest hourly demand.

Differential purchased power cost with $51.32/MWh adjusted system average cost =
885,935.19 – (5,214 MWh * $51.32/MWh) = $618,353

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 10
COMPANY Florida Power & Light (Direct)
WITNESS G. Yupp (GJY-9)
DATE 03/17/10

DAVID E. DISMUKES, PH.D.

Professor, Associate Executive Director &
Director of Policy Analysis
Center for Energy Studies
Louisiana State University
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EDUCATION

Ph.D., Economics, Florida State University, 1995.
M.S., Economics, Florida State University, 1992.
M.S., International Affairs, Florida State University, 1988.
B.A., History, University of West Florida, 1987.
A.A., Liberal Arts, Pensacola Junior College, 1985.

Master's Thesis: *Nuclear Power Project Disallowances: A Discrete Choice Model of Regulatory Decisions*

Ph.D. Dissertation: *An Empirical Examination of Environmental Externalities and the Least-Cost Selection of Electric Generation Facilities*

ACADEMIC APPOINTMENTS

Louisiana State University, Baton Rouge, Louisiana

Center for Energy Studies

2007-Current	Director, Division of Policy Analysis
2006-Current	Professor
2003-Current	Associate Executive Director
2001-2006	Associate Professor
2000-2001	Research Fellow and Adjunct Assistant Professor
1999-2000	Managing Director, Distributed Energy Resources Initiative
1995-2000	Assistant Professor

E.J. Ourso College of Business Administration, Department of Economics

2006-Current	Adjunct Professor
2001-2006	Adjunct Associate Professor
1999-2000	Adjunct Assistant Professor

Florida State University, Tallahassee, Florida
College of Social Sciences, Department of Economics

1995	Instructor

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 11
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-1)
DATE 03/18/10

PROFESSIONAL EXPERIENCE

Acadian Consulting Group, Baton Rouge, Louisiana

2001-Current	Consulting Economist/Principal
1995-2000	Consulting Economist/Principal

Econ One Research, Inc., Houston, Texas

2000-2001	Senior Economist

Florida Public Service Commission, Tallahassee, Florida
Division of Communications, Policy Analysis Section

1995	Planning & Research Economist

Division of Auditing & Financial Analysis, Forecasting Section

1993	Planning & Research Economist
1992-1993	Economist

Project for an Energy Efficient Florida &
Florida Solar Energy Industries Association, Tallahassee, Florida

1994	Energy Economist

Ben Johnson Associates, Inc., Tallahassee, Florida

1991-1992	Research Associate
1989-1991	Senior Research Analyst
1988-1989	Research Analyst

GOVERNMENT APPOINTMENTS

2007-Current	Louisiana Representative, Interstate Oil and Gas Compact Commission; Energy Resources, Research & Technology Committee.
2007-Current	Louisiana Representative, University Advisory Board Representative; Energy Council (Center for Energy, Environmental and Legislative Research).
2005	Member, Task Force on Energy Sector Workforce and Economic Development (HCR 322).
2003-2005	Member, Energy and Basic Industries Task Force, Louisiana Economic Development Council
2001-2003	Member, Louisiana Comprehensive Energy Policy Commission.

PUBLICATIONS: BOOKS AND MONOGRAPHS

1. *Power System Operations and Planning in a Competitive Market.* (2002). With Fred I. Denny. New York: CRC Press.

2. *Distributed Energy Resources: A Practical Guide for Service.* (2000). With Ritchie Priddy. London: Financial Times Energy.

PUBLICATIONS: PEER REVIEWED ACADEMIC JOURNALS

1. "The Value of Lost Production from the 2004-2005 Hurricane Seasons in the Gulf of Mexico." (2009). With Mark J. Kaiser and Yunke Yu. *Journal of Business Valuation and Economic Loss Analysis.* Status: Accepted, Forthcoming.

2. "Estimating the Impact of Royalty Relief on Oil and Gas Production on Marginal State Leases in the US." (2006). With Jeffrey M. Burke and Dmitry V. Mesyanzhinov. *Energy Policy* 34(12): 1389-1398.

3. "Using Competitive Bidding As A Means of Securing the Best of Competitive and Regulated Worlds." (2004). With Tom Ballinger and Elizabeth A. Downer. *NRRI Journal of Applied Regulation.* 2 (November): 69-85. (*Received 2005 Best Paper Award by NRRI*)

4. "Deregulation of Generating Assets and the Disposition of Excess Deferred Federal Income Taxes." (2004). With K.E. Hughes II. *International Energy Law and Taxation Review.* 10 (October): 206-212.

5. "Reflections on the U.S. Electric Power Production Industry: Precedent Decisions Vs. Market Pressures." (2003). With Robert F. Cope III and John W. Yeargain. *Journal of Legal, Ethical, and Regulatory Issues.* Volume 6, Number 1.

6. "A is for Access: A Definitional Tour Through Today's Energy Vocabulary." (2001) *Public Resources Law Digest.* 38: 2.

7. "A Comment on the Integration of Price Cap and Yardstick Competition Schemes in Electrical Distribution Regulation." (2001). With Steven A. Ostrover. *IEEE Transactions on Power Systems.* 16 (4): 940 -942.

8. "Modeling Regional Power Markets and Market Power." (2001). With Robert F. Cope. *Managerial and Decision Economics.* 22:411-429.

9. "A Data Envelopment Analysis of Levels and Sources of Coal Fired Electric Power Generation Inefficiency" (2000). With Williams O. Olatubi. *Utilities Policy.* 9 (2): 47-59.

10. "Cogeneration and Electric Power Industry Restructuring" (1999). With Andrew N. Kleit. *Resource and Energy Economics.* 21:153-166.

11. "Capacity and Economies of Scale in Electric Power Transmission" (1999). With Robert F. Cope and Dmitry Mesyanzhinov. *Utilities Policy* 7: 155-162.

12. "Oil Spills, Workplace Safety, and Firm Size: Evidence from the U.S. Gulf of Mexico OCS." (1997). With O. O. Iledare, A. G. Pulsipher, and Dmitry Mesyanzhinov. *Energy Journal* 4: 73-90.

13. "A Comment on Cost Savings from Nuclear Regulatory Reform" (1997). *Southern Economic Journal*. 63:1108-1112.

14. "The Demand for Long Distance Telephone Communication: A Route-Specific Analysis of Short-Haul Service." (1996). *Studies in Economics and Finance* 17:33-45.

PUBLICATIONS: PEER REVIEWED PROCEEDINGS

1. "Technology Based Ethical Issues Surrounding the California Energy Crisis." (2002). With Robert F. Cope III and John Yeargain. *Proceedings of the Academy of Legal, Ethical, and Regulatory Issues*. September: 17-21.

2. "Electric Utility Restructuring and Strategies for the Future." (2001). With Scott W. Geiger. *Proceedings of the Southwest Academy of Management*. March.

3. "Applications for Distributed Energy Resources in Oil and Gas Production: Methods for Reducing Flare Gas Emissions and Increasing Generation Availability" *(2000)*. With Ritchie D. Priddy. *Proceedings of the International Energy Foundation – ENERGEX 2000*. July.

4. "Power System Operations, Control, and Environmental Protection in a Restructured Electric Power Industry" (1998). With Fred I. Denny. *IEEE Proceedings: Large Engineering Systems Conference on Power Engineering*. June: 294-298.

5. "New Paradigms for Power Engineering Education." (1997). With Fred I. Denny. *Proceedings of the International Association of Science and Technology for Development*. October: 499-504.

6. "Safety Regulations, Firm Size, and the Risk of Accidents in E&P Operations on the Gulf of Mexico Outer Continental Shelf" (1996). With Allan Pulsipher, Omowumi Iledare, and Bob Baumann. *Proceedings of the American Society of Petroleum Engineers: Third International Conference on Health, Safety, and the Environment in Oil and Gas Exploration and Production*, June.

7. "Comparing the Safety and Environmental Records of Firms Operating Offshore Platforms in the Gulf of Mexico." (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. *Proceedings of the American Society of Mechanical Engineers: Offshore and Arctic Operations 1996*, January.

PUBLICATIONS: OTHER SCHOLARLY PROCEEDINGS

1. "A Collaborative Investigation of Baseline and Scenario Information for Environmental Impact Statements" (2005). *Proceedings of the 23rd Annual Information Technology Meetings*. U.S. Department of the Interior, Minerals Management Service, Gulf Coast Region, New Orleans, LA. January 12, 2005.

2. "Trends and Issues in the Natural Gas Industry and the Development of LNG: Implications for Louisiana. (2004) *Proceedings of the 51st Mineral Law Institute*, Louisiana State University, Baton Rouge, LA. April 2, 2004.

3. "Competitive Bidding in the Electric Power Industry." (2003). *Proceedings of the Association of Energy Engineers.* December 2003.

4. "The Role of ANS Gas on Southcentral Alaskan Development." (2002). With William Nebesky and Dmitry Mesyanzhinov. *Proceedings of the International Association for Energy Economics: Energy Markets in Turmoil: Making Sense of It All.* October.

5. "A New Consistent Approach to Modeling Regional Economic Impacts of Offshore Oil and Gas Activities." (2002). With Vicki Zatarain. *Proceedings of the 2002 National IMPLAN Users Conference*: 241-258.

6. "Analysis of the Economic Impact Associated with Oil and Gas Activities on State Leases." (2002). With Dmitry Mesyanzhinov, Robert H. Baumann, and Allan G. Pulsipher. *Proceedings of the 2002 National IMPLAN Users Conference*: 149-155.

7. "Do Deepwater Activities Create Different Impacts to Communities Surrounding the Gulf OCS?" (2001). *Proceedings of the International Association for Energy Economics: 2001: An Energy Odyssey?* April.

8. "Modeling the Economic Impact of Offshore Activities on Onshore Communities." (2000). With Williams O. Olatubi. *Proceedings of the 20th Annual Information Transfer Meeting.* U.S. Department of Interior, Minerals Management Service: New Orleans, Louisiana.

9. "Empirical Challenges in Estimating the Economic Impacts of Offshore Oil and Gas Activities in the Gulf of Mexico" (2000). With Williams O. Olatubi. *Proceedings of the International Association for Energy Economics: Transforming Energy Markets.* August.

10. "Asymmetric Choice and Customer Benefits: Lessons from the Natural Gas Industry." (1999). With Rachelle F. Cope and Dmitry Mesyanzhinov. *Proceedings of the International Association for Energy Economics: The Only Constant is Change* August: 444-452.

11. "Modeling Electric Power Markets in a Restructured Environment" (1998). With Robert F. Cope and Dan Rinks. *Proceedings of the International Association for Energy Economics: Technology's Critical Role in Energy and Environmental Markets.* October: 48-56.

12. "Assessing Environmental and Safety Risks of the Expanding Role of Independents in E&P Operations on the Gulf of Mexico OCS." (1996). With Allan Pulsipher, Omowumi Iledare, Bob Baumann, and Dmitry Mesyanzhinov. *Proceedings of the 16th Annual Information Transfer Meeting.* U.S. Department of Interior, Minerals Management Service: New Orleans, Louisiana: 162-166.

13. "Comparing the Safety and Environmental Performance of Offshore Oil and Gas Operators." (1995). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. *Proceedings of the 15th Annual Information Transfer Meeting.* U.S. Department of Interior, Minerals Management Service: New Orleans, Louisiana.

PUBLICATIONS: BOOK CHAPTERS

1. "The Role of Distributed Energy Resources in a Restructured Power Industry." (2006). In *Electric Choices: Deregulation and the Future of Electric Power*. Edited by Andrew N. Kleit. Oakland, CA: The Independent Institute (Rowman & Littlefield Publishers, Inc.), 181-208.

2. "The Road Ahead: The Outlook for Louisiana Energy." (2006). In *Commemorating Louisiana Energy: 100 Years of Louisiana Natural Gas Development*. Houston, TX: Harts Energy Publications, 68-72.

3. "Competitive Power Procurement An Appropriate Strategy in a Quasi-Regulated World." (2004). In *Electric and Natural Gas Business: Using New Strategies, Understanding the Issues*. With Elizabeth A. Downer. Edited by Robert Willett. Houston, TX: Financial Communications Company, 91-104.

4. "Alaskan North Slope Natural Gas Development." (2003). In *Natural Gas and Electric Industries Analysis 2003*. With William E. Nebesky, Dmitry Mesyanzhinov, and Jeffrey M. Burke. Edited by Robert Willett. Houston, TX: Financial Communications Company, 185-205.

5. "Challenges and Opportunities for Distributed Energy Resources in the Natural Gas Industry." (2002). In *Natural Gas and Electric Industries Analysis 2001-2002*. Edited by Robert Willett. With Martin J. Collette, Ritchie D. Priddy, and Jeffrey M. Burke. Houston, TX: Financial Communications Company, 114-131.

6. "The Hydropower Industry of the United States." (2000). With Dmitry Mesyanzhinov. In *Renewable Energy: Trends and Prospects*. Edited by E.W. Miller and A.I. Panah. Lafayette, PN: The Pennsylvania Academy of Science, 133-146.

7. "Electric Power Generation." (2000). In the *Macmillan Encyclopedia of Energy*. Edited by John Zumerchik. New York: Macmillan Reference.

PUBLICATIONS: BOOK REVIEWS

1. Review of ***Renewable Resources for Electric Power: Prospects and Challenges***. Raphael Edinger and Sanjay Kaul. (Westport, Connecticut: Quorum Books, 2000), pp 154. ISBN 1-56720-233-0. *Natural Resources Forum*. (2000).

2. Review of ***Electricity Transmission Pricing and Technology***, edited by Michael Einhorn and Riaz Siddiqi. (Boston: Kluwer Academic Publishers, 1996) pp. 282. ISBN 0-7923-9643-X. *Energy Journal* 18 (1997): 146-148.

3. Review of ***Electric Cooperatives on the Threshold of a New Era*** by Public Utilities Reports. (Vienna, Virginia: Public Utilities Reports, 1996) pp. 232. ISBN 0-910325-63-4. *Energy Journal* 17 (1996): 161-62.

PUBLICATIONS: TRADE AND PROFESSIONAL JOURNALS

1. "Value of Production Losses Tallied for 2004-2005 Storms." (2008). With Mark J. Kaiser and Yunke Yu. *Oil and Gas Journal*. Vol. 106.27: 32-26 (July 21) (part 3 of 3).

2. "Model Framework Can Aid Decision on Redevelopment." (2008). With Mark J. Kaiser and Yunke Yu. *Oil and Gas Journal*. Vol. 106.26: 49-53 (July 14) (part 2 of 3).

3. "Field Redevelopment Economics and Storm Impact Assessment." (2008). With Mark J. Kaiser and Yunke Yu. *Oil and Gas Journal*. Vol. 106.25: 42-50 (July 7) (part 1 of 3).

4. "The IRS' Latest Proposal on Tax Normalization: A Pyrrhic Victory for Ratepayers," (2006). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 55(1): 217-236

5. "Executive Compensation in the Electric Power Industry: Is It Excessive?" (2006). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 54(4): 913-940.

6. "Renewable Portfolio Standards in the Electric Power Industry." With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 54(3): 693-706.

7. "Regulating Mercury Emissions from Electric Utilities: Good Environmental Stewardship or Bad Public Policy? (2005). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 54 (2): 401-424

8. "Using Industrial-Only Retail Choice as a Means of Moving Competition Forward in the Electric Power Industry." (2005). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 54(1): 211-223

9. "The Nuclear Power Plant Endgame: Decommissioning and Permanent Waste Storage. (2005). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 53 (4): 981-997

10. "Can LNG Preserve the Gas-Power Convergence?" (2005). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 53 (3):783-796.

11. "Competitive Bidding as a Means of Securing Opportunities for Efficiency." (2004). With Elizabeth A. Downer. *Electricity and Natural Gas* 21 (4): 15-21.

12. "The Evolving Markets for Polluting Emissions: From Sulfur Dioxide to Carbon Dioxide." (2004). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 53(2): 479-494.

13. "The Challenges Associated with a Nuclear Power Revival: Its Past." (2004). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 53 (1): 193-211.

14. "Deregulation of Generating Assets and The Disposition of Excess Deferred Federal Income Taxes: A 'Catch-22' for Ratepayers." (2004). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 52: 873-891.

15. "Will Competitive Bidding Make a Comeback?" (2004). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 52: 659-674

16. "An Electric Utility's Exposure to Future Environmental Costs: Does It Matter? You Bet!" (2003). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 52: 457-469.

17. "White Paper or White Flag: Do FERC's Concessions Represent A Withdrawal from Wholesale Power Market Reform?" (2003). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 52: 197-207.

18. "Clear Skies" or Storm Clouds Ahead? The Continuing Debate over Air Pollution and Climate Change" (2003). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 51: 823-848.

19. "Economic Displacement Opportunities in Southeastern Power Markets." (2003). With Dmitry V. Mesyanzhinov. *USAEE Dialogue.* 11: 20-24.

20. "What's Happened to the Merchant Energy Industry? Issues, Challenges, and Outlook" (2003). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 51: 635-652.

21. "Is There a Role for the TVA in Post-Restructured Electric Markets?" (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 51: 433-454.

22. "The Role of Alaska North Slope Gas in the Southcentral Alaska Regional Energy Balance." (2002). With William Nebesky and Dmitry Mesyanzhinov. *Natural Gas Journal.* 19: 10-15.

23. "Standardizing Wholesale Markets For Energy." (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 51: 207-225.

24. "Do Economic Activities Create Different Economic Impacts to Communities Surrounding the Gulf OCS?" (2002). With Williams O. Olatubi. *IAEE Newsletter.* Second Quarter: 16-20.

25. "Will Electric Restructuring Ever Get Back on Track? Texas is not California." (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 50: 943-960.

26. "An Assessment of the Role and Importance of Power Marketers." (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly. 50: 713-731.*

27. "The EPA v. The TVA, et. al. Over New Source Review." (2001) With K.E. Hughes, II. *Oil, Gas and Energy Quarterly.* 50:531-543.

28. "Energy Policy by Crisis: Proposed Federal Changes for the Electric Power Industry." (2001). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 50:235-249.

29. "A is for Access: A Definitional Tour Through Today's Energy Vocabulary." (2001). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 49:947-973.

30. "California Dreaming: Are Competitive Markets Achievable?" (2001). With K.E. Hughes II. *Oil, Gas and Energy Quarterly.* 49: 743-759.

31. "Distributed Energy Must Be Watched As Opportunity for Gas Companies." (2001). With Martin Collette, and Ritchie D. Priddy. *Natural Gas Journal.* January: 9-16.

32. "Clean Air, Kyoto, and the Boy Who Cried Wolf." (2000). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. December: 529-540.

33. "Energy Conservation Programs and Electric Restructuring: Is There a Conflict?" (2000). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. September: 211-224.

34. "The Post-Restructuring Consolidation of Nuclear-Power Generation in the Electric Power Industry." (2000) With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 49: 751-765.

35. "Issues and Opportunities for Small Scale Electricity Production in the Oil Patch." (2000). With Ritchie D. Priddy. *American Oil and Gas Reporter*. 49: 78-82.

36. "Distributed Energy Resources: The Next Paradigm Shift in the Electric Power Industry." (2000). With K.E. Hughes II *Oil, Gas and Energy Quarterly*. 48:593-602.

37. "Coming to a Neighborhood Near You: The Merchant Electric Power Plant." (1999). With K.E. Hughes II. *Oil, Gas, and Energy Quarterly*. 48:433-441.

38. "Slow as Molasses: The Political Economy of Electric Restructuring in the South." (1999). With K.E. Hughes II. *Oil, Gas, and Energy Quarterly*. 48: 163-183.

39. "Stranded Investment and Non-Utility Generation." (1999). With Michael T. Maloney. *Electricity Journal* 12: 50-61.

40. "Reliability or Profit? Why Entergy Quit the Southwest Power Pool." (1998). With Fred I. Denny. *Public Utilities Fortnightly*. February 1: 30-33.

41. "Electric Utility Mergers and Acquisitions: A Regulator's Guide." (1996). With Kimberly H. Dismukes. *Public Utilities Fortnightly*. January 1.

PUBLICATIONS: REPORTS AND OTHER PUBLICATIONS

1. *The Benefits of Continued and Expanded Investments in the Port of Venice*. (2009). With Christopher Peters and Kathryn Perry. Baton Rouge, LA: LSU Center for Energy Studies. 83 pp.

2. *Examination of the Development of Liquefied Natural Gas on the Gulf of Mexico*. (2008). U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA OCS Study MMS 2008-017. 106 pp.

3. *Gulf of Mexico OCS Oil and Gas Scenario Examination: Onshore Waste Disposal*. (2007). With Michelle Barnett, Derek Vitrano, and Kristen Strellec. OCS Report, MMS 2007-051. New Orleans, LA: U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico Region.

4. *Economic Impact Analysis of the Proposed Lake Charles Gasification Project*. (2007). Report Prepared on Behalf of Leucadia Corporation.

5. *The Economic Impacts of New Jersey's Proposed Renewable Portfolio Standard*. (2005)

Report Prepared on Behalf of the New Jersey Division of Ratepayer Advocate.

6. *The Importance of Energy Production and Infrastructure in Plaquemines Parish.* (2006). Report Prepared on Behalf of Project Rebuild Plaquemines.

7. *Louisiana's Oil and Gas Industry: A Study of the Recent Deterioration in State Drilling Activity.* (2005). With Kristi A.R. Darby, Jeffrey M. Burke, and Robert H. Baumann. Baton Rouge, LA: Louisiana Department of Natural Resources.

8. *Comparison of Methods for Estimating the NO_x Emission Impacts of Energy Efficiency and Renewable Energy Projects Shreveport, Louisiana Case Study.* (2005). With Adam Chambers, David Kline, Laura Vimmerstedt, Art Diem, and Dmitry Mesyanzhinov. Golden, Colorado: National Renewable Energy Laboratory.

9. *Economic Opportunities for a Limited Industrial Retail Choice Plan in Louisiana.* (2004). With Elizabeth A. Downer and Dmitry V. Mesyanzhinov. Baton Rouge, LA: Louisiana State University Center for Energy Studies.

10. *Economic Opportunities for LNG Development in Louisiana.* (2004). With Elizabeth A. Downer and Dmitry V. Mesyanzhinov. Baton Rouge, LA: Louisiana Department of Economic Development and Greater New Orleans, Inc.

11. *Marginal Oil and Gas Production in Louisiana: An Empirical Examination of State Activities and Policy Mechanisms for Stimulating Additional Production.* (2004). With Dmitry V. Mesyanzhinov, Jeffrey M. Burke, Robert H. Baumann. Baton Rouge, LA: Louisiana Department of Natural Resources, Office of Mineral Resources.

12. *Deepwater Program: OCS-Related Infrastructure in the Gulf of Mexico Fact Book.* (2004). With Louis Berger Associates, University of New Orleans National Ports and Waterways Institute, and Research and Planning Associates. MMS Study No. 1435-01-99-CT-30955. U.S. Department of the Interior, Minerals Management Service.

13. *The Power of Generation: The Ongoing Benefits of Independent Power Development in Louisiana.* With Dmitry V. Mesyanzhinov, Jeffrey M. Burke, and Elizabeth A. Downer. Baton Rouge, LA: LSU Center for Energy Studies, 2003.

14. *Modeling the Economic Impact of Offshore Oil and Gas Activities in the Gulf of Mexico: Methods and Application.* (2003). With Williams O. Olatubi, Dmitry V. Mesyanzhinov, and Allan G. Pulsipher. Prepared by the Center for Energy Studies, Louisiana State University, Baton Rouge, LA. OCS Study MMS2000-0XX. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA.

15. *An Analysis of the Economic Impacts Associated with Oil and Gas Activities on State Leases.* (2002) With Robert H. Baumann, Dmitry V. Mesyanzhinov, and Allan G. Pulsipher. Baton Rouge, LA: Louisiana Department of Natural Resources, Office of Mineral Resources.

16. *Alaska In-State Natural Gas Demand Study.* (2002). With Dmitry Mesyanzhinov, et.al. Anchorage, Alaska: Alaska Department of Natural Resources, Division of Oil and Gas.

17. *Moving to the Front of the Lines: The Economic Impacts of Independent Power Plant Development in Louisiana.* (2001). With Dmitry Mesyanzhinov and Williams O. Olatubi. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.

18. *The Economic Impacts of Merchant Power Plant Development in Mississippi.* (2001). Report Prepared on Behalf of the US Oil and Gas Association, Alabama and Mississippi Division. Houston, TX: Econ One Research, Inc.

19. *Energy Conservation and Electric Restructuring In Louisiana.* (2000). With Dmitry Mesyanzhinov, Ritchie D. Priddy, Robert F. Cope III, and Vera Tabakova. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.

20. *Assessing the Environmental and Safety Risks of the Expanded Role of Independents in Oil and Gas E&P Operations on the U.S. Gulf of Mexico OCS.* (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.

21. *Restructuring the Electric Utility Industry: Implications for Louisiana.* (1996). With Allan Pulsipher and Kimberly H. Dismukes. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.

GRANT RESEARCH

1. *Principal Investigator.* "Economic Contributions and Benefits Support by the Port of Venice." Port of Venice Coalition. Total Project: $20,000. Status: Completed.

2. *Principal Investigator.* "Energy Policy Development in Louisiana." Louisiana Department of Natural Resources. Total Project: $49,500. Status: Completed.

3. *Principal Investigator.* "Preparing Louisiana for the Possible Federal Regulation of Greenhouse Gas Regulation." With Michael D. McDaniel. Louisiana Department of Economic Development. Total Project: $98,543. Status: In Progress.

4. *Principal Investigator.* "OCS Studies Review: Louisiana and Texas Oil and Gas Activity and Production Forecast; Pipeline Position Paper; and Geographical Units for Observing and Modeling Socioeconomic Impact of Offshore Activity." (2008). With Mark J. Kaiser and Allan G. Pulsipher. U.S. Department of the Interior, Minerals Management Service. Total Project: $377,917 (3 years). Status: Awarded, In Progress.

5. *Principal Investigator.* "State and Local Level Fiscal Effects of the Offshore Petroleum Industry." (2007). With Loren C. Scott. U.S. Department of the Interior, Minerals Management Service. Total Project: $241,216 (2.5 years). Status: Awarded, In Progress.

6. *Principal Investigator.* "Understanding Current and Projected Gulf OCS Labor and Ports Needs." (2007). With Allan. G. Pulsipher, Kristi A. R. Darby. U.S. Department of the Interior, Minerals Management Service. Total Project: $169,906. (one year). Status: Awarded, In Progress.

7. *Principal Investigator.* "Structural Shifts and Concentration of Regional Economic Activity Supporting GOM Offshore Oil and Gas Activities." (2007). With Allan. G. Pulsipher, Michelle Barnett. U.S. Department of the Interior, Minerals Management Service. Total Project: $78,374 (one year). Status: Awarded, In Progress.

8. *Principal Investigator.* "Plaquemine Parish's Role in Supporting Critical Energy Infrastructure and Production." (2006). With Seth Cureington. Plaquemines Parish Government, Office of the Parish President and Plaquemines Association of Business and Industry. Total Project: $18,267. Status: Completed.

9. *Principal Investigator.* "Diversifying Energy Industry Risk in the Gulf of Mexico." (2006). With Kristi A. R. Darby. U.S. Department of the Interior, Minerals Management Service. Total Project: $65,302 (two years). Status: Awarded, In Progress.

10. *Principal Investigator.* "Post-Hurricane Assessment of OCS-Related Infrastructure and Communities in the Gulf of Mexico Region." (2006). U.S. Department of the Interior, Minerals Management Service. Total Project Funding: $244,837. Status: In Progress.

11. *Principal Investigator.* "Ultra Deepwater Road Mapping Process." (2005). With Kristi A. R. Darby, Subcontract with the Texas A&M University, Department of Petroleum Engineering. Funded by the Gas Technology Institute. Total Project Funding: $15,000. Status: Completed.

12. *Principal Investigator.* "An Examination of the Opportunities for Drilling Incentives on State Leases." (2004). With Robert H. Baumann and Kristi A. R. Darby. Louisiana Office of Mineral Resources. Total Project Funding: $75,000. Status: Completed.

13. *Principal Investigator.* " An Examination on the Development of Liquefied Natural Gas Facilities on the Gulf of Mexico." (2004). With Dmitry V. Mesyanzhinov and Mark J. Kaiser. U.S. Department of the Interior, Minerals Management Service. Total Project Funding $101,054. Status: Completed.

14. *Principal Investigator.* "Examination of the Economic Impacts Associated with Large Customer, Industrial Retail Choice." (2004). With Dmitry V. Mesyanzhinov. Louisiana Mid-Continent Oil and Gas Association. Total Project Funding: $37,000. Status: Completed.

15. *Principal Investigator.* "Economic Opportunities from LNG Development in Louisiana." (2003). With Dmitry V. Mesyanzhinov. Metrovision/New Orleans Chamber of Commerce and the Louisiana Department of Economic Development. Total Project Funding: $25,000. Status: Completed.

16. *Principal Investigator.* "Marginal Oil and Gas Properties on State Leases in Louisiana: An Empirical Examination and Policy Mechanisms for Stimulating Additional Production." (2002). With Robert H. Baumann and Dmitry V. Mesyanzhinov. Louisiana Office of Mineral Resources. Total Project Funding: $72,000. Status: Completed.

17. *Principal Investigator.* "A Collaborative Investigation of Baseline and Scenario Information for Environmental Impact Statements." (2002). With Dmitry V. Mesyanzhinov and Williams O. Olatubi. U.S. Department of Interior, Minerals Management Service. Total Project Funding:

$557,744. Status: Awarded, In Progress.

18. *Co-Principal Investigator.* "An Analysis of the Economic Impacts of Drilling and Production Activities on State Leases." (2002). With Robert H. Baumann, Allan G. Pulsipher, and Dmitry V. Mesyanzhinov. Louisiana Office of Mineral Resources. Total Project Funding: $8,000. Status: Completed.

19. *Principal Investigator.* "Cost Profiles and Cost Functions for Gulf of Mexico Oil and Gas Development Phases for Input Output Modeling." (1998). With Dmitry Mesyanzhinov and Allan G. Pulsipher. U.S. Department of Interior, Minerals Management Service. Total Project Funding: $244,956. Status: Completed.

20. *Principal Investigator.* "An Economic Impact Analysis of OCS Activities on Coastal Louisiana." (1998). With Dmitry Mesyanzhinov and David Hughes. U.S. Department of Interior, Minerals Management Service. Total Project Funding: $190,166. Status: Completed.

21. *Principal Investigator.* "Energy Conservation and Electric Restructuring in Louisiana." (1997). Louisiana Department of Natural Resources." Petroleum Violation Escrow Program Funds. Total Project Funding: $43,169. Status: Completed.

22. *Principal Investigator.* "The Industrial Supply of Electricity: Commercial Generation, Self-Generation, and Industry Restructuring." (1996). With Andrew Kleit. Louisiana Energy Enhancement Program, LSU Office of Research and Development. Total Project Funding: $19,948. Status: Completed.

23. *Co-Principal Investigator.* "Assessing the Environmental and Safety Risks of the Expanded Role of Independents in Oil and Gas E&P Operations on the U.S. Gulf of Mexico OCS." (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, Grant Number 95-0056. Total Project Funding: $109,361. Status: Completed.

ACADEMIC CONFERENCE PAPERS/PRESENTATIONS

1. "Analysis of Risk and Post-Hurricane Reaction." (2009). 25th Annual Information Transfer Meeting. U.S. Department of the Interior, Minerals Management Service. January 7, 2009.

2. "Legacy Litigation, Regulation, and Other Determinants of Interstate Drilling Activity Differentials." (2008). With Christopher Peters and Mark Kaiser. 28th Annual USAEE/IAEE North American Conference: Unveiling the Future of Future of Energy Frontiers. New Orleans, LA, December 3, 2008.

3. "Gulf Coast Energy Infrastructure Renaissance: Overview." (2008). 28th Annual USAEE/IAEE North American Conference: Unveiling the Future of Future of Energy Frontiers. New Orleans, LA, December 3, 2008.

4. "Understanding the Impacts of Katrina and Rita on Energy Industry Infrastructure." (2008). American Chemical Society National Meetings, New Orleans, Louisiana. April 7, 2008.

5. "Determining the Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure." (2007). With Kristi A. R. Darby and Michelle Barnett. International Association for Energy Economics, Wellington, New Zealand, February 19, 2007.

6. "Regulatory Issues in Rate Design, Incentives, and Energy Efficiency." (2007). 34th Annual Public Utilities Research Center Conference, University of Florida. Gainesville, FL. February 16, 2007.

7. "An Examination of LNG Development on the Gulf of Mexico." (2007). With Kristi A.R. Darby. US Department of the Interior, Minerals Management Service. 24th Annual Information Technology Meeting. New Orleans, LA. January 9.

8. "OCS-Related Infrastructure on the GOM: Update and Summary of Impacts." (2007). US Department of the Interior, Minerals Management Service. 24th Annual Information Technology Meeting. New Orleans, LA. January 10.

9. "The Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure." (2006). With Michelle Barnett. Third National Conference on Coastal and Estuarine Habitat Restoration. Restore America's Estuaries. New Orleans, Louisiana, December 11.

10. "The Impact of Implementing a 20 Percent Renewable Portfolio Standard in New Jersey." (2006). With Seth E. Cureington. Mid-Continent Regional Science Association 37th Annual Conference, Purdue University, Lafayette, Indiana, June 9.

11. "The Impacts of Hurricane Katrina and Rita on Energy infrastructure Along the Gulf Coast." (2006). Environment Canada: 2006 Artic and Marine Oilspill Program. Vancouver, British Columbia, Canada.

12. "Hurricanes, Energy Markets, and Energy Infrastructure in the Gulf of Mexico: Experiences and Lessons Learned." (2006). With Kristi A.R. Darby and Seth E. Cureington. 29th Annual IAEE International Conference, Potsdam, Germany, June 9.

13. "An Examination of the Opportunities for Drilling Incentives on State Leases in Louisiana." (2005). With Kristi A.R. Darby. 28th Annual IAEE International Conference, Taipei, Taiwan (June).

14. "Fiscal Mechanisms for Stimulating Oil and Gas Production on Marginal Leases." (2004). With Jeffrey M. Burke. International Association of Energy Economics Annual Conference, Washington, D.C. (July).

15. "GIS and Applied Economic Analysis: The Case of Alaska Residential Natural Gas Demand." (2003). With Dmitry V. Mesyanzhinov. Presented at the Joint Meeting of the East Lakes and West Lakes Divisions of the Association of American Geographers in Kalamazoo, MI, October 16-18.

16. "Are There Any In-State Uses for Alaska Natural Gas?" (2002). With Dmitry V. Mesyanzhinov and William E. Nebesky. IAEE/USAEE 22nd Annual North American Conference: "Energy Markets in Turmoil: Making Sense of It All." Vancouver, British Columbia, Canada. October 7.

17. "The Economic Impact of State Oil and Gas Leases on Louisiana." (2002). With Dmitry V. Mesyanzhinov. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.

18. "Moving to the Front of the Lines: The Economic Impact of Independent Power Plant Development in Louisiana." (2002). With Dmitry V. Mesyanzhinov and Williams O. Olatubi. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.

19. "New Consistent Approach to Modeling Regional Economic Impacts of Offshore Oil and Gas Activities in the Gulf of Mexico." (2002). With Vicki Zatarain. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.

20. "Distributed Energy Resources, Energy Efficiency, and Electric Power Industry Restructuring." (1999). American Society of Environmental Science Fourth Annual Conference. Baton Rouge, Louisiana. December.

21. "Estimating Efficiency Opportunities for Coal Fired Electric Power Generation: A DEA Approach." (1999). With Williams O. Olatubi. Southern Economic Association Sixty-ninth Annual Conference. New Orleans, November.

22. "Applied Approaches to Modeling Regional Power Markets." (1999.) With Robert F. Cope. Southern Economic Association Sixty-ninth Annual Conference. New Orleans, November 1999.

23. "Parametric and Non-Parametric Approaches to Measuring Efficiency Potentials in Electric Power Generation." (1999). With Williams O. Olatubi. International Atlantic Economic Society Annual Conference, Montreal, October.

24. "Asymmetric Choice and Customer Benefits: Lessons from the Natural Gas Industry." (1999). With Rachelle F. Cope and Dmitry Mesyanzhinov. International Association of Energy Economics Annual Conference. Orlando, Florida. August.

25. "Modeling Regional Power Markets and Market Power." (1999). With Robert F. Cope. Western Economic Association Annual Conference. San Diego, California. July.

26. "Economic Impact of Offshore Oil and Gas Activities on Coastal Louisiana" (1999). With Dmitry Mesyanzhinov. Annual Meeting of the Association of American Geographers. Honolulu, Hawaii. March.

27. "Empirical Issues in Electric Power Transmission and Distribution Cost Modeling." (1998). With Robert F. Cope and Dmitry Mesyanzhinov. Southern Economic Association. Sixty-Eighth Annual Conference. Baltimore, Maryland. November.

28. "Modeling Electric Power Markets in a Restructured Environment." (1998). With Robert F. Cope and Dan Rinks. International Association for Energy Economics Annual Conference. Albuquerque, New Mexico. October.

29. "Benchmarking Electric Utility Distribution Performance." (1998) With Robert F. Cope and Dmitry Mesyanzhinov. Western Economic Association, Seventy-sixth Annual Conference. Lake Tahoe, Nevada. June.

30. "Power System Operations, Control, and Environmental Protection in a Restructured Electric Power Industry." (1998). With Fred I. Denny. IEEE Large Engineering Systems Conference on Power Engineering. Nova Scotia, Canada. June.

31. "Benchmarking Electric Utility Transmission Performance." (1997). With Robert F. Cope and Dmitry Mesyanzhinov. Southern Economic Association, Sixty-seventh Annual Conference. Atlanta, Georgia. November 21-24.

32. "A Non-Linear Programming Model to Estimate Stranded Generation Investments in a Deregulated Electric Utility Industry." (1997). With Robert F. Cope and Dan Rinks. Institute for Operations Research and Management Science Annual Conference. Dallas Texas. October 26-29.

33. "New Paradigms for Power Engineering Education." (1997). With Fred I. Denny. International Association of Science and Technology for Development, *High Technology in the Power* Industry Conference. Orlando, Florida. October 27-30

34. "Cogeneration and Electric Power Industry Restructuring." (1997). With Andrew N. Kleit. Western Economic Association, Seventy-fifth Annual Conference. Seattle, Washington. July 9-13.

35. "The Unintended Consequences of the Public Utilities Regulatory Policies Act of 1978." (1997). National Policy History Conference on the Unintended Consequences of Policy Decisions. Bowling Green State University. Bowling Green, Ohio. June 5-7.

36. "Assessing Environmental and Safety Risks of the Expanding Role of Independents in E&P Operations on the Gulf of Mexico OCS." (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, 16th Annual Information Transfer Meeting. New Orleans, Louisiana.

37. "Empirical Modeling of the Risk of a Petroleum Spill During E&P Operations: A Case Study of the Gulf of Mexico OCS." (1996). With Omowumi Iledare, Allan Pulsipher, and Dmitry Mesyanzhinov. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.

38. "Input Price Fluctuations, Total Factor Productivity, and Price Cap Regulation in the Telecommunications Industry" (1996). With Farhad Niami. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.

39. "Recovery of Stranded Investments: Comparing the Electric Utility Industry to Other Recently Deregulated Industries" (1996). With Farhad Niami and Dmitry Mesyanzhinov. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.

40. "Spatial Perspectives on the Forthcoming Deregulation of the U.S. Electric Utility Industry." (1996) With Dmitry Mesyanzhinov. Southwest Association of American Geographers Annual Meeting. Norman, Oklahoma.

41. "Comparing the Safety and Environmental Performance of Offshore Oil and Gas Operators." (1995). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, 15th Annual Information Transfer Meeting. New Orleans, Louisiana.

42. "Empirical Determinants of Nuclear Power Plant Disallowances." (1995). Southern Economic Association, Sixty-Fifth Annual Conference. New Orleans, Louisiana.

43. "A Cross-Sectional Model of IntraLATA MTS Demand." (1995). Southern Economic Association, Sixty-Fifth Annual Conference. New Orleans, Louisiana.

ACADEMIC SEMINARS AND PRESENTATIONS

1. "Energy Regulation: Overview of Power and Gas Regulation." Lecture before School of the Coast & Environment, Course in Energy Policy and Law. October 5, 2009.

2. "Trends and Issues in Renewable Energy." Presentation before the School of the Coast & Environment, Louisiana State University. Spring Guest Lecture Series. May 4, 2007.

3. "CES Research Projects and Status." Presentation before the U.S. Department of the Interior, Minerals Management Service, Outer Continental Shelf Scientific Committee Meeting, New Orleans, LA May 22, 2007.

4. "Hurricane Impacts on Energy Production and Infrastructure." Presentation Before the 53rd Mineral Law Institute, Louisiana State University. April 7, 2006.

5. "Trends and Issues in the Natural Gas Industry and the Development of LNG: Implications for Louisiana. (2004) 51st Mineral Law Institute, Louisiana State University, Baton Rouge, LA. April 2, 2004.

6. "Electric Restructuring and Conservation." (2001). Presentation before the Department of Electrical Engineering, McNesse State University. Lake Charles, Louisiana. May 2, 2001.

7. "Electric Restructuring and the Environment." (1998). Environment 98: Science, Law, and Public Policy. Tulane University. Tulane Environmental Law Clinic. March 7, New Orleans, Louisiana.

8. "Electric Restructuring and Nuclear Power." (1997). Louisiana State University. Department of Nuclear Science. November 7, Baton Rouge, Louisiana.

9. "The Empirical Determinants of Co-generated Electricity: Implications for Electric Power Industry Restructuring." (1997). With Andrew N. Kleit. Florida State University. Department of Economics: Applied Microeconomics Workshop Series. October 17, Tallahassee, Florida.

PROFESSIONAL AND CIVIC PRESENTATIONS

1. "Natural Gas Supply Issues: Gulf Coast Supply Trends and Implications for Louisiana." Energy Bar Association, New Orleans Chapter Meeting. Jones Walker Law Firm. January 28, 2010, New Orleans, LA.

2. "Potential Impacts of Federal Greenhouse Gas Legislation on Louisiana Industry." LCA Government Affairs Committee Meeting. November 10, 2009. Baton Rouge, LA

3. "Regulatory and Ratemaking Issues Associated with Cost and Revenue Tracker Mechanisms." National Association of State Utility Consumer Advocates ("NASUCA") Gas Committee Monthly Meeting. November 10, 2009.

4. "Louisiana's Stakes in the Greenhouse Gas Debate." Louisiana Chemical Association and Louisiana Chemical Industry Alliance Annual Meeting: The Billing Dollar Budget Crisis: Catastrophe or Change? New Orleans, LA.

5. "Gulf Coast Energy Outlook: Issues and Trends." Women's Energy Network, Louisiana Chapter. September 17, 2009. Baton Rouge, LA.

6. "Gulf Coast Energy Outlook: Issues and Trends." Natchez Area Association of Energy Service Companies. September 15, 2009, Natchez, MS.

7. "The Small Picture: The Cost of Climate Change to Louisiana." Louisiana Association of Business and Industry, U.S. Chamber of Commerce, Louisiana Oil and Gas Association, and LSU Center for Energy Studies Conference: Can Louisiana Make a Buck After Climate Change Legislation? August 21, 2009. Baton Rouge, LA.

8. "Carbon Legislation and Clean Energy Markets: Policy and Impacts." National Association of Conservation Districts, South Central Region Meeting. August 14, 2009. Baton Rouge, LA.

9. "Evolving Carbon and Clean Energy Markets." The Carbon Emissions Continuum: From Production to Consumption." Jones Walker Law Firm and LSU Center for Energy Studies Workshop. June 23, 2009. Baton Rouge, LA

10. "Potential Impacts of Cap and Trade on Louisiana Ratepayers: Preliminary Results." (2009). Briefing before the Louisiana Public Service Commission. Business and Executive Meeting, May 12, 2009. Baton Rouge, LA.

11. "Natural Gas Outlook." (2009). Briefing before the Louisiana Public Service Commission. Business and Executive Meeting, May 12, 2009. Baton Rouge, LA.

12. "Gulf Coast Energy Outlook: Issues and Trends." (2009). ISA-Lafayette Technical Conference & Expo. Cajundome Conference Center. Lafayette, Louisiana. March 12, 2009.

13. "The Cost of Energy Independence, Climate Change, and Clean Energy Initiatives on Utility Ratepayers." (2009). National Association of Business Economists (NABE). 25th Annual Washington Economic Policy Conference: Restoring Financial and Economic Stability. Arlington, VA March 2, 2009.

14. Panelist, "Expanding Exploration of the U.S. OCS" (2009). Deep Offshore Technology International Conference and Exhibition. PennWell. New Orleans, Louisiana. February 4, 2009.

15. "Gulf Coast Energy Outlook." (2008.) Atmos Energy Regional Management Meeting. Louisiana and Mississippi Division. New Orleans, Louisiana. October 8, 2008.

16. "Background, Issues, and Trends in Underground Hydrocarbon Storage." (2008). Presentation before the LSU Center for Energy Studies Industry Advisory Board Meeting. Baton Rouge, Louisiana. August 27, 2008.

17. "Greenhouse Gas Regulations and Policy: Implications for Louisiana." (2008). Presentation before the Praxair Customer Seminar. Houston, Texas, August 14, 2008.

18. "Market and Regulatory Issues in Alternative Energy and Louisiana Initiatives." (2008). Presentation before the 2008 Statewide Clean Cities Coalition Conference: Making Sense of Alternative Fuels and Advanced Technologies. New Orleans, Louisiana, March 27, 2008.

19. "Regulatory Issues in Rate Design, Incentives, and Energy Efficiency." (2007) Presentation before the New Hampshire Public Utilities Commission. Workshop on Energy Efficiency and Revenue Decoupling. November 7, 2007.

20. "Regulatory Issues for Consumer Advocates in Rate Design, Incentives, and Energy Efficiency." (2007). National Association of State Utility Consumer Advocates, Mid-Year Meeting. June 12, 2007.

21. "Regulatory and Policy Issues in Nuclear Power Plant Development." (2007). LSU Center for Energy Studies Industry Advisory Council Meeting. Baton Rouge, LA. March 23, 2007.

22. "Oil and Gas in the Gulf of Mexico: A North American Perspective." (2007). Canadian Consulate, Heads of Mission EnerNet Workshop, Houston, Texas. March 20, 2007.

23. "Regulatory Issues for Consumer Advocates in Rate Design, Incentives & Energy Efficiency. (2007). National Association of State Utility Consumer Advocates ("NASUCA") Gas Committee Monthly Meeting. February 13, 2006.

24. "Recent Trends in Natural Gas Markets." (2006). National Association of Regulatory Utility Commissioners, 118th Annual Convention. Miami, FL November 14, 2006.

25. "Energy Markets: Recent Trends, Issues & Outlook." (2006). Association of Energy Service Companies (AESC) Meeting. Petroleum Club, Lafayette, LA, November 8, 2006.

26. "Energy Outlook" (2006). National Business Economics Issues Council. Quarterly Meeting, Nashville, TN, November 1-2, 2006.

27. "Global and U.S. Energy Outlook." (2006). Energy Virginia Conference. Virginia Military Institute, Lexington, VA. October 17, 2006.

28. "Interdependence of Critical Energy Infrastructure Systems." (2006). Cross Border Forum on Energy Issues: Security and Assurance of North American Energy Systems. Woodrow Wilson Center for International Scholars. Washington, DC, October 13, 2006.

29. "Determining the Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure." (2006) The Economic and Market Impacts of Coastal Restoration: America's Wetland Economic Forum II. Washington, DC September 28, 2006.

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44. Energy Market Outlook and Update on Hurricane Damage to Energy Infrastructure. Presentation to the Energy Council 2005 Global Energy and Environmental Issues Conference. Santa Fe, New Mexico, December 10, 2005.

45. "Putting Our Energy Infrastructure Back Together Again." Presentation Before the 117th Annual Convention of the National Association of Regulatory Utility Commissioners (NARUC). November 15, 2005. Palm Springs, CA

46. "Hurricanes and the Outlook for Energy Markets." Presentation before the Baton Rouge Rotary Club. November 9, 2005, Baton Rouge, LA.

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54. "Electric Restructuring: Past, Present, and Future." Presentation to the Southeastern Association of Tax Administrators Annual Conference. Sheraton Hotel and Conference Facility. New Orleans, LA July 12, 2005.

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57. "Background and Overview of LNG Development." Energy Council Workshop on LNG/CNG. Biloxi, Ms: Beau Rivage Resort and Hotel, April 9, 2005.

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59. "The Economic Opportunities for a Limited Industrial Retail Choice Plan." Louisiana Department of Economic Development. Baton Rouge, Louisiana. November 19, 2004.

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74. "Natural Gas Outlook: Trends and Issues for Louisiana." Presentation before the Louisiana Joint Agricultural Association Meetings. January 14, 2004, Hotel Acadiana, Lafayette, Louisiana.

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76. "Competitive Bidding in the Electric Power Industry." Presentation before the Association of Energy Engineers. Business Energy Solutions Expo. December 11-12, 2003, New Orleans, Louisiana.

77. "Regional Transmission Organization in the South: The Demise of SeTrans" Presentation before the LSU Center for Energy Studies Industry Associates Advisory Council Meeting. December 9, 2003. Baton Rouge, Louisiana.

78. "Affordable Energy: The Key Component to a Strong Economy." Presentation before the National Association of Regulatory Utility Commissioners ("NARUC"), November 18, 2003, Atlanta, Georgia.

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81. "What's Happened to the Merchant Energy Industry? Issues, Challenges, and Outlook" Presentation before the LSU Center for Energy Studies Industry Associates Advisory Council Meeting. November 12, 2002. Baton Rouge, Louisiana.

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83. "Merchant Energy Development Issues in Louisiana." Presentation before the Program Committee of the Center for Legislative, Energy, and Environmental Research (CLEER), Energy Council. April 19, 2002.

84. "Power Plant Siting Issues in Louisiana." Presentation before 24th Annual Conference on Waste and the Environment. Sponsored by the Louisiana Department of Environmental Quality. Lafayette, Louisiana, Cajundome. March 12, 2002.

85. "Merchant Power and Deregulation: Issues and Impacts." Presentation before the Air and Waste Management Association Annual Meeting. Baton Rouge, LA, November 15, 2001.

86. "Moving to the Front of the Lines: The Economic Impact of Independent Power Production in Louisiana." Presentation before the LSU Center for Energy Studies Merchant Power Generation and Transmission Conference, Baton Rouge, LA. October 11, 2001.

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90. "Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Interagency Group on Merchant Power Development . Baton Rouge, LA, July 16, 2001.

91. "The Changing Nature of the Electric Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Office of the Governor. Baton Rouge, LA, July 16, 2001.

92. "The Changing Nature of the Electric Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Department of Economic Development. Baton Rouge, LA, July 3, 2001.

93. "The Economic Impacts of Merchant Power Plant Development In Mississippi." Presentation before the Mississippi Public Service Commission. Jackson, Mississippi, March 20, 2001.

94. "Energy Conservation and Electric Restructuring." With Ritchie D. Priddy. Presentation before the Louisiana Department of Natural Resources. Baton Rouge, Louisiana, October 23, 2000.

95. "Pricing and Regulatory Issues Associated with Distributed Energy." Joint Conference by Econ One Research, Inc., the Louisiana State University Distributed Energy Resources Initiative, and the University of Houston Energy Institute: "Is the Window Closing for Distributed Energy?" Houston, Texas, October 13, 2000.

96. "Electric Reliability and Merchant Power Development Issues." Technical Meetings of the Louisiana Public Service Commission. Baton Rouge, LA. August 29, 2000.

97. "A Introduction to Distributed Energy Resources." Summer Meetings, Southeastern Association of Regulatory Utility Commissioners (SEARUC). New Orleans, LA. June 27, 2000.

98. Roundtable Moderator/Discussant. Mid-South Electric Reliability Summit. U.S. Department of Energy. New Orleans, Louisiana. April 24, 2000.

99. "Electricity 101: Definitions, Precedents, and Issues." Energy Council's 2000 Federal Energy and Environmental Matters Conference. Loews L'Enfant Plaza Hotel, Washington, D.C. March 11-13, 2000.

100. "LSU/CES Distributed Energy Resources Initiatives." Los Alamos National Laboratories. Office of Energy and Sustainable Systems. Los Alamos, New Mexico. February 16, 2000.

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102. "Merchant Power Opportunities in Louisiana." Louisiana Mid-Continent Oil and Gas Association (LMOGA) Power Generation Committee Meetings. Baton Rouge, Louisiana. November 10, 1999.

103. Roundtable Discussant. "Environmental Regulation in a Restructured Market" The Big E: How to Successfully Manage the Environment in the Era of Competitive Energy. PUR Conference. New Orleans, Louisiana. May 24, 1999.

104. "The Political Economy of Electric Restructuring In the South" Southeastern Electric Exchange, Rate Section Annual Conference. New Orleans, Louisiana. May 7, 1999.

105. "The Dynamics of Electric Restructuring in Louisiana." Joint Meeting of the American Association of Energy Engineers and the International Association of Facilities Managers. Metairie, Louisiana. April 29, 1999.

106. "The Implications of Electric Restructuring on Independent Oil and Gas Operations." Petroleum Technology Transfer Council Workshop: Electrical Power Cost Reduction Methods in Oil and Gas Field Operations. Lafayette, Louisiana, March 24, 1999.

107. "What's Happened to Electricity Restructuring in Louisiana?" Louisiana State University, Center for Energy Studies Industry Associates Meeting. March 22, 1999.

108. "A Short Course on Electric Restructuring." Central Louisiana Electric Company. Sales and Marketing Division. Mandeville, Louisiana, October 22, 1998.

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110. "How Will Utility Deregulation Affect Tourism." Louisiana Travel Promotion Association Annual Meeting, Alexandria, Louisiana. January 15, 1998.

111. "Reflections and Predictions on Electric Utility Restructuring in Louisiana." With Fred I. Denny. Louisiana State University, Center for Energy Studies Industry Associates Meeting. November 20, 1997.

112. "Electric Utility Restructuring in Louisiana." Hammond Chamber of Commerce, Hammond, Louisiana. October 30, 1997.

113. "Electric Utility Restructuring." Louisiana Association of Energy Engineers. Baton Rouge, Louisiana. September 11, 1997.

114. "Electric Utility Restructuring: Issues and Trends for Louisiana." Opelousas Chamber of Commerce, Opelousas, Louisiana. June 24, 1997.

115. "The Electric Utility Restructuring Debate In Louisiana: An Overview of the Issues." Annual Conference of the Public Affairs Research Council of Louisiana. Baton Rouge, Louisiana. March 25, 1997.

116. "Electric Restructuring: Louisiana Issues and Outlook for 1997." Louisiana State University, Center for Energy Studies Industry Associates Meeting, Baton Rouge, Louisiana, January 15, 1997.

117. "Restructuring the Electric Utility Industry." Louisiana Propane Gas Association Annual Meeting, Alexandria, Louisiana, December 12, 1996.

118. "Deregulating the Electric Utility Industry." Eighth Annual Economic Development Summit, Baton Rouge, Louisiana, November 21, 1996.

119. "Electric Utility Restructuring in Louisiana." Jennings Rotary Club, Jennings, Louisiana, November 19, 1996.

120. "Electric Utility Restructuring in Louisiana." Entergy Services, Transmission and Distribution Division, Energy Centre, New Orleans, Louisiana, September 12, 1996

121. "Electric Utility Restructuring" Louisiana Electric Cooperative Association, Baton Rouge, Louisiana, August 27, 1996.

122. "Electric Utility Restructuring – Background and Overview." Louisiana Public Service Commission, Baton Rouge, Louisiana, August 14, 1996.

123. "Electric Utility Restructuring." Sunshine Rotary Club Meetings, Baton Rouge, Louisiana, August 8, 1996.

124. Roundtable Moderator, "Stakeholder Perspectives on Electric Utility Stranded Costs." Louisiana State University, Center for Energy Studies Seminar on Electric Utility Restructuring in Louisiana, Baton Rouge, May 29, 1996.

125. Panelist, "Deregulation and Competition." American Nuclear Society: Second Annual Joint Louisiana and Mississippi Section Meetings, Baton Rouge, Louisiana, April 20, 1996.

EXPERT WITNESS, LEGISLATIVE, AND PUBLIC TESTIMONY; EXPERT REPORTS, RECOMMENDATIONS, AND AFFIDAVITS

1. Expert Testimony. Before the Tennessee Regulatory Authority. Docket 09-00104. In the Matter of the Petition of Piedmont Natural Gas Company, Inc. to Implement a Margin Decoupling Tracker Rider and Related Energy Efficiency and Conservation Programs. On the Behalf of the Tennessee Attorney General, Consumer Advocate & Protection Division. Issues: revenue decoupling, energy efficiency program review.

2. Expert Testimony. Before the Nebraska Public Service Commission. Docket Number NG-0060. In the Matter of SourceGas Distribution, LLC Approval for a General Rate Increase. On the Behalf of the Nebraska Public Advocate. October 29, 2009. Issues: revenue decoupling, inflation trackers, infrastructure replacement riders, customer adjustment rider, weather normalization rider, weather normalization adjustments, estimation of normal weather for ratemaking purposes.

3. Expert Report and Deposition. Before the 23rd Judicial District Court, Parish of Assumption, State of Louisiana. On the Behalf of Dow Hydrocarbons and Resources, Inc. September 1, 2009. (Deposition, November 23-24, 2009). Issues: replacement and repair costs for underground salt cavern hydrocarbon storage.

4. Expert Testimony. D.P.U. 09-30. Before the Massachusetts Department of Public Utilities. In the Matter of Bay State Gas Company Request for Increase in Rates. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Revenue decoupling; target infrastructure replacement program rider; revenue distribution; and rate design.

5. Expert Testimony. Docket EO09030249. Before the New Jersey Board of Public Utilities. In the Matter of the Petition of Public Service Electric and Gas Company for Approval of a Solar Loan II Program and An Associated Cost Recovery Mechanism. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: solar energy market design, renewable portfolio standards, solar energy, and renewable financing/loan program design.

6. Expert Testimony. Docket EO0920097. Before the New Jersey Board of Public Utilities. In the Matter of the Verified Petition of Rockland Electric Company for Approval of an SREC-Based Financing Program and An Associated Cost Recovery Mechanism. On the Behalf of the

Department of the Public Advocate, Division of Rate Counsel. Issues: solar energy market design; renewable energy portfolio standards; solar energy.

7. Expert Rebuttal Report. Civil Action No.: 2:07-CV-2165. (2009). Before the U.S. District Court, Western Division of Louisiana, Lake Charles Division. Prepared on the Behalf of the Transcontinental Pipeline Corporation. Issues: expropriation and industrial use of property.

8. Expert Testimony. Docket EO06100744. (2008). Before the New Jersey Board of Public Utilities. In the Matter of the Renewable Portfolio Standard – Amendments to the Minimum filing Requirements for Energy Efficiency, Renewable Energy, and Conservation Programs and For Electric Distribution Company Submittals of Filings in connection with Solar Financing (Atlantic City Electric Company). On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: Solar energy market design; renewable energy portfolio standards; solar energy. (Rebuttal and Surrebuttal)

9. Expert Testimony. Docket EO08090840. (2008). Before the New Jersey Board of Public Utilities. In the Matter of the Renewable Portfolio Standard – Amendments to the Minimum filing Requirements for Energy Efficiency, Renewable Energy, and Conservation Programs and For Electric Distribution Company Submittals of Filings in connection with Solar Financing (Jersey Central Power & Light Company). On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: Solar energy market design; renewable energy portfolio standards; solar energy. (Rebuttal and Surrebuttal)

10. Expert Testimony. Docket UG-080546. (2008). Before the Washington Utilities and Transportation Commission. On the Behalf of the Washington Attorney General (Public Counsel Section). Issues: Rate Design, Cost of Service, Revenue Decoupling, Weather Normalization.

11. Congressional Testimony. (2008). Senate Republican Conference: Panel on Offshore Drilling in the Restricted Areas of the Outer Continental Shelf. September 18, 2008.

12. Expert Testimony. Appeal Number 2007-125 and 2007-299. (2008). Before the Louisiana Tax Commission. On the Behalf of Jefferson Island Storage and Hub, LLC (AGL Resources). Issues: Valuation Methodologies, Underground Storage Valuation, LTC Guidelines and Policies, Public Purpose of Natural Gas Storage. July 15, 2008 and August 20, 2008.

13. Expert Testimony. Docket Number 07-057-13. (2008). Before the Utah Public Service Commission. In the Matter of the Application of Questar Gas Company to File a General Rate Case. On the Behalf of the Utah Committee of Consumer Services. Issues: Cost of Service, Rate Design. August 18, 2008 (Direct, Rebuttal, Surrebuttal).

14. Rulemaking Testimony. (2008). Before the Louisiana Tax Commission. Examination of Replacement Cost Tables, Depreciation and Useful Lives for Oil and Gas Properties. Chapter 9 (Oil and Gas Properties) Section. August 5, 2008.

15. Legislative Testimony. (2008). Examination of Proposal to Change Offshore Natural Gas Severance Taxes (HB 326 and Amendments). Joint Finance and Appropriations Committee of the Alabama Legislature. March 13, 2008.

16. Public Testimony. (2007). Issues in Environmental Regulation. Testimony before Gubernatorial Transition Committee on Environmental Regulation (Governor-Elect Bobby Jindal). December 17, 2007.

17. Public Testimony. (2007). Trends and Issues in Alternative Energy: Opportunities for Louisiana. Testimony before Gubernatorial Transition Committee on Natural Resources (Governor-Elect Bobby Jindal). December 13, 2007.
18. Expert Report and Recommendation: Docket Number S-30336 (2007). Before the Louisiana Public Service Commission. In re: Entergy Gulf States, Inc. Application for Approval of Advanced Metering Pilot Program. Issues: pilot program for demand response programs and advanced metering systems.

19. Expert Testimony. Docket EO07040278 (2007). Before the New Jersey Board of Public Utilities. In the Matter of the Petition of Public Service Electric & Gas Company for Approval of a Solar Energy Program and An Associated Cost Recovery Mechanism. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: renewable energy market development, solar energy development, SREC markets, rate impact analysis, cost recovery issues.

20. Expert Testimony: Docket Number 05-057-T01 (2007). Before the Utah Public Service Commission. In the Matter of: Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for Approval of the Conservation Enabling Tariff Adjustment Options and Accounting Orders. On the behalf of the Utah Committee of Consumer Services. Issues: Revenue Decoupling, Demand-side Management; Energy Efficiency policies. (Direct, Rebuttal, and Surrebuttal Testimony)

21. Expert Testimony (Non-sworn rulemaking testimony) Docket Number RR-2008, (2007). Before the Louisiana Tax Commission. In re: Commission Consideration of Amendment and/or Adoption of Tax Commission Real/Personal Property Rules and Regulations. Issues: Louisiana oil and natural gas production trends, appropriate cost measures for wells and subsurface property, economic lives and production decline curve trends.

22. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29213 & 29213-A, ex parte, (2007). Before the Louisiana Public Service Commission. In re: In re: Investigation to determine if it is appropriate for LPSC jurisdictional electric utilities to provide and install time-based meters and communication devices for each of their customers which enable such customers to participate in time-based pricing rate schedules and other demand response programs. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: demand response programs, advanced meter systems, cost recovery issues, energy efficiency issues, regulatory issues.

23. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29712, ex parte, (2007) Before the Louisiana Public Service Commission. In re: Investigation into the ratemaking and generation planning implications of nuclear construction in Louisiana. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: nuclear cost power plant development, generation planning issues, and cost recovery issues.

24. Expert Testimony, Case Number U-14893, (2006). Before the Michigan Public Service

Commission. In the Matter of SEMCO Energy Gas Company for Authority to Redesign and Increase Its Rates for the Sale and Transportation of Natural Gas In its MPSC Division and for Other Relief. On the behalf of the Michigan Attorney General. Issues: Rate Design, revenue decoupling, financial analysis, demand-side management program and energy efficiency policy. (Direct and Rebuttal Testimony).

25. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29380, ex parte, (2006). Before the Louisiana Public Service Commission. In re: An Investigation Into the Ratemaking and Generation Planning Implications of the U.S. EPA Clean Air Interstate Rule. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: environmental regulation and cost recovery; allowance allocations and air credit markets; ratepayer impacts of new environmental regulations.

26. Expert Affidavit Before the Louisiana Tax Commission (2006). On behalf of ANR Pipeline, Tennessee Gas Transmission and Southern Natural Gas Company. Issues: Competitive nature of interstate and intrastate transportation services.

27. Expert Affidavit Before the 19th Judicial District Court (2006). Suit Number 491,453 Section 26. On behalf of Transcontinental Pipeline Corporation, et.al. Issues: Competitive nature of interstate and intrastate transportation services.

28. Expert Testimony: Docket Number 05-057-T01 (2006). Before the Utah Public Service Commission. In the Matter of: Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for Approval of the Conservation Enabling Tariff Adjustment Options and Accounting Orders. On the behalf of the Utah Committee of Consumer Services. Issues: Revenue Decoupling, Demand-side Management; Energy Efficiency policies. (Rebuttal and Supplemental Rebuttal Testimony)

29. Legislative Testimony (2006). Senate Committee on Natural Resources. Senate Bill 655 Regarding Remediation of Oil and Gas Sites, Legacy Lawsuits, and the Deterioration of State Drilling.

30. Expert Report: Rulemaking Docket (2005). Before the New Jersey Bureau of Public Utilities. In re: Proposed Rulemaking Changes Associated with New Jersey's Renewable Portfolio Standard. Expert Report. The Economic Impacts of New Jersey's Proposed Renewable Portfolio Standard. On behalf of the New Jersey Office of Ratepayer Advocate. Issues: Renewable Portfolio Standards, rate impacts, economic impacts, technology cost forecasts.

31. Expert Testimony: Docket Number 2005-191-E. (2005). Before the South Carolina Public Service Commission. On behalf of NewSouth Energy LLC. In re: General Investigation Examining the Development of RFP Rules for Electric Utilities. Issues: Competitive bidding; merchant development. (Direct and Rebuttal Testimony).

32. Expert Testimony: Docket No. 05-UA-323. (2005). Before the Mississippi Public Service Commission. On the behalf of Calpine Corporation. In re: Entergy Mississippi's Proposed Acquisition of the Attala Generation Facility. Issues: Asset acquisition; merchant power development; competitive bidding.

33. Expert Testimony: Docket Number 050045-EI and 050188-EI. (2005). Before the Florida

Public Service Commission. On the behalf of the Citizens of the State of Florida. In re: Petition for Rate Increase by Florida Power & Light Company. Issues: Load forecasting; O&M forecasting and benchmarking; incentive returns/regulation.

34. Expert Testimony (non-sworn, rulemaking): Comments on Decreased Drilling Activities in Louisiana and the Role of Incentives. (2005). Louisiana Mineral Board Monthly Docket and Lease Sale. July 13, 2005

35. Legislative Testimony (2005). Background and Impact of LNG Facilities on Louisiana. Joint Meeting of Senate and House Natural Resources Committee. Louisiana Legislature. May 19, 2005.

36. Public Testimony. Docket No. U-21453. (2005). Technical Conference before the Louisiana Public Service Commission on an Investigation for a Limited Industrial Retail Choice Plan.

37. Expert Testimony: Docket No. 2003-K-1876. (2005). On Behalf of Columbia Gas Transmission. Expert Testimony on the Competitive Market Structure for Gas Transportation Service in Ohio. Before the Ohio Board of Tax Appeals.

38. Expert Report and Testimony: Docket No. 99-4490-J, *Lafayette City-Parish Consolidated Government, et. al. v. Entergy Gulf States Utilities, Inc. et. al.* (2005, 2006). On behalf of the City of Lafayette, Louisiana and the Lafayette Utilities Services. Expert Rebuttal Report of the Harborfront Consulting Group Valuation Analysis of the LUS Expropriation. Filed before 15th Judicial District Court, Lafayette, Louisiana.

39. Expert Testimony: ANR Pipeline Company v. Louisiana Tax Commission (2005), Number 468,417 Section 22, 19th Judicial District Court, Parish of East Baton Rouge, State of Louisiana Consolidated with Docket Numbers: 480,159; 489,776;480,160; 480,161; 480,162; 480,163; 480,373; 489,776; 489,777; 489,778;489,779; 489,780; 489,803; 491,530; 491,744; 491,745; 491,746; 491,912;503,466; 503,468; 503,469; 503,470; 515,414; 515,415; and 515,416. In re: Market structure issues and competitive implications of tax differentials and valuation methods in natural gas transportation markets for interstate and intrastate pipelines.

40. Expert Report and Recommendation: Docket No. U-27159. (2004). On Behalf of the Louisiana Public Service Commission Staff. Expert Report on Overcharges Assessed by Network Operator Services, Inc. Before the Louisiana Public Service Commission.

41. Expert Testimony: Docket Number 2004-178-E. (2004). Before the South Carolina Public Service Commission. On behalf of Columbia Energy LLC. In re: Rate Increase Request of South Carolina Electric and Gas. (Direct and Surrebuttal Testimony)

42. Expert Testimony: Docket Number 040001-EI. (2004). Before the Florida Public Service Commission. On behalf of Power Manufacturing Systems LLC, Thomas K. Churbuck, and the Florida Industrial Power Users Group. In re: Fuel Adjustment Proceedings; Request for Approval of New Purchase Power Agreements. Company examined: Florida Power & Light Company.

43. Expert Affidavit: Docket Number 27363. (2004). Before the Public Utilities Commission of Texas. Joint Affidavit on Behalf of the Cities of Texas and the Staff of the Public Utilities

Commission of Texas Regarding Certified Issues. In Re: Application of Valor Telecommunications, L.P. For Authority to Establish Extended Local Calling Service (ELCS) Surcharges For Recovery of ELCS Surcharge.

44. Expert Report and Testimony. Docket 1997-4665-PV, 1998-4206-PV, 1999-7380-PV, 2000-5958-PV, 2001-6039-PV, 2002-64680-PV, 2003-6231-PV. (2003) Before the Kansas Board of Tax Appeals. (2003). In the Matter of the Appeals of CIG Field Services Company from orders of the Division of Property Valuation. On the Behalf of CIG Field Services. Issues: the competitive nature of natural gas gathering in Kansas.

45. Expert Report and Testimony: Docket Number U-22407. Before the Louisiana Public Service Commission (2002). On the Behalf of the Louisiana Public Service Commission Staff. Company examined: Louisiana Gas Services, Inc. Issues: Purchased Gas Acquisition audit, fuel procurement and planning practices.

46. Expert Testimony: Docket Number 000824-EI. Before the Florida Public Service Commission. (2002). On the Behalf of the Citizens of the State of Florida. Company examined: Florida Power Corporation. Issues: Load Forecasts and Billing Determinants for the Projected Test Year.

47. Public Testimony: Louisiana Board of Commerce and Industry (2001). Testimony on the Economic Impacts of Merchant Power Generation.

48. Expert Testimony: Docket Number 24468. (2001). On the Behalf of the Texas Office of Public Utility Counsel. Public Utility Commission of Texas Staff's Petition to Determine Readiness for Retail Competition in the Portion of Texas Within the Southwest Power Pool. Company examined: AEP-SWEPCO.

49. Expert Report. (2001) On Behalf of David Liou and Pacific Richland Products, Inc. to Review Cogeneration Issues Associated with Dupont Dow Elastomers, L.L.C. (DDE) and the Dow Chemical Company (Dow).

50. Expert Testimony: Docket Number 01-1049, Docket Number 01-3001. (2001) On behalf the Nevada Office of Attorney General, Bureau of Consumer Protection. Petition of Central Telephone Company-Nevada D/b/a Sprint of Nevada and Sprint Communications L.P. for Review and Approval of Proposed Revised Performance Measures and Review and Approval of Performance Measurement Incentive Plans. Before the Public Utilities Commission of Nevada.

51. Expert Affidavit: Multiple Dockets (2001). Before the Louisiana Tax Commission. On the Behalf of Louisiana Interstate Pipeline Companies. Testimony on the Competitive Nature of Natural Gas Transportation Services in Louisiana.

52. Expert Affidavit before the Federal District Court, Middle District of Louisiana (2001). Issues: Competitive Nature of the Natural Gas Transportation Market in Louisiana. On behalf of a Consortium of Interstate Natural Gas Transportation Companies.

53. Public Testimony: Louisiana Board of Commerce and Industry (2001). Testimony on the Economic and Ratepayer Benefits of Merchant Power Generation and Issues Associated with

Tax Incentives on Merchant Power Generation and Transmission.

54. Expert Testimony: Docket Number 01-1048 (2001). Before the Public Utilities Commission of Nevada. On the Behalf of the Nevada Office of the Attorney General, Bureau of Consumer Protection. Company analyzed: Nevada Bell Telephone Company. Issues: Statistical Issues Associated with Performance Incentive Plans.

55. Expert Testimony: Docket 22351 (2001). Before the Public Utility Commission of Texas. On the Behalf of the City of Amarillo. Company analyzed: Southwestern Public Service Company. Issues: Unbundled cost of service, affiliate transactions, load forecasting.

56. Expert Testimony: Docket 991779-EI (2000). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Competitive Nature of Wholesale Markets, Regional Power Markets, and Regulatory Treatment of Incentive Returns on Gains from Economic Energy Sales.

57. Expert Testimony: Docket 990001-EI (1999). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Regulatory Treatment of Incentive Returns on Gains from Economic Energy Sales.

58. Expert Testimony: Docket 950495-WS (1996). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Company analyzed: Southern States Utilities, Inc. Issues: Revenue Repression Adjustment, Residential and Commercial Demand for Water Service.

59. Legislative Testimony. Louisiana House of Representatives, Special Subcommittee on Utility Deregulation. (1997). On Behalf of the Louisiana Public Service Commission Staff. Issue: Electric Restructuring.

60. Expert Testimony: Docket 940448-EG – 940551-EG (1994). Before the Florida Public Service Commission. On the Behalf of the Legal Environmental Assistance Foundation. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Comparison of Forecasted Cost-Effective Conservation Potentials for Florida.

61. Expert Testimony: Docket 920260-TL, (1993). Before the Florida Public Service Commission. On the Behalf of the Florida Public Service Commission Staff. Company analyzed: BellSouth Communications, Inc. Issues: Telephone Demand Forecasts and Empirical Estimates of the Price Elasticity of Demand for Telecommunication Services.

62. Expert Testimony: Docket 920188-TL, (1992). Before the Florida Public Service Commission. On the Behalf of the Florida Public Service Commission Staff. Company analyzed: GTE-Florida. Issues: Telephone Demand Forecasts and Empirical Estimates of the Price Elasticity of Demand for Telecommunication Services.

REFEREE AND EDITORIAL APPOINTMENTS

Referee, 1995-Current, *Energy Journal*
Contributing Editor, 2000-Current, *Oil, Gas and Energy Quarterly*
Referee, 2005, *Energy Policy*
Referee, 2004, *Southern Economic Journal*
Referee, 2002, *Resource & Energy Economics*
Committee Member, IAEE/USAEE Student Paper Scholarship Award Committee, 2003

PROPOSAL TECHNICAL REVIEWER

California Energy Commission, Public Interest Energy Research (PIER) Program (1999).

PROFESSIONAL ASSOCIATIONS

American Economic Association, American Statistical Association, Econometric Society, Southern Economic Association, Western Economic Association, and the International Association of Energy Economists.

HONORS AND AWARDS

National Association of Regulatory Utility Commissioners (NARUC). Best Paper Award for papers published in the *Journal of Applied Regulation* (2004).

Baton Rouge Business Report, Selected as "Top 40 Under 40" (2003).

Omicron Delta Epsilon (1992-Current)

Interstate Oil and Gas Compact Commission (IOGCC) "Best Practice" Award for Research on the Economic Impact of Oil and Gas Activities on State Leases for the Louisiana Department of Natural Resources (2003).

Distinguished Research Award, Academy of Legal, Ethical and Regulatory Issues, Allied Academics (2002).

Florida Public Service Commission, Staff Excellence Award for Assistance in the Analysis of Local Exchange Competition Legislation (1995).

TEACHING EXPERIENCE

Principles of Microeconomic Theory
Principles of Macroeconomic Theory
Lecturer, Environmental Management and Permitting. Lecture in Natural Gas Industry, LNG and Markets.
Lecturer, Electric Power Industry Environmental Issues, Field Course on Energy and the Environment. (Dept of Environmental Studies).
Lecturer, Electric Power Industry Trends, Principles Course in Power Engineering (Dept. of Electric

Engineering).

Continuing Education. Electric Power Industry Restructuring for Energy Professionals.

"The Gulf Coast Energy Situation: Outlook for Production and Consumption." Educational Course and Lecture Prepared for the Foundation for American Communications and the Society for Professional Journalists, New Orleans, LA, December 2, 2004

"The Impact of Hurricane Katrina on Louisiana's Energy Infrastructure and National Energy Markets." Educational Course and Lecture Prepared for the Foundation for American Communications and the Society for Professional Journalists, Houston, TX, September 13, 2005.

THESIS/DISSERTATIONS COMMITTEES

5 Thesis Committee Memberships (Environmental Studies, Geography)
3 Doctoral Committee Memberships (Information Systems & Decision Sciences, Agricultural and Resource Economics, Economics).
1 Doctoral Examination Committee Membership (Information Systems & Decision Sciences)
1 Senior Honors Thesis (Journalism, Loyola University)

LSU SERVICE AND COMMITTEE MEMBERSHIPS

Steering Committee Member, LSU Coastal Marine Institute (2009-Current).

CES Promotion Committee, Division of Radiation Safety (2006).

Search Committee Chair (2006), Research Associate 4 Position.

Search Committee Member (2005), Research Associate 4 Position.

Search Committee Member (2005), CES Communications Manager.

LSU Graduate Research Faculty, Associate Member (1997-2004); Full Member (2004-Current)

LSU Faculty Senate (2003-2006)

Conference Coordinator. (2005-Current) Center for Energy Studies Conference on Alternative Energy.

LSU CES/SCE Public Art Selection Committee (2003-2005).

Conference Coordinator. Center for Energy Studies Annual Energy Conference/Summit. (2003-Current).

Conference Coordinator. Center for Energy Studies Seminar Series on Electric Utility Restructuring and Wholesale Competition. (1996-2003).

Co-Chairman, Review Committee, Louisiana Port Construction and Development Priority Program Rules and Regulations, On Behalf of the LSU Ports and Waterways Institute. (1997).

LSU Main Campus Cogeneration/Turbine Project, (1999-2000).

LSU InterCollege Environmental Cooperative. (1999-2001).

LSU Faculty Senate Committee on Public Relations (1997-1999).

LSU Faculty Senate Committee on Student Retention and Recruitment (1999-2003).

PROFESSIONAL SERVICE

Advisor (2008). National Association of Regulatory Utility Commissioners ("NARUC"). Study Committee on the Impact of Executive Drilling Moratoria on Federal Lands.

Steering Committee Member, Louisiana Representative (2008-Current). Southeast Agriculture & Forestry Energy Resources Alliance. Southern Policies Growth Board.

Advisor (2007-Current). National Association of State Utility Consumer Advocates ("NASUCA"), Natural Gas Committee.

Program Committee Chairman (2007-2008). U.S. Association of Energy Economics ("USAEE") Annual Conference, New Orleans, LA

Finance Committee Chairman (2007-2008). USAEE Annual Conference, New Orleans, LA

Committee Member (2006), International Association for Energy Economics ("IAEE") Nominating Committee.

Founding President (2005-2007) Louisiana Chapter, USAEE.

Secretary (2001) Houston Chapter, USAEE.

Advisor, Louisiana LNG Buyers/Developers Summit, Office of the Governor/Louisiana Department of Economic Development/Louisiana Department of Natural Resources, and Greater New Orleans, Inc. (2004).

129 FERC ¶ 61,016
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, and Philip D. Moeller.

Florida Blackout Docket No. IN08-5-000

ORDER APPROVING STIPULATION AND CONSENT AGREEMENT

(Issued October 8, 2009)

1. The Commission approves the attached Stipulation and Consent Agreement (Agreement) between the Office of Enforcement (Enforcement), the North American Electric Reliability Corporation (NERC) and Florida Power and Light Company (FPL). This order is in the public interest because it resolves on fair and reasonable terms the investigation as to FPL conducted by Enforcement, the Commission's Office of Electric Reliability and NERC into possible violations of Reliability Standards associated with the Bulk Electric System (BES) load loss event in the State of Florida on February 26, 2008, more commonly referred to as the "Florida Blackout."[1]

2. FPL has agreed to pay a civil penalty of $25,000,000. $10,000,000 shall be paid each to the United States Treasury and NERC and $5,000,000 may be spent, subject to Commission staff and NERC staff approval, by FPL on BES reliability enhancement measures that go above and beyond the Agreement's reliability compliance commitments or what the Reliability Standards require. Moreover, as stated in the Agreement, FPL is adding significant additional protection redundancy at several transmission stations. Also, in the Agreement, FPL has committed to undertake numerous specific reliability enhancement measures (apart from the $5,000,000 in expenditures noted above) including: enhancing its compliance program; enhancing training and certification requirements for operating employees; improving its frequency response; updating emergency operating procedures; providing additional staffing for BES analysis; and ensuring that specified equipment is properly inspected and maintained. FPL has also agreed to make quarterly progress reports to Enforcement and NERC and conduct an independent audit after one year following the Agreement to ensure compliance with the Agreement. These compliance and mitigation measures are in addition to numerous

[1] In *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242 (2007), P 75, the Commission stated that it would rely, at least for an initial period, on the NERC definition of "bulk electric system" to define the scope of facilities subject to the Reliability Standards.

actions taken by FPL on its own initiative after the event and during the course of staff's investigation.

Background

3. FPL is a public utility with transmission, distribution, and generation operations serving approximately 4.5 million customer accounts in Florida. Among other things, FPL is registered as Balancing Authority, Planning Authority, Transmission Owner, Transmission Operator, and Transmission Service Provider by NERC and is responsible for compliance with the Reliability Standards associated with those functions.

4. Florida Reliability Coordinating Council (FRCC) is a not-for-profit company incorporated in Florida. Along with serving as a "Regional Entity" responsible for proposing and enforcing Reliability Standards within its region, FRCC also performs various member services including functioning as the Reliability Coordinator (RC) under the Reliability Standards. As an RC, FRCC has the responsibility and authority for the reliable operation of the BES within FRCC and compliance with associated Reliability Standards. FRCC performs this function through a contract with FPL, by which FPL executes the RC function through FPL control room personnel. FPL also holds a substantial share of the membership of FRCC with respect to the member services functions.

5. On February 26, 2008, portions of the lower two-thirds of the State of Florida experienced a loss of load event more commonly referred to as the Florida Blackout. The event led to the loss of 22 transmission lines, 4,300 MW of generation, and 3,650 MW of customer service or load. In response to the event, the Commission publicly announced a formal non-public investigation into the cause and events surrounding the blackout.[2]

6. The event originated at the Flagami Substation on the FPL system when a field engineer was diagnosing a piece of BES transmission equipment that had previously malfunctioned. Specifically, on February 23, 2008 and February 24, 2008, when the FPL Load Dispatcher on duty in the FPL control center in Miami attempted to initiate separating one of the shunt reactors (a voltage control device) at Flagami from the 138kV bus by opening the associated circuit switcher, a lock-out relay for the reactor tripped the associated breaker. The relays were reset and the circuit switcher was tagged "emergency use only."

7. On February 26, 2008, a FPL Protection and Control (P&C) Engineer was sent to test the circuit switcher at Flagami. Once there, he disabled the primary protection and the breaker failure protection (considered the secondary level of protection). The P&C Engineer did not notify the Load Dispatcher on duty in the FPL control center that he had

[2] *Order of Non-Public, Formal Investigation*, 122 FERC ¶ 61,244 (2008).

disabled the second level of protection and neither the System Operator on duty in the FPL Control Center nor the RC were aware that any protection had been disabled.

8. At the request of the P&C Engineer, the Load Dispatcher then opened the circuit switcher, and due to the failure of the circuit switcher's bottle interrupter, a fault on the system occurred. The fault caused a 17-19 second arc which spread to the adjacent shunt reactor's circuit switcher, which in turn caused a three phase fault on the 138 kV system. Because the primary and secondary levels of protection were disabled, the fault was cleared remotely in approximately 1.7 seconds. This resulted in significant frequency swings, voltage excursions and tripping of transmission and generation around portions of the lower two-thirds of Florida.

Applicable Reliability Standards

9. On March 16, 2007, the Commission approved the first Reliability Standards,[3] submitted by NERC, pursuant to section 215 of the Federal Power Act.[4] Those categories of Reliability Standards applicable to the Agreement are described below:

10. The Balancing (BAL) group of Reliability Standards address balancing resources and demand to maintain interconnection frequency within prescribed limits.[5]

11. The Communications (COM) group of Reliability Standards require adequate internal and external telecommunications facilities and that these communication facilities be staffed and available to address real-time emergencies and that operating personnel carry out effective communications.[6]

12. The Emergency Preparedness and Operations (EOP) group of Reliability Standards address preparation for emergencies, necessary actions during emergencies and system restoration and reporting following disturbances.[7]

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[3] *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242 (2007).

[4] 16 U.S.C. § 824o (2006).

[5] *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, P 305 (2007).

[6] *Id.* P 472.

[7] *Id.* P 541.

13. The Personnel Performance, Training and Qualifications (PER) group of Reliability Standards are intended to ensure the retention of suitably trained and qualified personnel in positions that can impact the reliable operation of the BES.[8]

14. Protection and Control (PRC) group of Reliability Standards cover a wide range of topics related to the protection and control of power systems.[9]

15. The Transmission Operations (TOP) group of Reliability Standards ensure that the transmission system is operated within operating limits and specifically cover the responsibilities and decision-making authority for reliable operations, requirements for operations planning, planned outage coordination, real-time operations, provision of operating data, monitoring of system conditions, reporting of operating limit violations and actions to mitigate such violations.[10]

16. The Transmission Planning (TPL) group of Reliability Standards ensure that the transmission system is planned and designed to meet an appropriate and specific set of reliability criteria.[11]

Stipulation and Consent Agreement

17. Enforcement and NERC allege that FPL violated Reliability Standards in the BAL, COM, EOP, PER, PRC, TOP, and TPL areas. FPL does not admit that its actions constituted violations of the Reliability Standards.

18. The Agreement provides for a substantial civil penalty in the amount of $25,000,000 that reflects the seriousness and nature of the event and yet takes account of efforts to remedy the violations. This amount is to be paid in a manner that reflects the dual nature of this investigation which both the Commission and NERC conducted and in recognition that some amount of expenditure above the requirements of the Reliability Standards on additional reliability measures is in the public interest. Accordingly, FPL shall pay $10,000,000 each to the United States Treasury and NERC and $5,000,000 may be spent, subject to Commission staff and NERC staff approval, by FPL on Bulk Electric System (BES) reliability enhancement measures that go above and beyond the reliability compliance commitments that are also a significant feature of the Agreement or what the Reliability Standards require. If FPL has not spent or committed to spend for approved projects all of the $5,000,000 amount within three years of the Effective Date of the

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[8] *Id.* P 1324.

[9] *Id.* P 1418.

[10] *Id.* P 1567.

[11] *Id.* P 1683.

Agreement, the amount or any remainder of the amount shall be paid and divided equally between the U.S. Treasury and NERC. Also, except as required by law, this amount may not be deducted or otherwise treated favorably to FPL for tax purposes nor recovered in rates by FPL.

19. The Agreement also provides for substantial, wide ranging, and specific reliability enhancement measures (apart from the $5,000,000 in expenditures noted above) that are a significant element to the resolution of this matter. These include FPL committing to: enhance its overall electric reliability compliance program; enhance training and certification requirements for operating employees; improve its system's frequency response performance; update its emergency operating procedures; provide additional staffing for BES analysis; and ensure that specified equipment is properly inspected and maintained. FPL has also agreed to make quarterly progress reports to Enforcement and NERC and conduct an independent audit after one year following the Agreement to ensure compliance with the Agreement. These compliance and mitigation measures are in addition to numerous actions taken by FPL on its own initiative after the event and during the course of staff's investigation.

20. In assessing the appropriate remedy, staff considered the serious nature of the event and its impact on the BES. As the Agreement stipulates, this was a serious outage. On the other hand, staff also considered that FPL's actions were neither intentional nor fraudulent and that FPL demonstrated exemplary cooperation throughout the investigation. Also, FPL implemented voluntarily many reliability enhancement measures immediately following the event and throughout the investigation.

Determination of the Appropriate Sanctions and Remedies

21. We conclude that the penalty set forth in the Agreement is a fair and equitable resolution of this matter and is in the public interest, as it reflects the nature and seriousness of FPL's alleged conduct and the event as well as the efforts taken by FPL to remedy the alleged violations, recognizing the company specific considerations as stated above and in the attached Agreement. We also conclude that, under the specific circumstances of this case, the payment provisions relating to the civil penalty reflect a balanced and sensible approach, including a portion to be paid to NERC and the allowance of a limited portion of the civil penalty to be spent by FPL to provide additional reliability protections on the FPL portion of the BES. We also conclude that the reliability enhancement measures set forth in the Agreement are substantial, relate directly to the alleged violations, and will enhance BES reliability and are therefore also fair and in the public interest.

The Commission orders:

The attached Stipulation and Consent Agreement is hereby approved without modification.

By the Commission. Commissioners Spitzer and Moeller concurring with separate statements attached.
Commissioner Kelly is not participating.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

2008 Florida Blackout Docket No. IN08-5-000

STIPULATION AND CONSENT AGREEMENT

I. INTRODUCTION

1. Staff of the Office of Enforcement ("Enforcement") of the Federal Energy Regulatory Commission ("Commission"), staff of the North American Electric Reliability Corporation ("NERC") (collectively "staff"), and Florida Power and Light Company ("FPL") enter into this Stipulation and Consent Agreement ("Agreement") to resolve a non-public investigation conducted by Enforcement, staff of the Office of Electric Reliability of the Commission and NERC, pursuant to Part 1b of the Commission's regulations, 18 C.F.R. Part 1b (2008), and NERC's Compliance Monitoring and Enforcement Program into alleged violations of the Reliability Standards by FPL surrounding a loss of load event in Florida on February 26, 2008.

II. STIPULATED FACTS

Enforcement, NERC and FPL hereby stipulate to the following:

2. On February 26, 2008, portions of the lower two-thirds of the Bulk Electric System ("BES") in peninsular Florida experienced a loss of service to electric customers. The event led to the loss of 22 transmission lines, 4,300 MW of generation, and 3,650 MW of customer service or load. Approximately 596,000 FPL customer accounts and 354,000 non-FPL customer accounts were out of service, representing approximately 8% of Florida electric customer accounts. In response to the event, the Commission publicly opened a formal investigation into the cause and events surrounding the blackout. *Order of Non-Public, Formal Investigation*, 122 FERC ¶ 61,244 (2008). NERC also opened a parallel Compliance Violation Investigation (NERC0002CVI).

3. FPL is a public utility with transmission, distribution, and generation operations serving approximately 4.5 million customer accounts in Florida.

4. Based on industry benchmarking studies for the time period January 1, 2006 through December 31, 2008, FPL's distribution reliability, as measured by "SAIDI," ranked in the top decile of performance.

5. The FPL Control Center is located in western Miami. It has two levels, one which includes consoles for five "Load Dispatchers," and another level which includes consoles

for the "System Operator" and "Reliability Coordinator." At the time of the event, Load Dispatchers were responsible for monitoring a specific region and ensuring that proper switching orders and clearances are issued and executed. They are the main contact with Protection and Control ("P&C") Field Engineers. A Readiness Review conducted by the Florida Reliability Coordinating Council ("FRCC") and NERC in March 2004 included a recommendation relating to the Load Dispatchers and System Operator oversight. FPL took actions to address these recommendations in June 2004. A Readiness Review conducted by FRCC and NERC during April 2007 determined that "FPL has taken appropriate actions to implement and satisfactorily resolve all of the recommendations from the 2004 report" and did not identify Load Dispatcher certification as an area of concern. FPL did not require its Load Dispatchers to be NERC certified. The System Operator is responsible for supervising the Load Dispatchers and is charged with directing and implementing actions to ensure the stable and reliable operation of the FPL System. While the System Operator cannot effectively read the Load Dispatchers' monitoring screens from the System Operator desk and at the time of the event did not receive the same alarms on his monitoring screens as the Load Dispatchers, the System Operator can access the same information that is available to the Load Dispatchers from his station. FPL requires its System Operators to be NERC certified. At times, including February 26, 2008, System Operators also fulfill the function of "Reliability Coordinator," which is responsible for overseeing reliability in the entire FRCC region.

6. FPL P&C Field Engineers are responsible for conducting maintenance and troubleshooting on substation equipment. FPL P&C Field Engineers are highly skilled, experienced and trained and hold four year engineering degrees.

7. The Flagami Substation is located in western Miami and is centrally located in the southern portion of the FPL transmission system. The 230 kV/138 kV station contains two 138 kV shunt reactors, which are used to control voltage. Each shunt reactor is connected to the 138kV bus by a circuit switcher, which consists of a Sulfur Hexafluoride (SF_6) gas filled high speed bottle interrupter in series with a low speed air break disconnect switch. The circuit switchers were installed by FPL in 1987 and 1998.

8. In 2001, FPL studied the effects of a fault at Flagami. Based on the results, it added redundant primary bus differential relay protection at Flagami, but determined that it was not necessary to add redundancy around the autotransformer at Flagami.

9. On February 23, 2008 and February 24, 2008, when the Load Dispatcher on duty attempted to initiate separating one of the shunt reactors at Flagami from the 138kV bus by opening the associated circuit switcher, a lock-out relay for the reactor tripped the associated breaker. The relays were reset and the circuit switcher was tagged "emergency use only."

10. On February 26, 2008, a P&C Field Engineer was sent to test the circuit switcher at Flagami. Once there, he disabled the primary protection and the breaker failure protection (considered the secondary level of protection). At this point, the shunt reactor and its associated circuit switcher were operating live on the system with two levels of protection disabled for approximately 37 minutes.

11. The P&C Engineer communicated the disabling of the breaker trip for the primary protection for the shunt reactors to the Load Dispatcher; the Load Dispatcher, when interviewed by staff, indicated that he did not understand that any protection had been disabled. The Field Engineer did not inform the Load Dispatcher that he had disabled the secondary level of protection. The Load Dispatcher did not request authorization for the removal of any levels of protection from the System Operator and did not communicate that one level of protection had been disabled to the System Operator. The System Operator's monitoring equipment did not independently alert him to the disabling of protection by the P&C Field Engineer. The System Operator, unaware of the disabling of protection, did not conduct an assessment of the changed system configurations or take action within 30 minutes in response to the changed condition.

12. The P&C Field Engineer performed a visual inspection of the bottle interrupter per FPL policy, which showed the presence of gas (which normally indicates proper functioning), prior to working on the circuit switcher. At the request of the P&C Field Engineer, the Load Dispatcher then opened the circuit switcher, and due to the failure of the circuit switcher's bottle interrupter, a fault on the system occurred. Subsequent forensic evaluation showed that the metal contacts within the bottle interrupter were fused into in a closed condition due to a connecting rod failure. Also the semaphore indicating low gas in the bottle interrupter had failed, giving a false indication of the presence of gas (and thereby giving a false indication that it was functioning properly) during the P&C Engineer's visual inspection.

13. The fault caused a 17-19 second arc which spread to the adjacent shunt reactor's circuit switcher causing a three phase fault on the 138 kV system. Because the primary and secondary levels of protection were disabled, the fault was cleared remotely in approximately 1.7 seconds. This resulted in significant frequency swings, voltage excursions and tripping of transmission and generation around portions of the lower two-thirds of Florida.

14. Immediately after the fault, the System Operator/Reliability Coordinator assigned the Reliability Coordinator responsibilities to a NERC-certified System Operator present in the Control Center, but not involved in operations that day. The System Operator then focused on restoring the FPL system. At the time of the event, there were four operators NERC-certified at the Reliability Coordinator level in the Control Center.

15. The System Operator then questioned the Load Dispatcher about the problem at Flagami. The Load Dispatcher reported that there had been a reactor fire at Flagami. After noting that Flagami was de-energized, the System Operator ordered all breakers at Flagami open.

16. Of affected firm customers, 56% were restored to service within one hour, 84% were restored within two hours, and all non-interruptible customers were restored within three hours.

17. While not the most significant event the BES has experienced, this was a serious outage.

18. FPL's action were neither intentional nor fraudulent.

19. FPL demonstrated exemplary cooperation throughout the investigation.

20. FPL implemented reliability enhancement measures immediately after the event and throughout the investigation.

21. As part of FPL's ongoing reliability improvements to the system, FPL: (a) is implementing protection redundancy for new transmission substations above 100 kV with in-service dates of 2010 and beyond that is intended to ensure single-points-of-failure on protection systems would not result in N-1 transmission system contingencies from evolving into more severe or extreme events; (b) is adding high speed redundant protection on the autotransformers at Flagami Substation; (c) is implementing protection redundancy for the autotransformers at eight substations that have similar bus arrangements as Flagami (Davis, Ft. Myers, Lauderdale Inner, Lauderdale Outer, Midway, Sanford Plant, Brevard and Ringling)(with two substations completed in each year commencing in 2009); and (d) in the interim period prior to completed in-service dates, is implementing automatic remote monitoring of the protection circuit fuses and developing a procedure for immediate action in the case of an alarm.

III. RESOLUTION

22. Enforcement and NERC alleged that FPL violated Reliability Standards in the BAL, COM, EOP, PER, PRC, TOP, and TPL areas. FPL does not admit that its actions constitute violations of the Reliability Standards or that it committed any violations of the Reliability Standards. Nonetheless, in view of the costs and risks of litigation, and in the interest of resolving all matters in dispute between Enforcement, NERC, and itself regarding the acts in question, FPL agrees to undertake the obligations set forth in this Agreement.

23. This agreement does not constitute an admission of liability or wrongdoing by FPL to any third party and FPL does not consent to the use of this Agreement by any other party in any other proceeding.

24. For purposes of settling any and all civil and administrative disputes arising from Enforcement's and NERC's investigation of FPL, and in lieu of any other remedy that the Commission or NERC might assess, determine, initiate, or pursue, concerning any of the matters referred to above, FPL agrees that after the Commission issues an order approving this Agreement without modification or condition, it shall take the following actions:

A. Civil Penalty

25. FPL shall pay a civil penalty in the amount of $25,000,000. $10,000,000 shall be paid each to the United States Treasury and NERC, within 10 days of the Effective Date. $5,000,000 shall be remitted and FPL may spend it to further enhance the reliability of the BES upon staff approval (which will not be unreasonably withheld) on additional BES reliability enhancement measures not otherwise required under this Agreement or by the reliability standards as in effect on the date of this Agreement. If FPL has not spent or committed to spend for approved projects all of such amount within three years of the Effective Date, the amount or any remainder of the amount shall be paid and split equally between the U.S. Treasury and NERC. Except as required by law, this amount shall not be deducted or otherwise treated favorably to FPL for tax purposes nor recovered in rates by FPL.

B. Reliability Enhancement Measures

26. FPL will adopt the following reliability enhancement measures:

1. *Enhancements to FPL Compliance Program*: Within 6 months of the Effective Date, FPL will undertake incremental enhancements to its existing Reliability Standards compliance program with respect to all FPL owned or operated Bulk Electric System operations. This shall include specified roles for senior management involvement, independent reporting of compliance management to senior executives outside of the business units that plan, operate and maintain BES equipment, internal auditing, accountability for reliability in compensation packages, a compliance hotline, a written reliability compliance manual, and improvements to document databases, processes, and training. In addition, FPL will perform practice audits of all FPL Business Units, including a review of procedures, process flowcharts, and compliance documentation. FPL will also assess NERC compliance education and training for all employees responsible for compliance with the Reliability Standards and implement improvements in

these programs. To execute these enhancements, perform additional training, document control and spot audits to enhance a sustainable culture of compliance, FPL will provide additional employee support for its compliance program. In its quarterly progress reports to the Commission as described below, FPL shall document compliance improvement actions taken to date. Some of the incremental enhancements set forth herein have been undertaken prior to the effectiveness of the Agreement.

2. *Training and Certification:* FPL will enhance training to operating employees staffing the control room on the functionalities and limitations of the protection schemes, emergency operations procedures and the requirement to utilize three part communication protocols of Direct-Repeat-Acknowledge. This training shall address the reliability risks to the BES when a part or all of a protection scheme is removed for maintenance or other purposes. FPL will also provide detailed technical training for field relay testing engineers regarding Protection and Control compliance activities, which will include a phased-in certification program. This training shall address seeking express permission from System Operators before switching or before work can be performed on energized BES facilities and the protection systems. Some of the incremental enhancements set forth herein have been undertaken prior to the effectiveness of the Agreement. In addition, FPL's initiative to NERC-certify all load dispatchers is currently in progress and will be completed per the schedule agreed upon in a separate Remedial Action Directive Settlement with NERC.

3. *Frequency Response*: FPL will implement measures to maintain its average frequency response for any calendar year (measured as being equal to its average frequency response in response to all events, as defined by the Resource Subcommittee of the NERC Operating Committee, that occur during such calendar year) to be as close as reasonably practicable to its frequency bias setting for such calendar year (it being understood that the Company's frequency bias setting is equal to 1% of its maximum peak load). For the purpose of maintaining such frequency response, both generation and load demand response measures will be acceptable. Frequency response measures to meet the above-referenced performance criteria shall include some combination of the following:

    - Modify generating units' droop characteristics.

    - Apply controllable demand response technology (it being understood that such technology that responds in a manner that is substantially similar to the response shown on

example Attachments A-1 and A-2 would be among technology that is considered acceptable for these purposes).

FPL's obligation to maintain such frequency response shall commence in no event later than one year from the Effective Date (as this obligation likely will commence in the midst of a calendar year, the parties agree that only events that occur after the commencement of such obligation through the remainder of such calendar year shall be considered in determining whether FPL has complied with such obligations for such initial calendar year).

4. *Update Emergency Operating Procedures*: FPL will review and modify, as is reasonably necessary, plans to mitigate operating physical emergencies including fires within stations or on BES transmission facilities. These revised procedures will be reviewed by NERC and FERC Staff. Such procedures shall specify a situational assessment to identify and, if possible, isolate the specific portion of the switchyard that is on fire. In the quarterly progress reports to the Commission, FPL shall document actions to be taken to conduct reasonably adequate emergency training of these revised procedures to operators of the BES.

5. *Additional Operations Engineers for BES Analysis*: FPL will staff two additional operations engineers to perform additional BES analysis including increased modeling scenarios for both planning and real-time scenarios as well as day-to-day contingency analysis.

6. *Equipment Maintenance*: To the extent not heretofore done: FPL will review its maintenance practices for Bulk Electric System circuit switchers to assure all such equipment is maintained based on condition assessment and performance monitoring practices that are consistent with standard utility practice. Such condition assessment and maintenance may include a combination of thermography, visual inspection, operational testing, lubrication and adjustment and other means. FPL will, with respect to all 1986 through 1995 S&C Series 2000 circuit switchers, (a) inspect them for potentially defective low gas indicators, (b) to the extent practicable, conduct non-destructive testing of control rods and (c) develop procedures to avoid operation of any switchers that are identified as defective.

7. *Quarterly Progress Reports*: FPL will make quarterly progress reports to FERC and NERC staff before a final independent audit is conducted one year after the Effective Date. The audit will evaluate FPL's compliance with the terms of this Agreement. FERC Staff and FPL shall reasonably

agree on the audit firm, with due regard for the independence of such firm, and any audit recommendations to be implemented.

IV. TERMS OF CONSENT AGREEMENT

27. The Effective Date of this Agreement shall be the date upon which the Commission issues an order approving this Agreement without modification or condition. Given unique circumstances of this case concerning FPL's role with respect to FRCC, staff covenants and agrees that it does not intend to pursue an agreement between staff and FRCC, or other resolution, resolving all or any matters in this same docket pertaining to FRCC (the "FRCC Matters") that includes (a) payments by FRCC that exceed the payments contemplated by the draft agreement that staff has provided (with the knowledge and concurrence of FRCC) to FPL most recently prior to the time of execution this Agreement (the "Current Draft FRCC Agreement") or (b) terms and conditions that are substantively different from, or in addition to, those set forth in the Current Draft FRCC Agreement. Staff covenants and agrees to use best efforts to cause this Agreement to be presented to the Commission for consideration as promptly as practicable following the execution of this Agreement.

28. Unless the Commission issues an order approving the Agreement in its entirety and without modification or condition, the Agreement shall be null and void and of no effect whatsoever, and neither Commission staff, NERC, nor FPL shall be bound by any provision or term of the Agreement, unless otherwise agreed in writing by Commission staff, NERC and FPL.

29. The Agreement shall remain confidential until approved by *each* party and the Commission issues an order approving the Agreement without modification or condition. The Agreement shall be made public only after the Commission's approval without modification or condition.

30. The Agreement binds FPL and its agents, successors and assigns. The Agreement does not create or impose any additional or independent obligations on FPL, or any affiliated entity, its agents, officers, directors or employees, other than the obligations identified in Section III of this Agreement.

31. All information and documents provided by FPL to the Commission and/or NERC as part of the investigation and/or the settlement of the investigation were submitted on a confidential basis and are not information and documents that would normally be disclosed to the public. Aside from the public release of the Agreement after the Commission issues an order approving the Agreement in its entirety and without modification or condition, no information or documents pertaining to the investigation shall be disclosed by the Commission or NERC, except as required by law.

32. In connection with the payment of the civil penalty provided for herein, FPL agrees that the Commission's order approving the Agreement without modification or condition shall be a final order assessing a civil penalty under section 316A(b) of the FPA, 16 U.S.C. § 825o-1(b), as amended. FPL further waives rehearing of any Commission order approving the Agreement without modification or condition, and judicial review by any court of any Commission order approving the Agreement without modification or condition. FPL also waives any rights of appeals provided by the NERC Rules of Procedure.

33. Commission approval of this Agreement without modification or condition shall fully, irrevocably, and unconditionally release FPL, its agents, officers, directors, employees, shareholders, representatives and affiliates, both past and present, and their respective successors and assigns, and forever bar the Commission and NERC from holding or seeking in any forum to hold FPL, its agents, officers, directors, employees, shareholders, representatives and affiliates, both past and present, and their respective successors and assigns liable for any and all direct and/or indirect administrative, civil, criminal or other claims or liability (whether or not now known) arising out of, related to, or connected with the event or the investigation. In further consideration for this release, FPL represents that it is not aware of any cause of the event that was not disclosed to staff during the investigation and which might reasonably be considered to be a violation of any Reliability Standard.

34. Upon the Effective Date of this Agreement, Enforcement's and NERC's investigation of FPL shall terminate in Docket No. IN08-5-000 and NERC0002CVI.

35. Failure to make a timely payment or to comply with any other provision of this Agreement once effective shall be deemed a violation of a final order of the Commission issued pursuant to the FPA, 16 U.S.C. § 792, *et seq.*, and may subject FPL to additional action under the enforcement and penalty provisions of the FPA.

36. If FPL does not make the payment above at or before the time agreed by the parties, interest payable to the United States Treasury and NERC will begin to accrue, pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii), from the date that payment is due.

37. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Enforcement, NERC, or FPL has been made to induce the signatories or any other party to enter into the Agreement.

38. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Agreement on the entity's behalf.

39. The undersigned representative of FPL affirms that he or she has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Agreement is entered into by Enforcement and NERC in express reliance on those representations.

40. The Agreement may be signed in counterparts.

41. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:

Norman C. Bay — 9/25/09

Norman C. Bay
Director, Office of Enforcement
Federal Energy Regulatory Commission

Date

David W. Hilt — 09/25/09

David Hilt
Vice President and Director of Compliance
North American Electric Reliability Corporation

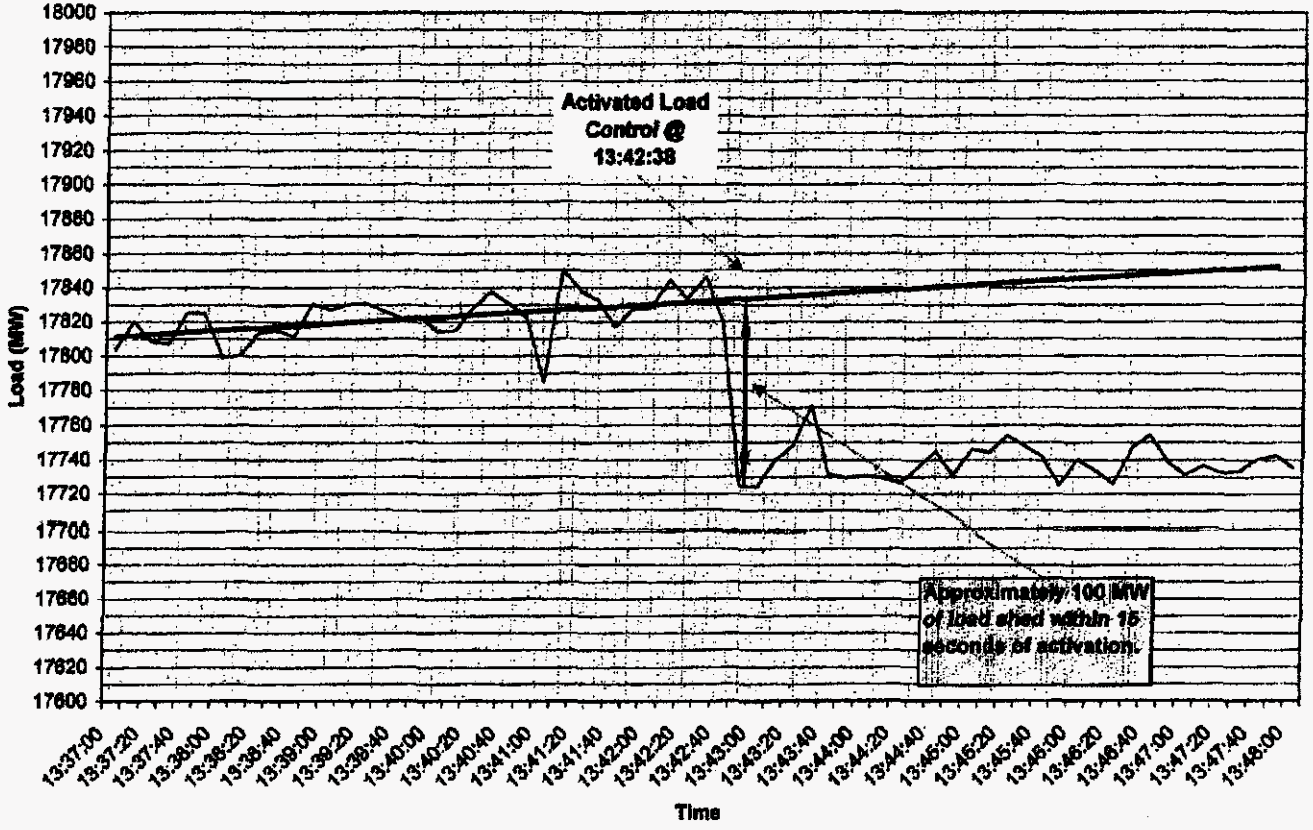
Date

A. J. Olivera — 9/24/09

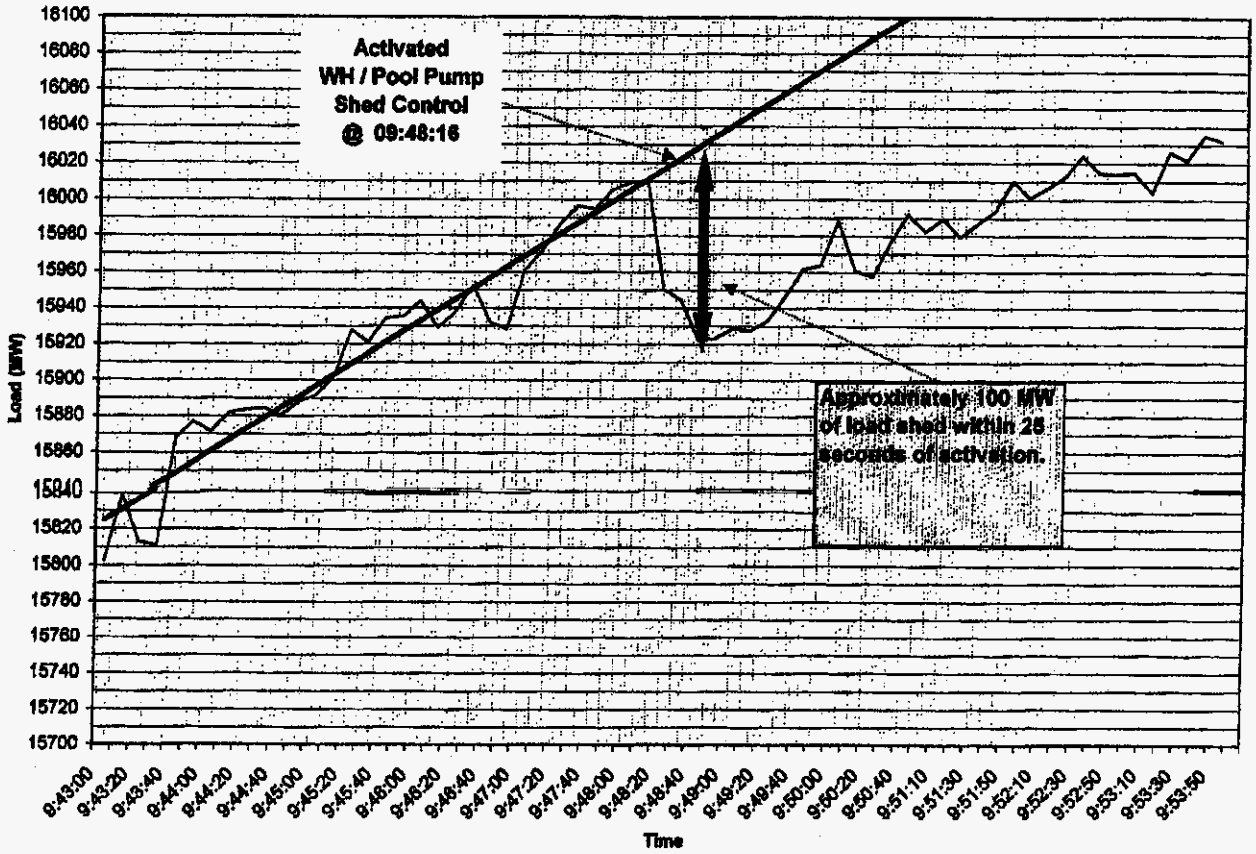
Armando J. Olivera
President and CEO
Florida Power and Light Company

Date

Attachment A - 1
Load Graph - 07-20-2006



Attachment A - 2
Load Graph - 06-22-2007



UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Florida Blackout Docket No. IN08-5-000

(Issued October 8, 2009)

SPITZER, Commissioner, concurring:

I support the Order as a reasonable outcome. However, I write separately to express my concern with a lack of transparency and an absence of clarity in the Order. In light of the importance of our reliability program and compliance with the Reliability Standards, I would have required that the Order identify with specificity the Reliability Standards alleged to have been violated in this matter and how the facts of this case apply to those Reliability Standards. In the future, I expect that all orders on settlements addressing alleged violations of the Reliability Standards will provide this important information.

On February 26, 2008, the lower two-thirds of Florida lost electricity for several hours. That event, which the Order refers to as the Florida Blackout, knocked out 22 transmission lines and 4,300 MW of generation. The Florida Blackout resulted in the loss of 3,560 MW of customer service or load. Clearly, the Florida Blackout was a major event for the system and for consumers. Order P 5, 20.

Today's Order is the outcome of our investigation into Florida Power and Light Company's (FPL) role in the Florida Blackout. We find that the event originated on the FPL system. Order P 6. We outline certain actions of FPL preceding the Florida Blackout. Order P 6-8. However, when it comes to identifying the Reliability Standards that FPL is alleged to have violated with regard to the Florida Blackout – the basis for the Commission's and North American Electric Reliability Corporation's (NERC) investigation into FPL in the first place – the Order merely identifies the *categories* of the relevant Reliability Standards. Order P 17. Although we impose a substantial penalty on FPL and require FPL to enhance its reliability measures through specific mitigation, nowhere does the Order identify with any specificity the Reliability Standards that the Commission and NERC alleged FPL violated in connection with the Florida Blackout. Nowhere does the Order provide an explanation of how the facts support the application of those Reliability Standards in this case.

In the Energy Policy Act of 2005, Congress vested the Commission with the authority to approve and enforce Reliability Standards. Critical to that responsibility are clear rules, regulations and policies. Indeed, as I have explained before, such clarity and transparency is an important means to ensure a meaningful enforcement program. *See, e.g., Tenaska Marketing Ventures, et al.*, 126 FERC ¶ 61,040 at 61,247 (2009) (Spitzer, dissenting).

The problem with today's Order is that, by failing to identify with any specificity the Reliability Standards that FPL is alleged to have violated or how the facts support the application of the Reliability Standards, the Commission fails to provide clarity or transparency to the industry as to what is expected under the relevant Reliability Standards. I appreciate that settlements are case-specific matters rather than industry-wide promulgations. This proceeding, however, is the first reliability enforcement matter in which we impose a substantial penalty and specific mitigation measures in response to a serious outage. Yet we provide no meaningful information as to why the actions taken by FPL leading up to and after the Florida Blackout are, in the Commission's view, violative of the Reliability Standards. We provide no information as to which Reliability Standards caused the Commission and NERC to investigate the matter in the first instance or to impose the penalty and mitigation program herein.

The Commission's enforcement authority, including the imposition of sanctions, is a component of the Commission's mission. However, the Commission's ultimate objective is to promote compliance with our rules, regulations and orders. We best achieve that objective by providing all users, owners and operators of the grid clarity as to how the Commission will apply the Reliability Standards. Today's Order fails to provide that important information.

For these reasons, I respectfully concur in the Order.

_____

Marc Spitzer
Commissioner

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Florida Blackout Docket No. IN08-5-000

(Issued October 8, 2009)

MOELLER, Commissioner, *concurring*:

I respectfully concur in the Order as a reasonable outcome. As I have stated several times, "[t]hose who are subject to Commission penalties need to know, in advance, what they must do to avoid a penalty."[1] For that reason, I agree with Commissioner Spitzer's concurring statement in this case that, "[i]n the future, ... all orders on settlements addressing alleged violations of the Reliability Standards" should, "... identify with specificity the Reliability Standards alleged to have been violated ... and how the facts of [the] case apply to those reliability standards."

Philip D. Moeller
Commissioner

[1] Concurring Opinions of Commissioner Moeller in *Enforcement of Statutes, Regulations, and Orders*, 123 FERC ¶ 61,156 (2008) and *Compliance with Statutes, Regulations, and Orders*, 125 FERC ¶ 61,058 (2008). This statement was repeated in the dissenting opinions of Commissioner Moeller in *Seminole Energy Services, LLC, et al.*, 126 FERC ¶ 61,041 (2009) and *National Fuel Marketing Co., LLC, et al.*, 126 FERC ¶ 61,042 (2009).

PROPOSED RESOLUTION OF ISSUES ("PRI")
DOCKET NO. 090505-EI
DECEMBER 4, 2009

Background

On February 26, 2008, a fault occurred at FPL's Flagami substation in connection with troubleshooting a switch used to connect a shunt inductor to FPL's transmission system. The fault created conditions that, among other things, caused three fossil-fueled generating units and Turkey Point Nuclear Units 3 and 4 to trip offline, which is how they are designed to operate in such a situation. This event is referred to herein as the "Flagami Transmission Event."

The Federal Energy Regulatory Commission ("FERC") and the North American Electric Reliability Council ("NERC") conducted investigations of the Flagami Transmission Event. On October 8, 2009, FPL agreed with FERC and NERC to settle claims that FPL allegedly violated certain FERC and NERC transmission reliability standards. As part of the settlement agreement, FERC does not conclude that FPL violated any reliability standards or laws, and FPL does not admit any violations or liability in connection with the outage.

Docket 090001-EI contained the following issue: "With respect to the February 26, 2008 outages, should FPL or its customers be responsible for replacement power costs associated with the outages?" This docket was opened in November 2009 to address that issue by itself. In light of FPL's agreement herein to bear the cost of replacement power attributable to the Flagami Transmission Event, FPL proposes and the other parties to this PRI agree that the scope of this docket should now be limited to determining the appropriate measure of replacement power costs.

Components of the PRI

FPL will ask the Commission to approve the following, and the other parties to this PRI agree to support FPL's request:

1. FPL agrees to bear the cost of replacement power attributable to the Flagami Transmission Event; provided, however, that:

   a. FPL does not admit imprudence or any other improper action or failure with regard to the Flagami Transmission Event and reserves all of its rights and defenses with respect to the propriety of its actions in connection with the Flagami Transmission Event; and

   b. the appropriate measure of replacement power costs that are attributable to the Flagami Transmission Event remains an issue to be determined by the Commission in this docket.

DOCUMENT NUMBER-DATE
12020 DEC 16 09
FPSC-COMMISSION CLERK

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 13
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-3)
DATE 03/18/10

2. All parties to this PRI and Staff may each take any position that it wishes concerning the proper measure of replacement power costs, if any, that FPL should refund to customers as a result of the Flagami Transmission Event. Testimony and discovery will be limited to the issue of the appropriate measure of replacement power costs.

3. This PRI is a one-time response to an extraordinary situation. All of the parties to this PRI acknowledge, and the Commission finds, that approval of this PRI will establish no precedent with respect to any matter resolved herein.

4. This PRI may be executed in counterparts, and all such counterparts will constitute one instrument binding on the signatories, notwithstanding that all parties may not be signatories to the original or the same counterpart. Facsimile transmission of an executed copy of this PRI will be accepted as evidence of a party's execution of the PRI.

Agreed and accepted on behalf of:

Office of Public Counsel
c/o The Florida Legislature
111 W. Madison Street, Room 812
Tallahassee, FL 32399-1400

By: Charlie Beck
Charlie Beck, Esq.

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

By:
John T. Butler, Esq.

Office of the Attorney General
The Capitol - PL01
Tallahassee, FL 32399-1050

By: Cecilia Bradley
Cecilia Bradley, Esq.

Replacement Cost Credit
Hypothetical Example

Plant Capacity (MW)	(a)		1,000
Outage (hours)	(b)		100
Total Lost Generation (MWh)	**(c) = (a)*(b)**		**100,000**
Cost of Purchased Power ($/MWh)	(d)	$	100.00
Total Cost of Outage ($)	**(e) = (c)*(d)**	**$**	**10,000,000**
Variable Fuel Cost ($/MWh)	(f)	$	5.00
Total Avoided Fuel Cost ($)	**(g) = (c)*(f)**	**$**	**500,000**
Net Replacement Cost	**(h) = (e)-(g)**	**$**	**9,500,000**

Docket No. 090505-EI
Exhibit DED-4
Hypothetical Example
Page 1 of 1

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 14
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-4)
DATE 03/18/10

Florida Power & Light Company
Peaking Unit Production Cost Calculation

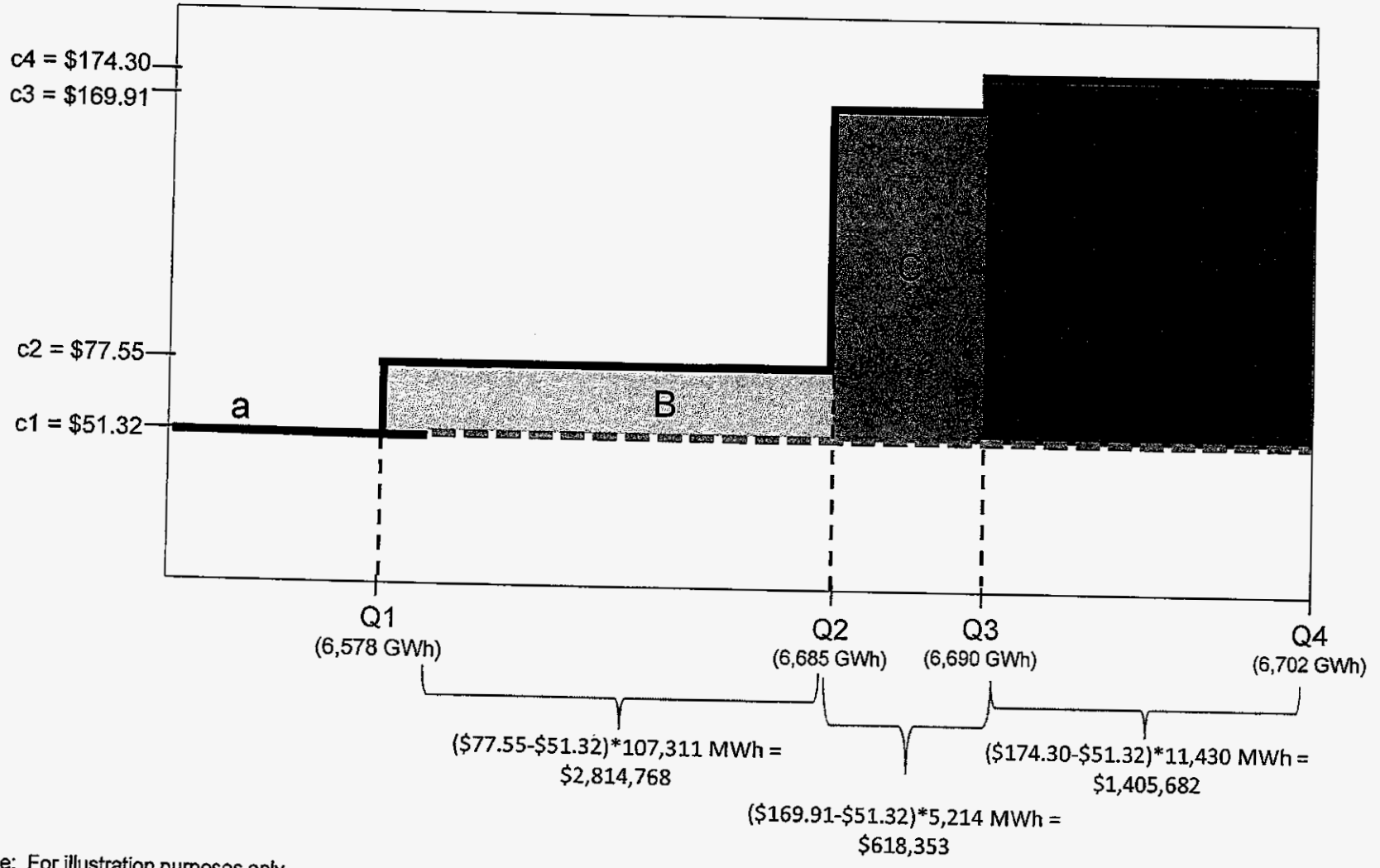
Unit	Heat Rate (MMBtu/MWh)	Production Cost: Fuel Cost Natural Gas ($/MMBtu)	Fuel Cost #2 Oil ($/MMBtu)	Fuel Consumption Natural Gas (MMBtu)	Fuel Consumption #2 Oil (MMBtu)	Total	Percent of Total Natural Gas (%)	Percent of Total #2 Oil (%)	Blended Fuel Cost ($/MMBtu)	Production Cost ($/MWh)
LG1	17.716	$ 9.94	$ 14.33	86,334	714	87,048	99.2%	0.8%	$ 9.98	$ 176.81
LG2	16.450	$ 9.94	$ 14.33	52,402	3,444	55,846	93.8%	6.2%	$ 10.21	$ 167.95
PGT	17.727	$ 9.94	$ 12.10	42,141	111	42,252	99.7%	0.3%	$ 9.95	$ 176.38
FGT	13.265	n.a.	$ 13.25						$ 13.25	$ 175.76

Hourly MWh Production & Peaking Unit Production Cost					
Hour Ending	LG1	LG2	PGT (MWh)	FGT	Total
1400	173	178	180	532	1,063
1500	262	321	302	559	1,444
1600	267	335	307	550	1,459
1700	270	338	309	559	1,476
1800	276	347	305	559	1,487
1900	289	356	305	550	1,500
2000	292	357	308	550	1,507
2100	287	297	169	485	1,238
2200	59	72	13	112	256
Total	**2,175**	**2,601**	**2,198**	**4,456**	**11,430**
Total Peaking Unit Production Cost	**$ 384,562**	**$ 436,838**	**$ 387,683**	**$ 783,187**	**$ 1,992,270**

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 15
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-5)
DATE 03/18/10

Docket No.090505-EI
Exhibit DED-5
FPL Peaking Cost Calculation
Page 1 of 1

Florida Power & Light Company
Replacement Cost Estimate



Note: For illustration purposes only.

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 16
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-6)
DATE 03/18/10

Docket No. 090505-EI
Exhibit DED-6
FPL Replacement Cost Estimate
Page 1 of 1

1. NET PEAK REPLACEMENT GENERATION COST

1A. Replacement Fuel Cost

Hour Ending	Hourly Production (MWh) LG1	LG2	PGT	FGT	Total
1400	173	178	180	532	1,063
1500	262	321	302	559	1,444
1600	267	335	307	550	1,459
1700	270	338	309	559	1,476
1800	276	347	305	559	1,487
1900	289	356	305	550	1,500
2000	292	357	308	550	1,507
2100	287	297	169	485	1,238
2200	59	72	13	112	256
Total	**2,175**	**2,601**	**2,198**	**4,456**	**11,430**

Replacement Fuel Cost ($) LG1	LG2	PGT	FGT	Total
$ 30,587	$ 29,896	$ 31,749	$ 93,505	$ 185,737
$ 46,323	$ 53,913	$ 53,268	$ 98,251	$ 251,755
$ 47,207	$ 56,265	$ 54,150	$ 96,669	$ 254,290
$ 47,738	$ 56,769	$ 54,503	$ 98,251	$ 257,259
$ 48,798	$ 58,280	$ 53,797	$ 98,251	$ 259,126
$ 51,097	$ 59,792	$ 53,797	$ 96,669	$ 261,354
$ 51,627	$ 59,960	$ 54,326	$ 96,669	$ 262,582
$ 50,743	$ 49,882	$ 29,809	$ 85,244	$ 215,679
$ 10,432	$ 12,093	$ 2,293	$ 19,685	$ 44,503
$ 384,552	**$ 436,850**	**$ 387,691**	**$ 783,192**	**$ 1,992,285**

1B. Total Fuel Not Incurred

	Generation (MWh)	Fuel Mix (%)	Fuel Cost ($/MWh)	System Average Cost ($/MWh)
Natural Gas	4,052,626	94.7%	76.05	$ 72.01
Light Oil	4,669	0.1%	178.943	$ 0.20
Heavy Oil	222,625	5.2%	102.873	$ 5.35
Total	**4,279,920**	**100.0%**		**$ 77.55**

	Fuel Cost ($/MWh)	Capacity (MW)	Non-Peak Outage Hours	Energy to Replace (MWh)	Fuel Cost ($)
Turkey Point Unit 3	$ 4.440	717	74.8	53,656	$ 238,230
Turkey Point Unit 4	$ 4.440	717	74.8	53,656	$ 238,230
Total		**1,434**	**149.7**	**107,311**	**$ 476,461**

Total Fuel Cost (A3)	$ 352,372,341
Adjusted Total Fuel Cost	$ 351,895,880
Total System MWh	6,696,564
Adjusted System Average Cost	**$ 52.55**

	Capacity (MW)	Peak Outage Hours	Not Incurred Generation	Fuel Cost ($/MWh)	Fuel Cost Not Incurred ($)
Turkey Point Unit 3	717	8	5,736	$ 52.55	$ 301,419
Turkey Point Unit 4	717	8	5,736	$ 52.55	$ 301,419
Total	**1,434**		**11,472**		**$ 602,839**

1A. REPLACEMENT FUEL COST	**$ 1,992,285**
1B. TOTAL FUEL NOT INCURRED	**$ 602,839**
NET PEAK REPLACEMENT GENERATION COST	**$ 1,389,446**

Docket No. 090505-EI
Exhibit DED-7
First Alternative RPC Calculation
Page 1 of 3

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 17
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-7)
DATE 03/18/10

2. NET NON-PEAK REPLACEMENT GENERATION COST

2A. Replacement Fuel Cost

	Generation		Fuel Mix		Fuel Cost		System Average Cost	
	February	March	February	March	February	March	February	March
	— (MWh) —		— (%) —		— ($/MWh) —		($/MWh)	
Natural Gas	4,052,626	4,401,718	94.7%	93.3%	76.05	78.367	$ 72.01	$ 73.15
Light Oil	4,669	628	0.1%	0.0%	178.943	222.013	$ 0.20	$ 0.03
Heavy Oil	222,625	313,262	5.2%	6.6%	102.873	101.382	$ 5.35	$ 6.73
Total	4,279,920	4,715,608	100.0%	100.0%			$ 77.55	$ 79.92

	Capacity		Non-Peak Outage Hours		Non-Peak Energy to Replace		Replacement Generation Cost		
	February	March	February	March	February	March	February	March	Total
	— (MW) —		— (hours) —		— (MWh) —		— ($) —		
Turkey Point Unit 3	717	717	74.8	75.2	53,656	53,918	$ 4,161,233	$ 4,308,891	$ 8,470,124
Turkey Point Unit 4	717	717	74.8	24.2	53,656	17,351	$ 4,161,233	$ 1,386,638	$ 5,547,871
Total	1,434	1,434	149.7	99.4	107,311	71,270	$ 8,322,465	$ 5,695,529	$ 14,017,994
							$ 77.55	$ 79.92	

2B. Fuel Cost Not Incurred

	Turkey Point Fuel Cost		Non-Peak Energy to Replace		Turkey Point Fuel Cost		
	February	March	February	March	February	March	Total
	— ($/MWh) —		— (MWh) —			($)	
Turkey Point Unit 3	$ 4.983	$ 4.945	53,656	53,918	$ 267,365	$ 266,626	$ 533,992
Turkey Point Unit 4	$ 4.350	$ 4.332	53,656	17,351	$ 233,401	$ 75,166	$ 308,568
Total			107,311	71,270	$ 500,767	$ 341,793	$ 842,560

Total Fuel Cost (A3)	$ 352,372,341	$ 389,720,951	742,093,292
Adjusted Total Fuel Cost	$ 351,871,574	$ 389,379,158	741,250,732
Total System MWh	6,696,564	6,944,633	13,641,197
Adjusted System Average Cost	$ 52.55	$ 56.07	$ 54.34

	MWh		Fuel Cost		Fuel Cost Not Incurred		
	February	March	February	March	February	March	Total
	— (MWh) —		($/MWh)			($)	
Turkey Point Unit 3	53,656	53,918	$ 52.55	$ 56.07	$ 2,819,333	$ 3,023,155	$ 5,842,488
Turkey Point Unit 4	53,656	17,351	$ 52.55	$ 56.07	$ 2,819,333	$ 972,877	$ 3,792,210
Total	107,311	71,270			$ 5,638,666	$ 3,996,032	$ 9,634,698

Replacement Fuel Cost	$ 14,017,994
Fuel Cost Not Incurred	$ 9,634,698
Net Non-Peak Replacement Generation Cost	**$ 4,383,296**

3. NET PURCHASED POWER REPLACEMENT COST

Purchased Power (MWh)		5,214
Cost of Purchased Power ($)	$	885,935
Average Nuclear Production Cost Avoided ($/MWh)	$	52.55
Adjusted Cost of Purchased Power ($)	$	273,970
Net Purchased Power Replacement Cost	$	**611,965**

4. TOTAL REPLACEMENT COST CREDIT

NET PEAK REPLACEMENT GENERATION COST	$	1,389,446
NET NON-PEAK REPLACEMENT GENERATION COST	$	4,383,296
NET PURCHASED POWER REPLACEMENT COST	$	611,965
TOTAL REPLACEMENT COST CREDIT	$	**6,384,707**

1. NET PEAK REPLACEMENT GENERATION COST

1A. Replacement Fuel Cost

Hour Ending	Hourly Production (MWh) LG1	LG2	PGT	FGT	Total	Replacement Fuel Cost ($) LG1	LG2	PGT	FGT	Total
1400	173	178	180	532	1,063	$ 30,587	$ 29,896	$ 31,749	$ 93,505	$ 185,737
1500	262	321	302	559	1,444	$ 46,323	$ 53,913	$ 53,268	$ 98,251	$ 251,755
1600	267	335	307	550	1,459	$ 47,207	$ 56,265	$ 54,150	$ 96,669	$ 254,290
1700	270	338	309	559	1,476	$ 47,738	$ 56,769	$ 54,503	$ 98,251	$ 257,259
1800	276	347	305	559	1,487	$ 48,798	$ 58,280	$ 53,797	$ 98,251	$ 259,126
1900	289	356	305	550	1,500	$ 51,097	$ 59,792	$ 53,797	$ 96,669	$ 261,354
2000	292	357	308	550	1,507	$ 51,627	$ 59,960	$ 54,326	$ 96,669	$ 262,582
2100	287	297	169	485	1,238	$ 50,743	$ 49,882	$ 29,809	$ 85,244	$ 215,679
2200	59	72	13	112	256	$ 10,432	$ 12,093	$ 2,293	$ 19,685	$ 44,503
Total	2,175	2,601	2,198	4,456	11,430	$ 384,552	$ 436,850	$ 387,691	$ 783,192	$ 1,992,285

1B. Total Fuel Not Incurred

	Capacity (MW)	Peak Outage Hours	Not Incurred Generation	Heat Rate (MMBtu/MWh)	Fuel Cost ($/MMBtu)	Fuel Cost Not Incurred ($)
Turkey Point Unit 3	717	8	5,736	10.864	0.460	$ 28,665
Turkey Point Unit 4	717	8	5,736	10.915	0.400	$ 25,043
Total	1,434		11,472			$ 53,709

footnote don't match.

1A. REPLACEMENT FUEL COST	$ 1,992,285
1B. TOTAL FUEL NOT INCURRED	$ 53,709
NET PEAK REPLACEMENT GENERATION COST	$ 1,938,577

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 18
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-8)
DATE 03/18/10

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Exhibit DED-8
Second Alternative RPC Calculation
1 of 3

2. NET NON-PEAK REPLACEMENT GENERATION COST

2A. Replacement Fuel Cost

	Generation		Fuel Mix		Fuel Cost		System Average Cost	
	February	March	February	March	February	March	February	March
	— (MWh) —		— (%) —		— ($/MWh) —		($/MWh)	
Natural Gas	4,052,626	4,401,718	94.7%	93.3%	76.047	78.367	$ 72.01	$ 73.15
Light Oil	4,669	628	0.1%	0.0%	178.943	222.013	$ 0.20	$ 0.03
Heavy Oil	222,625	313,262	5.2%	6.6%	102.873	101.382	$ 5.35	$ 6.73
Total	4,279,920	4,715,608	100.0%	100.0%			$ 77.55	$ 79.92

	Capacity		Non-Peak Outage Hours		Non-Peak Energy to Replace		Replacement Generation Cost		
	February	March	February	March	February	March	February	March	Total
	— (MW) —		— (hours) —		— (MWh) —			— ($) —	
Turkey Point Unit 3	717	717	74.8	75.2	53,656	53,918	$ 4,161,233	$ 4,308,891	$ 8,470,124
Turkey Point Unit 4	717	717	74.8	24.2	53,656	17,351	$ 4,161,233	$ 1,386,638	$ 5,547,871
Total	1,434	1,434	149.7	99.4	107,311	71,270	$ 8,322,465	$ 5,695,529	**$ 14,017,994**
							$ 77.55		

2B. Fuel Cost Not Incurred

	Non-Peak Total Outage Hours		Not Incurred Generation		Heat Rate		Fuel Cost		Fuel Cost Not Incurred		
	February	March	February	March	February	March	February	March	February	March	Total
	— (hours) —		— (MWh) —		— (MMBtu/MWh) —		($/MMBtu)			— ($) —	
Turkey Point Unit 3	74.8	75.2	53,656	53,918	10.864	10.950	0.460	0.450	$ 268,140	$ 265,683	$ 533,823
Turkey Point Unit 4	74.8	24.2	53,656	17,351	10.915	10.944	0.400	0.400	$ 234,260	$ 75,957	$ 310,217
Total			107,311	71,270					$ 502,400	$ 341,640	**$ 844,040**
									$ 4.68		

2A. REPLACEMENT FUEL COST	$ 14,017,994
2B. TOTAL FUEL NOT INCURRED	$ 844,040
NET NON-PEAK REPLACEMENT GENERATION COST	**$ 13,173,954**

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Exhibit DED-8
Second Alternative RPC Calculation
2 of 3

3. NET PURCHASED POWER REPLACEMENT COST

Purchased Power (MWh)		5,214
Cost of Purchased Power ($)	$	885,935
Average Nuclear Production Cost Avoided ($/MWh)	$	4.68
Adjusted Cost of Purchased Power ($)	$	24,410
NET PURCHASED POWER REPLACEMENT COST	**$**	**861,525**

4. TOTAL REPLACEMENT COST CREDIT

NET PEAK REPLACEMENT GENERATION COST	**$**	**1,938,577**
NET NON-PEAK REPLACEMENT GENERATION COST	**$**	**13,173,954**
NET PURCHASED POWER REPLACEMENT COST	**$**	**861,525**
TOTAL REPLACEMENT COST CREDIT	**$**	**15,974,055**

Docket No. 090505-EI
Exhibit DED-8
Second Alternative RPC Calculation
3 of 3

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.69%
Light Oil	4,669	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.24%
Light Oil	628	0.01%
Heavy Oil	313,282	6.64%
Total	4,715,998	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	6.17

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	75

Turkey Point 4	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	24

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement fuel cost ($) = (Gas fuel cost ($/MMBtu) * Lauderdale/Port Aircraft Gas Turbine Heat Rate (MMBtu/MWh) * Lauderdale/Port Aircraft Gas Turbine MWh) +
(Light Oil fuel cost ($/MMBtu) * Fort Myers Gas Turbine Heat Rate (MMBtu/MWh) * Fort Myers Gas Turbine MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,468	29,105	31,717	93,505	($)
15	282	321	302	859	MWh	15	46,137	52,488	53,214	98,251	($)
16	267	335	307	950	MWh	16	47,018	54,777	54,095	99,668	($)
17	270	338	309	553	MWh	17	47,546	55,267	54,448	98,251	($)
18	276	347	305	559	MWh	18	48,603	56,739	53,743	98,251	($)
19	289	356	305	550	MWh	19	50,892	58,211	53,743	98,668	($)
20	292	357	308	550	MWh	20	51,420	58,374	54,272	98,668	($)
21	287	297	169	455	MWh	21	50,540	48,563	29,779	85,244	($)
22	59	72	13	112	MWh	22	10,390	11,773	2,291	19,685	($)
	2,175	2,601	2,198	4,456	MWh	Total	383,011	425,297	387,302	783,192	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh	*Values based on Schedule A4					
Fuel Price*	8.94	9.94	9.94	13.25	$/MMBtu	*Values based on Schedule A4					

Replacement Fuel Cost (Part A) Total 1,576,602

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2009:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2009:

Gas fuel cost =	7.5357	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement fuel cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	176,533	MWh
Replacement fuel cost =	14,013,670	

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Heat Rate* (MMBtu/MWh)	Fuel Cost* ($/MMBtu)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,775	10.884	0.46	29,274	268,737
TP3 March	0	53,775	10.950	0.45	0	264,976
TP4 February	5,858	53,775	10.915	0.40	25,576	234,782
TP4 March	0	17,208	10.944	0.40	0	75,330
Total	11,716	178,533			54,850	843,825

*Values based on Schedule A4

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($)
= 15,013,737

Docket No. 090505-EI
Exhibit DED-9
FPL RPC Estimate
Page 1 of 1

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 19
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-9)
DATE 03/18/10

Comparison of Non-Fuel Base Rates

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	($/MWh)									
Florida Power and Light*	**$ 52.51**	**$ 48.91**	**$ 55.86**	**$ 50.20**	**$ 46.64**	**$ 51.83**	**$ 50.71**	**$ 68.83**	**$ 62.17**	**$ 52.19**
Alabama Power*	$ 39.13	$ 38.22	$ 35.53	$ 38.22	$ 37.95	$ 40.07	$ 41.40	$ 43.27	$ 49.30	$ 51.25
Carolina Power and Light*	$ 47.33	$ 47.20	$ 48.79	$ 47.92	$ 48.07	$ 47.75	$ 44.33	$ 48.09	$ 49.27	$ 49.50
CLECO	$ 39.43	$ 44.84	$ 48.96	$ 47.46	$ 52.03	$ 54.83	$ 65.10	$ 70.89	$ 70.87	$ 77.11
Duke Power*	$ 45.10	$ 45.53	$ 45.74	$ 46.10	$ 46.64	$ 45.97	$ 45.20	$ 44.37	$ 46.37	$ 44.68
Florida Power Corp*	$ 52.72	$ 44.22	$ 55.90	$ 51.47	$ 49.07	$ 52.10	$ 44.90	$ 63.37	$ 52.93	$ 54.60
Georgia Power*	$ 45.21	$ 43.86	$ 46.39	$ 43.55	$ 42.73	$ 45.49	$ 48.29	$ 47.00	$ 45.46	$ 55.08
Gulf Power	$ 31.77	$ 34.94	$ 35.34	$ 35.72	$ 36.04	$ 34.77	$ 37.99	$ 33.37	$ 40.40	$ 39.14
Mississippi Power	$ 31.10	$ 32.07	$ 22.66	$ 27.06	$ 30.80	$ 27.59	$ 30.66	$ 24.38	$ 25.79	$ 22.34
Savannah Electric	$ 51.64	$ 56.69	$ 55.02	$ 54.91	$ 57.91	$ 64.68	$ 71.44	$ 64.56	n.a.	n.a.
South Carolina Electric & Gas*	$ 48.19	$ 49.05	$ 50.74	$ 49.70	$ 53.88	$ 50.79	$ 53.07	$ 54.42	$ 54.55	$ 60.29
Tampa Electric	$ 47.96	$ 50.18	$ 54.16	$ 62.62	$ 56.57	$ 55.43	$ 46.33	$ 56.59	$ 60.60	$ 55.77

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	(Rank)									
Florida Power and Light*	**2**	**4**	**2**	**4**	**7**	**5**	**4**	**2**	**2**	**6**
Alabama Power*	10	10	10	10	10	10	10	10	6	7
Carolina Power and Light*	6	5	7	6	6	7	9	7	7	8
CLECO	9	7	6	7	4	3	2	1	1	1
Duke Power*	8	6	9	8	8	8	7	9	8	9
Florida Power Corp*	1	8	1	3	5	4	8	4	5	5
Georgia Power*	7	9	8	9	9	9	5	8	9	4
Gulf Power	11	11	11	11	11	11	11	11	10	10
Mississippi Power	12	12	12	12	12	12	12	12	11	11
Savannah Electric	3	1	3	2	1	1	1	3	n.a.	n.a.
South Carolina Electric & Gas*	4	3	5	5	3	6	3	6	4	2
Tampa Electric	5	2	4	1	2	2	6	5	3	3

Source: Federal Energy Regulatory Commission

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 20
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-10)
DATE 03/18/10

Docket No. 090505-EI
Exhibit DED-10
Comparison of Non-Fuel Base Rates
Page 1 of 1

Nuclear Investment Disallowances and Overruns

Unit	Utility	Original Cost	Final Cost (million $)	Cost Overrun	Percent Increase (%)	Disallowed (million $)	Disallowance as a Percent of Final Cost (%)
Braidwood 1	Commonwealth Edison Co.	$ 501.4	$ 3,265.6	$ 2,764.2	551%	$ 278.3	8.5%
Byron 2	Commonwealth Edison Co.	$ 350.0	$ 1,981.2	$ 1,631.2	466%	$ 180.6	9.1%
Byron 1	Commonwealth Edison Co.	$ 400.0	$ 2,558.4	$ 2,158.4	540%	$ 101.5	4.0%
Fermi 2	Detroit Edison	$ 220.7	$ 4,542.8	$ 4,322.1	1958%	$ 1,310.0	28.8%
Vogtle 1&2	Georgia Power Co	$ 847.8	$ 5,269.0	$ 4,421.2	521%	$ 541.0	10.3%
River Bend 1	Gulf States Utilities Co.	$ 390.0	$ 3,802.6	$ 3,412.6	875%	$ 1,297.0	34.1%
South Texas 1&2	Houston Light & Power	$ 959.8	$ 3,797.9	$ 2,838.1	296%	$ 375.5	9.9%
Clinton 1	Illinois Power Co.	$ 403.9	$ 4,264.3	$ 3,860.4	956%	$ 665.0	15.6%
Shoreham 1	Long Island Lighting	$ 223.0	$ 2,252.0	$ 2,029.0	910%	$ 1,395.0	61.9%
Waterford 3	Louisiana Power & Light	$ 230.0	$ 2,840.2	$ 2,610.2	1135%	$ 284.0	10.0%
Nine Mile Point 2	Multiple	$ 370.0	$ 6,030.4	$ 5,660.4	1530%	$ 2,141.0	35.5%
Wolf Creek 1	Multiple	$ 605.7	$ 2,641.3	$ 2,035.6	336%	$ 1,617.6	61.2%
Perry 1	Multiple	$ 1,234.0	$ 5,398.5	$ 4,164.5	337%	$ 665.0	12.3%
Seabrook 1	Multiple	n.a.	n.a.	n.a.	n.a.	$ 646.4	n.a.
Hope Creek 1	Multiple	$ 573.9	$ 4,494.9	$ 3,921.0	683%	$ 511.6	11.4%
Millstone 3	Multiple	$ 641.7	$ 3,825.0	$ 3,183.3	496%	$ 353.0	9.2%
San Onofre 1&2	Multiple	$ 378.5	$ 2,694.3	$ 2,315.8	612%	$ 252.0	9.4%
Grand Gulf 1	Multiple	$ 600.0	$ 3,281.2	$ 2,681.2	447%	$ 246.2	7.5%
Palo Verde 1-3	Multiple	$ 1,797.4	$ 5,859.7	$ 4,062.3	226%	$ 188.0	3.2%
Beaver Valley 2	Multiple	$ 295.9	$ 4,544.3	$ 4,248.4	1436%	$ 125.3	2.8%
Diablo Canyon 1&2	Pacific Gas & Electric	$ 304.1	$ 6,043.2	$ 5,739.1	1887%	$ 2,000.0	33.1%
Susquehanna 1&2	Pennsylvania Light & Power	$ 300.0	$ 2,171.1	$ 1,871.1	624%	$ 847.0	39.0%
Limerick 1	Philadelphia Electric Co.	$ 251.8	$ 3,822.0	$ 3,570.2	1418%	$ 368.9	9.7%
Summer 1	South Carolina Electric & Gas	n.a.	n.a.	n.a.	n.a.	$ 123.0	n.a.
Comanche Peak 1&2	Texas Utilities	n.a.	n.a.	n.a.	n.a.	$ 1,381.0	n.a.
Callaway 1	Union Electric Co	$ 839.0	$ 3,070.0	$ 2,231.0	266%	$ 413.7	13.5%

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 21
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-11)
DATE 03/18/10

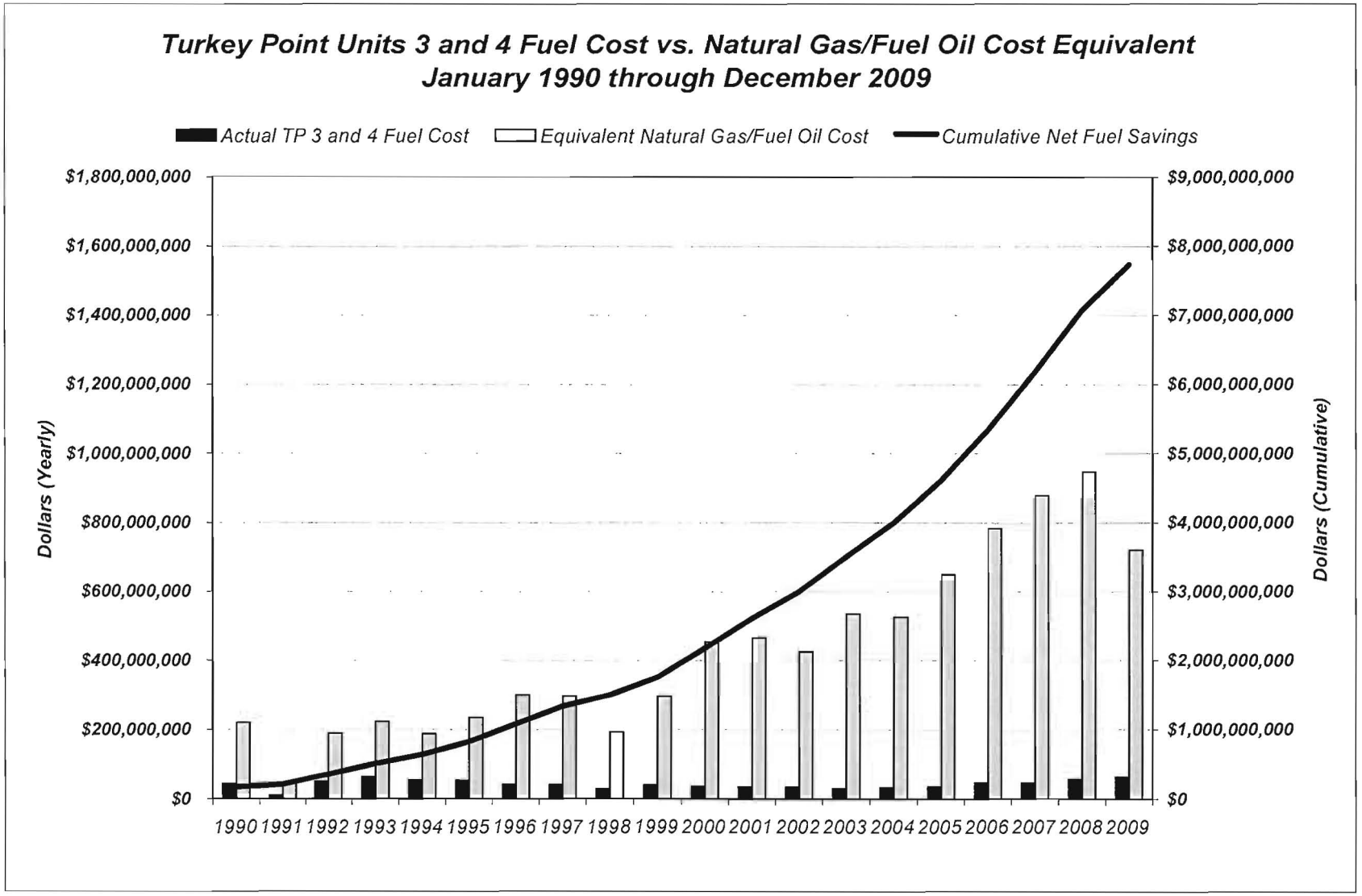
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Exhibit DED-11
Nuclear Investment Disallowances and Overruns
Page 1 of 1

Nuclear Legislation and Regulation

Issue	Florida	Georgia	North Carolina	South Carolina	Louisiana	Kansas	Mississippi
Allows prudence finding on decision to move forward with nuclear	✓	✓	✓	✓	✓	✓	✓
Recognizes various nuclear power plant development phases	✓	✓	✓	✓	✓	✓	✓
Allows recovery of pre-construction investments prior to commercial operation	✓	✓	✓		✓	✓	✓
Allows recovery of cancelled plants	✓	✓	✓	✓			✓
Cash earnings on CWIP	✓			✓		✓	
Cost subject to prudence review	✓	✓	✓	✓	✓	✓	✓

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 22
COMPANY Office of Public Counsel (Direct)
WITNESS D. Dismukes (DED-12)
DATE 03/18/10

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Exhibit DED-12
Nuclear Legislation and Regulation
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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 23
COMPANY Florida Power & Light (Rebuttal)
WITNESS G. Yupp (GJY-10)
DATE 03/18/10

Docket No. 090505-EI
Turkey Point Fuel Savings (1990-2009)
Exhibit GJY-10, Page 1 of 1

FPL's peaking units ran for approximately 8 hours and 10 minutes after the Flagami Transmission Event. The $1,992,270 calculated in Exhibit GJY-6 represents the replacement fuel costs for the first 8 hours and 10 minutes. In order to calculate replacement fuel costs for a total outage duration of 48 hours, replacement fuel costs must be calculated for an additional 39 hours and 50 minutes. FPL's Blended Marginal Cost for February 2008 (shown in Exhibit GJY-7) is multiplied times the equivalent MWh of lost nuclear production for 39 hours and 50 minutes:

Equivalent MWh of Lost Nuclear Production:
1,434 MW * 39 hours and 50 minutes = 57,121 MWh

Fuel Cost for 39 Hours and 50 Minutes:
57,121 MWh * $77.55/MWh = $4,429,734

The total fuel cost for the 48-hour period is the sum of the peaking units cost plus the cost of the fuel during the additional 39 hours and 50 minutes.

Total Replacement Fuel Cost:
$1,992,270 + $4,429,734 = $6,422,004

Using FPL's system average cost approach, the net replacement costs are as follows:

Total MWh for 48 Hours:
1,434 MW * 48 Hours (Total Outage Duration) = 68,832 MWh

Fuel Costs using System Average Approach:
68,832 MWh * $51.32/MWh (Adjusted System Average Cost, Exhibit GJY-7) = $3,532,458

Net Replacement Power Costs:
$6,422,004 - $3,532,458 = $2,889,546

Total RPC:
Net Replacement Power Costs + Net Purchased Power Costs (Exhibit GJY-9)
$2,889,546 + 618,353 = $3,507,899

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 24
COMPANY Florida Power & Light (Rebuttal)
WITNESS G. Yupp (GJY-11)
DATE 03/18/10

FPL's peaking units ran for approximately 8 hours and 10 minutes after the Flagami Transmission Event. The $1,992,270 calculated in Exhibit GJY-6 represents the replacement fuel costs for the first 8 hours and 10 minutes. In order to calculate replacement fuel costs for a total outage duration of 48 hours, replacement fuel costs must be calculated for an additional 39 hours and 50 minutes. FPL's Blended Marginal Cost for February 2008 (shown in Exhibit GJY-7) is multiplied times the equivalent MWh of lost nuclear production for 39 hours and 50 minutes:

Equivalent MWh of Lost Nuclear Production:
1,434 MW * 39 hours and 50 minutes = 57,121 MWh

Fuel Cost for 39 Hours and 50 Minutes:
57,121 MWh * $77.55/MWh = $4,429,734

The total fuel cost for the 48-hour period is the sum of the peaking units cost plus the cost of the fuel during the additional 39 hours and 50 minutes.

Total Replacement Fuel Cost:
$1,992,270 + $4,429,734 = $6,422,004

Using the avoided cost of nuclear units, the net replacement costs are as follows:

Total MWh for 48 Hours:
Unit 3: 717 MW * 48 Hours = 34,416 MWh
Unit 4: 717 MW * 48 Hours = 34,416 MWh

Nuclear Fuel Costs:
34,416 MWh * $4.98/MWh (Turkey Point Unit 3 Cost – Schedule A4) = $171,392
34,416 MWh * $4.35/MWh (Turkey Point Unit 4 Cost – Schedule A4) = $149,710
Total Nuclear Fuel Costs = $171,392 + $149,710 = $321,102

Net Replacement Power Costs:
$6,422,004 - $321,102 = $6,100,902

Total RPC:
Net Replacement Power Costs + Net Purchased Power Costs
$6,100,902 + $390,605 = $6,491,507

Note: Under this methodology, net purchased power costs should be calculated versus FPL's marginal units at the time of the event, not versus nuclear fuel costs. At the time of the event, FPL's system marginal cost was approximately $95/MWh. If Turkey Point Units 3 and 4 remained on-line, FPL's marginal units would have been producing power at approximately $95/MWh to meet load. Therefore, the net impact of FPL's off-system purchases should be calculated as follows:

Total Purchased Power Costs – (Total MWh Purchased * System Marginal Cost)
$885,935 – (5,214 MWh * $95/MWh) = $390,605

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 25
COMPANY Florida Power & Light (Rebuttal)
WITNESS G. Yupp (GJY-12)
DATE 03/18/10

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090505.Hearing Exhibits.26-30.pdf - This is a 350-page document, Bates-stamped, that contains Staff Exhibits 26, 27, 28, 29, and 30.

Exhibit 26 is found at Bates Nos. 000001-000009
Exhibit 27 is found at Bates Nos. 000010-000324
Exhibit 28 is found at Bates Nos. 000325-000345
Exhibit 29 is found at Bates Nos. 000346-000348
Exhibit 30 is found at Bates Nos. 000349-000350

090505.Hearing Exhibits.31-33.pdf - This is a 262-page document, Bates-stamped, that contains Staff Exhibits 31, 32, and 33.

Exhibit 31 is found at Bates Nos. 000351-000491
Exhibit 32 is found at Bates Nos. 000492-000533
Exhibit 33 is found at Bates Nos. 000534-000612



26

FPL's Responses to Staff's First Set of Interrogatories In Docket No. 080001-EI (Nos. 66-70)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 26
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 26
DATE 03/17/10

Q.

On February 26, 2008, several Florida utilities experienced an electrical disturbance that resulted from an equipment failure at the Flagami substation. For each generating unit on your utility's system that tripped as a result of this electrical disturbance, please provide the information requested in the table below:

A.

A. Fossil Generation

	Name of unit	Turkey Point 5
	Size of Unit (MW)	1113 winter net off control continuous
	Fuel type	Gas
	Output at time of disturbance (MW)	1087
	Date and time of unit trip	Feb 26, 2008 at 1:09p
	Date and time when unit returned to service	First generator returned at 4:50p with complete unit returning at 2:40a on Feb 27th see note below

Note: At Turkey Point Unit 5 all 4 combustion turbine generators and the steam turbine generator tripped during the Feb 26th event. The return to service times for 5A, 5B, 5C & 5D combustion turbines and the steam turbine were as follows; 5:33p, 4:50p, 2:40a on 27th, 7:30p and 11:20p. Approximately 1100 MWs of generation tripped at Turkey Point Unit 5.

	Name of unit	Martin 8
	Size of Unit (MW)	1112 winter net off control continuous
	Fuel type	Gas
	Output at time of disturbance (MW)	923
	Date and time of unit trip	Feb 26, 2008 at 1:09p
	Date and time when unit returned to service	First generator returned at 3:00p with complete unit returning at 6:32p see note below

Note: At Martin Unit 8 only 3 of the 4 combustion turbine generators tripped during the Feb 26th event. The Martin 8 steam turbine generator did not trip during the Feb 26th event. 8A, 8B & 8C combustion turbines returned to service at 3:00p, 4:48p and 6:32p. Approximately 457 MWs of CT generation tripped at Martin Unit 8.

Name of unit	Lauderdale 5
Size of Unit (MW)	447 winter net off control continuous
Fuel type	Gas
Output at time of disturbance (MW)	445
Date and time of unit trip	Feb 26, 2008 at 1:09p
Date and time when unit returned to service	The one combustion turbine generator that tripped returned at 7:10p

Note: Only the 5A combustion turbine generator tripped. The 5A combustion turbine returned to service at 7:10p
after the fuel control valve was repaired. Approximately 153 MWs of CT generation tripped at Lauderdale Unit 5.

B. Nuclear Generation

Name of Unit	Turkey Point 3
Size of Unit (MW)	717 winter net
Fuel Type	Nuclear
Output at time of disturbance (MW)	718
Date and time of unit trip	February 26, 2008 at 1:10 p
Date and time when unit returned to service	Unit returned on March 4, 2008 at 3:15a

Name of Unit	Turkey Point Unit 4
Size of Unit (MW)	717 winter net
Fuel Type	Nuclear
Output at time of unit trip	712
Date and time of unit trip	February 26, 2008 at 1:09 p
Date and time when unit returned to service	Unit returned on March 2, 2008 at 1:10a

Note: As discussed in the response to Interrogatory No. 70, the outages at Turkey Point Units 3 and 4 were extended by the occurrence of other maintenance and operational issues unrelated to the initial tripping of the units as a result of the February 26, 2008 electrical disturbance.

Q.

Please identify any purchased power that was secured as a result of the electrical disturbance described above. Such description should include the duration of the purchase, the MW and MWH purchased, the source of the power, and the total cost in dollars and cents/kwh.

A.

As a result of the electrical disturbance on February 26, 2008, FPL purchased power from six different entities. A description of each transaction is provided below:

Transaction No.	Begin Time	End Time	Volume (MWh)	Highest Hour MW	Total Cost ($)	Total Cost (cents/KWh)
1	1400	2100	1,350	200	169,700.00	12.570
2	1500	2000	863	300	117,890.00	13.660
3	1400	1800	650	200	127,100.00	19.554
4	1500	2100	625	165	186,250.00	29.800
5	1400	2100	1,661	305	265,672.64	15.995
6	1500	2000	65	18	19,322.55	29.727
		Total	5,214	305	885,935.19	16.991

If the electrical disturbance had not occurred, FPL would have produced the 5,214 MWh with its own generation. FPL's marginal cost of power production during this time period is estimated at $95 per MWh. The total estimated cost for FPL to produce this energy is $495,330 ($95 per MWh times 5,214 MWh). Therefore, the net cost differential of the purchases FPL made in response to the electrical disturbance is approximately $390,605 ($885,935 minus $495,330).

Q.

Please identify any utility owned generation that was called upon to replace the units that tripped as a result of the electrical disturbance described above. Such description should include the duration of the replacement generation, the MW and MWH generated, the unit name and fuel type, and the total cost in dollars and cents/kwh.

A.

The attached document contains data related to generation that was started as a result of the February 26, 2008 electrical disturbance. Other types of units would have operated at higher/lower output in order to meet system load requirements following the electrical disturbance, but FPL cannot specifically identify which units and by how much the output would have changed . The document contains unit(s) names, MW rating, time on/off and run duration for each unit. Please see Interrogatory No. 70 for calculation of replacement fuel costs.

SITE 1 (FT. LAUDLE)

GT #	MW RATING	TIME ON	TIME OFF	RUN DURATION
1	32	2/26/2008 13:21:10	2/26/2008 21:19:40	7 hr 58 min
2	32	2/26/2008 13:21:20	2/26/2008 21:21:20	8 hr 0 min
4	32	2/26/2008 17:27:30	2/26/2008 21:10:50	3 hr 43 min
6	32	2/26/2008 13:17:07	2/26/2008 21:23:50	8 hr 6 min
7	32	2/26/2008 13:17:20	2/26/2008 21:24:10	8 hr 7 min
8	32	2/26/2008 13:18:10	2/26/2008 21:28:00	8 hr 10 min
9	32	2/26/2008 13:17:00	2/26/2008 21:33:20	8 hr 16 mi
10	32	2/26/2008 13:17:40	2/26/2008 21:34:20	8 hr 17 min
11	32	2/26/2008 13:17:30	2/26/2008 21:39:50	8 hr 12 min
12	32	2/26/2008 13:16:50	2/26/2008 21:16:50	8 hr 0 min

SITE 2 (FT. LAUDLE)

GT #	MW RATING	TIME ON	TIME OFF	
13	32	2/26/2008 13:16:50	2/26/2008 21:27:50	8 hr 11 min
14	32	2/26/2008 13:16:50	2/26/2008 21:35:50	8 hr 19 min
15	32	2/26/2008 13:29:30	2/26/2008 21:15:40	7 hr 46 min
16	32	2/26/2008 13:17:20	2/26/2008 21:16:10	7 hr 59 min
17	32	2/26/2008 13:17:20	2/26/2008 21:35:10	8 hr 18 min
18	32	2/26/2008 13:17:30	2/26/2008 21:22:10	8 hr 5 min
19	32	2/26/2008 16:38:10	2/26/2008 21:20:10	4 hr 42 min
20	32	2/26/2008 13:21:30	2/26/2008 21:24:40	8 hr 3 min
21	32	2/26/2008 13:29:40	2/26/2008 21:23:40	7 hr 54 min
22	32	2/26/2008 13:18:40	2/26/2008 21:23:30	8 hr 5 min
23	32	2/26/2008 13:28:50	2/26/2008 21:26:20	7 hr 58 min
24	32	2/26/2008 14:14:20	2/26/2008 21:01:00	6 hr 47 min

SITE 3 (PORT EVERGLADES)

GT #	MW RATING	TIME ON	TIME OFF	
1	32	2/26/2008 13:19:40 2/26/2008 14:12:10	2/26/2008 13:35:50 2/26/2008 21:14:00	7 hr 18 min
2	32	2/26/2008 13:23:50	2/26/2008 21:13:50	7 hr 50 min
3	32	2/26/2008 13:22:20	2/26/2008 21:03:50	7 hr 41 min
4	32	2/26/2008 13:23:00	2/26/2008 21:03:50	7 hr 40 min
5	32	2/26/2008 13:20:10	2/26/2008 21:04:30	7 hr 44 min
7	32	2/26/2008 13:19:20	2/26/2008 21:07:00	7 hr 48 min
9	32	2/26/2008 13:21:30	2/26/2008 21:08:20	7 hr 47 min
10	32	2/26/2008 13:20:40	2/26/2008 21:09:10	7 hr 49 min
11	32	2/26/2008 13:20:50	2/26/2008 21:12:40	7 hr 52 min
12	32	2/26/2008 13:21:00	2/26/2008 20:59:10	6 hr 38 min

FGT (FT. MYERS)

GT #	MW RATING	TIME ON	TIME OFF	
1	52	2/26/2008 13:21:10	2/26/2008 21:28:00	8 hr 7 min
2	52	2/26/2008 13:21:00	2/26/2008 21:13:00	7 hr 52 min
3	52	2/26/2008 13:22:40	2/26/2008 21:13:10	7 hr 51 min
4	52	2/26/2008 13:20:50	2/26/2008 21:13:20	7 hr 53 min
5	52	2/26/2008 13:20:50	2/26/2008 21:27:00	8 hr 7 min
6	52	2/26/2008 13:50:40	2/26/2008 21:13:30	7 hr 26 min
7	52	2/26/2008 13:20:40	2/26/2008 21:27:40	8 hr 7 min
8	52	2/26/2008 13:20:50	2/26/2008 21:36:30	8 hr 16 min
10	52	2/26/2008 13:20:30	2/26/2008 21:13:50	7 hr 53 min
11	52	2/26/2008 13:21:10	2/26/2008 21:13:40	7 hr 52 min
12	52	2/26/2008 13:23:20	2/26/2008 21:27:10	7 hr 56 min

Q.

For each unit described above, please indicate if any preventative maintenance was performed during the time the unit was off line. If such maintenance was performed, please describe the work performed and the dates the maintenance was previously scheduled to be performed.

A.

A. Fossil Generation

No preventative maintenance was performed during the time that the affected generating units (Turkey Point Unit 5, Martin Unit 8 CTs and Lauderdale CT5A) were off line. The focus was on completing the activities required to get the affected units back on line promptly.

B. Nuclear Generation

FPL extended the outage in Turkey Point Unit 3 to replace a rod position indication coil required by an NRC commitment. While the unit was down to meet the NRC commitment, FPL replaced tubing on an inlet isolation valve to the Heater Drain control valve to ensure reliability. This replacement was planned during the next available outage or significant load curtailment. FPL did perform elective maintenance on Turkey Point Unit 4 to ensure unit reliability upon return to service.

Q.

Please provide an estimate of the net replacement power costs, if any, that resulted from the electrical disturbance described above.

A.

FPL estimated the net replacement power costs that resulted from the electrical disturbance on February 26, 2008 in three separate parts. Part A is an estimate of the replacement fuel costs immediately following the electrical disturbance (an 8.17-hour period until the system was returned to "normal" - all gas turbines were off-line, on average, by 10 minutes past the 8th full hour of operation). During this period, FPL generated a total of 11,430 MWh from its peaking units at Port Everglades, Fort Lauderdale and Fort Myers to cover the loss of generation caused by the disturbance. As shown on the attached spreadsheet, the replacement fuel costs for this period are calculated by multiplying the generation produced at each of these peaking facilities by its associated heat rate and fuel price. Heat rates and fuel prices were based on Schedule A4 data for the month of February 2008. This calculation resulted in $1,978,802 of replacement fuel costs during the period immediately following the incident (Part A).

Part B is an estimate of the replacement fuel costs for the time period following Part A until Turkey Point nuclear units 3 and 4 would have been ready to return to service but for the occurrence of other maintenance and operational issues unrelated to the initial tripping of the units as a result of the February 26 electrical disturbance. This "Part B" time period covered 39.83 hours in total (FPL has estimated that the total time to return to service for each unit in the absence of unrelated issues would have been 48 hours, so the duration of Part B is calculated as follows: 48 total hours - 8.17 "Part A" hours = 39.83 "Part B" hours). As shown on the attached spreadsheet, during the "Part B" time period, Turkey Point units 3 and 4 could have produced 57,116 MWh of energy. Therefore, other units on FPL's system were required to make-up this off-line generation. FPL applied the actual percentage mix of natural gas, light oil and heavy oil from Schedule A3 for the month of February 2008 to the 57,116 MWh and multiplied each resulting volume by the actual fuel price per Schedule A3 for the month. The resulting replacement fuel costs for Part B are $4,429,628.

The final step, Part C, was to credit the sum of the replacement fuel costs from Parts A and B with the cost of the fuel that would have been incurred by Turkey Point units 3 and 4 during the entire duration of Parts A and B had each unit been on-line. As shown on the attached spreadsheet, the fuel costs that were not incurred by running Turkey Point units 3 and 4 during the entire duration of Parts A and B was calculated to be $322,252. This value was calculated using actual heat rate and fuel price data for the Turkey Point units per Schedule A4 from February 2008. The net replacement power costs are the sum of Parts A, B and C. As shown on the attached spreadsheet, the sum of Parts A, B and C is $6,086,178.

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FPL's Responses to Staff's First Set of Interrogatories (Nos. 1-15, 17-18, 20, 23-24, and 26-42)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 27
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 27
DATE 03/17/10

Q.
If the Commission were to agree with FPL on the refund amount and refund method proposed by FPL, please provide an estimate of the interest amount to be included in the 2010 net true-up. Please provide calculations for the following components or assumptions.

a. the 2008 final true-up amount (including interest) after deducting the total replacement fuel cost of $2,024,035, as proposed by FPL from the February 2008 actual costs.

b. the 2008 final true-up amount (including interest) after deducting the total replacement fuel cost of $2,024,035, as proposed by FPL from the March 2008 actual costs.

c. the interest effect for each $1,000 refund amount in 2008, 2009, and 2010.

A.
a. The resulting 2008 final true-up amount is $253,532,476 including interest. The interest associated with this estimate is $60,031. This is after deducting $2,024,035 X 99.99169% (retail jurisdictional factor in February 2008) X 1.00065 (line loss factor).

b. The resulting 2008 final true-up amount is $253,537,509 including interest. The interest associated with this estimate is $54,881. This is after deducting $2,024,035 X 99.99600% (retail jurisdictional factor in March 2008) X 1.00065 (line loss factor).

c. The interest effect for each $1,000 is as follows (Please see Attachments I and II) :

Feb - Dec 2008	$23.57
Jan - Dec 2009	$ 4.02
Jan - Dec 2010	$ 2.06

Interest Calculation

ACCOUNT	2009 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	1,000	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023		
Interest		1.29	2.39	2.29	2.21	2.05	2.06	2.06	3.13	3.35	1.89	0.87	23.57	23.57
Total	-	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023	1,024		

ACCOUNT	2009 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	2010 NOV	2010 DEC	
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%	
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%	
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%	
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%	
Amount	1,023.57	1,024.14	1,024.79	1,025.35	1,025.75	1,026.05	1,026.33	1,026.61	1,026.84	1,027.05	1,027.23	1,027.41	
Interest	0.57	0.66	0.56	0.41	0.30	0.28	0.28	0.24	0.20	0.19	0.18	0.17	4.02	27.59
Total	1,024.14	1,024.79	1,025.35	1,025.75	1,026.05	1,026.33	1,026.61	1,026.84	1,027.05	1,027.23	1,027.41	1,027.59		

ACCOUNT	2010 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	
Amount	1,028	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029	
Interest	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	2.06	29.64
Total	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029	1,030		

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 1
Attachment I, Page 1 of 1

FLAGAMI TRANSMISSION EVENT - Outage
Interest Calculation

	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	Annual	Cumulative
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Interest	Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Flagami Incident		2,025,182	2,027,786	2,032,619	2,037,251	2,041,725	2,045,876	2,050,045	2,054,222	2,060,555	2,067,338	2,071,163		
Interest	-	2,603	4,833	4,633	4,473	4,152	4,168	4,177	6,334	6,783	3,825	1,752	47,732	47,732
Total	-	2,027,786	2,032,619	2,037,251	2,041,725	2,045,876	2,050,045	2,054,222	2,060,555	2,067,338	2,071,163	2,072,915		

	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007		
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Flagami Incident	2,072,915	2,074,063	2,075,394	2,076,518	2,077,340	2,077,946	2,078,509	2,079,072	2,079,548	2,079,956	2,080,337	2,080,701		
Interest	1,149	1,331	1,124	822	606	563	563	476	407	381	364	347	8,133	55,865
Total	2,074,063	2,075,394	2,076,518	2,077,340	2,077,946	2,078,509	2,079,072	2,079,548	2,079,956	2,080,337	2,080,701	2,081,048		

	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008		
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Flagami Incident	2,081,048	2,081,395	2,081,741	2,082,088	2,082,435	2,082,783	2,083,130	2,083,477	2,083,824	2,084,171	2,084,519	2,084,866		
Interest	347	347	347	347	347	347	347	347	347	347	347	347	4,166	60,031
Total	2,081,395	2,081,741	2,082,088	2,082,435	2,082,783	2,083,130	2,083,477	2,083,824	2,084,171	2,084,519	2,084,866	2,085,214		

090505 Hearing Exhibits - 000013

FLAGAMI TRANSMISSION EVENT - Outage
Interest Calculation

ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Flagami Incident			2,025,270	2,027,683	2,032,305	2,036,767	2,040,908	2,045,067	2,049,234	2,055,552	2,062,318	2,066,134		
Interest	-	-	2,413	4,621	4,463	4,141	4,158	4,167	6,318	6,766	3,815	1,748	42,612	42,612
Total	-	-	2,027,683	2,032,305	2,036,767	2,040,909	2,045,067	2,049,234	2,055,552	2,062,318	2,066,134	2,067,881		

ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Flagami Incident	2,067,881	2,069,027	2,070,355	2,071,476	2,072,296	2,072,901	2,073,462	2,074,024	2,074,499	2,074,905	2,075,286	2,075,649		
Interest	1,146	1,328	1,121	820	604	561	562	475	406	380	363	346	8,113	50,725
Total	2,069,027	2,070,355	2,071,476	2,072,296	2,072,901	2,073,462	2,074,024	2,074,499	2,074,905	2,075,286	2,075,649	2,075,995		

ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Flagami Incident	2,075,995	2,076,341	2,076,687	2,077,033	2,077,379	2,077,725	2,078,072	2,078,418	2,078,764	2,079,111	2,079,457	2,079,804		
Interest	346	346	346	346	346	346	346	346	346	347	347	347	4,156	54,881
Total	2,076,341	2,076,687	2,077,033	2,077,379	2,077,725	2,078,072	2,078,418	2,078,764	2,079,111	2,079,457	2,079,804	2,080,151		

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.		(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
A	Fuel Costs & Net Power Transactions						
1	a Fuel Cost of System Net Generation	$ 341,952,079.42	$ 352,372,341.83	$ 389,720,951.38	$ 472,675,311.57	$ 567,605,752.04	$ 639,870,941.61
	b Incremental Hedging Costs	41,705.88	57,175.77	92,341.25	66,325.45	50,125.57	62,729.21
	c Nuclear Fuel Disposal Costs	1,972,368.07	1,762,352.30	1,917,393.24	1,592,404.43	1,765,798.91	1,976,643.48
	d Scherer Coal Cars Depreciation & Return	248,994.23	247,157.37	244,954.37	241,531.80	238,480.69	236,655.27
	f DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00
2	a Fuel Cost of Power Sold (Per A6)	(12,447,913.24)	(9,720,557.14)	(6,131,296.36)	(2,735,839.54)	(2,711,178.39)	(5,488,875.49)
	b Gains from Off-System Sales	(4,388,836.07)	(3,042,935.00)	(1,335,797.96)	(608,277.78)	(526,159.70)	(1,123,635.21)
3	a Fuel Cost of Purchased Power (Per A7)	21,519,164.53	25,415,390.80	22,085,105.96	24,856,993.00	26,669,254.96	29,579,617.49
	b Energy Payments to Qualifying Facilities (Per A8)	15,668,470.98	17,928,682.82	15,647,958.79	10,331,922.08	18,329,454.97	18,759,926.25
4	Energy Cost of Economy Purchases (Per A9)	1,176,041.25	3,065,395.66	8,805,030.75	6,391,196.15	3,243,567.06	1,767,392.85
5	Total Fuel Costs & Net Power Transactions	$ 365,742,075.05	$ 388,085,004.41	$ 431,046,641.62	$ 512,813,567.16	$ 614,665,096.11	$ 685,641,395.46
6	Adjustments to Fuel Cost						
	a Sales to Fla Keys Elect Coop (FKEC) & City of Key West (CKW)	(4,296,574.26)	(4,215,225.53)	(4,909,356.46)	(5,742,314.53)	(6,208,760.62)	(7,283,537.87)
	b Energy Imbalance Fuel Revenues	(115,723.27)	(147,214.50)	(221,811.44)	(49,212.27)	(496,599.32)	(608,389.75)
	c Inventory Adjustments	(62,735.12)	7,754.68	23,604.69	13,105.75	39,710.35	(51,148.83)
	d Non Recoverable Oil/Tank Bottoms - Docket No. 13092	0.00	0.00	95,927.46	0.00	116,255.89	0.00
	e Plagami Replacement Fuel Costs - Docket No. 090505-EI	0.00	(2,024,035.00)				
7	Adjusted Total Fuel Costs & Net Power Transactions	$ 361,267,042.40	$ 381,706,284.06	$ 426,035,005.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
B	kWh Sales						
1	Jurisdictional kWh Sales	8,399,773,134	7,454,101,518	7,370,925,305	7,628,218,997	8,337,469,479	9,759,914,795
2	Sale for Resale (excluding FKEC & CKW)	655,962	619,117	295,189	659,911	642,321	601,435
3	Sub-Total Sales (excluding FKEC & CKW)	8,400,429,096	7,454,720,635	7,371,220,494	7,628,878,908	8,338,111,800	9,760,516,230
6	Jurisdictional % of Total Sales (B1/B3)	99.99219%	99.99169%	99.99600%	99.99135%	99.99230%	99.99384%
C	True-up Calculation						
1	*Juris Fuel Revenues (Net of Revenue Taxes)*	$ 464,815,080.12	$ 409,441,561.51	$ 404,802,527.36	$ 419,941,331.68	$ 461,720,669.73	$ 544,700,995.21
2	Fuel Adjustment Revenues Not Applicable to Period						
	a Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)
	b GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)
	c Prior Period True-up (Collected)/Refunded This Period						
3	Jurisdictional Fuel Revenues Applicable to Period	$ 457,455,323.69	$ 402,081,805.08	$ 397,442,770.93	$ 412,581,575.25	$ 454,360,913.30	$ 537,341,238.78

090505 Hearing Exhibits - 000015

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
4	a	Adjusted Total Fuel Costs & Net Power Transactions (Line A-7)	$ 361,267,042.40	$ 381,706,284.06	$ 426,035,005.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
	b	Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	c	RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	d	D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	e	Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	361,267,042.40	381,706,284.06	426,035,005.88	507,035,146.12	608,115,702.22	677,698,319.01
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99219 %	99.99169 %	99.99600 %	99.99135 %	99.99230 %	99.99384 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 361,473,632.68	$ 381,922,652.74	$ 426,294,876.16	$ 507,320,831.91	$ 608,464,122.08	$ 678,097,049.56
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ 95,981,691.01	$ 20,159,152.34	$ (28,852,105.23)	$ (94,739,256.66)	$ (154,103,208.78)	$ (140,755,810.78)
8		Interest Provision for the Month	(500,596.34)	(218,215.70)	(197,425.22)	(315,030.64)	(562,884.34)	(808,700.57)
9	a	True-up & Interest Provision Beg. of Period -	(79,322,258.00)	22,769,024.84	49,320,149.65	26,880,807.37	(61,563,291.76)	(209,619,196.71)
	b	Deferred True-up Beginning of Period - Over/(Under) Recovery	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17
	b	Prior Period True-up Collected/(Refunded) This Period						
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (98,267,081.16)	$ (71,715,956.35)	$ (94,155,298.63)	$ (182,599,397.76)	$ (330,655,302.71)	$ (465,609,625.89)
D		Interest Provision						
1		Beginning True-up Amount (Lines C9a + C9b)	(200,358,364.00)	(98,267,081.16)	(71,715,956.35)	(94,155,298.63)	(182,599,397.76)	(330,655,302.71)
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C10)	(97,766,484.82)	(71,497,740.65)	(93,957,873.41)	(182,284,367.12)	(330,092,418.37)	(464,800,925.32)
3		Total of Beginning & Ending True-up Amount	(298,124,848.82)	(169,764,821.81)	(165,673,829.76)	(276,439,665.75)	(512,691,816.13)	(795,456,228.03)
4		Average True-up Amount (50% of Line D3)	(149,062,424.00)	(84,882,411.00)	(82,836,915.00)	(138,219,833.00)	(256,345,908.00)	(397,728,114.00)
5		Interest Rate - First Day Reporting Business Month	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%
6		Interest Rate - First Day Subsequent Business Month	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%
7		Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%
8		Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%
9		Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%
10		Interest Provision (Line D4 x Line D9)	($500,596.34)	($218,215.70)	($197,425.22)	($315,030.64)	($562,884.34)	($808,700.57)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%
		Monthly entry Over/(under)	$ 102,891,282.84	$ 26,551,124.81	$ (22,439,342.28)	$ (88,444,099.13)	$ (148,855,904.95)	$ (134,954,323.18)

NOTES (a) Generation Performance Incentive Factor is ((39,001,300) x 99.9280%) - See Order No. PSC-08-0030-POF-EI.

Nuclear Fuel Repair Costs	-	-	-	-	-	-
Scherer Fuel Additives	205,692.26	111,893.54	151,254.48	65,504.81	108,354.74	160,652.59
Total added to line A 1 a	$ 205,692.26	$ 111,893.54	$ 151,254.48	$ 65,504.81	$ 108,354.74	$ 160,652.59

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 1
Attachment 1, Page 4 of 11

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.		(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
A	Fuel Costs & Net Power Transactions							
1	a Fuel Cost of System Net Generation	$ 634,544,248.83	$ 591,017,822.02	$ 587,451,086.95	$ 437,661,917.33	$ 323,519,670.78	$ 292,147,608.54	$ 5,630,539,732.30
	b Incremental Hedging Costs	52,025.26	50,028.43	14,717.71	47,472.29	59,035.90	44,772.09	638,454.81
	c Nuclear Fuel Disposal Costs	2,020,269.78	1,811,039.95	2,069,906.43	1,771,267.32	1,649,038.35	2,047,170.00	22,355,652.26
	d Scherer Coal Cars Depreciation & Return	234,829.84	233,004.41	231,028.00	229,053.00	227,230.37	225,407.75	2,838,327.31
	f DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	a Fuel Cost of Power Sold (Per A6)	(2,420,428.59)	(2,106,804.77)	(846,305.00)	(1,233,990.26)	(5,736,275.97)	(7,053,335.64)	(58,632,800.39)
	b Gains from Off-System Sales	(417,095.55)	(458,395.99)	(109,927.98)	(306,065.29)	(2,083,215.95)	(2,601,139.90)	(17,001,482.38)
3	a Fuel Cost of Purchased Power (Per A7)	31,104,111.17	31,740,013.89	34,971,313.17	25,988,629.86	22,396,640.31	22,426,405.28	318,752,640.42
	b Energy Payments to Qualifying Facilities (Per A8)	20,536,251.66	14,677,935.15	18,336,626.59	19,077,748.06	13,802,794.93	16,580,462.60	199,680,234.88
4	Energy Cost of Economy Purchases (Per A9)	4,977,248.52	14,297,009.49	5,929,892.08	3,275,096.28	1,347,530.31	507,406.57	54,782,806.97
5	Total Fuel Costs & Net Power Transactions	$ 690,631,460.92	$ 651,261,652.58	$ 648,048,337.95	$ 486,511,128.59	$ 355,182,449.03	$ 324,324,757.29	$ 6,153,953,566.18
6	Adjustments to Fuel Cost							
	a Sales to Fla Keys Elect Coop (FKEC) & City of Key We	(7,470,452.57)	(8,135,438.01)	(6,920,512.25)	(6,205,245.92)	(5,093,001.00)	(3,649,897.39)	(70,130,316.60)
	b Energy Imbalance Fuel Revenues	(412,777.41)	(304,657.82)	(256,252.87)	(322,483.64)	(60,349.55)	(44,527.37)	(3,039,999.21)
	c Inventory Adjustments	45,546.06	(26,084.80)	(410.31)	(37,027.04)	(111,516.38)	(2,717.01)	(161,917.96)
	d Non Recoverable Oil/Tank Bottoms - Docket No. 13092	73,211.84	0.00	0.00	0.00	(70,648.14)	242,422.10	457,169.15
	e Flagami Replacement Fuel Costs - Docket No. 090505-E							(2,024,033.00)
7	Adjusted Total Fuel Costs & Net Power Transactions	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,079,054,466.55
B	kWh Sales							
1	Jurisdictional kWh Sales	9,757,483,937	9,672,918,747	10,238,892,821	9,066,192,587	7,573,675,476	7,659,240,667	102,918,807,463
2	Sale for Resale (excluding FKEC & CKW)	615,667	643,124	597,289	589,969	506,467	531,902	6,958,353
3	Sub-Total Sales (excluding FKEC & CKW)	9,758,099,604	9,673,561,871	10,239,490,110	9,066,782,556	7,574,181,943	7,659,772,569	102,925,765,816
6	Jurisdictional % of Total Sales (B1/B3)	99.99369%	99.99333%	99.99417%	99.99349%	99.99311%	99.99306%	99.99324%
C	True-up Calculation							
1	Juris Fuel Revenues (Net of Revenue Taxes)	$ 544,705,015.15	$ 609,041,612.89	$ 654,081,593.24	$ 576,510,428.88	$ 476,673,522.35	$ 481,992,384.54	$ 6,048,426,722.66
2	Fuel Adjustment Revenues Not Applicable to Period							
	a Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(79,322,258.00)
	b GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(8,994,819.12)
	c Prior Period True-up (Collected)/Refunded This Period		$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (121,036,106)
3	Jurisdictional Fuel Revenues Applicable to Period	$ 537,345,258.72	$ 577,474,635.26	$ 622,514,615.61	$ 544,943,451.25	$ 445,106,544.72	$ 450,425,406.91	$ 5,839,073,539.54

090505 Hearing Exhibits - 000017

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 1
Attachment II, Page 5 of 11

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.		(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
4	a Adjusted Total Fuel Costs & Net Power Transactions (Li	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,079,054,466.55
	b Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	c RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	d D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	e Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	682,866,988.83	642,795,471.95	640,871,162.52	479,946,371.99	349,846,933.96	320,870,037.62	6,079,054,466.55
5	Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99369 %	99.99335 %	99.99417 %	99.99349 %	99.99331 %	99.99306 %	99.99324 %
6	Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 683,267,735.46	$ 643,170,515.32	$ 641,250,341.70	$ 480,227,072.31	$ 350,050,914.50	$ 321,056,320.29	$ 6,082,596,064.71
7	True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ (145,922,476.74)	$ (65,695,880.06)	$ (18,735,726.09)	$ 64,716,378.94	$ 95,055,630.22	$ 129,369,086.62	$ (243,522,525.17)
8	Interest Provision for the Month	(1,090,604.01)	(1,270,282.95)	(1,961,350.12)	(1,923,254.87)	(879,663.69)	(281,942.17)	(10,009,950.62)
9	a True-up & Interest Provision Beg. of Period -	(344,573,519.89)	(484,976,412.47)	(521,125,166.11)	(511,004,832.95)	(417,394,299.51)	(292,400,923.61)	(79,322,258.00)
	b Deferred True-up Beginning of Period - Over/(Under) Re	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	79,322,258.00
	b Prior Period True-up Collected/(Refunded) This Period	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 121,036,106
11	End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (606,012,518.47)	$ (642,161,272.11)	$ (632,040,938.95)	$ (538,430,405.51)	$ (413,437,029.61)	$ (253,532,475.79)	$ (253,532,475.79)
D	Interest Provision							
1	Beginning True-up Amount (Lines C9a + C9b)	(465,609,625.89)	(606,012,518.47)	(642,161,272.11)	(632,040,938.95)	(538,430,405.51)	(413,437,029.61)	
2	Ending True-up Amount Before Interest (C7+C9a+C9b+	(604,921,914.46)	(640,890,989.16)	(630,079,588.83)	(536,507,150.64)	(412,557,365.92)	(253,250,533.62)	
3	Total of Beginning & Ending True-up Amount	(1,070,531,540.35)	(1,246,903,507.63)	(1,272,240,860.94)	(1,168,548,089.59)	(950,987,771.43)	(666,687,563.23)	
4	Average True-up Amount (50% of Line D3)	(535,265,770.00)	(623,451,754.00)	(636,120,430.00)	(584,274,045.00)	(475,493,886.00)	(333,343,782.00)	
5	Interest Rate - First Day Reporting Business Month	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	
6	Interest Rate - First Day Subsequent Business Month	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%	
7	Total (Line D5 + Line D6)	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%	
8	Average Interest Rate (50% of Line D7)	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%	
9	Monthly Average Interest Rate (Line D8 / 12)	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%	
10	Interest Provision (Line D4 x Line D9)	($1,090,604.01)	($1,270,282.95)	($1,961,350.12)	($1,923,254.87)	($879,663.69)	($281,942.17)	$ (10,009,950.63)
	REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	
	Monthly entry Over/(under)	$ (140,402,891.58)	$ (36,148,753.64)	$ 10,120,333.16	$ 93,610,533.44	$ 124,993,375.96	$ 159,904,563.82	

NOTES (a) Generation Performance Incentive Factor is ([redacted]

Nuclear Fuel Repair Costs	41,646.00	-	-	-	-	-
Scherer Fuel Additives	165,106.37	206,978.58	84,635.99	224,031.84	172,112.02	208,304.51
Total added to line A 1 a	$ 206,752.37	$ 206,978.58	$ 84,635.99	$ 224,031.84	$ 172,112.02	$ 208,304.51

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.		(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
A	**Fuel Costs & Net Power Transactions**						
1	a Fuel Cost of System Net Generation	$ 341,952,079.42	$ 352,372,341.83	$ 389,720,951.38	$ 472,675,311.57	$ 567,605,752.04	$ 639,870,941.61
	b Incremental Hedging Costs	41,705.88	57,175.77	92,341.25	66,325.45	50,125.57	62,729.21
	c Nuclear Fuel Disposal Costs	1,972,368.07	1,762,352.30	1,917,393.24	1,592,404.43	1,765,798.91	1,976,643.48
	d Scherer Coal Cars Depreciation & Return	248,994.23	247,157.37	244,954.57	241,531.80	238,480.69	236,655.27
	f DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00
2	a Fuel Cost of Power Sold (Per A6)	(12,447,913.24)	(9,720,557.14)	(6,131,296.36)	(2,735,839.54)	(2,711,178.39)	(5,488,875.49)
	b Gains from Off-System Sales	(4,388,836.07)	(3,042,935.00)	(1,335,797.96)	(608,277.78)	(526,159.70)	(1,123,635.21)
3	a Fuel Cost of Purchased Power (Per A7)	21,519,164.53	25,415,390.80	22,085,103.96	24,856,993.00	26,669,254.96	29,579,617.49
	b Energy Payments to Qualifying Facilities (Per A8)	15,668,470.98	17,928,682.82	15,647,958.79	10,333,922.08	18,329,454.97	18,759,926.25
4	Energy Cost of Economy Purchases (Per A9)	1,176,041.25	3,065,395.66	8,805,030.75	6,391,196.15	3,243,567.06	1,767,392.85
5	Total Fuel Costs & Net Power Transactions	$ 365,742,075.05	$ 388,085,004.41	$ 431,046,641.62	$ 512,813,567.16	$ 614,665,096.11	$ 685,641,395.46
6	**Adjustments to Fuel Cost**						
	a Sales to Fla Keys Elect Coop (FKEC) & City of Key West (CKW)	(4,296,574.26)	(4,215,225.53)	(4,909,356.46)	(5,742,314.53)	(6,208,760.82)	(7,283,537.87)
	b Energy Imbalance Fuel Revenues	(115,723.27)	(147,214.50)	(221,811.44)	(49,212.27)	(496,599.32)	(608,389.75)
	c Inventory Adjustments	(62,735.12)	7,754.68	23,604.69	13,105.75	39,710.35	(51,148.83)
	d Non Recoverable Oil/Tank Bottoms - Docket No. 13092	0.00	0.00	95,927.46	0.00	116,255.89	0.00
	e Plagami Replacement Fuel Costs - Docket No. 090505-EI			(2,024,035.00)			
7	Adjusted Total Fuel Costs & Net Power Transactions	$ 361,267,042.40	$ 383,730,319.06	$ 424,010,970.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
B	**kWh Sales**						
1	Jurisdictional kWh Sales	8,399,773,134	7,454,101,518	7,370,925,305	7,628,218,997	8,337,469,479	9,759,914,795
2	Sale for Resale (excluding FKEC & CKW)	655,962	619,117	295,189	659,911	642,321	601,435
3	Sub-Total Sales (excluding FKEC & CKW)	8,400,429,096	7,454,720,635	7,371,220,494	7,628,878,908	8,338,111,800	9,760,516,230
6	**Jurisdictional % of Total Sales (B1/B3)**	99.99219%	99.99169%	99.99600%	99.99135%	99.99230%	99.99384%
C	**True-up Calculation**						
1	Juris Fuel Revenues (Net of Revenue Taxes)	$ 464,815,080.12	$ 409,441,561.51	$ 404,802,527.36	$ 419,941,331.68	$ 461,720,669.73	$ 544,700,995.21
2	**Fuel Adjustment Revenues Not Applicable to Period**						
	a Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)
	b GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)
	c Prior Period True-up (Collected)/Refunded This Period						
3	Jurisdictional Fuel Revenues Applicable to Period	$ 457,455,323.69	$ 402,081,805.08	$ 397,442,770.93	$ 412,581,575.25	$ 454,360,913.30	$ 537,341,238.78
4	a Adjusted Total Fuel Costs & Net Power Transactions (Line A-7)	$ 361,267,042.40	$ 383,730,319.06	$ 424,010,970.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
	b Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	c RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	d D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	e Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	361,267,042.40	383,730,319.06	424,010,970.88	507,035,146.12	608,115,702.22	677,698,319.01

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99219 %	99.99169 %	99.99600 %	99.99135 %	99.99230 %	99.99384 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4a x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 361,473,632.68	$ 383,947,835.05	$ 424,269,606.55	$ 507,320,831.91	$ 608,464,122.08	$ 678,097,049.56
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ 95,981,691.01	$ 18,137,970.03	$ (26,826,835.62)	$ (94,739,256.66)	$ (154,103,208.78)	$ (140,755,810.78)
8		Interest Provision for the Month	(500,596.34)	(220,818.87)	(199,844.63)	(315,041.89)	(562,895.21)	(808,710.65)
9	a	True-up & Interest Provision Beg. of Period -	(79,322,258.00)	22,769,024.84	47,292,364.17	26,875,872.09	(61,568,238.29)	(209,624,154.11)
	b	Deferred True-up Beginning of Period - Over/(Under) Recovery	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17
	b	Prior Period True-up Collected/(Refunded) This Period						
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (98,267,081.16)	$ (73,743,741.83)	$ (94,160,233.91)	$ (182,604,344.29)	$ (330,660,260.11)	$ (465,614,593.37)
D		Interest Provision						
1		Beginning True-up Amount (Lines C9a + C9b)	(200,358,364.00)	(98,267,081.16)	(73,743,741.83)	(94,160,233.91)	(182,604,344.29)	(330,660,260.11)
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C10)	(97,766,484.82)	(73,522,922.96)	(93,960,389.28)	(182,289,302.40)	(330,097,364.90)	(464,805,882.72)
3		Total of Beginning & Ending True-up Amount	(298,124,848.82)	(171,790,004.12)	(167,704,131.11)	(276,449,536.31)	(512,701,709.19)	(795,466,142.83)
4		Average True-up Amount (50% of Line D3)	(149,062,424.00)	(85,895,002.00)	(83,852,066.00)	(138,224,768.00)	(256,350,855.00)	(397,733,071.00)
5		Interest Rate - First Day Reporting Business Month	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%
6		Interest Rate - First Day Subsequent Business Month	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%
7		Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%
8		Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%
9		Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%
10		Interest Provision (Line D4 x Line D9)	($500,596.34)	($220,818.87)	($199,844.63)	($315,041.89)	($562,895.21)	($808,710.65)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%
		Monthly entry Over/(under)	$ 102,091,282.84	$ 24,523,339.33	$ (20,416,491.08)	$ (88,444,110.38)	$ (148,055,915.82)	$ (134,954,333.26)

NOTES (a) Generation Performance Incentive Factor is ((59,001,300) x 99.9280%) - See Order No. PSC-08-0030-FOF-EI.

Nuclear Fuel Repair Costs	-	-	-	-	-	-	
Scherer Fuel Additives	205,692.26	111,893.54	151,254.48	65,504.81	108,354.74	160,652.59	
Total added to line A 1 a	$ 205,692.26	$ 111,893.54	$ 151,254.48	$ 65,504.81	$ 108,354.74	$ 160,652.59	

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.		(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
A	Fuel Costs & Net Power Transactions							
1	a Fuel Cost of System Net Generation	$ 634,544,248.83	$ 591,017,822.02	$ 587,451,086.95	$ 437,661,917.33	$ 323,519,670.78	$ 292,147,608.54	$ 5,630,539,732.30
	b Incremental Hedging Costs	52,025.26	50,028.43	14,717.71	47,472.29	59,035.90	44,772.09	638,454.81
	c Nuclear Fuel Disposal Costs	2,020,269.78	1,811,039.95	2,069,906.43	1,771,267.32	1,649,038.35	2,047,170.00	22,355,652.26
	d Scherer Coal Cars Depreciation & Return	234,829.84	233,004.41	231,028.00	229,053.00	227,230.37	225,407.75	2,838,327.31
	f DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	a Fuel Cost of Power Sold (Per A6)	(2,420,428.59)	(2,106,804.77)	(846,305.00)	(1,233,990.26)	(5,736,275.97)	(7,053,335.64)	(58,632,800.39)
	b Gains from Off-System Sales	(417,095.55)	(458,395.99)	(109,927.98)	(306,065.29)	(2,083,215.95)	(2,601,139.90)	(17,001,482.38)
3	a Fuel Cost of Purchased Power (Per A7)	31,104,111.17	31,740,013.89	34,971,313.17	25,988,629.86	22,396,640.31	22,426,405.28	318,752,640.42
	b Energy Payments to Qualifying Facilities (Per A8)	20,536,251.66	14,677,935.15	18,336,626.59	19,077,748.06	13,802,794.93	16,580,462.60	199,680,234.88
4	Energy Cost of Economy Purchases (Per A9)	4,977,248.52	14,297,009.49	5,929,892.08	3,275,096.28	1,347,530.31	507,406.57	54,782,806.97
5	Total Fuel Costs & Net Power Transactions	$ 690,631,460.92	$ 651,261,652.58	$ 648,048,337.95	$ 486,511,128.59	$ 355,182,449.03	$ 324,324,757.29	$ 6,153,953,566.18
6	Adjustments to Fuel Cost							
	a Sales to Fla Keys Elect Coop (FKEC) & City of Key Wes	(7,470,452.57)	(8,135,438.01)	(6,920,512.25)	(6,205,245.92)	(5,093,001.00)	(3,649,897.39)	(70,130,316.60)
	b Energy Imbalance Fuel Revenues	(412,777.41)	(304,657.82)	(256,252.87)	(322,483.64)	(60,349.55)	(44,527.37)	(3,039,999.21)
	c Inventory Adjustments	45,546.06	(26,084.80)	(410.31)	(37,027.04)	(111,516.38)	(2,717.01)	(161,917.96)
	d Non Recoverable Oil/Tank Bottoms - Docket No. 13092	73,211.84	0.00	0.00	0.00	(70,648.14)	242,422.10	457,169.15
	e Plaguru Replacement Fuel Costs - Docket No. 090505-EI							(2,024,035.00)
7	Adjusted Total Fuel Costs & Net Power Transactions	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,079,054,466.55
B	kWh Sales							
1	Jurisdictional kWh Sales	9,757,483,937	9,672,918,747	10,238,892,821	9,066,192,587	7,573,675,476	7,659,240,667	102,918,807,463
2	Sale for Resale (excluding FKEC & CKW)	615,667	643,124	597,289	589,969	506,467	531,902	6,958,353
3	Sub-Total Sales (excluding FKEC & CKW)	9,758,099,604	9,673,561,871	10,239,490,110	9,066,782,556	7,574,181,943	7,659,772,569	102,925,765,816
6	Jurisdictional % of Total Sales (B1/B3)	99.99369%	99.99335%	99.99417%	99.99349%	99.99331%	99.99306%	99.99324%
C	True-up Calculation							
1	Juris Fuel Revenues (Net of Revenue Taxes)	$ 544,705,015.15	$ 609,041,612.89	$ 654,081,593.24	$ 576,510,428.88	$ 476,673,522.35	$ 481,992,384.54	$ 6,048,426,722.66
2	Fuel Adjustment Revenues Not Applicable to Period							
	a Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(79,322,258.00)
	b GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(8,994,819.12)
	c Prior Period True-up (Collected)/Refunded This Period		$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (121,036,106)
3	Jurisdictional Fuel Revenues Applicable to Period	$ 537,345,258.72	$ 577,474,635.26	$ 622,514,615.61	$ 544,943,451.25	$ 445,106,544.72	$ 450,425,406.91	$ 5,839,073,339.54
4	a Adjusted Total Fuel Costs & Net Power Transactions (La	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,079,054,466.55
	b Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	c RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	d D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	e Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	682,866,988.83	642,795,471.95	640,871,162.52	479,946,371.99	349,846,933.96	320,870,037.62	6,079,054,466.55

090505 Hearing Exhibits - 000021

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
	5	Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99369 %	99.99335 %	99.99417 %	99.99349 %	99.99331 %	99.99306 %	99.99324 %
	6	Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 683,267,735.46	$ 643,170,515.22	$ 641,250,341.70	$ 480,227,072.31	$ 350,050,914.50	$ 321,056,320.29	$ 6,082,595,977.41
	7	True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ (145,922,476.74)	$ (65,695,880.06)	$ (18,735,726.09)	$ 64,716,378.94	$ 95,055,630.22	$ 129,369,086.62	$ (243,522,437.87)
	8	Interest Provision for the Month	(1,090,614.13)	(1,270,293.09)	(1,961,365.50)	(1,923,271.34)	(879,672.97)	(281,946.42)	(10,015,071.04)
	9 a	True-up & Interest Provision Beg. of Period -	(344,578,487.37)	(484,981,390.07)	(521,130,153.85)	(511,009,836.07)	(417,399,319.10)	(292,405,952.48)	(79,322,258.00)
	b	Deferred True-up Beginning of Period - Over/(Under) R	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
	10 a	*Prior Period True-up Collected/(Refunded) This Period*	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	79,322,258.00
	b	Prior Period True-up Collected/(Refunded) This Period		$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 121,036,106
	11	End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (606,017,496.07)	$ (642,166,259.85)	$ (632,045,942.07)	$ (538,435,425.10)	$ (413,442,058.48)	$ (253,537,508.91)	$ (253,537,508.91)
D		Interest Provision							
	1	Beginning True-up Amount (Lines C9a + C9b)	(465,614,593.37)	(606,017,496.07)	(642,166,259.85)	(632,045,942.07)	(538,435,425.10)	(413,442,058.48)	
	2	Ending True-up Amount Before Interest (C7+C9a+C9b+	(604,926,881.94)	(640,895,966.76)	(630,084,576.57)	(536,512,153.76)	(412,562,385.51)	(253,255,562.49)	
	3	Total of Beginning & Ending True-up Amount	(1,070,541,475.31)	(1,246,913,462.83)	(1,272,250,836.42)	(1,168,558,095.83)	(950,997,810.61)	(666,697,620.97)	
	4	Average True-up Amount (50% of Line D3)	(535,270,738.00)	(623,456,731.00)	(636,125,418.00)	(584,279,048.00)	(475,498,905.00)	(333,348,810.00)	
	5	Interest Rate - First Day Reporting Business Month	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	
	6	Interest Rate - First Day Subsequent Business Month	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%	
	7	Total (Line D5 + Line D6)	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%	
	8	Average Interest Rate (50% of Line D7)	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%	
	9	*Monthly Average Interest Rate (Line D8 / 12)*	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%	
	10	Interest Provision (Line D4 x Line D9)	($1,090,614.13)	($1,270,293.09)	($1,961,365.50)	($1,923,271.34)	($879,672.97)	($281,946.42)	$ (10,015,071.05)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	
		Monthly entry Over/(under)	$ (140,402,902.70)	$ (36,148,763.78)	$ 10,120,317.78	$ 93,610,516.97	$ 124,993,366.62	$ 159,904,549.57	

NOTES (a) Generation Performance Incentive Factor is ((

Nuclear Fuel Repair Costs	41,646.00	-	-	-	-	-
Scherer Fuel Additives	165,106.37	206,978.58	84,635.99	224,031.84	172,112.02	208,304.51
Total added to line A 1 a	$ 206,752.37	$ 206,978.58	$ 84,635.99	$ 224,031.84	$ 172,112.02	$ 208,304.51

090505 Hearing Exhibits - 000022

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 1
Attachment II, Page 10 of 11

Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	1,000	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023		
Interest		1.29	2.39	2.29	2.21	2.05	2.06	2.06	3.13	3.35	1.89	0.87	23.57	23.57
Total	-	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023	1,024		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.36000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	1,024	1,024	1,025	1,025	1,026	1,026	1,026	1,027	1,027	1,027	1,027	1,027		
Interest	0.57	0.66	0.56	0.41	0.30	0.28	0.28	0.24	0.20	0.19	0.18	0.17	4.02	27.59
Total	1,024	1,025	1,026	1,026	1,026	1,026	1,027	1,027	1,027	1,027	1,027	1,028		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	1,028	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029		
Interest	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	2.06	29.64
Total	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029	1,030		

Q.

If the Commission were to agree with Office of Public Counsel (OPC) on the refund amount and refund method proposed by OPC, please provide an estimate of the interest amount to be included in the 2010 net true-up. Please provide calculations for the following components or assumptions.

a. the 2008 final true-up amount (including interest) after deducting the total replacement fuel cost as proposed by OPC from the February 2008 actual costs.

b. the 2008 final true-up amount (including interest) after deducting the total replacement fuel cost as proposed by OPC from the March 2008 actual costs.

c. the interest effect for each $1,000 refund amount in 2008, 2009, and 2010.

A.

a. The resulting 2008 final true-up amount is $240,147,149 including interest. The interest associated with this estimate is $447,668. This is after deducting $15,093,737 X 99.99169% (retail jurisdictional factor in February 2008) X 1.00065 (line loss factor).

b. The resulting 2008 final true-up amount is $240,184,682 including interest. The interest associated with this estimate is $409,260. This is after deducting $15,093,737 X 99.99600% (retail jurisdictional factor in March 2008) X 1.00065 (line loss factor).

c. The interest effect for each $1,000 is as follows (Please see Attachments I and II) :

Feb - Dec 2008	$23.57
Jan - Dec 2009	$ 4.02
Jan - Dec 2010	$ 2.06.

Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63600%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	1,000	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023		
Interest		1.29	2.39	2.29	2.21	2.05	2.06	2.06	3.13	3.35	1.89	0.87	23.57	23.57
Total	-	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023	1,024		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	1,023.57	1,024.14	1,024.79	1,025.35	1,025.75	1,026.05	1,026.33	1,026.61	1,026.84	1,027.05	1,027.23	1,027.41		
Interest	0.57	0.66	0.58	0.41	0.30	0.28	0.28	0.24	0.20	0.19	0.18	0.17	4.02	27.59
Total	1,024.14	1,024.79	1,025.35	1,025.75	1,026.05	1,026.33	1,026.61	1,026.84	1,027.05	1,027.23	1,027.41	1,027.59		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	1,028	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029		
Interest	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	2.06	29.64
Total	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029	1,030		

FLAGAMI TRANSMISSION EVENT - Outage

Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Flagami Incident		15,102,294	15,121,706	15,157,748	15,192,293	15,225,653	15,256,612	15,287,697	15,318,848	15,366,079	15,416,659	15,445,180		
Interest	-	19,413	36,040	34,547	33,360	30,959	31,085	31,149	47,233	50,580	28,521	13,064	355,950	355,950
Total	-	15,121,706	15,157,746	15,192,293	15,225,653	15,256,612	15,287,697	15,318,848	15,366,079	15,416,659	15,445,180	15,458,244		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.54000%	0.78000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.78000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.32000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Flagami Incident	15,458,244	15,466,811	15,478,735	15,485,118	15,491,248	15,495,766	15,499,963	15,504,161	15,507,714	15,510,751	15,513,594	15,516,309		
Interest	8,566	9,925	8,383	6,130	4,518	4,197	4,198	3,553	3,037	2,844	2,715	2,586	60,651	416,602
Total	15,466,811	15,476,735	15,485,118	15,491,248	15,495,766	15,499,963	15,504,161	15,507,714	15,510,751	15,513,594	15,516,309	15,518,895		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Flagami Incident	15,518,895	15,521,482	15,524,069	15,526,656	15,529,244	15,531,832	15,534,421	15,537,010	15,539,599	15,542,189	15,544,780	15,547,370		
Interest	2,586	2,587	2,587	2,588	2,588	2,589	2,589	2,590	2,590	2,590	2,591	2,591	31,088	447,668
Total	15,521,482	15,524,069	15,526,656	15,529,244	15,531,832	15,534,421	15,537,010	15,539,599	15,542,189	15,544,780	15,547,370	15,549,962		

FLAGAMI TRANSMISSION EVENT - Outage
Interest Calculation

	2008	2008	2008	2008										
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Flagami Incident			15,102,944	15,120,942	15,155,405	15,188,684	15,219,567	15,250,577	15,281,650	15,328,769	15,379,226	15,407,678		
Interest	-	-	17,998	34,463	33,279	30,884	31,010	31,073	47,118	50,457	28,452	13,032	317,766	317,766
Total	-	-	15,120,942	15,155,405	15,188,684	15,219,567	15,250,577	15,281,650	15,328,769	15,379,226	15,407,678	15,420,710		

	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009		
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.78000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.65000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Flagami Incident	15,420,710	15,429,255	15,439,156	15,447,519	15,453,633	15,458,141	15,462,327	15,466,515	15,470,059	15,473,089	15,475,926	15,478,634		
Interest	8,548	9,900	8,363	6,115	4,507	4,187	4,188	3,544	3,030	2,837	2,708	2,580	60,504	378,270
Total	15,429,255	15,439,156	15,447,519	15,453,633	15,458,141	15,462,327	15,466,515	15,470,059	15,473,089	15,475,926	15,478,634	15,481,214		

	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010		
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Flagami Incident	15,481,214	15,483,794	15,486,375	15,488,956	15,491,537	15,494,119	15,496,701	15,499,284	15,501,867	15,504,451	15,507,035	15,509,620		
Interest	2,580	2,581	2,581	2,581	2,582	2,582	2,583	2,583	2,584	2,584	2,585	2,585	30,991	409,260
Total	15,483,794	15,486,375	15,488,956	15,491,537	15,494,119	15,496,701	15,499,284	15,501,867	15,504,451	15,507,035	15,509,620	15,512,205		

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
A		Fuel Costs & Net Power Transactions						
1	a	Fuel Cost of System Net Generation	$ 341,952,079.42	$ 352,372,341.83	$ 389,720,951.38	$ 472,675,311.57	$ 567,605,752.04	$ 639,870,941.61
	b	Incremental Hedging Costs	41,705.88	57,175.77	92,341.25	66,325.45	50,125.57	62,729.21
	c	Nuclear Fuel Disposal Costs	1,972,368.07	1,762,352.30	1,917,393.24	1,592,404.43	1,765,798.91	1,976,643.48
	d	Scherer Coal Cars Depreciation & Return	248,994.23	247,157.37	244,954.57	241,531.80	238,480.69	236,655.27
	f	DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00
2	a	Fuel Cost of Power Sold (Per A6)	(12,447,913.24)	(9,720,557.14)	(6,131,296.36)	(2,735,839.54)	(2,711,178.39)	(5,488,875.49)
	b	Gains from Off-System Sales	(4,388,836.07)	(3,042,935.00)	(1,335,797.96)	(608,277.78)	(526,159.70)	(1,123,635.21)
3	a	Fuel Cost of Purchased Power (Per A7)	21,519,164.53	25,415,390.80	22,085,105.96	24,856,993.00	26,669,254.96	29,579,617.49
	b	Energy Payments to Qualifying Facilities (Per A8)	15,668,470.98	17,928,682.82	15,647,958.79	10,333,922.08	18,329,454.97	18,759,926.25
4		Energy Cost of Economy Purchases (Per A9)	1,176,041.25	3,065,395.66	8,805,030.75	6,391,196.15	3,243,567.06	1,767,392.85
5		Total Fuel Costs & Net Power Transactions	$ 365,742,075.05	$ 388,085,004.41	$ 431,046,641.62	$ 512,813,567.16	$ 614,665,096.11	$ 685,641,395.46
6		Adjustments to Fuel Cost						
	a	Sales to Fla Keys Elect Coop (FKEC) & City of Key West (CKW)	(4,296,574.26)	(4,215,225.53)	(4,909,356.46)	(5,742,314.53)	(6,208,760.82)	(7,283,537.87)
	b	Energy Imbalance Fuel Revenues	(115,723.27)	(147,214.50)	(221,811.44)	(49,212.27)	(496,599.32)	(608,389.75)
	c	Inventory Adjustments	(62,735.12)	7,754.68	23,604.69	13,105.75	39,710.35	(51,148.83)
	d	Non Recoverable Oil/Tank Bottoms - Docket No. 13092	0.00	0.00	95,927.46	0.00	116,255.89	0.00
	e	Flagami Replacement Fuel Costs - Docket No. 090505-EI		(15,093,737.00)				
7		Adjusted Total Fuel Costs & Net Power Transactions	$ 361,267,042.40	$ 368,636,582.06	$ 426,035,005.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
B		kWh Sales						
1		Jurisdictional kWh Sales	8,399,773,134	7,454,101,518	7,370,925,305	7,628,218,997	8,337,469,479	9,759,914,795
2		Sale for Resale (excluding FKEC & CKW)	655,962	619,117	295,189	659,911	642,321	601,435
3		Sub-Total Sales (excluding FKEC & CKW)	8,400,429,096	7,454,720,635	7,371,220,494	7,628,878,908	8,338,111,800	9,760,516,230
6		Jurisdictional % of Total Sales (B1/B3)	99.99219%	99.99169%	99.99600%	99.99135%	99.99230%	99.99384%
C		True-up Calculation						
1		Juris Fuel Revenues (Net of Revenue Taxes)	$ 464,815,080.12	$ 409,441,561.51	$ 404,802,527.36	$ 419,941,331.68	$ 461,720,669.73	$ 544,700,995.21
2		Fuel Adjustment Revenues Not Applicable to Period						
	a	Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)
	b	GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)
	c	Prior Period True-up (Collected)/Refunded This Period						
3		Jurisdictional Fuel Revenues Applicable to Period	$ 457,455,323.69	$ 402,081,805.08	$ 397,442,770.93	$ 412,581,575.25	$ 454,360,913.30	$ 537,341,238.78
4	a	Adjusted Total Fuel Costs & Net Power Transactions (Line A-7)	$ 361,267,042.40	$ 368,636,582.06	$ 426,035,005.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
	b	Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
	c	RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	d	D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	e	Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	361,267,042.40	368,636,582.06	426,035,005.88	507,035,146.12	608,115,702.22	677,698,319.01
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99219 %	99.99169 %	99.99600 %	99.99135 %	99.99230 %	99.99384 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 361,473,632.68	$ 368,845,542.23	$ 426,294,876.16	$ 507,320,831.91	$ 608,464,122.08	$ 678,097,049.56
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ 95,981,691.01	$ 33,236,262.85	$ (28,852,105.23)	$ (94,739,256.66)	$ (154,103,208.78)	$ (140,755,810.78)
8		Interest Provision for the Month	(500,596.34)	(201,406.39)	(166,218.48)	(285,115.85)	(533,998.51)	(781,893.70)
9	a	True-up & Interest Provision Beg. of Period -	(79,322,258.00)	22,769,024.84	62,414,069.47	40,005,933.93	(48,408,250.41)	(196,435,269.53)
	b	Deferred True-up Beginning of Period - Over/(Under) Recovery	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17
	b	Prior Period True-up Collected/(Refunded) This Period						
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (98,267,081.16)	$ (58,622,036.53)	$ (81,030,172.07)	$ (169,444,356.41)	$ (317,471,375.53)	$ (452,398,891.84)
D		Interest Provision						
1		Beginning True-up Amount (Lines C9a + C9b)	(200,358,364.00)	(98,267,081.16)	(58,622,036.53)	(81,030,172.07)	(169,444,356.41)	(317,471,375.53)
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C10)	(97,766,484.82)	(58,420,630.14)	(80,863,953.59)	(169,159,240.56)	(316,937,377.02)	(451,616,998.14)
3		Total of Beginning & Ending True-up Amount	(298,124,848.82)	(156,687,711.30)	(139,485,990.12)	(250,189,412.63)	(486,381,733.43)	(769,088,373.67)
4		Average True-up Amount (50% of Line D3)	(149,062,424.00)	(78,343,856.00)	(69,742,995.00)	(125,094,706.00)	(243,190,867.00)	(384,544,187.00)
5		Interest Rate - First Day Reporting Business Month	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%
6		Interest Rate - First Day Subsequent Business Month	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%
7		Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%
8		Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%
9		Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%
10		Interest Provision (Line D4 x Line D9)	($500,596.34)	($201,406.39)	($166,218.48)	($285,115.85)	($533,998.51)	($781,893.70)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%
		Monthly entry Over/(under)	$ 102,091,282.84	$ 39,645,044.63	$ (22,408,135.54)	$ (88,414,184.34)	$ (148,027,019.12)	$ (134,927,516.31)

NOTES (a) Generation Performance Incentive Factor is (($9,001,300) x 99.9280%) - See Order No. PSC-08-0030-FOF-EI.

Nuclear Fuel Repair Costs	-	-	-	-	-	-
Scherer Fuel Additives	205,692.26	111,893.54	151,254.48	65,504.81	108,354.74	160,652.59
Total added to line A 1 a	$ 205,692.26	$ 111,893.54	$ 151,254.48	$ 65,504.81	$ 108,354.74	$ 160,652.59

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

	LINE NO.			(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
A			Fuel Costs & Net Power Transactions							
	1	a	Fuel Cost of System Net Generation	$ 634,544,248.83	$ 591,017,822.02	$ 587,451,086.95	$ 437,661,917.33	$ 323,519,670.78	$ 292,147,608.54	$ 5,630,539,732.30
		b	Incremental Hedging Costs	52,025.26	50,028.43	14,717.71	47,472.29	59,035.90	44,772.09	638,454.81
		c	Nuclear Fuel Disposal Costs	2,020,269.78	1,811,039.95	2,069,906.43	1,771,267.32	1,649,038.35	2,047,170.00	22,355,652.26
		d	Scherer Coal Cars Depreciation & Return	234,829.84	233,004.41	231,028.00	229,053.00	227,230.37	225,407.75	2,838,327.31
		f	DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	a	Fuel Cost of Power Sold (Per A6)	(2,420,428.59)	(2,106,804.77)	(846,305.00)	(1,233,990.26)	(5,736,275.97)	(7,053,335.64)	(58,632,800.39)
		b	Gains from Off-System Sales	(417,095.55)	(458,395.99)	(109,927.98)	(306,065.29)	(2,083,215.95)	(2,601,139.90)	(17,001,482.38)
	3	a	Fuel Cost of Purchased Power (Per A7)	31,104,111.17	31,740,013.89	34,971,313.17	25,988,629.86	22,396,640.31	22,426,405.28	318,752,640.42
		b	Energy Payments to Qualifying Facilities (Per A8)	20,536,251.66	14,677,935.15	18,336,626.59	19,077,748.06	13,802,794.93	16,580,462.60	199,680,234.88
	4		Energy Cost of Economy Purchases (Per A9)	4,977,248.52	14,297,009.49	5,929,892.08	3,275,096.28	1,347,530.31	507,406.57	54,782,806.97
	5		Total Fuel Costs & Net Power Transactions	$ 690,631,460.92	$ 651,261,652.58	$ 648,048,337.95	$ 486,511,128.59	$ 355,182,449.03	$ 324,324,757.29	$ 6,153,953,566.18
	6		Adjustments to Fuel Cost							
		a	Sales to Fla Keys Elect Coop (FKEC) & City of Key Wes	(7,470,452.57)	(8,135,438.01)	(6,920,512.25)	(6,205,245.92)	(5,093,001.00)	(3,649,897.39)	(70,130,316.60)
		b	Energy Imbalance Fuel Revenues	(412,777.41)	(304,657.82)	(256,252.87)	(322,483.64)	(60,349.55)	(44,527.37)	(3,039,999.21)
		c	Inventory Adjustments	45,546.06	(26,084.80)	(410.31)	(37,027.04)	(111,516.38)	(2,717.01)	(161,917.96)
		d	Non Recoverable Oil/Tank Bottoms - Docket No. 13092	73,211.84	0.00	0.00	0.00	(70,648.14)	242,422.10	457,169.15
		e	Flagami Replacement Fuel Costs - Docket No. 090505-EI							(15,093,737.00)
	7		Adjusted Total Fuel Costs & Net Power Transactions	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,065,984,764.55
B			kWh Sales							
	1		Jurisdictional kWh Sales	9,757,483,937	9,672,918,747	10,238,892,821	9,066,192,587	7,573,675,476	7,659,240,667	102,918,807,463
	2		Sale for Resale (excluding FKEC & CKW)	615,667	643,124	597,289	589,969	506,467	531,902	6,958,353
	3		Sub-Total Sales (excluding FKEC & CKW)	9,758,099,604	9,673,561,871	10,239,490,110	9,066,782,556	7,574,181,943	7,659,772,569	102,925,765,816
	6		Jurisdictional % of Total Sales (B1/B3)	99.99369%	99.99335%	99.99417%	99.99349%	99.99331%	99.99306%	99.99324%
C			True-up Calculation							
	1		Juris Fuel Revenues (Net of Revenue Taxes)	$ 544,705,015.15	$ 609,041,612.89	$ 654,081,593.24	$ 576,510,428.88	$ 476,673,522.35	$ 481,992,384.54	$ 6,048,426,722.66
	2		Fuel Adjustment Revenues Not Applicable to Period							
		a	Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(79,322,258.00)
		b	GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(8,994,819.12)
		c	Prior Period True-up (Collected)/Refunded This Period		$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (121,036,106)
	3		Jurisdictional Fuel Revenues Applicable to Period	$ 537,345,258.72	$ 577,474,635.26	$ 622,514,615.61	$ 544,943,451.25	$ 445,106,544.72	$ 450,425,406.91	$ 5,839,073,539.54
	4	a	Adjusted Total Fuel Costs & Net Power Transactions (Lir	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,065,984,764.55
		b	Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
	c	RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	d	D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	e	Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	682,866,988.83	642,795,471.95	640,871,162.52	479,946,371.99	349,846,933.96	320,870,037.62	6,065,984,764.55
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99369 %	99.99335 %	99.99417 %	99.99349 %	99.99331 %	99.99306 %	99.99324 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 683,267,735.46	$ 643,170,515.32	$ 641,250,341.70	$ 480,227,072.31	$ 350,050,914.50	$ 321,056,320.29	$ 6,069,518,954.20
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ (145,922,476.74)	$ (65,695,880.06)	$ (18,735,726.09)	$ 64,716,378.94	$ 95,055,630.22	$ 129,369,086.62	$ (230,445,414.66)
8		Interest Provision for the Month	(1,063,687.14)	(1,243,311.23)	(1,920,451.31)	(1,879,457.09)	(854,967.45)	(270,630.43)	(9,701,733.92)
9	a	True-up & Interest Provision Beg. of Period -	(331,362,785.84)	(471,738,761.55)	(507,860,543.47)	(497,699,311.50)	(404,044,980.28)	(279,026,908.14)	(79,322,258.00)
	b	Deferred True-up Beginning of Period - Over/(Under) Re	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	79,322,258.00
	b	Prior Period True-up Collected/(Refunded) This Period		$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 121,036,106
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (592,774,867.55)	$ (628,896,649.47)	$ (618,735,417.50)	$ (525,081,086.28)	$ (400,063,014.14)	$ (240,147,148.58)	$ (240,147,148.58)
D		**Interest Provision**							
1		Beginning True-up Amount (Lines C9a + C9b)	(452,398,891.84)	(592,774,867.55)	(628,896,649.47)	(618,735,417.50)	(525,081,086.28)	(400,063,014.14)	
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C	(591,711,180.41)	(627,653,338.24)	(616,814,966.19)	(523,201,629.19)	(399,208,046.69)	(239,876,518.15)	
3		Total of Beginning & Ending True-up Amount	(1,044,110,072.25)	(1,220,428,205.79)	(1,245,711,615.66)	(1,141,937,046.69)	(924,289,132.97)	(639,939,532.29)	
4		Average True-up Amount (50% of Line D3)	(522,055,036.00)	(610,214,103.00)	(622,855,808.00)	(570,968,523.00)	(462,144,566.00)	(319,969,766.00)	
5		Interest Rate - First Day Reporting Business Month	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	
6		Interest Rate - First Day Subsequent Business Month	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%	
7		Total (Line D5 + Line D6)	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%	
8		Average Interest Rate (50% of Line D7)	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%	
9		Monthly Average Interest Rate (Line D8 / 12)	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%	
10		Interest Provision (Line D4 x Line D9)	($1,063,687.14)	($1,243,311.23)	($1,920,451.31)	($1,879,457.09)	($854,967.45)	($270,630.43)	$ (9,701,733.90)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	
		Monthly entry Over/(under)	$ (140,375,975.71)	$ (36,121,781.92)	$ 10,161,231.97	$ 93,654,331.22	$ 125,018,072.14	$ 159,915,865.56	

NOTES

(a) **Generation Performance Incentive Factor is ((S**

Nuclear Fuel Repair Costs	41,646.00	-	-	-	-	-	
Scherer Fuel Additives	165,106.37	206,978.58	84,635.99	224,031.84	172,112.02	208,304.51	
Total added to line A 1 a	$ 206,752.37	$ 206,978.58	$ 84,635.99	$ 224,031.84	$ 172,112.02	$ 208,304.51	

090505 Hearing Exhibits - 000031

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 2
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CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

	LINE NO.			(1) JAN	(2) FEB	(3) MAR	(4) APR	(5) MAY	(6) JUN
A			Fuel Costs & Net Power Transactions						
	1	a	Fuel Cost of System Net Generation	$ 341,952,079.42	$ 352,372,341.83	$ 389,720,951.38	$ 472,675,311.57	$ 567,605,752.04	$ 639,870,941.61
		b	Incremental Hedging Costs	41,705.88	57,175.77	92,341.25	66,325.45	50,125.57	62,729.21
		c	Nuclear Fuel Disposal Costs	1,972,368.07	1,762,352.30	1,917,393.24	1,592,404.43	1,765,798.91	1,976,643.48
		d	Scherer Coal Cars Depreciation & Return	248,994.23	247,157.37	244,954.57	241,531.80	238,480.69	236,655.27
		f	DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00
	2	a	Fuel Cost of Power Sold (Per A6)	(12,447,913.24)	(9,720,557.14)	(6,131,296.36)	(2,735,839.54)	(2,711,178.39)	(5,488,875.49)
		b	Gains from Off-System Sales	(4,388,836.07)	(3,042,935.00)	(1,335,797.96)	(608,277.78)	(526,159.70)	(1,123,635.21)
	3	a	Fuel Cost of Purchased Power (Per A7)	21,519,164.53	25,415,390.80	22,085,105.96	24,856,993.00	26,669,254.96	29,579,617.49
		b	Energy Payments to Qualifying Facilities (Per A8)	15,668,470.98	17,928,682.82	15,647,958.79	10,333,922.08	18,329,454.97	18,759,926.25
	4		Energy Cost of Economy Purchases (Per A9)	1,176,041.25	3,065,395.66	8,805,030.75	6,391,196.15	3,243,567.06	1,767,392.85
	5		Total Fuel Costs & Net Power Transactions	$ 365,742,075.05	$ 388,085,004.41	$ 431,046,641.62	$ 512,813,567.16	$ 614,665,096.11	$ 685,641,395.46
	6		Adjustments to Fuel Cost						
		a	Sales to Fla Keys Elect Coop (FKEC) & City of Key West (CKW)	(4,296,574.26)	(4,215,225.53)	(4,909,356.46)	(5,742,314.53)	(6,208,760.82)	(7,283,537.87)
		b	Energy Imbalance Fuel Revenues	(115,723.27)	(147,214.50)	(221,811.44)	(49,212.27)	(496,599.32)	(608,389.75)
		c	Inventory Adjustments	(62,735.12)	7,754.68	23,604.69	13,105.75	39,710.35	(51,148.83)
		d	Non Recoverable Oil/Tank Bottoms - Docket No. 13092	0.00	0.00	95,927.46	0.00	116,255.89	0.00
		e	Flagami Replacement Fuel Costs - Docket No. 090505-EI			(15,093,737.00)			
	7		Adjusted Total Fuel Costs & Net Power Transactions	$ 361,267,042.40	$ 383,730,319.06	$ 410,941,268.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
B			kWh Sales						
	1		Jurisdictional kWh Sales	8,399,773,134	7,454,101,518	7,370,925,305	7,628,218,997	8,337,469,479	9,759,914,795
	2		Sale for Resale (excluding FKEC & CKW)	655,962	619,117	295,189	659,911	642,321	601,435
	3		Sub-Total Sales (excluding FKEC & CKW)	8,400,429,096	7,454,720,635	7,371,220,494	7,628,878,908	8,338,111,800	9,760,516,230
	6		Jurisdictional % of Total Sales (B1/B3)	99.99219%	99.99169%	99.99600%	99.99135%	99.99230%	99.99384%
C			True-up Calculation						
	1		Juris Fuel Revenues (Net of Revenue Taxes)	$ 464,815,080.12	$ 409,441,561.51	$ 404,802,527.36	$ 419,941,331.68	$ 461,720,669.73	$ 544,700,995.21
	2		Fuel Adjustment Revenues Not Applicable to Period						
		a	Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)
		b	GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)
		c	Prior Period True-up (Collected)/Refunded This Period						
	3		Jurisdictional Fuel Revenues Applicable to Period	$ 457,455,323.69	$ 402,081,805.08	$ 397,442,770.93	$ 412,581,575.25	$ 454,360,913.30	$ 537,341,238.78
	4	a	Adjusted Total Fuel Costs & Net Power Transactions (Line A-7)	$ 361,267,042.40	$ 383,730,319.06	$ 410,941,268.88	$ 507,035,146.12	$ 608,115,702.22	$ 677,698,319.01
		b	Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00

CALCULATION OF ACTUAL TRUE-UP AMOUNT								
FLORIDA POWER & LIGHT COMPANY								
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008								
			(1)	(2)	(3)	(4)	(5)	(6)
LINE NO.			JAN	FEB	MAR	APR	MAY	JUN
	c	RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	d	D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00
	e	Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	361,267,042.40	383,730,319.06	410,941,268.88	507,035,146.12	608,115,702.22	677,698,319.01
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99219 %	99.99169 %	99.99600 %	99.99135 %	99.99230 %	99.99384 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 361,473,632.68	$ 383,947,835.05	$ 411,191,932.37	$ 507,320,831.91	$ 608,464,122.08	$ 678,097,049.56
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ 95,981,691.01	$ 18,133,970.03	$ (13,749,161.44)	$ (94,739,256.66)	$ (154,103,208.78)	$ (140,755,810.78)
8		Interest Provision for the Month	(500,596.34)	(220,818.87)	(184,260.62)	(285,199.74)	(534,079.50)	(781,968.86)
9	a	True-up & Interest Provision Beg. of Period -	(79,322,258.00)	22,769,024.84	47,292,364.17	39,969,130.28	(48,445,137.95)	(196,472,238.06)
	b	Deferred True-up Beginning of Period - Over/(Under) Recovery	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17
	b	Prior Period True-up Collected/(Refunded) This Period						
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (98,267,081.16)	$ (73,743,741.83)	$ (81,066,975.72)	$ (169,481,243.95)	$ (317,508,344.06)	$ (452,435,935.53)
D		Interest Provision						
1		Beginning True-up Amount (Lines C9a + C9b)	(200,358,364.00)	(98,267,081.16)	(73,743,741.83)	(81,066,975.72)	(169,481,243.95)	(317,508,344.06)
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C10)	(97,766,484.82)	(73,522,922.96)	(80,882,715.10)	(169,196,044.21)	(316,974,264.56)	(451,653,966.67)
3		Total of Beginning & Ending True-up Amount	(298,124,848.82)	(171,790,004.12)	(154,626,456.93)	(250,263,019.93)	(486,455,508.51)	(769,162,310.73)
4		Average True-up Amount (50% of Line D3)	(149,062,424.00)	(85,895,002.00)	(77,313,228.00)	(125,131,510.00)	(243,227,754.00)	(384,581,155.00)
5		Interest Rate - First Day Reporting Business Month	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%
6		Interest Rate - First Day Subsequent Business Month	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%
7		Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%
8		Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%
9		Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%
10		Interest Provision (Line D4 x Line D9)	($500,596.34)	($220,818.87)	($184,260.62)	($285,199.74)	($534,079.50)	($781,968.86)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%
		Monthly entry Over/(under)	$ 102,091,282.84	$ 24,523,339.33	$ (7,323,233.89)	$ (88,414,268.23)	$ (148,027,100.11)	$ (134,927,591.47)
NOTES		(a) Generation Performance Incentive Factor is (($9,001,300) x 99.9280%) - See Order No. PSC-08-0030-FOF-EI.						
		Nuclear Fuel Repair Costs	-	-	-	-	-	-
		Scherer Fuel Additives	205,692.26	111,893.54	151,254.48	65,504.81	108,354.74	160,652.59
		Total added to line A 1 a	$ 205,692.26	$ 111,893.54	$ 151,254.48	$ 65,504.81	$ 108,354.74	$ 160,652.59

CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

	LINE NO.			(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
A			Fuel Costs & Net Power Transactions							
	1	a	Fuel Cost of System Net Generation	$ 634,544,248.83	$ 591,017,822.02	$ 587,451,086.95	$ 437,661,917.33	$ 323,519,670.78	$ 292,147,608.54	$ 5,630,539,732.30
		b	Incremental Hedging Costs	52,025.26	50,028.43	14,717.71	47,472.29	59,035.90	44,772.09	638,454.81
		c	Nuclear Fuel Disposal Costs	2,020,269.78	1,811,039.95	2,069,906.43	1,771,267.32	1,649,038.35	2,047,170.00	22,355,652.26
		d	Scherer Coal Cars Depreciation & Return	234,829.84	233,004.41	231,028.00	229,053.00	227,230.37	225,407.75	2,838,327.31
		f	DOE D&D Fund Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	a	Fuel Cost of Power Sold (Per A6)	(2,420,428.59)	(2,106,804.77)	(846,305.00)	(1,233,990.26)	(5,736,275.97)	(7,053,335.64)	(58,632,800.39)
		b	Gains from Off-System Sales	(417,095.55)	(458,395.99)	(109,927.98)	(306,065.29)	(2,083,215.95)	(2,601,139.90)	(17,001,482.38)
	3	a	Fuel Cost of Purchased Power (Per A7)	31,104,111.17	31,740,013.89	34,971,313.17	25,988,629.86	22,396,640.31	22,426,405.28	318,752,640.42
		b	Energy Payments to Qualifying Facilities (Per A8)	20,536,251.66	14,677,935.15	18,336,626.59	19,077,748.06	13,802,794.93	16,580,462.60	199,680,234.88
	4		Energy Cost of Economy Purchases (Per A9)	4,977,248.52	14,297,009.49	5,929,892.08	3,275,096.28	1,347,530.31	507,406.57	54,782,806.97
	5		Total Fuel Costs & Net Power Transactions	$ 690,631,460.92	$ 651,261,652.58	$ 648,048,337.95	$ 486,511,128.59	$ 355,182,449.03	$ 324,324,757.29	$ 6,153,953,566.18
	6		Adjustments to Fuel Cost							
		a	Sales to Fla Keys Elect Coop (FKEC) & City of Key Wes	(7,470,452.57)	(8,135,438.01)	(6,920,512.25)	(6,205,245.92)	(5,093,001.00)	(3,649,897.39)	(70,130,316.60)
		b	Energy Imbalance Fuel Revenues	(412,777.41)	(304,657.82)	(256,252.87)	(322,483.64)	(60,349.55)	(44,527.37)	(3,039,999.21)
		c	Inventory Adjustments	45,546.06	(26,084.80)	(410.31)	(37,027.04)	(111,516.38)	(2,717.01)	(161,917.96)
		d	Non Recoverable Oil/Tank Bottoms - Docket No. 13092	73,211.84	0.00	0.00	0.00	(70,648.14)	242,422.10	457,169.15
		e	Flagam Replacement Fuel Costs - Docket No. 090505-EI							(15,093,737.00)
	7		Adjusted Total Fuel Costs & Net Power Transactions	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,065,984,764.55
B			kWh Sales							
	1		Jurisdictional kWh Sales	9,757,483,937	9,672,918,747	10,238,892,821	9,066,192,587	7,573,675,476	7,659,240,667	102,918,807,463
	2		Sale for Resale (excluding FKEC & CKW)	615,667	643,124	597,289	589,969	506,467	531,902	6,958,353
	3		Sub-Total Sales (excluding FKEC & CKW)	9,758,099,604	9,673,561,871	10,239,490,110	9,066,782,556	7,574,181,943	7,659,772,569	102,925,765,816
	6		Jurisdictional % of Total Sales (B1/B3)	99.99369%	99.99335%	99.99417%	99.99349%	99.99331%	99.99306%	99.99324%
C			True-up Calculation							
	1		Juris Fuel Revenues (Net of Revenue Taxes)	$ 544,705,015.15	$ 609,041,612.89	$ 654,081,593.24	$ 576,510,428.88	$ 476,673,522.35	$ 481,992,384.54	$ 6,048,426,722.66
	2		Fuel Adjustment Revenues Not Applicable to Period							
		a	Prior Period True-up (Collected)/Refunded This Period	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(6,610,188.17)	(79,322,258.00)
		b	GPIF, Net of Revenue Taxes (a)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(749,568.26)	(8,994,819.12)
		c	Prior Period True-up (Collected)/Refunded This Period		$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (24,207,221)	$ (121,036,106)
	3		Jurisdictional Fuel Revenues Applicable to Period	$ 537,345,258.72	$ 577,474,635.26	$ 622,514,615.61	$ 544,943,451.25	$ 445,106,544.72	$ 450,425,406.91	$ 5,839,073,539.54
	4	a	Adjusted Total Fuel Costs & Net Power Transactions (Lir	$ 682,866,988.83	$ 642,795,471.95	$ 640,871,162.52	$ 479,946,371.99	$ 349,846,933.96	$ 320,870,037.62	$ 6,065,984,764.55
		b	Nuclear Fuel Expense - 100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00

090505 Hearing Exhibits - 000034

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 2
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CALCULATION OF ACTUAL TRUE-UP AMOUNT
FLORIDA POWER & LIGHT COMPANY
FOR THE PERIOD JANUARY THROUGH DECEMBER 2008

LINE NO.			(7) JUL	(8) AUG	(9) SEP	(10) OCT	(11) NOV	(12) DEC	(13) TOTAL PERIOD
	c	RTP Incremental Fuel -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	d	D&D Fund Payments -100% Retail	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	e	Adj Total Fuel Costs & Net Power Transactions - Excluding 100% Retail Items (C4a-C4b-C4c-C4d)	682,866,988.83	642,795,471.95	640,871,162.52	479,946,371.99	349,846,933.96	320,870,037.62	6,065,984,764.55
5		Jurisdictional Sales % of Total kWh Sales (Line B-6)	99.99369 %	99.99335 %	99.99417 %	99.99349 %	99.99331 %	99.99306 %	99.99324 %
6		Jurisdictional Total Fuel Costs & Net Power Transactions (Line C4e x C5 x 1.00065(b)) +(Lines C4b,c,d)	$ 683,267,735.46	$ 643,170,515.32	$ 641,250,341.70	$ 480,227,072.31	$ 350,050,914.50	$ 321,056,320.29	$ 6,069,518,303.23
7		True-up Provision for the Month - Over/(Under) Recovery (Line C3 - Line C6)	$ (145,922,476.74)	$ (65,695,880.06)	$ (18,735,726.09)	$ 64,716,378.94	$ 95,055,630.22	$ 129,369,086.62	$ (230,444,763.69)
8		Interest Provision for the Month	(1,063,762.61)	(1,243,386.86)	(1,920,566.00)	(1,879,579.90)	(855,036.70)	(270,662.15)	(9,739,918.15)
9	a	True-up & Interest Provision Beg. of Period -	(331,399,829.53)	(471,775,880.71)	(507,897,738.26)	(497,736,620.98)	(404,082,412.57)	(279,064,409.68)	(79,322,258.00)
	b	Deferred True-up Beginning of Period - Over/(Under) Re	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)	(121,036,106.00)
10	a	Prior Period True-up Collected/(Refunded) This Period	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	6,610,188.17	79,322,258.00
	b	Prior Period True-up Collected/(Refunded) This Period		$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 24,207,221	$ 121,036,106
11		End of Period Net True-up Amount Over/(Under) Recovery (Lines C7 through C10)	$ (592,811,986.71)	$ (628,933,844.26)	$ (618,772,726.98)	$ (525,118,518.57)	$ (400,100,515.68)	$ (240,184,681.84)	$ (240,184,681.84)
D		Interest Provision							
1		Beginning True-up Amount (Lines C9a + C9b)	(452,435,935.53)	(592,811,986.71)	(628,933,844.26)	(618,772,726.98)	(525,118,518.57)	(400,100,515.68)	
2		Ending True-up Amount Before Interest (C7+C9a+C9b+C	(591,748,224.10)	(627,690,457.40)	(616,852,160.98)	(523,238,938.67)	(399,245,478.98)	(239,914,019.69)	
3		Total of Beginning & Ending True-up Amount	(1,044,184,159.63)	(1,220,502,444.11)	(1,245,786,005.24)	(1,142,011,665.65)	(924,363,997.55)	(640,014,535.37)	
4		Average True-up Amount (50% of Line D3)	(522,092,080.00)	(610,251,222.00)	(622,893,003.00)	(571,005,833.00)	(462,181,999.00)	(320,007,268.00)	
5		Interest Rate - First Day Reporting Business Month	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	
6		Interest Rate - First Day Subsequent Business Month	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%	
7		Total (Line D5 + Line D6)	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%	
8		Average Interest Rate (50% of Line D7)	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%	
9		Monthly Average Interest Rate (Line D8 / 12)	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%	
10		Interest Provision (Line D4 x Line D9)	($1,063,762.61)	($1,243,386.86)	($1,920,566.00)	($1,879,579.90)	($855,036.70)	($270,662.15)	$ (9,739,918.15)
		REVENUE TAX FACTOR	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	99.9280%	
		Monthly entry Over/(under)	$ (140,376,051.18)	$ (36,121,857.55)	$ 10,161,117.28	$ 93,654,208.41	$ 125,018,002.89	$ 159,915,833.84	

NOTES (a) Generation Performance Incentive Factor is (($

Nuclear Fuel Repair Costs	41,646.00	-	-	-	-	-	
Scherer Fuel Additives	165,106.37	206,978.58	84,635.99	224,031.84	172,112.02	208,304.51	
Total added to line A 1 a	$ 206,752.37	$ 206,978.58	$ 84,635.99	$ 224,031.84	$ 172,112.02	$ 208,304.51	

090505 Hearing Exhibits - 000035

Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	1,000	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023		
Interest		1.29	2.39	2.29	2.21	2.05	2.06	2.06	3.13	3.35	1.89	0.87	23.57	23.57
Total	-	1,001	1,004	1,006	1,008	1,010	1,012	1,014	1,017	1,021	1,023	1,024		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	1,024	1,024	1,025	1,025	1,026	1,026	1,026	1,027	1,027	1,027	1,027	1,027		
Interest	0.57	0.66	0.56	0.41	0.30	0.28	0.28	0.24	0.20	0.19	0.18	0.17	4.02	27.59
Total	1,024	1,025	1,025	1,026	1,026	1,026	1,027	1,027	1,027	1,027	1,027	1,028		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	1,028	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029		
Interest	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	2.06	29.64
Total	1,028	1,028	1,028	1,028	1,028	1,029	1,029	1,029	1,029	1,029	1,029	1,030		

Q.

In Interrogatory No. 70 (Staff's Fifth Set of Interrogatories) in Docket No. 080001-EI, staff asked FPL to provide an estimate of the net replacement power costs, if any, that resulted from the February 26, 2008, electrical disturbance. In response to that interrogatory FPL calculated a net replacement power cost of $6,086,178. FPL assumed in its calculation an outage duration of 48 hours for Turkey Point Units 3 and 4. FPL also assumed that all fuel costs not incurred during the outage were associated with Turkey Point Units 3 and 4. Please explain why these assumptions are contrary to those proposed by FPL in docket No. 090505-EI.

A.

At the time it prepared the response to Interrogatory No. 70 in Docket No. 080001-EI, FPL had not yet evaluated the disincentives to the development of low fuel cost generating resources such as nuclear, solar and wind power that would result from basing the replacement power costs ("RPC") for a transmission-created outage on the fuel costs and operational characteristics of a nuclear unit that had been prudently operated but nonetheless came offline as a result of such an outage. After evaluating those disincentives, FPL determined that a fairer and more appropriate approach in such circumstances would be to calculate the RPC for the period of time that FPL's more conventional, non-nuclear generation was offline as a result of the transmission-created outage, using adjusted system average fuel costs as the measure of avoided costs.

Q.

Please provide the following information for each unexpected FPL nuclear plant shut down since 2000:

a. Reason for shut down.

b. Date and time at shut down.

c. Date and time at start up.

d. Planned and unplanned repairs performed during the shutdown.

A.

a. - c. Please see Attachment I.

d. Please see Attachment II for the March 2009 planned outage. This work schedule for one outage illustrates the significant amount of work that occurs during each outage. There is an average of 120 work orders for each unscheduled outage, so providing this information for 10 years of unplanned outages at FPL's Turkey Point Nuclear Plant Units 3 and 4 and St. Lucie Nuclear Plant Units 1 and 2 would be unduly burdensome and is not relevant to any issue in this docket.

Turkey Point Unit 3:

Outage Start	Outage End	Description
8/10/2001 5:10	8/11/2001 21:19	TRIPPED MAIN TURBINE TO ALLOW H2 LEAK INVESTIGATION
8/15/2001 4:49	8/20/2001 2:04	MANUAL REACTOR TRIP ON LOW CONDENSER VACUUM
1/27/2003 8:44	1/29/2003 8:12	Manual Trip due to loss of instrument air.
4/28/2003 21:10	5/1/2003 22:04	Manual Reactor Shutdown due to CV-3-200B OOS.
5/20/2003 15:43	5/21/2003 14:59	MANUAL SHUTDOWN DUE TO Tech Spec 3.1.3:5 SHUT DOWN ROD INSERTION LIMITS
12/6/2003 5:44	12/7/2003 1:16	Turbine governor repair
6/17/2004 17:48	6/18/2004 14:33	Repair oil leak at Turbine Front Standard
6/26/2004 22:28	6/29/2004 2:07	Power reduction due to Right Stop and #2 Control valve instability
12/14/2004 11:45	12/18/2004 22:10	Manual Reactor Shutdown due to fire at the HP Turbine
12/28/2004 22:46	12/31/2004 23:59	Manual Reactor shutdown due to leakage into exciter
1/1/2005 0:00	1/3/2005 10:11	Manual Reactor Shutdown due to leak in Exciter.
1/3/2005 10:11	1/7/2005 16:34	Shutdown to repair Main Steam Isolation Valve Actuator and Exciter
10/15/2005 7:01	10/19/2005 12:48	Manual Trip due to the loss of 3C Feed water regulating valve
10/24/2005 7:16	10/27/2005 17:38	Offline due to Hurricane Wilma
12/29/2005 17:20	12/31/2005 21:05	Reactor shut down due to Turbine Plant Cooling Water leak in exciter
6/6/2007 11:51	6/22/2007 17:45	Reactor Shutdown due to multiple Rod Position Indicator failures, failed temperature element, volatage regulator failure
2/26/2008 13:10	3/3/2008 15:21	Reactor Trip due to loss of switchyard
6/28/2008 3:42	6/28/2008 22:58	Outage to perform balance shot on the #9 turbine bearing

Turkey Point Unit 4:

Outage Start	Outage End	Description
1/24/2000 11:42	1/27/2000 10:27	Manual Trip due to loss of 4A Steam Generator Feed Control
1/25/2001 19:52	1/31/2001 12:15	MANUAL REACTOR TRIP DUE TO DROPPED RODS
10/4/2002 23:45	10/5/2002 14:10	Full forced down power due to secondary steam leak
5/14/2004 17:29	5/18/2004 15:58	Reactor Automatically Tripped on 4A Steam Generator low level.
12/25/2004 7:36	12/26/2004 10:12	Manual Reactor Shutdown due to low condenser vacuum
3/22/2005 3:47	3/23/2005 15:30	Manual Reactor Shutdown due to the 4A Steam Generator Feed Pump Motor Fault
3/23/2005 19:57	3/24/2005 16:34	Reactor Shutdown due to Oil Leak on the 4B Steam Generator Feed Pump
6/27/2005 3:16	7/13/2005 19:20	Reactor Trip due to Fire on the Main Transformer
7/14/2005 4:10	7/15/2005 1:37	Shutdown for exciter balance adjustment
7/15/2005 18:16	7/16/2005 23:09	Manual Reactor Trip to repair isophase bus ground
10/24/2005 7:00	10/28/2005 4:18	Taken offline due to Hurricane Wilma
10/28/2005 4:18	10/31/2005 22:20	Shutdown due to condenser tube leak
10/31/2005 22:20	11/2/2005 1:04	Offline due to Loss of Offsite power and startup transformer
11/2/2005 1:04	11/12/2005 22:48	Offline due to condenser tube sheet plug leak
2/20/2006 1:24	2/21/2006 6:07	Down power to Mode 3 to repair Nuclear Instrument System detector
5/18/2006 21:00	5/22/2006 7:59	Reactor shutdown due to condensate piping hanger failure
2/26/2008 13:09	2/29/2008 4:47	Reactor Trip due to loss of switch yard
2/29/2008 4:50	3/1/2008 10:53	Reactor trip due to A Steam Generator Water Level greater than 75 percent
1/11/2010 10:58	1/14/2010 18:29	Reactor Tip due to loss of the 4A Steam Generator Feed Pump

St. Lucie Unit 1:

Outage Start	Outage End	Description
6/5/2001 10:48	6/7/2001 22:10	1A2 Reactor Coolant Pump Trip
11/8/2001 12:42	11/12/2001 12:34	Steam Piping
9/4/2004 10:32	9/14/2004 10:52	Hurricane Frances Outage
9/25/2004 11:30	10/3/2004 4:01	Hurricane Jeanne Outage
10/20/2005 6:00	10/26/2005 15:00	Hurricane Wilma preps and outage
5/27/2007 7:26	5/27/2007 12:30	SL1-21 Turbine Control System Malfunction
8/20/2008 6:49	8/25/2008 16:05	Steam Generator High Sodium (Tropical Storm Fay)

St. Lucie Unit 2:

Outage Start	Outage End	Description
4/16/2000 22:42	4/17/2000 0:01	Steam Generator Chemistry
3/14/2001 17:50	3/18/2001 4:53	Control Rod Drive Power Supply
12/26/2001 0:00	12/29/2001 5:39	Repair Main feed water isolation valve v-09-1
4/1/2003 16:03	4/5/2003 20:12	Inter and After Condensers
6/11/2003 1:30	6/17/2003 23:00	Reactor Trip-Feed water Valves
12/4/2003 16:32	12/5/2003 23:57	Manual Shutdown due to condensate pump problems
12/20/2003 9:49	12/24/2003 19:34	Reactor Shut down Due to Loss of Main Generator Excitation
12/26/2003 10:24	12/28/2003 13:15	Reactor Shutdown Due to Generator Exciter Problems
9/4/2004 1:56	9/18/2004 1:55	Hurricane Frances Outage
9/25/2004 11:59	10/4/2004 22:27	Hurricane Jeanne Outage
12/25/2004 6:51	12/26/2004 23:30	2B Condensate Pump Motor Failure Outage
12/26/2004 23:30	12/27/2004 17:20	Axial Shape Index Restart Hold
12/27/2004 17:20	12/31/2004 23:59	Main Feed water Loss at Startup
1/1/2005 0:00	1/2/2005 5:33	Main Feed water loss at Startup
8/11/2005 10:48	8/12/2005 15:00	LOSS OF 2A2 4160 BUS OUTAGE
10/24/2005 0:01	10/27/2005 22:40	Hurricane Wilma Outage
1/20/2006 8:56	1/24/2006 10:33	Condenser Tube Leak Outage
6/15/2006 22:23	6/17/2006 5:10	Digital Electro Hydraulic System Leak
8/18/2007 16:02	8/29/2007 15:48	Reactor Coolant Pump Seal Injection Line Repair
8/29/2007 15:48	8/31/2007 12:20	Control Element Drive Mechanism
12/21/2007 19:20	12/27/2007 18:50	2B2 Reactor Coolant Pump Seal Injection Line Leak
12/27/2007 18:50	1/4/2008 17:23	Control Element Assembly #1 Drop, Troubleshoot & Repair
1/29/2008 5:31	2/8/2008 17:45	2B1 Reactor Coolant Pump Seal Leak
6/4/2008 17:30	6/6/2008 11:15	Heater Drain Pump & Main Feed water Pump Trip
6/7/2008 8:18	6/8/2008 23:23	2B Condensate Pump Motor
4/1/2009 18:05	4/3/2009 19:00	Debris Filter System High Differential Pressure - Sea grass intrusion
6/19/2009 23:48	6/20/2009 10:53	Turbine Vibration Repair
7/13/2009 0:38	7/27/2009 23:56	2B2 Reactor Coolant Pump Seal Injection Line Leak
9/17/2009 3:59	9/19/2009 10:55	Safety iljection Recirc Valve V3495 Repair & Foreign Material Exclusion Retrieval
9/21/2009 13:34	9/29/2009 9:35	Safety Relief Valve V1202 Repair

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624		ISI BOLTING INSPECTIONS--CLASS I WALKDOWN	4	16MAR09 17:00	16MAR09 20:59	PJ
38012007	CTMT	INSPECT & REPAIR CONTAINMENT PHONES	16	16MAR09 07:00	17MAR09 10:59	EM
38012007	FUEL	SETUP & TEST CONTAINMENT REFUELING COMMUNICATION	36	16MAR09 08:00*	19MAR09 07:59	EM
38012007	FUEL	(P) REFUELING TELEX - RIG TO FUEL PLATFORM	2	17MAR09 23:00	18MAR09 00:59	PJ
38012007	FUEL	DEMOB CONTAINMENT REFUELING COMMUNICATIONS	12	31MAR09 07:00*	31MAR09 18:59	EM
38012007	FUEL	(P)RIG OUT CTMT REFUELING COMMUNICATION EQUIP(H)	2	31MAR09 19:00	31MAR09 20:59	PJ
38012007	FUEL	CTMNT REFUELING COMM - STORE EQUPT	2	01APR09 07:00*	01APR09 08:59	EM
38012007	FUEL	OUTAGE COMMUNICATION SUPPORT WO - CLOSE WO	4	06APR09 07:00*	06APR09 10:59	EM
37018726		REPAIR PERSONNEL HATCH PHONE MIC	10	20MAR09 07:00*	20MAR09 16:59	EM
38010232		INSPECT COMMUNICATIONS CABLES INSIDE CONTAINMENT	10	26MAR09 07:00*	26MAR09 16:59	EM
38011754	3C01	CLEAN CONTROL ROOM RACKS & CONSOLES	20	22MAR09 22:00	23MAR09 17:59	IC
36012545	3C02	3C02, REPLACE DETACHED TIE WRAP HOLDERS	3	22MAR09 23:00	23MAR09 01:59	IC
32004097	3S77	S77-H L/C TRANSFER SWITCH INSPECTION	8	24MAR09 07:00*	24MAR09 14:59	EM
32004097	3S77	PMT S77-H L/C TRANSFER SWITCH INSPECTION	4	24MAR09 15:00	24MAR09 18:59	EM

Run Date 18FEB10 13:52	Turkey Point Nuclear Power Station	
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WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38000879	3X21	3C Tx - REPAIR LOW SIDE LEAD BOX	24	25MAR09 07:00*	26MAR09 18:59	EM
38000879	3X21	3C Tx - MM SUPPORT REPAIR LOW SIDE LEAD BOX	24	25MAR09 07:00	26MAR09 18:59	MM
38012272	3X21	3C TX LOW SIDE - REMOVE SCAFFOLD	4	01APR09 12:00	01APR09 15:59	PJ
38012192	3AA02	3AA02 - EM PREP GTD FOR SWITCHING ORDER	1	16MAR09 05:00	16MAR09 05:59	EM
38012192	3AA02	EM REQ SWOD-REMV GTD FRM 3AA02 FOR SAFEGD SETUP	1	28MAR09 11:00	28MAR09 11:59	EM
38012192	3AA02	EM REQ SWOD-RACK UP GTD AA02-AFTER SAFEGARDS	1	02APR09 10:00	02APR09 10:59	EM
38012192	3AA02	EM STORE GTD IN 3A SWITCHGEAR ROOM	1	06APR09 06:00	06APR09 06:59	EM
38015381	3AA07	PMT-3AA07 A HDP-PC/M 08-006 VERIFY SFGDS COMPL	1	01APR09 20:00	01APR09 20:59	EM
38015381	3AA07	ITOP - 3AA07 B HDP - PC/M 08-006 MOD IN SEQ CAB	1	01APR09 21:00	01APR09 21:59	EM
37024679	3AA16	PMT - 3AA16-3A1 CWP - REPLACE SECONDARY COUPLER	2	05APR09 12:00	05APR09 13:59	EM
N.REQ	3AB	EM SHOP MOBILIZE FOR B BUS OUTAGE	4	20MAR09 07:00*	20MAR09 10:59	EM
N.REQ	3AB	B BUS - MIDSHIFT SHOP WALKDOWN BUS CLEARANCE	2	21MAR09 05:00	21MAR09 06:59	EM
N.REQ	3AB	B BUS - DAYSHIFT SHOP WALKDOWN CLEARANCE	2	21MAR09 07:00	21MAR09 08:59	EM
38012213	3AB01	3AB01 - REMOVE OLD RCP BKRS & XPORT TO SHOP	4	18MAR09 22:00*	19MAR09 01:59	EM
36017001	3AB01	3AB01-3B RCP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	23MAR09 09:00	23MAR09 14:59	PJ
36017001	3AB01	3AB01-3B RCP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 23:00	24MAR09 00:59	PJ
38012213	3AB01	3AB01 MRM REMOVED BREAKER TO CRF AT OUTAGE END	8	08APR09 07:00	08APR09 14:59	EM
38012192	3AB02	3AB02 - EM PREP GTD FOR SWITCHING ORDER	1	16MAR09 04:00	16MAR09 04:59	EM
38012192	3AB02	MAIN DIV CLR - EM REQ SWOD INSTL GTD-AA02 & AB02	1	16MAR09 05:00	16MAR09 05:59	EM
38012222	3AB02	3AB02 AUX TX BKR INSP IN SWGR ROOM (NOT A SWAP)	16	16MAR09 07:00	17MAR09 10:59	EM
38012192	3AB02	MAIN DIV CLR: EM REQ SWOD TO RACK DWN 3AB02 GTD	2	20MAR09 17:00	20MAR09 18:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012192	3AB02	MN DIV CLR - EM REQST DIV BNDRY MOVE TO 3AB02	1	24MAR09 09:00	24MAR09 09:59	EM
38012192	3AB02	EM REQ SWOD-RACK UP GTD AB02-AFTER SAFEGARDS	1	28MAR09 01:00	28MAR09 01:59	EM
38012192	3AB02	EM STORE GTD IN 3B SWITCHGEAR ROOM	2	06APR09 04:00	06APR09 05:59	EM
36017001	3AB03	3AB03 SPARE CUBE CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 13:00	22MAR09 18:59	PJ
36017001	3AB03	3AB03 SPARE CUBE - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 03:00	23MAR09 04:59	PJ
38012241	3AB06	3AB06 - REMOVE OLD RCP BKRS & XPORT TO SHOP	4	18MAR09 22:00	19MAR09 01:59	EM
36017001	3AB06	3AB06 - 3C RCP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 19:00	23MAR09 00:59	PJ
36017001	3AB06	3AB06 - 3C RCP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 09:00	23MAR09 10:59	PJ
38012241	3AB06	3AB06 MRM REMOVED BREAKER TO CRF AT OUTAGE END	8	08APR09 07:00	08APR09 14:59	EM
38012245	3AB07	EM VERFY B BUS CLR BNDRY RESTRD PRIOR TO BUS MEG	1	24MAR09 10:00	24MAR09 10:59	EM
38012247	3AB09	3AB09 MRM REMOVED BREAKER TO CRF AT OUTAGE END	8	08APR09 07:00	08APR09 14:59	EM
38012250	3AB10	3AB10 3B HDP BKR: INSP IN SWGR ROOM (NOT A SWAP)	16	16MAR09 01:00	17MAR09 04:59	EM
38011049	3AB10	3AB10 - B HDP:DAM & SEAL CONDUIT (FRONT OF CUBE)	2	21MAR09 10:00	21MAR09 11:59	PJ
38011049	3AB10	3AB10 - B HDP - TOP COAT COND SEAL (CUBE FRONT)	2	21MAR09 23:00	22MAR09 00:59	PJ
36017001	3AB10	3AB10 3B HDP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 17:00	22MAR09 22:59	PJ
36017001	3AB10	3AB10 3B HDP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 07:00	23MAR09 08:59	PJ
38015381	3AB10	PMT-3AB10 B HDP-PC/M 08-006 VERIFY SFGDS COMPL	1	27MAR09 12:00	27MAR09 12:59	EM
38015381	3AB10	ITOP - 3AB10 B HDP - PC/M 08-006 MOD IN SEQ CAB	1	27MAR09 13:00	27MAR09 13:59	EM
36017001	3AB11	3AB11 B TPCW PP CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 11:00	22MAR09 16:59	PJ
36017001	3AB11	3AB11 B TPCW PP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 01:00	23MAR09 02:59	PJ
36017001	3AB12	3AB12 B HHSI PP CLEAN,DAM & SEAL CONDUIT (REAR)	6	23MAR09 01:00	23MAR09 06:59	PJ
36017001	3AB12	3AB12 B HHSI PP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 15:00	23MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36017001	3AB13	3AB13 B CCW PP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 07:00*	22MAR09 12:59	PJ
36017001	3AB13	3AB13 B CCW PP - TOP COAT CONDUT (CUBE REAR)	2	22MAR09 21:00	22MAR09 22:59	PJ
38012255	3AB14	3AA14 MRM REMOVED BREAKER TO CRF AT OUTAGE END	8	08APR09 07:00	08APR09 14:59	EM
36017001	3AB15	3AB15 B RHR PP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	23MAR09 05:00	23MAR09 10:59	PJ
36017001	3AB15	3AB15 B RHR PP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 19:00	23MAR09 20:59	PJ
38012259	3AB15	3AB15 MRM REMOVED BREAKER TO CRF AT OUTAGE END	8	08APR09 07:00	08APR09 14:59	EM
36017001	3AB16	3AB16 B1 CWP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 15:00*	22MAR09 20:59	PJ
36017001	3AB16	3AB16 B1 CWP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 05:00	23MAR09 06:59	PJ
36017001	3AB17	3AB17 B ICW PMP CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 09:00*	22MAR09 14:59	PJ
36017001	3AB17	3AB17 B ICW PMP - TOP COAT CONDUT (CUBE REAR)	2	22MAR09 23:00	23MAR09 00:59	PJ
36017001	3AB18	3AB18 B2 CWP - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 19:00	23MAR09 00:59	PJ
36017001	3AB18	3AB18 B2 CWP - TOP COAT CONDUT (CUBE REAR)	2	23MAR09 11:00	23MAR09 12:59	PJ
38011049	3AB19	3AB19-B/D TIE:DAM & SEAL CONDUIT (FRONT OF CUBE)	2	21MAR09 12:00	21MAR09 13:59	PJ
38011049	3AB19	3AB19 - B/D TIE -TOP COAT COND SEAL (CUBE FRONT)	2	22MAR09 07:00	22MAR09 08:59	PJ
36017001	3AB19	3AB19 B/D TIE - CLEAN,DAM & SEAL CONDUIT (REAR)	6	22MAR09 13:00	22MAR09 18:59	PJ
36017001	3AB19	3AB19 B/D - TIE TOP COAT CONDUT (CUBE REAR)	2	23MAR09 05:00	23MAR09 06:59	PJ
38011049	3AB20	3AB20 - B EDG:DAM & SEAL CONDUIT (FRONT OF CUBE)	3	21MAR09 20:00	21MAR09 22:59	PJ
36017001	3AB20	3AB20 - B EDG - DAM & SEAL CONDUT (CUBE REAR)	6	22MAR09 01:00	22MAR09 06:59	PJ
38011049	3AB20	3AB20 - B EDG - TOP COAT COND SEAL (CUBE FRONT)	2	22MAR09 09:00	22MAR09 10:59	PJ
36017001	3AB20	3AB20 - B EDG - TOP COAT CONDUT (CUBE REAR)	2	22MAR09 15:00	22MAR09 16:59	PJ
36017001	3AB21	3AB21 B COND - CLEAN,DAM & SEAL CONDUIT (REAR)	6	23MAR09 11:00	23MAR09 16:59	PJ
36017001	3AB21	3AB21 B COND - TOP COAT CONDUT (CUBE REAR)	2	24MAR09 01:00	24MAR09 02:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36017001	3AB22	3AB22 A/B/C TIE: CLEAN,DAM & SEAL CONDUIT (REAR)	6	21MAR09 14:00	21MAR09 19:59	PJ
36017001	3AB22	3AB22 A/B/C TIE: TOP COAT CONDUT (CUBE REAR)	2	22MAR09 07:00	22MAR09 08:59	PJ
38012327	3AC	3C 4KV ENCLOSURE ROOF INSPECTON - ERECT SCAFFOLD	10	24MAR09 06:00	24MAR09 15:59	PJ
38012342	3AC	3C BUS - REMOVE 4 BKRS & XPORT TO SHOP FOR INSP	6	27MAR09 16:00	27MAR09 21:59	EM
38012330	3AC	DAYSHIFT WALKDOWN C BUS CLR	2	28MAR09 07:00	28MAR09 08:59	EM
RWO09013	3AC	C BUS - P&C PERFORM BUS RELAY CALIBRATIONS	24	28MAR09 07:00	29MAR09 18:59	SP
38012753	3AC	3C 4KV BUS - SEAL CONDUITS IN REAR COMPARTMENTS	20	28MAR09 15:00	30MAR09 10:59	PJ
38012330	3AC	NIGHT SHIFT WALKDOWN C BUS CLR	2	28MAR09 22:00*	28MAR09 23:59	EM
38013680	3AC	3C BKRS-CLEAN & REPL PRIMARY LUBE W/MOBIL 28	59*	29MAR09 00:00	31MAR09 10:59	EM
35031219	3AC	3C BUS REPLACE IND RESISTORS,LAMPS,CAPS	16	29MAR09 19:00*	30MAR09 10:59	EM
37025803	3AC	3C BUS ASSIST ENGR - WATER INTRUSION INSPECTION	8	31MAR09 07:00	31MAR09 14:59	EM
37025803	3AC	3C BUS - WATER INTRUSION INSPECTION	8	31MAR09 07:00	31MAR09 14:59	EN
38012327	3AC	3C 4KV ENCLOSURE ROOF INSPECTON & RESEAL	8	31MAR09 16:00	31MAR09 23:59	PJ
38012327	3AC	3C 4KV ENCLOSURE ROOF INSPECTON - REMOVE SCAFOLD	10	01APR09 00:00	01APR09 11:59	PJ
38012342	3AC01	3AC01 4C TX FEED TO 3C BUS BKR INSPECTION	16	28MAR09 07:00	29MAR09 10:59	EM
38012343	3AC01	3AC01 PARTIAL CUBICLE INSP 4C XFMR FEED	12	29MAR09 11:00	30MAR09 10:59	EM
38012342	3AC01	3AC01:TRANSPORT & INSTALL INSPECTED BKR	2	30MAR09 09:00	30MAR09 10:59	EM
38012344	3AC02	3AC02 PT & METERING CUBICLE - PARTIAL CUBE INSP	8	29MAR09 00:00	29MAR09 19:59	EM
38012346	3AC03	3AC03 C-C TIE:TRANSPORT BKR TO SHOP FOR INSP	4	25MAR09 03:00	25MAR09 06:59	EM
38012346	3AC03	3AC03 C-C TIE FEED BREAKER INSPECTION	16	26MAR09 23:00	28MAR09 02:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012348	3AC03	4AC03 INSTALL GTD FOR 3AC03 C-C TIE CUBE INSP	4	27MAR09 21:00	28MAR09 00:59	EM
38012348	3AC03	3AC03 C-C TIE CUBICLE INSP	12	29MAR09 20:00	30MAR09 19:59	EM
38012346	3AC03	3AC03:TRANSPORT & INSTALL INSPECTED BKR	2	30MAR09 18:00	30MAR09 19:59	EM
38012348	3AC03	4AC03 REMOVE GTD AFTER 3AC03 C-C TIE CUBE INSP	4	31MAR09 15:00	31MAR09 18:59	EM
38012349	3AC04	3AC04 E L/C:TRANSPORT BKR TO SHOP FOR INSP	4	25MAR09 03:00	25MAR09 06:59	EM
38012349	3AC04	3AC04 E L/C FEED BREAKER INSPECTION	16	25MAR09 19:00	26MAR09 22:59	EM
38012350	3AC04	3AC04 E L/C INSTALL CUBICLE INSP GROUNDS	6	28MAR09 01:00	28MAR09 06:59	EM
38012350	3AC04	3AC04 E L/C CUBICLE INSP	12	31MAR09 07:00	31MAR09 18:59	EM
38012349	3AC04	3AC04:TRANSPORT & INSTALL INSPECTED BKR	4	31MAR09 15:00	31MAR09 18:59	EM
38012350	3AC04	3AC04 E L/C REMOVE CUBICLE INSP GROUNDS	6	01APR09 04:00	01APR09 09:59	EM
37020846	3AC05	3AC05 (SPARECUBICLE) REPLACE SHUTTER LEVER	4	29MAR09 23:00*	30MAR09 02:59	EM
38012351	3AC05	3AC05 (SPARE CUBICLE) CUBICLE INSPECTION	8	30MAR09 03:00	30MAR09 22:59	EM
38012352	3AC06	3AC06 A SSGFP BREAKER INSPECTION	16	29MAR09 00:00	30MAR09 03:59	EM
38012353	3AC06	3AC06 A SSGFP CUBICLE INSP	12	31MAR09 22:00	01APR09 09:59	EM
38012352	3AC06	3AC06:TRANSPORT & INSTALL INSPECTED BKR	2	01APR09 08:00	01APR09 09:59	EM
38012354	3AC07	3AC07 RELAY COMPARTMENT CUBICLE INSPECTION	10	29MAR09 20:00	30MAR09 05:59	EM
38012330	3AC08	3AC08 GROUND 3C 4KV BUS	4	27MAR09 21:00	28MAR09 00:59	EM
38012330	3AC08	3C BUS CROSS ISLE BUS DUCT INSP (AC03<>AC14)	10	30MAR09 20:00	31MAR09 05:59	EM
38012361	3AC08	3AC08 (SPARE CUBICLE) CUBICLE INSPECTION	8	31MAR09 11:00	31MAR09 18:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
34018313	3AC09	3AC09 (SPARE) - REPLACE TOC SWITCH	6	30MAR09 07:00*	30MAR09 12:59	EM
38012362	3AC09	3AC09 (SPARE CUBICLE) CUBICLE INSPECTION	8	30MAR09 13:00	31MAR09 08:59	EM
38012330	3AC09	MOVE BUS GROUND GTD 3AC08 TO 3AC09 <<Stop Work>>	2	31MAR09 09:00	31MAR09 10:59	EM
38012330	3AC09	VERIFY BUS CLR BOUND RESTORED PRIOR TO BUS MEGER	1	01APR09 11:00	01APR09 11:59	EM
38012330	3AC09	3AC09 - UNGROUND & MEGGER 3C 4KV BUS	4	01APR09 11:00	01APR09 14:59	EM
38012363	3AC10	3AC10 J L/C FEED BREAKER INSPECTION	16	29MAR09 07:00*	30MAR09 10:59	EM
38012364	3AC10	3AC10 J L/C PARTIAL CUBICLE INSP	12	30MAR09 19:00	31MAR09 06:59	EM
38012363	3AC10	3AC10:TRANSPORT & INSTALL INSPECTED BKR	4	31MAR09 03:00	31MAR09 06:59	EM
38012365	3AC11	3AC11 F&G L/C: TRANSPORT BKR TO SHOP FOR INSP	4	25MAR09 03:00	25MAR09 06:59	EM
38012365	3AC11	3AC11 F&G L/C FEED BREAKER INSPECTION	16	26MAR09 07:00	27MAR09 10:59	EM
38012366	3AC11	3AC11 F&G L/C INSTALL CUBICLE INSP GROUNDS	6	28MAR09 01:00	28MAR09 06:59	EM
38012366	3AC11	3AC11 F&G L/C CUBICLE INSP	12	29MAR09 20:00	30MAR09 19:59	EM
38012365	3AC11	3AC11:TRANSPORT & INSTALL INSPECTED BKR	2	30MAR09 18:00	30MAR09 19:59	EM
38012366	3AC11	3AC11 F&G L/C REMOVE CUBICLE INSP GROUNDS	6	01APR09 04:00	01APR09 09:59	EM
38012367	3AC12	3AC12:3C COND: TRANSPORT OLD BKR TO SHOP	4	18MAR09 07:00*	18MAR09 10:59	EM
38012368	3AC12	3AC12 3C CONDENSATE CUBICLE INSP	12	30MAR09 07:00	30MAR09 18:59	EM
38012367	3AC12	3AC12:TRANSPORT & INSTALL INSPECTED BKR	2	30MAR09 17:00	30MAR09 18:59	EM
38012367	3AC12	3AC12 - MRM OLD BREAKER AFTER OUTAGE	8	08APR09 07:00	08APR09 14:59	EM
38012370	3AC13	3AC13 A/B/C TIE BREAKER INSPECTION	16	30MAR09 07:00*	31MAR09 10:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012371	3AC13	3AC13 A/B/C TIE CUBICLE INSP	12	31MAR09 11:00	31MAR09 22:59	EM
38012370	3AC13	3AC13:TRANSPORT & INSTALL INSPECTED BKR	4	31MAR09 19:00	31MAR09 22:59	EM
38012373	3AC14	3AC14: TRANSPORT OLD BKR TO SHOP	4	18MAR09 07:00	18MAR09 10:59	EM
38012702	3AC14	3AC14/AC14-162/169/194/195 AGA RELAY CAL	12	23MAR09 07:00*	23MAR09 18:59	EM
38012373	3AC14	3AC14:3B SGFP:TRANSPORT NEW BREAKER TO C BUS	2	23MAR09 19:00	23MAR09 20:59	EM
38012702	3AC14	PMT - 3AC14/AC14-162/169/194/195 AGA RELAY CAL	6	24MAR09 07:00*	24MAR09 12:59	EM
38012374	3AC14	3AC14 3B SGFP CUBICLE INSP	12	28MAR09 18:00	29MAR09 17:59	EM
38012373	3AC14	3AC14 3B SGFP INSTAL NEW BKR	1	29MAR09 17:00	29MAR09 17:59	EM
38012373	3AC14	3AC14 - MRM OLD BREAKER AFTER OUTAGE	8	08APR09 07:00	08APR09 14:59	EM
38010292	3AC15	3AC-2 GND RES BANK: INSP,CLEAN,REPL COVER	8	25MAR09 07:00*	25MAR09 14:59	EM
38003523	3AC15	3AC15:3C BUS VOLTAGE REPLACE VOLT METER	1	29MAR09 18:00	29MAR09 18:59	EM
38012385	3AC15	3AC15 PT & METERING CUBICLE - CUBICLE INSP	10	29MAR09 18:00	30MAR09 15:59	EM
38012272	3AC16	3C TX -EM REQST SWOD TO INSTAL GTD 3AC16 & 4AC01	1	24MAR09 11:00	24MAR09 11:59	EM
38012272	3AC16	3C TX - EM PERFORM SWOD - INSTALL GTD 3AC16	3	24MAR09 11:00	24MAR09 13:59	EM
38012388	3AC16	3AC16:3C TX FEED: TRANSPORT BKR TO SHOP	4	25MAR09 03:00*	25MAR09 06:59	EM
38012272	3AC16	3C TX -EM VERIFY 3C Tx LO SIDE GROUNDED	1	27MAR09 07:00	27MAR09 07:59	EM
38012272	3AC16	3C TX -EM REQUEST SWOD TO REMOVE GTD 3AC16	1	27MAR09 07:00	27MAR09 07:59	EM
38012272	3AC16	3C TX -EM PERFORM SWOD REMOVE GTD 3AC16	2	27MAR09 08:00	27MAR09 09:59	EM
38012391	3AC16	3AC16 3C TX FEED CUBICLE INSP	12	28MAR09 19:00	29MAR09 06:59	EM
38012388	3AC16	3AC16 3C TX TRANSPORT & INSTAL NEW BKR	2	29MAR09 05:00	29MAR09 06:59	EM
38012272	3AC16	3C TX -EM REQUEST SWOD TO INSTALL GTD 3AC16	3	31MAR09 10:00	31MAR09 12:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012272	3AC16	3C TX -EM PERFORM SWOD INSTALL GTD 3AC16	3	31MAR09 10:00	31MAR09 12:59	EM
38012272	3AC16	3C TX - EM REQUEST SWOD REMOVE GTD 3AC16 & 4AC01	1	31MAR09 20:00	31MAR09 20:59	EM
38012272	3AC16	3C TX - EM PERFORM SWOD REMOVE GTD 3AC16	3	31MAR09 20:00	31MAR09 22:59	EM
38012388	3AC16	3AC16 - MRM OLD BREAKER AFTER OUTAGE	8	08APR09 07:00	08APR09 14:59	EM
35001516	3C264	PANEL 3C264 - SEAL 1" CONDUIT - WATER INTRUSION	8	21MAR09 07:00*	21MAR09 14:59	PJ
38012693	3P200A	A RCP MTR - VERIFY READY FOR GND REMOVAL	1	02APR09 08:00	02APR09 08:59	EM
38012695	3P200B	B RCP MTR - VERIFY READY FOR GND REMOVAL	1	02APR09 19:00	02APR09 19:59	EM
38009602	3P200C	C RCP MTR GNDS - VERIFY READY FOR GND REMOVAL	1	02APR09 19:00	02APR09 19:59	EM
38012202	3X01	DELAY FENCE: RESTORE PERMANENT FENCE	4	07APR09 07:00	07APR09 10:59	MM
38012272	3X21	3C TX - EM ASSIST SWITCH OUT & TAG	2	24MAR09 07:00	24MAR09 08:59	EM
38012272	3X21	3C TX - EM PICK UP DIV CLR	2	24MAR09 09:00	24MAR09 10:59	EM
38012272	3X21	3C Tx: EM REQST BNDARY MOVE TO 3C TX LO SIDE	1	27MAR09 10:00	27MAR09 10:59	EM
38012272	3X21	3C TX EM VERIFY LO SIDE CONECTED & GRNDS REMOVED	1	31MAR09 19:00	31MAR09 19:59	EM
38012272	3X21	C TX - ASSIST SAO SWITCH IN TX	2	01APR09 09:00	01APR09 10:59	EM
38012272	4AC01	3C TX - EM PERFORM SWOD - INSTALL GTD 4AC01	3	24MAR09 14:00	24MAR09 16:59	EM
38012272	4AC01	3C TX - EM PERFORM SWOD REMOVE GTD 4AC01	3	31MAR09 23:00	01APR09 01:59	EM
38010293	4AC02	4AC-1 GND RES BANK: INSP,CLEAN,REPL COVER	8	25MAR09 15:00	26MAR09 10:59	EM
38012443	30108	30108 3A CRDM MG - NEW BKR TO L/C ROOM FOR SWAP	3	16MAR09 01:00	16MAR09 03:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012443	30108	30108 3A CRDM MG:TRANSPORT BKR TO SHOP AFTR SWAP	3	16MAR09 19:00	16MAR09 21:59	EM
38012443	30108	30108 MRM REMOVED BREAKER TO CRF AT OUTAGE END	4	08APR09 07:00	08APR09 10:59	EM
38012421	30303	30303 C LC FEED TO H LC-TIME DELAY RELAY CAL	12	16MAR09 17:00	17MAR09 04:59	EM
38012421	30303	PMT:30303 C LC FEED TO H LC-TIME DELAY RELAY CAL	4	31MAR09 16:00	31MAR09 19:59	EM
38012427	30402	30402 D LC FEED TO H LC-TIME DELAY RELAY CAL	12	20MAR09 17:00	21MAR09 04:59	EM
38012427	30402	PMT:30402 D LC FEED TO H LC-TIME DELAY RELAY CAL	4	26MAR09 04:00	26MAR09 07:59	EM
38012455	30410	30410 - TRANSPORT INSPECTED BKR TO L/C ROOM	3	20MAR09 14:00	20MAR09 16:59	EM
38012455	30410	30410 - TRANSPORT REMOVED BKR TO SHOP	3	23MAR09 00:00*	23MAR09 02:59	EM
38012455	30410	30410 MRM BREAKER TO STORES	4	08APR09 07:00	08APR09 10:59	EM
38012436	30411	30411 - TRANSPORT INSPECTED BKR TO L/C ROOM	4	26MAR09 15:00	26MAR09 18:59	EM
38012436	30411	30411 D-NV FEED FRM D L/C - PMT BKR SWAP	1	26MAR09 21:00	26MAR09 21:59	EM
38012436	30411	30411 D-NV FEED TRANSPORT OLD BKR TO SHOP	4	06APR09 19:00*	06APR09 22:59	EM
38012436	30411	30411 MRM REMOVED BREAKER TO STORES	4	08APR09 07:00	08APR09 10:59	EM
38012437	34102	34102 BKR SWAP TRANSPORT BKR TO 3E L/C ROOM	2	24MAR09 19:00*	24MAR09 20:59	EM
38012437	34102	34102 BKR SWAP L/C E FEED FROM 3C SWGR	2	24MAR09 22:00	24MAR09 23:59	EM
38012437	34102	34102 BKR SWAP TRANSPRT BKR TO SHOP AFTR SWAP	1	25MAR09 00:00	25MAR09 00:59	EM
38012437	34102	34102 - MRM OLD BREAKER TO STORES	4	08APR09 07:00	08APR09 10:59	EM
38012456	35001	35001 - H LC FD FROM D LC - TIME DELAY RELAY CAL	12	20MAR09 17:00	21MAR09 04:59	EM
38012456	35001	PMT:35001-H LC FD FROM D LC-TIME DELAY RELAY CAL	4	26MAR09 04:00	26MAR09 07:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012457	35007	35007 H LC FEED FROM C L/C -TIME DELAY RELAY CAL	12	16MAR09 17:00	17MAR09 04:59	EM
38012457	35007	PMT:35007-H LC FD FROM C LC-TIME DELAY RELAY CAL	4	31MAR09 16:00	31MAR09 19:59	EM
38012363	3AC10	3AC10 BKR SWAP - EM PERFORM PMT	2	02APR09 02:00	02APR09 03:59	EM
38015381	480V LC	SATS - PC/M 08-006 L/C UV RELAY & HDP UV TRIP	1	04APR09 17:00	04APR09 17:59	EN
RWO09010	480V LC 3A	ITOP P&C - A L/C REPLACE UV RELAY 327H/3A1 & 3A2	1	31MAR09 16:00	31MAR09 16:59	SP
38015381	480V LC 3A	ITOP E/M - A L/C REPLACE UV RELAY 327H/3A1 & 3A2	1	31MAR09 16:00	31MAR09 16:59	EM
38015381	480V LC 3B	ITOP E/M - B L/C REPLACE UV RELAY 327H/3B1 & 3B2	1	26MAR09 01:00	26MAR09 01:59	EM
RWO09011	480V LC 3B	ITOP P&C-B L/C REPLACE UV RELAY 327H/3B1 & 3B2	1	26MAR09 07:00	26MAR09 07:59	SP
38015381	480V LC 3C	SUPORT PMT PCM 08-006 C- L/C U/V TST OSP-006.2	2	17MAR09 09:00	17MAR09 10:59	EM
RWO09010	480V LC 3C	ITOP P&C - C L/C REPLACE UV RELAY 327H/3C1 & 3C2	1	17MAR09 11:00	17MAR09 11:59	SP
38015381	480V LC 3C	ITOP E/M - C L/C REPLACE UV RELAY 327H/3C1 & 3C2	1	17MAR09 11:00	17MAR09 11:59	EM
37025517	480V LC 3D	327T/D1 - CR 0729062 - PLANNING CLOSE WO 3702551	2	04APR09 10:00	04APR09 11:59	EM
RWO09011	480V LC 3D	ITOP P&C-D L/C REPLACE UV RELAY 327H/3D1 & 3D2	1	04APR09 16:00	04APR09 16:59	SP
38015381	480V LC 3D	ITOP E/M - D L/C REPLACE UV RELAY 327H/3D1 & 3D2	1	04APR09 16:00	04APR09 16:59	EM
38006922	30635	30635 & 30636 - INSP & TST NEW BKR & BUCKET	10	18MAR09 22:00*	19MAR09 07:59	EM
38006922	30635	30635 & 30636 - INSTALL NEW BKRS & BUCKET	12	21MAR09 07:00	21MAR09 18:59	EM
38024666	30635	30635 3B1 B.CHG - CONTINGENCY TEST EXISTING BKR	6	21MAR09 19:00	22MAR09 00:59	EM
38006922	30635	PMT - 30635 - 3B1 B.CHARGER - NEW BKR & BUCKET	2	22MAR09 01:00	22MAR09 02:59	EM
38006922	30635	PMT - 30636 - E 16A/E17A - NEW BKR & BUCKET	2	24MAR09 23:00	25MAR09 00:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38006922	30635	ITOP - 30635 - 3B1 B.CHARGER - NEW BKR & BUCKET	1	25MAR09 01:00	25MAR09 01:59	EM
38006921	30805	30805 - 4A2 B.CHARGR:INSP & TST NEW BKR & BUCKET	10	19MAR09 08:00	19MAR09 17:59	EM
38006921	30805	40813 - 3A2 B.CHARGER - INSTALL NEW BKR & BUCKET	12	02APR09 14:00	03APR09 01:59	EM
38024692	30805	40813 - 3A2 B.CHG - CONTINGENCY TST EXISTING BKR	6	03APR09 02:00	03APR09 07:59	EM
38006921	30805	PMT - 30805 - 3A2 B.CHARGER - NEW BKR & BUCKET	2	03APR09 08:00	03APR09 09:59	EM
38006921	30805	ITOP - 30805 - 3A2 B.CHARGER - NEW BKR & BUCKET	1	03APR09 10:00	03APR09 10:59	EM
38024691	40804	40804 - 3B2 B.CHGR - TEST EXISTING BKR CR073932	6	26MAR09 01:00	26MAR09 06:59	EM
38024691	40804	PMT - 40804 - 3B2 B.CHARGER - BREAKER TEST	2	26MAR09 09:00	26MAR09 10:59	EM
38002253	40813	40813 - 3A2 B.CHARGR:INSP & TST NEW BKR & BUCKET	10	19MAR09 08:00	19MAR09 17:59	EM
38002253	40813	40813 - 3A2 B.CHARGER - INSTALL NEW BKR & BUCKET	12	03APR09 12:00	03APR09 23:59	EM
38024692	40813	40813 3A2 B.CHG - CONTINGENCY TEST EXISTING BKR	6	04APR09 00:00	04APR09 05:59	EM
38002253	40813	PMT - 40813 - 3A2 B.CHARGER - NEW BKR & BUCKET	2	04APR09 06:00	04APR09 07:59	EM
38002253	40813	ITOP - 40813 - 3A2 B.CHARGER - NEW BKR & BUCKET	1	04APR09 08:00	04APR09 08:59	EM
38016666	3-60-041	REMOVE VALVE 3-60-041 & INSTALL NEW VALV SCAF SE	10	31MAR09 07:00	31MAR09 16:59	PJ
35020614	CV-3-2203	CV-2203-TPCW FRM GEN H2 COOLERS CV- ERECT SCAF	8	30MAR09 07:00*	30MAR09 14:59	PJ
35020614	CV-3-2203	CV-2203-TPCW FRM GEN H2 COOLERS CV-REMOVE ACT	3	31MAR09 02:00*	31MAR09 04:59	VT
35020614	CV-3-2203	CV-2203 -TPCW FRM GEN H2 COOLERS CV- O/H VLV	10	31MAR09 07:00*	31MAR09 16:59	VT
35020614	CV-3-2203	CV-2203-TPCW FRM GEN H2 COLERS CV-INST ACT & REG	6	31MAR09 17:00	31MAR09 22:59	VT
36019617	CV-3-2203	CV-2203-TPCW FRM GEN H2 COOLERS TEMP CV-CAL ACT	4	31MAR09 23:00*	01APR09 02:59	VT
35020614	CV-3-2203	CV-2203-TPCW FRM GEN H2 COOLERS CV- REMOVE SCAF	8	01APR09 03:00	01APR09 12:59	PJ
37025596	3-50-023	SEAT LEAKAGE/REPLACE WITH SS BALL VALVE	8	17MAR09 18:00	18MAR09 01:59	VT
37025596	3-50-023	SEAT LEAKAGE/REPL WITH SS BALL VALVE-PMT	1	01APR09 18:00	01APR09 18:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM EJE-REMO INSU	4	20MAR09 11:00	20MAR09 14:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM E-CUT OUT VLV	2	20MAR09 15:00*	20MAR09 16:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM - PREP PIPING	2	20MAR09 17:00	20MAR09 18:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM -WELD NEW VLV	4	20MAR09 19:00	20MAR09 22:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM -COAT NEW VLV	2	20MAR09 23:00	21MAR09 00:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM EJE - PMT	1	03APR09 16:00	03APR09 16:59	MM
39003209	3-50-031	3-50-031 DRN VLV 25OLB STM TO PRIM E-INSTAL INSU	4	03APR09 17:00	03APR09 20:59	MM
37025597	3-50-043	DRN VLV WTRBX B - REPL WITH SS BALL VALVE	8	17MAR09 18:00	18MAR09 01:59	VT
37025597	3-50-043	DRN VLV WTRBX B - REPL WITH SS BALL VALVE-PMT	1	01APR09 18:00	01APR09 18:59	VT
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE-REMO INSU	4	19MAR09 11:00	19MAR09 14:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE-CUT OUT VLV	2	19MAR09 15:00*	19MAR09 16:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE -PREP PIPING	2	19MAR09 17:00	19MAR09 18:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE-WELD NEW VLV	4	19MAR09 19:00	19MAR09 22:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE-COAT NEW VLV	2	19MAR09 23:00	20MAR09 00:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE - PMT	1	03APR09 16:00	03APR09 16:59	MM
39003209	3-50-050	3-50-050 ISO VLV STM TO PRIMING EJE-INSTAL INSU	4	03APR09 17:00	03APR09 20:59	MM
38013783	3E7A	WTRBX INSP-"A" WTRBXS WALKDOWN CLEARANCE/SIGN ON	4	16MAR09 07:00	16MAR09 10:59	PJ
38013793	3E7A	WTRBX INSP -"AN & AS" DEMOB AFTER TUBE CLEANING	8	23MAR09 07:00	23MAR09 14:59	PJ
38013783	3E7AN	WTRBX INSP- "ANO & ANI" INSTALL VENTILATION	4	16MAR09 11:00	16MAR09 14:59	PJ
38013783	3E7AN	WTRBX INSP-"ANO & ANI" WTRBXS-OPEN MANWAYS	5	16MAR09 11:00	16MAR09 15:59	PJ
38012566	3E7AN	A-N WTRBX-REMOVE & STORE REF CELLS	6	16MAR09 11:00	16MAR09 16:59	PJ
38013783	3E7AN	FME MONITOR @ -"AN & AS" WTRBXS-MANWAYS HAMMOCK	443*	16MAR09 11:00	03APR09 21:59	PJ
38013783	3E7AN	WTRBX INSP-"ANO & ANI" WTRBX INITIAL CLEANING	4	16MAR09 17:00	16MAR09 20:59	PJ
38013783	3E7AN	WTRBX INSP - "ANO" INSPECT WTRBX AMERTAP SCREENS	4	16MAR09 21:00	17MAR09 00:59	EN
38013783	3E7AN	WTRBX INSP - "ANO" OUTLET ERECT SCAFFOLD	10	17MAR09 01:00	17MAR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013783	3E7AN	WTRBX INSP - "ANI" INLET ERECT SCAFFOLD	10	17MAR09 01:00	17MAR09 10:59	PJ
38013783	3E7AN	WTRBX INSP-"ANO & ANI" WTRBX PRESSURE WASH	10	17MAR09 11:00	17MAR09 20:59	PJ
38013783	3E7AN	WTRBX INSP - "ANO" & "ANI" INSPECT WATERBOXES	4	17MAR09 21:00	18MAR09 00:59	EN
38013783	3E7AN	WTRBX INSP-"AN" WTRBXS PERFORM TUBE CLEANING	24	18MAR09 01:00	19MAR09 00:59	PJ
38013783	3E7AN	WTRBX INSP-"AN" WTRBXS PERFORM ECT OF TUBES	24	19MAR09 01:00	20MAR09 00:59	EN
38013765	3E7AN	AN WATERBOX EMERGENT REPAIRS	100	20MAR09 01:00	25MAR09 14:59	PJ
38013765	3E7AN	AN WATERBOX COATING REPAIRS	200	20MAR09 01:00	31MAR09 02:59	PJ
38012566	3E7AN	A-N INLET. INSPECT COND WTRBOX ANODES	2	28MAR09 01:00	28MAR09 02:59	PJ
38012566	3E7AN	A-N OUTLET. INSPECT COND WTRBOX ANODES	2	28MAR09 01:00	28MAR09 02:59	PJ
38012566	3E7AN	A-N INLET- REPAIR COND WTRBOX ANODES CONTINGENCY	12	28MAR09 03:00	28MAR09 16:59	PJ
38012566	3E7AN	A-N OUTLET.REPAIR COND WTRBOX ANODES CONTINGENCY	12	28MAR09 03:00	28MAR09 16:59	PJ
38013765	3E7AN	WTRBX EMRGNT RPRS-"AN"CLOSE WO 38013765-01	2	31MAR09 03:00	31MAR09 04:59	PJ
38013765	3E7AN	AN WTRBX COATING REPAIRS- CLOSE WO 38013765-03	4	31MAR09 03:00	31MAR09 08:59	PJ
38013783	3E7AN	WTRBX INSP - "ANO" REMOVE SCAFFOLD	8	02APR09 00:00	02APR09 07:59	PJ
38013783	3E7AN	WTRBX INSP - "ANI" REMOVE SCAFFOLD	8	02APR09 08:00	02APR09 15:59	PJ
38012566	3E7AN	A-N INLET&OUTLET:INSTALL & TERM WTRBX REF CELLS	8	03APR09 02:00	03APR09 07:59	PJ
38012566	3E7AN	A-N IN&OUT:FINAL ANODE INSP AFTER SCAFFOLD REMOV	1	03APR09 08:00	03APR09 08:59	PJ
38013783	3E7AN	WTRBX INSP - "AN" WTRBXS CLOSE ALL MANWAYS	12	03APR09 09:00	03APR09 20:59	PJ
38012566	3E7AN	EM REQUEST JUNO CATH PROT ENG SUPPORT	6	03APR09 15:00	04APR09 08:59	EM
38013783	3E7AN	AN WTRBX INSP-CLOSE WO 38013783-01	2	03APR09 21:00	03APR09 22:59	PJ
38012566	3E7AN	A-N INLET & OUTLET: SETUP CATHODIC PROTECTION	6	06APR09 15:00	07APR09 08:59	EM
38012566	3E7AN	A WATERBOX - ENG ASSIST SETUP CATHODIC PROT	6	06APR09 15:00	07APR09 08:59	EN
38013765	3E7AN	PMT AN WATERBOX EMERGENT REPAIRS	1	06APR09 16:00	06APR09 16:59	PJ
38013783	3E7AS	WTRBX INSP-"ASI & ASO" INSTALL VENTILATION	4	16MAR09 16:00	16MAR09 19:59	PJ
38013783	3E7AS	WTRBX INSP-"ASI & ASO" WTRBXS-OPEN MANWAYS	5	16MAR09 16:00	16MAR09 20:59	PJ
38012566	3E7AS	A-S WATERBOXES - REMOVE & STORE REF CELLS	6	16MAR09 17:00	16MAR09 22:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013783	3E7AS	WTRBX INSP-"ASI & ASO" WTRBXS INITIAL CLEANING	4	16MAR09 23:00	17MAR09 02:59	PJ
38013783	3E7AS	WTRBX INSP - "ASO" WTRBXS INSP AMERTAP SCREENS	4	17MAR09 03:00	17MAR09 06:59	EN
38013783	3E7AS	WTRBX INSP - "ASO" OUTLET ERECT SCAFFOLD	10	18MAR09 17:00	19MAR09 02:59	PJ
38013783	3E7AS	WTRBX INSP - "ASI" INLET ERECT SCAFFOLD	10	18MAR09 17:00	19MAR09 02:59	PJ
38013783	3E7AS	WTRBX INSP-"ASI & ASO" WTRBXS PRESSURE WASH	6	19MAR09 03:00	19MAR09 10:59	PJ
38013783	3E7AS	WTRBX INSP - "ASO" & "ASI" WTRBXS INSP	4	19MAR09 11:00	19MAR09 14:59	EN
38013783	3E7AS	WTRBX AS- PERFORM TUBE CLEANING	24	21MAR09 13:00	22MAR09 12:59	PJ
38013783	3E7AS	WTRBX INSP-"AS" WTRBXS PERFORM ECT OF TUBES	24	22MAR09 13:00	23MAR09 12:59	EN
38013765	3E7AS	WTRBX EMERG RPRS - "AS" EMERGENT REPAIRS	100	23MAR09 13:00	28MAR09 00:59	PJ
38013765	3E7AS	WTRBX - "AS" COATING REPRS	200	23MAR09 13:00	02APR09 14:59	PJ
38012566	3E7AS	A-S INLET.INSPECT COND WTRBOX ANODES	12	28MAR09 03:00	28MAR09 16:59	PJ
38012566	3E7AS	A-S OUTLET. INSPECT COND WTRBOX ANODES	12	28MAR09 03:00	28MAR09 16:59	PJ
38012566	3E7AS	A-S INLET.REPAIR COND WTRBOX ANODES CONTINGENCY	12	28MAR09 17:00	29MAR09 04:59	PJ
38012566	3E7AS	A-S OUTLET.REPAIR COND WTRBOX ANODES CONTINGENCY	12	28MAR09 17:00	29MAR09 04:59	PJ
38013783	3E7AS	WTRBX INSP - "ASO" REMOVE SCAFFOLD	8	02APR09 00:00	02APR09 07:59	PJ
38013783	3E7AS	WTRBX INSP - "ASI" REMOVE SCAFFOLD	8	02APR09 08:00	02APR09 15:59	PJ
38013765	3E7AS	WTRBX EMERG RPRS-"AS" CLOSE WO 38013765-02	2	02APR09 15:00	02APR09 16:59	PJ
38013765	3E7AS	WTRBX - AS COATING REPRS - CLOSE WO 38013765-04	4	02APR09 15:00	02APR09 18:59	PJ
38012566	3E7AS	A-S INLET&OUTLET:INSTALL & TERM WTRBX REF CELLS	10	02APR09 16:00	03APR09 01:59	PJ
38012566	3E7AS	A-S IN&OUT:FINAL ANODE INSP AFTER SCAFFOLD REMOV	1	03APR09 09:00	03APR09 09:59	PJ
38012566	3E7AS	A-S IN&OUT ANODE-CLOSE WO 38012566-01	1	03APR09 10:00	03APR09 10:59	PJ
38013783	3E7AS	WTRBX INSP - "AS" WTRBXS CLOSE ALL MANWAYS	12	03APR09 10:00	03APR09 21:59	PJ
38013783	3E7AS	WTRBX INSP - "AS" CLOSE WO 38013783-02	1	03APR09 22:00	03APR09 22:59	PJ
38013765	3E7AS	PMT - WTRBX EMERG RPRS - "AN" REPAIRS AS REQ'D	1	06APR09 15:00	06APR09 15:59	PJ
38012566	3E7AS	A-S INLET & OUTLET: SETUP CATHODIC PROTECTION	6	06APR09 15:00	07APR09 06:59	EM
38013793	3E7B	WTRBX INSP-"BN" & "BS" WTRBXS NOTIFY SECURITY	2	16MAR09 18:00	16MAR09 19:59	PJ
38013793	3E7BN	WTRBX INSP-"B" WATERBOXES WALKDOWN CLEARANCE	2	17MAR09 18:00	17MAR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013793	3E7BN	WTRBX INSP-OPEN MANWAYS "BNI & BNO"	2	17MAR09 20:00	17MAR09 21:59	PJ
38013793	3E7BN	WTRBX INSP-"BNI & BNO" INSTALL VENTILATION	4	17MAR09 20:00	17MAR09 23:59	PJ
38012566	3E7BN	B-N WATERBOXES - REMOVE & STORE REF CELLS	6	17MAR09 20:00	18MAR09 01:59	PJ
38013793	3E7BN	WTRBX INSP-FME MONITOR -OPEN MANWAYS "BNI & BNO"	342	17MAR09 20:00	04APR09 09:59	PJ
38013793	3E7BN	WTRBX INSP-OPEN MANWAYS "BSI & BSO"	2	17MAR09 22:00	17MAR09 23:59	PJ
38013793	3E7BN	WTRBX INSP-"BSI & BSO" INSTALL VENTILATION	4	17MAR09 22:00	18MAR09 01:59	PJ
38013793	3E7BN	WTRBX INSP-FME MONITOR -OPEN MANWAYS "BSI & BSO"	342	17MAR09 22:00	04APR09 11:59	PJ
38013793	3E7BN	WTRBX INSP-"BN" INITIAL CLEANING	4	18MAR09 02:00	18MAR09 07:59	PJ
38013793	3E7BN	WTRBX INSP-"BNO" WATERBOX INSP AMERTAP SCREENS	4	18MAR09 08:00	18MAR09 11:59	EN
38013793	3E7BN	WTRBX INSP-"BS" INITIAL CLEANING	4	18MAR09 08:00	18MAR09 11:59	PJ
38013793	3E7BN	WTRBX INSP-"BSO" INITIAL INSP AMERTAP SCREENS	4	18MAR09 12:00	18MAR09 15:59	EN
38013793	3E7BN	3E7B/3BN WATERBOX - OUTLET SCAFFOLD	8	19MAR09 13:00*	19MAR09 20:59	PJ
38013793	3E7BN	3E7B/3BN WATERBOX - INLET SCAFFOLD	8	19MAR09 13:00	19MAR09 20:59	PJ
38013793	3E7BN	WTRBX INSP-"BNO" & "BNI" PRESSURE WASH WTRBXS	4	19MAR09 21:00	20MAR09 00:59	PJ
38013793	3E7BN	WTRBX INSP-"BNO" & "BNI" WATERBOX INSP	4	20MAR09 01:00	20MAR09 04:59	PJ
38013793	3E7BN	WTRBX INSP-"BSO" & "BSI" PRESSURE WASH WTRBXS	4	20MAR09 03:00	20MAR09 08:59	PJ
38013793	3E7BN	WTRBX INSP-"BN" WTRBXS PERFORM TUBE CLEANING	24	20MAR09 05:00	21MAR09 04:59	PJ
38013793	3E7BN	WTRBX INSP-"BSO" & "BSI" INSP WATERBOXES	4	20MAR09 09:00	20MAR09 12:59	PJ
38013793	3E7BN	WTRBX INSP-"BS" WTRBXS PERFORM TUBE CLEANING	24	20MAR09 13:00	21MAR09 12:59	PJ
38013793	3E7BN	WTRBX INSP -"BN & BS" DEMOB AFTER TUBE CLEANING	8	21MAR09 13:00	21MAR09 20:59	PJ
38013793	3E7BN	WTRBX INSP-"BN" WTRBXS PERFORM ECT OF TUBES	24	22MAR09 13:00	23MAR09 12:59	EN
38013767	3E7BN	"BS" WTRBOX-REMVE TEMP PLUGS & INSTAL PERM PLUGS	8	23MAR09 07:00	23MAR09 14:59	PJ
38013697	3E7BN	WTRBX INSP-WTRBXS REMV SERV WTR HEADER	10	23MAR09 07:00	23MAR09 16:59	PJ
38013767	3E7BN	BS WATERBOX EMERGENT REPAIRS	96	23MAR09 07:00	27MAR09 14:59	PJ
38013767	3E7BN	BS WATERBOX COATING REPAIRS	200	23MAR09 07:00	02APR09 08:59	PJ
38013767	3E7BN	BN WATERBOX EMERGENT REPAIRS	96	23MAR09 13:00	27MAR09 20:59	PJ
38013767	3E7BN	BN WATERBOX COATING REPAIRS	200	23MAR09 13:00	02APR09 14:59	PJ
38012566	3E7BN	B-N INLET. INSPECT COND WTRBOX ANODES	2	27MAR09 21:00	27MAR09 22:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012566	3E7BN	B-N OUTLET. INSPECT COND WTRBOX ANODES	2	27MAR09 21:00	27MAR09 22:59	PJ
38012566	3E7BN	B-N INLET.REPAIR COND WTRBOX ANODES CONTINGENCY	24	27MAR09 23:00	29MAR09 00:59	PJ
38012566	3E7BN	B-N OUTLET.REPAIR COND WTRBOX ANODES CONTINGENCY	24	27MAR09 23:00	29MAR09 00:59	PJ
38013793	3E7BN	WTRBX INSP - "BNO" REMOVE SCAFFOLD	8	02APR09 00:00	02APR09 09:59	PJ
38013793	3E7BN	WTRBX INSP - "BSO" REMOVE SCAFFOLD	8	02APR09 00:00	02APR09 09:59	PJ
38013767	3E7BN	BS WTRBX EMRGNT RPRS-CLOSE WO 38013767-02	1	02APR09 09:00	02APR09 09:59	PJ
38013767	3E7BN	BS WTRBX COATING REPAIRS -CLOSE WO 38013767-04	4	02APR09 09:00	02APR09 12:59	PJ
38013793	3E7BN	WTRBX INSP - "BNI" REMOVE SCAFFOLD	8	02APR09 10:00	02APR09 17:59	PJ
38013793	3E7BN	WTRBX INSP - "BSI" REMOVE SCAFFOLD	8	02APR09 10:00	02APR09 17:59	PJ
38013767	3E7BN	BN WTRBX EMRGNT RPRS-CLOSE WO 38013767-01	1	02APR09 15:00	02APR09 15:59	PJ
38013767	3E7BN	BN WTRBX COATING REPRS - CLOSE WO 38013767-03	4	02APR09 15:00	02APR09 18:59	PJ
38012566	3E7BN	B-N INLET&OUTLET:INSTALL & TERM WTRBX REF CELLS	6	03APR09 04:00	03APR09 11:59	PJ
38013793	3E7BN	WTRBX INSP - "BN" WTRBXS CLOSE ALL MANWAYS	12	03APR09 20:00	04APR09 09:59	PJ
38013793	3E7BN	WTRBX INSP - "BS" WTRBXS CLOSE ALL MANWAYS	12	03APR09 22:00	04APR09 11:59	PJ
38013793	3E7BN	WTRBX INSP/TUBE CLNG-CLOSE WO 38013793-01	2	04APR09 10:00	04APR09 11:59	PJ
38013793	3E7BN	BS WBX INSP - CLOSE WO 38013793-02	2	04APR09 12:00	04APR09 13:59	PJ
38013767	3E7BN	PMT-BS WATERBOX EMERGENT REPAIRS	1	06APR09 16:00	06APR09 16:59	PJ
38013767	3E7BN	PMT - BN WATERBOX EMERGENT REPAIRS	1	06APR09 16:00	06APR09 16:59	PJ
38012566	3E7BN	B-N INLET & OUTLET: SETUP CATHODIC PROTECTION	6	06APR09 16:00	07APR09 09:59	EM
38012566	3E7BN	B WATERBOX - ENG ASSIST SETUP CATHODIC PROT	6	06APR09 16:00	07APR09 09:59	EN
38012566	3E7BS	B-S WATERBOXES - REMOVE & STORE REF CELLS	6	18MAR09 00:00	18MAR09 07:59	PJ
38013793	3E7BS	3E7B/3BS WATERBOX - OUTLET SCAFFOLD	6	19MAR09 21:00	20MAR09 02:59	PJ
38013793	3E7BS	3E7B/3BS WATERBOX - INLET SCAFFOLD	6	19MAR09 21:00	20MAR09 02:59	PJ
38013793	3E7BS	WTRBX INSP-"BS" WTRBXS PERFORM ECT OF TUBES	24	21MAR09 13:00	22MAR09 12:59	EN
38012566	3E7BS	B-S INLET. INSPECT COND WTRBOX ANODES	2	27MAR09 23:00	28MAR09 00:59	PJ
38012566	3E7BS	B-S OUTLET. INSPECT COND WTRBOX ANODES	2	27MAR09 23:00	28MAR09 00:59	PJ
38012566	3E7BS	B-S INLET.REPAIR COND WTRBOX ANODES CONTINGENCY	12	29MAR09 01:00	30MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012566	3E7BS	B-S OUTLET.REPAIR COND WTRBOX ANODES CONTINGENCY	12	29MAR09 01:00	30MAR09 14:59	PJ
38012566	3E7BS	B-S INLET&OUTLET:INSTALL & TERM WTRBX REF CELLS	10	02APR09 18:00	03APR09 03:59	PJ
38012566	3E7BS	B-S IN&OUT:FINAL ANODE INSP AFTER SCAFFOLD REMOV	1	03APR09 13:00	03APR09 13:59	EN
38012566	3E7BS	B-S INLET & OUTLET: SETUP CATHODIC PROTECTION	6	06APR09 16:00	07APR09 09:59	EM
37022650	3P7A	3A1 CWP - REPLACE MOTOR HEATERS	8	01APR09 07:00*	01APR09 14:59	EM
38012632	3P7A	3A1 CWP MTR INSPECT MOTOR	20	01APR09 15:00	02APR09 10:59	EM
35017363	3P7A	3A1, CLEAN AND PAINT MOTOR SUPPORT	40	02APR09 11:00	04APR09 04:59	PJ
38012632	3P7A	3A1 CWP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	02APR09 12:00	02APR09 12:59	EM
38012632	3P7A	PMT 3A1 CWP MTR INSPECTION	1	06APR09 15:00	06APR09 15:59	EM
39003655	3P7B	3B1 CWP MTR - MOTOR INSPECTION & OIL CHANGE	32	01APR09 15:00	02APR09 22:59	EM
39003655	3P7B	3B1 CWP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	03APR09 00:00	03APR09 00:59	EM
39003655	3P7B	PMT - 3B1 CWP MOTOR INSPECTION	1	06APR09 16:00	06APR09 16:59	EM
39002513	3P7C	3A2 CWP MTR INSPECT AND OIL CHANGE	32	01APR09 15:00	02APR09 22:59	EM
39002513	3P7C	3A2 CWP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	03APR09 00:00	03APR09 00:59	EM
39002513	3P7C	PMT 3A2 CWP MTR INSPECTION	1	06APR09 15:00	06APR09 15:59	EM
38012654	3P7D	3B2 CWP MTR - MOTOR INSPECTION & OIL CHANGE	32	01APR09 15:00	02APR09 22:59	EM
38012654	3P7D	3B2 CWP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	03APR09 00:00	03APR09 00:59	EM
38012654	3P7D	PMT - 3B2 CWP MOTOR INSPECTION	1	06APR09 16:00	06APR09 16:59	EM
38012580	MOV-3-1413	MOV-1413(B2) GREASE INSP, OPER INSP,ADJ LM SW	7	01APR09 07:00*	01APR09 13:59	VT
38012580	MOV-3-1413	PMT STROKE - MOV-1413(B2) OPER INSP,ADJ LM SW	1	01APR09 13:00	01APR09 13:59	VT
38012581	MOV-3-1414	MOV-1414(B1) GREASE INSP, OPER INSP,ADJ LM SW	7	01APR09 14:00	01APR09 20:59	VT
38012581	MOV-3-1414	PMT STROKE - MOV-1414(B1) OPER INSP,ADJ LM SW	2	01APR09 19:00	01APR09 20:59	VT
38012543	MOV-3-1415	30916 STR INSP MOV-1415	23	14MAR09 15:00A	16MAR09 13:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012543	MOV-3-1415	30916 MOV-1415; REPLACE CONTROL TRANSFORMER	6	14MAR09 15:00A	16MAR09 13:59	EM
38012543	MOV-3-1415	30916 COMPLETE STR INSP MOV-1415	6	20MAR09 07:00*	20MAR09 12:59	EM
38012543	MOV-3-1415	30916 MOV-1415-REPLACE CONTROL TRANSFORMER (#2)	6	20MAR09 07:00*	20MAR09 12:59	EM
37019052	MOV-3-1415	MOV-3-1415 REPLACE GREASE SEAL	5	01APR09 21:00	02APR09 01:59	VT
38012582	MOV-3-1415	MOV-1415(A2) GREASE INSP, OPER INSP,ADJ LM SW	10	02APR09 02:00	02APR09 13:59	VT
37019052	MOV-3-1415	PMT STROKE - MOV-1415(A2) REPLACE GREASE SEAL	1	02APR09 13:00	02APR09 13:59	VT
38012582	MOV-3-1415	PMT STROKE - MOV-1415(A2) OPER INSP,ADJ LM SW	1	02APR09 13:00	02APR09 13:59	VT
38012543	MOV-3-1415	PMT - 30916 STR INSP MOV-1415	2	02APR09 13:00	02APR09 14:59	EM
37019053	MOV-3-1416	MOV-3-1416 - REPLACE GREASE SEAL	5	02APR09 14:00	02APR09 18:59	VT
38012584	MOV-3-1416	MOV-1416(A1) REPAIR DUAL IND - CLOSE WORK ORDER	1	02APR09 19:00	02APR09 19:59	VT
38012584	MOV-3-1416	MOV-1416(A1) GREASE INSP, OPER INSP,ADJ LM SW	10	02APR09 19:00	03APR09 04:59	VT
37019053	MOV-3-1416	PMT STROKE - MOV-1416(A1) REPLACE GREASE SEAL	1	03APR09 04:00	03APR09 04:59	VT
38012584	MOV-3-1416	PMT STROKE - MOV-1416(A1) OPER INSP,ADJ LM SW	1	03APR09 04:00	03APR09 04:59	VT
38012566		WBX CATH PROT SETUP - CLOSE WO 38012566-02	1	07APR09 10:00	07APR09 10:59	EM
38014653	3-70-232	SERV. WTR HDR USED FOR WTRBX CLEANING -REINSTALL	4	05APR09 03:00	06APR09 08:59	PJ
38013282	CT TMP PWR	CTMT TEMP PWR CABLE-OUTSIDE CTMT - REMOVE SCAFF	5	31MAR09 19:00	31MAR09 23:59	PJ
36019623	CV-3-2819	CV-3-2819 INST AIR BLEED RET INSIDE P-63,CAL ACT	4	01APR09 01:00	01APR09 04:59	PJ
36019623	CV-3-2819	INST AIR BLEED RETURN I/C - CAL ACT	4	01APR09 07:00*	01APR09 10:59	VT
36019623	CV-3-2819	CV-3-2819 CAL AOV ACTUATOR/ACCESS	4	01APR09 11:00	01APR09 14:59	PJ
36019627	CV-3-2826	INST AIR BLEED RETURN O/C - CAL ACT	4	01APR09 11:00	01APR09 14:59	VT
36019627	CV-3-2826	CV-3-2826 CAL AOV ACTUATOR/ACCES erect scaf	4	01APR09 15:00	01APR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38010661	3-CH-28X	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 07:00	20MAR09 07:59	PJ
38010661	3-CH-28X	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 07:00*	20MAR09 07:59	EN
38010661	3-CH-30	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 08:00	20MAR09 08:59	PJ
38010661	3-CH-30	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 08:00	20MAR09 08:59	EN
38010661	3-CH-31	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 12:00	20MAR09 12:59	PJ
38010661	3-CH-31	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 12:00	20MAR09 12:59	EN
38010661	3-CH-31Z	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 13:00	20MAR09 13:59	PJ
38010661	3-CH-31Z	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 13:00	20MAR09 13:59	EN
38010661	3-CH-32	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 14:00	20MAR09 14:59	PJ
38010661	3-CH-32	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 14:00	20MAR09 14:59	EN
38010661	3-CH-33	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 15:00	20MAR09 15:59	PJ
38010661	3-CH-33	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 15:00	20MAR09 15:59	EN
38010661	3-CH-34	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 16:00	20MAR09 16:59	PJ
38010661	3-CH-34	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 16:00	20MAR09 16:59	EN
38010661	3-CH-35	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 17:00	20MAR09 17:59	PJ
38010661	3-CH-35	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 17:00	20MAR09 17:59	EN
38010661	3-CH-36	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 18:00	20MAR09 18:59	PJ
38010661	3-CH-36	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 18:00	20MAR09 18:59	EN
38010661	3-CH-41	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 09:00	20MAR09 09:59	PJ
38010661	3-CH-41	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 09:00	20MAR09 09:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38010661	3-CH-42	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 10:00	20MAR09 10:59	PJ
38010661	3-CH-42	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 10:00	20MAR09 10:59	EN
38010661	3-CH-60	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 11:00	20MAR09 11:59	PJ
38010661	3-CH-60	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 11:00	20MAR09 11:59	EN
38010661	3-CH-61	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 19:00	20MAR09 19:59	PJ
38010661	3-CH-61	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 19:00	20MAR09 19:59	EN
38010661	3-CH-62	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 20:00	20MAR09 20:59	PJ
38010661	3-CH-62	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 20:00	20MAR09 20:59	EN
38010661	3-CH-63	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 21:00	20MAR09 21:59	PJ
38010661	3-CH-63	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 21:00	20MAR09 21:59	EN
38010661	3-CH-64	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 22:00	20MAR09 22:59	PJ
38010661	3-CH-64	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 22:00	20MAR09 22:59	EN
38010661	3-CH-65	SECONDARY HANGER - SUPP CSI INSP	1	20MAR09 23:00	20MAR09 23:59	PJ
38010661	3-CH-65	SECONDARY HANGER - PERFORM CSI INSP	1	20MAR09 23:00	20MAR09 23:59	EN
38014653	3E7	COND INSP-NOTIFY CHEMISTRY 24HR PRIOR TO OPENING	1	16MAR09 16:00	16MAR09 16:59	PJ
38014653	3E7	COND INSP - WALKDOWN/SIGN ON CLEARANCE 72-01	5	17MAR09 11:00	17MAR09 15:59	PJ
38014653	3E7	COND INSP - OPEN UPPER CONDENSER MANWAYS/DOORS	10	17MAR09 16:00	18MAR09 01:59	PJ
38014653	3E7	FME MONITOR @ AT CONDENSER MANWAYS	352*	17MAR09 16:00	01APR09 07:59	PJ
38014653	3E7	COND INSP - SET UP TEMP AIR MOVERS	12	18MAR09 02:00	18MAR09 13:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014653	3E7	COND INSP - WALKDOWN/SIGN ON CLEARANCE 73-01	4	18MAR09 11:00	18MAR09 14:59	PJ
38014653	3E7	COND INSP - OPEN CONDENSER BARNDOOR	4	18MAR09 15:00	18MAR09 18:59	PJ
38014653	3E7	COND INSP - SET UP TEMP AIR, PWR & LIGHT	10	18MAR09 19:00	19MAR09 04:59	PJ
38014653	3E7	COND INSP - INSPECT MAIN CONDENSER	6	19MAR09 07:00	19MAR09 12:59	EN
38014653	3E7	COND INSP - INST TUBE PROT"N (N.CDSR)	12	19MAR09 13:00	20MAR09 00:59	PJ
38014653	3E7	COND INSP - ERECT SCAFF WALKWAY THRU N.CDSR	12	20MAR09 01:00	20MAR09 12:59	PJ
38014653	3E7	COND INSP - INST TUBE PROT'N (S.CDSR)	12	20MAR09 13:00	21MAR09 00:59	PJ
38014653	3E7	COND INSP - ERECT SCAFF WALKWAY THRU S.CDSR	12	21MAR09 01:00	21MAR09 12:59	PJ
38014653	3E7	CONDENSER CLEAN AND INSPECT	50	21MAR09 13:00	23MAR09 14:59	PJ
38013798	3E7	SOUTH CONDENSER EMERGENT REPAIRS	100	23MAR09 15:00	27MAR09 18:59	PJ
38014653	3E7	COND INSP - PRESTAGE PORTABLE FIRE PUMP	10	26MAR09 23:00	27MAR09 08:59	PJ
38014653	3E7	COND INSP - NOTIFY SECURITY OF DELAY BARRIER	1	27MAR09 09:00	27MAR09 09:59	PJ
38014653	3E7	COND REPR - (S CDSR) DEMOB TOOLS AND EQUIPMENT	10	27MAR09 19:00	28MAR09 04:59	PJ
38013798	3E7	COND EMERG REPRS - REMOVE EQUIPMENT & DEMOBILIZE	10	27MAR09 19:00	28MAR09 04:59	PJ
38014653	3E7	COND INSP - REMV SCAFF WALKWAY THRU S.CDSR	12	28MAR09 05:00	28MAR09 16:59	PJ
38014653	3E7	REMOVE FENCE @ DWST	5	28MAR09 09:00	28MAR09 13:59	PJ
38014653	3E7	COND INSP - STAGE PORTABLE FIRE PUMP	5	28MAR09 14:00	28MAR09 18:59	PJ
38014653	3E7	COND INSP - REMOVE TUBE PROT"N (S.CDSR)	10	28MAR09 17:00	29MAR09 02:59	PJ
38014653	3E7	COND INSP - REMOVE SCAFF WALKWAY THRU N.CDSR	16	28MAR09 17:00	29MAR09 08:59	PJ
38014653	3E7	FOSAR S. CDSR - VENDOR PERFORM FOSAR OF S. CDSR	20	28MAR09 17:00	29MAR09 12:59	PJ
38014653	3E7	COND INSP - INSTALL FENCE @ DWST	4	28MAR09 19:00	28MAR09 22:59	PJ
38014653	3E7	INSTALL FIRE HOSE FOR CONDENSER WASH DOWN	20	28MAR09 23:00	29MAR09 18:59	PJ
38014653	3E7	COND INSP - REMOVE TUBE PROT"N (N.CDSR)	10	29MAR09 09:00	29MAR09 18:59	PJ
38014653	3E7	FOSAR N. CDSR - VENDOR PERFORM FOSAR OF N. CDSR	20	29MAR09 13:00	30MAR09 08:59	PJ
38014653	3E7	COND INSP - FINAL WASHDOWN AND CLEANUP	36	29MAR09 19:00	31MAR09 06:59	PJ
38014653	3E7	COND INSP DEMOB HOSES FROM CONDENSER WASH DOWN	20	31MAR09 07:00	01APR09 02:59	PJ
38014653	3E7	COND INSP - BUTTON UP CONDENSER	20	31MAR09 12:00	01APR09 07:59	PJ
38014653	3E7	COND INSP - REMOVE DELAY FENCE	4	01APR09 03:00	01APR09 06:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014653	3E7	COND INSP - REMOVE FIRE PUMP FROM DWST AREA	2	01APR09 07:00	01APR09 08:59	PJ
38013798	3E7	COND EMERG REPRS-CLOSE WO 38013798-01	2	01APR09 08:00	01APR09 09:59	PJ
38014653	3E7	COND INSP - INSTALL DELAY FENCE	4	01APR09 09:00	01APR09 12:59	PJ
38014653	3E7	COND INSP - RETURN PUMP	4	01APR09 13:00	01APR09 16:59	PJ
38014653	3E7	PERFORM CONDENSER LEAK CHECK	6	01APR09 18:00	01APR09 23:59	PJ
38014653	3E7	CONDENSER CLOSE WORK ORDER- 38014653-01	4	02APR09 00:00	02APR09 03:59	PJ
35013023	3E7A	COND - PREP COND WALL IAW ADM-732 & SPEC C-004	40	27MAR09 07:00	29MAR09 00:59	PJ
35019068	3E7A	NO COND - REMOVE PLUGS FRM SLOP DRNS.	8	27MAR09 15:00*	27MAR09 22:59	MM
35019068	3E7A	NO COND - ITOP PCM 05-092	8	28MAR09 09:00	28MAR09 16:59	MM
35019068	3E7A	NO COND - SATS PCM 05-092	8	28MAR09 17:00	29MAR09 00:59	EN
35013023	3E7A	COND - COAT COND WALL IAW ADM-732 & SPEC C-004	40	31MAR09 21:00	02APR09 16:59	PJ
35013021	3E7B	COND - PREP COND WALL IAW ADM-732 & SPEC C-004	40	27MAR09 07:00*	29MAR09 00:59	PJ
37021339	3E7B	COND MKUP SPRAY-SPRAY HEAD MISSING INSERT - REPL	6	27MAR09 13:00	27MAR09 18:59	PJ
35019069	3E7B	SO COND - REMOVE PLUGS FRM SLOP DRNS.	8	27MAR09 23:00	28MAR09 08:59	MM
35013021	3E7B	COND - COAT COND WALL IAW ADM-732 & SPEC C-004	40	29MAR09 01:00	31MAR09 20:59	PJ
36019632	CV-3-3700	MN STM TO AIR EJECTOR CV - REMOVE ACT & DISASS	10	02APR09 07:00*	02APR09 16:59	VT
36019632	CV-3-3700	MN STM TO AIR EJECTOR CV - O/H ACT & INSTALL	10	02APR09 17:00	03APR09 02:59	VT
36019632	CV-3-3700	MN STM TO AIR EJECTOR CV - AS LEFT CAL	8	03APR09 07:00*	03APR09 14:59	VT
37022800	LG-3-3400	CNDSR B HOTWELL LVL GAGES - CLEAN & REPAIR LEAK	8	18MAR09 18:00*	19MAR09 01:59	MM
37022800	LG-3-3400	CNDSR B HOTWELL LVL GAGES - PMT	1	01APR09 18:00	01APR09 18:59	MM
36008568	XCI-26	XCI-03-26 AUX STM HEADER - INSPECTION REPORT	24	18MAR09 12:00	19MAR09 11:59	EN
36008568	XCI-26	AUX STM HDR - XCI EXT CORR LCTN 26 - REMO SCAFF	8	06APR09 07:00*	06APR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36008568	XCI-26	XCI-03-26 Condenser-CLOSE WORK ORDER 36008568-01	4	08APR09 11:00	08APR09 14:59	PJ
36008568	XCI-26(18)	XCI-03-26 AUX STM HEADER-REMOVE INSULATION 18'	20	17MAR09 11:00	18MAR09 08:59	PJ
36008568	XCI-26(18)	XCI-03-26 AUX STM HEADER - NDE INSPECTION 18'	3	18MAR09 09:00	18MAR09 11:59	EN
36008568	XCI-26(18)	XCI-03-26 AUX STM HEADER - PREP & TENT 18'	30	18MAR09 12:00	19MAR09 19:59	PJ
36008568	XCI-26(18)	XCI-03-26 AUX STM HEADER - COAT PIPING 18' ELEV	30	19MAR09 20:00	21MAR09 03:59	PJ
36008568	XCI-26(18)	XCI-03-26 AUX STM HEADER-RESTORE INSULATION 18'	10	21MAR09 04:00	21MAR09 15:59	PJ
36008568	XCI-26(30)	XCI-03-26 AUX STM HEADER-REMOVE INSULATION 30'	25	18MAR09 09:00	19MAR09 11:59	PJ
36008568	XCI-26(30)	XCI-03-26 AUX STM HEADER - NDE INSPECTION 30'	6	19MAR09 12:00	19MAR09 17:59	EN
36008568	XCI-26(30)	XCI-03-26 AUX STM HEADER - PREP & TENT 30'	60	30MAR09 07:00*	01APR09 22:59	PJ
36008568	XCI-26(30)	XCI-03-26 AUX STM HEADER - COAT PIPING 30' ELEV	80	01APR09 23:00	06APR09 14:59	PJ
36008568	XCI-26(30)	XCI-03-26 AUX STM HEADER-RESTORE INSULATION 30'	10	06APR09 15:00	07APR09 00:59	PJ
36008568	XCI-26(42)	XCI-03-26 AUX STM HEADER-REMOVE INSULATION 42'	5	19MAR09 12:00	19MAR09 16:59	PJ
36008568	XCI-26(42)	XCI-03-26 AUX STM HEADER - NDE INSPECTION 42'	3	19MAR09 17:00	19MAR09 19:59	EN
36008568	XCI-26(42)	XCI-03-26 AUX STM HEADER - PREP & TENT 42'	15	06APR09 15:00	07APR09 07:59	PJ
36008568	XCI-26(42)	XCI-03-26 AUX STM HEADER - COAT PIPING 42' ELEV	15	07APR09 08:00	07APR09 22:59	PJ
36008568	XCI-26(42)	XCI-03-26 AUX STM HEADER-RESTORE INSULATION 42'	10	07APR09 23:00	08APR09 10:59	PJ
36008327	XCI-34	SJAE MN STM DRN LINE - REMOVE INSULATION	10	23MAR09 07:00*	23MAR09 16:59	PJ
36008327	XCI-34	SJAE MN STM DRN LINE - TENT & PREP	50	30MAR09 07:00*	01APR09 12:59	PJ
36008327	XCI-34	SJAE MN STM DRN LINE - COAT PIPING	20	01APR09 13:00	02APR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36008327	XCI-34	SJAE MN STM DRN LINE - INSTALL INSULATION	20	02APR09 11:00	03APR09 08:59	PJ
38013798		NORTH CONDENSER EMERGENT REPAIRS	100	23MAR09 15:00	28MAR09 02:59	PJ
38013798		COND INSP - REM SCAFFOLD STAIRS AT N/S DOOR	4	01APR09 12:00	01APR09 15:59	PJ
35019970	3-50-993	AMERTAP 3-WAY VLV TO WTRBX BN - INST NEW VLV	10	17MAR09 18:00	18MAR09 03:59	VT
35019970	3-50-993	AMERTAP 3-WAY VLV TO WTRBX BN - PMT	1	06APR09 16:00	06APR09 16:59	VT
35019969	3-50-995	AMERTAP 3WAY VLV TO WTRBX AN - REMOV PIPE & VLV	8	03APR09 07:00*	03APR09 14:59	VT
38005798	3-50-995	AMRTP 3WY VLV TO WBX AN-INST/REP WEST PIPE & FLG	8	03APR09 15:00	03APR09 22:59	VT
35019969	3-50-995	AMERTAP 3WAY VLV TO WTRBX AN - INSTALL NEW VLV	8	03APR09 23:00	04APR09 06:59	VT
35019969	3-50-995	AMERTAP 3-WAY VLV TO WTRBX AN - PMT	1	06APR09 15:00	06APR09 15:59	VT
38005798	3-50-995	AMERTAP 3WAY VLV TO WBX AN - WEST FLNG PMT	1	06APR09 15:00	06APR09 15:59	VT
38012664	MO-3-3425	MO-3425 AN-OUTER - OPERATOR MAINT & GREASE INSP	6	29MAR09 19:00	30MAR09 00:59	EM
38012664	MO-3-3425	MO-3425 AN OUTER - SET LM SW's	4	02APR09 08:00	02APR09 11:59	EM
38012664	MO-3-3425	PMT - MO-3425 AN-OUTER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012664	MO-3-3425	MO-3425 AN-OUTER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
39003746	MO-3-3426	MO-3426 AN-INNER DETERM & REMOVE OPERATOR	10	14MAR09 19:00A	15MAR09 04:59	EM
39003746	MO-3-3426	MO-3426 AN-INNER INSTALL & TERM OPERATOR	10	29MAR09 01:00	29MAR09 12:59	EM
38012665	MO-3-3426	MO-3426 AN-INNER - OPERATOR MAINT & GREASE INSP	6	29MAR09 19:00	30MAR09 00:59	EM
38012665	MO-3-3426	MO-3426 AN-INNER - SET LM SW's	4	02APR09 08:00	02APR09 11:59	EM
38012665	MO-3-3426	PMT - MO-3426 AN INNER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012665	MO-3-3426	MO-3426 AN-INNER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
38012666	MO-3-3427	MO-3427 BS OUTER - OPERATOR MAINT & GREASE INSP	6	30MAR09 09:00	30MAR09 14:59	EM
38012666	MO-3-3427	MO-3427 BS - OUTER - SET LM SW's	4	02APR09 10:00	02APR09 13:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012666	MO-3-3427	PMT - MO-3427 BN OUTER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012666	MO-3-3427	MO-3427 BS-OUTER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
38012668	MO-3-3428	MO-3428 BN-INNER - OPERATOR MAINT & GREASE INSP	6	30MAR09 09:00	30MAR09 14:59	EM
38012668	MO-3-3428	MO-3428 BN - INNER - SET LM SW's	4	02APR09 10:00	02APR09 13:59	EM
38012668	MO-3-3428	PMT - MO-3-3428 BN-INNER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012668	MO-3-3428	MO-3428 BN-INNER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
38012669	MO-3-3429	MO-3429 AS-OUTER - OPERATOR MAINT & GREASE INSP	6	30MAR09 15:00	30MAR09 20:59	EM
38012669	MO-3-3429	MO-3429 AS OUTER - SET LM SW's	4	02APR09 08:00	02APR09 11:59	EM
38012669	MO-3-3429	PMT - MO-3429 AS OUTER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012669	MO-3-3429	MO-3429 AS-OUTER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
38012670	MO-3-3430	MO-3430 AS-INNER - OPERATOR MAINT & GREASE INSP	6	30MAR09 15:00	30MAR09 20:59	EM
38012670	MO-3-3430	MO-3430 AS INNER - SET LM SW's	4	02APR09 08:00	02APR09 11:59	EM
38012670	MO-3-3430	PMT - MO-3430 AS INNER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
38012670	MO-3-3430	MO-3430 AS-INNER - AS LEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
39005252	MO-3-3431	MO-3431 BS-OUTER - OPERATOR MAINT & GREASE INSP	6	30MAR09 01:00	30MAR09 08:59	EM
39005252	MO-3-3431	MO-3431 BS-OUTER - SET LM SW's	4	02APR09 20:00	02APR09 23:59	EM
39005252	MO-3-3431	PMT - MO-3431 BS - OUTER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
39005252	MO-3-3431	MO-3-3431 BS-OUTER SCREEN-ASLEFT INSP W/MAINT	2	03APR09 02:00	03APR09 03:59	EN
39005253	MO-3-3432	MO-3428 BN-INNER - OPERATOR MAINT & GREASE INSP	6	30MAR09 01:00	30MAR09 08:59	EM
39005253	MO-3-3432	MO-3432 BN-INNER - SET LM SW's	4	02APR09 20:00	02APR09 23:59	EM
39005253	MO-3-3432	PMT - MO-3432 BS-INNER - STROKE W/ENG	2	03APR09 02:00	03APR09 03:59	EM
39005253	MO-3-3432	MO-3432 BS-INNER - AS LEFT INSP W/MAINTENANCE	2	03APR09 02:00	03APR09 03:59	EN
38015667		3AN WTRBOX N INNERSCREEN REPAIR BELOW REINJ NOZZ	36	20MAR09 01:00	21MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38015665		3BS WTRBOX S INNERSCREEN REPAIR BELOW REINJ NOZZ	36	23MAR09 07:00	24MAR09 20:59	PJ
38015668		3AS WTRBOX S INNERSCREEN REPAIR BELOW REINJ NOZZ	36	23MAR09 13:00	25MAR09 02:59	PJ
38015666		3BN WTRBOX N INNERSCREEN REPAIR BELOW REINJ NOZZ	36	27MAR09 21:00	30MAR09 12:59	PJ
38011656	3X01	MAIN TX-MM SUPPORT DELUGE TST	2	16MAR09 04:00	16MAR09 07:59	MM
38011656	3X01	MN TX-RESET&RESTORE AFTR DELUGE TST	2	16MAR09 08:00	16MAR09 09:59	MM
38011660	3X02	AUX&SEAL OIL- MM SUPRT DELUGE TEST	2	16MAR09 06:00	16MAR09 07:59	MM
38011660	3X02	AUX TX & SEAL OIL DELUGE - RESET AFTER DELUGE	2	16MAR09 08:00	16MAR09 09:59	MM
38011660	3X02	CLEAN UP WATER AFTER DELUGE TESTS	3	16MAR09 10:00	16MAR09 12:59	MM
37020633	3-50-308	3-50-308: INSTALL CRIBBING	6	02APR09 06:00	02APR09 11:59	PJ
37020633	3-50-308	3-50-308: REMOVE "T" IF REQ	12	02APR09 12:00	02APR09 23:59	PJ
37020633	3-50-308	3-50-308:INTK COOLING WTR HDR B TO HXS-REM VLV	12	03APR09 00:00	03APR09 11:59	PJ
37020633	3-50-308	ISO VLV INTKE CLNG WTR HDR B TO HX/ INST NEW VLV	12	03APR09 12:00	03APR09 23:59	PJ
37020633	3-50-308	ISO VLV INTAKE CLNG WTR HDR B TO Hx INSTL ELBOW	12	04APR09 00:00	04APR09 11:59	PJ
37020633	3-50-308	3-50-308: REMOVE CRIBBING	6	04APR09 12:00	04APR09 17:59	PJ
37020633	3-50-308	3-50-308: REPLACE VALVE-PMT	1	04APR09 16:00	04APR09 16:59	PJ
37007204	3-50-315	BACK FLUSH VLV TO BS-1400 - REPACK VALVE - PMT	1	04APR09 16:00	04APR09 16:59	VT
36014009	3-50-345	3-50-345:REPAIR HARD TO OPERATE, SCAFF RE	4	04APR09 00:00	04APR09 03:59	PJ
38007075	BS-3-1403	BS-1403 ICW STRN-REPL ELBOW-BLD DEAD WEIGHT SUPP	4	02APR09 12:00	02APR09 15:59	PJ
37016623	BS-3-1403	BS-1403 - ICW STRAINER - REMOVE COVER	8	02APR09 12:00	02APR09 19:59	PJ
38007075	BS-3-1403	BS-1403-ICW STRAINER - REPLACE 4" ELBOW	8	02APR09 16:00	02APR09 23:59	PJ
37016623	BS-3-1403	BS-1403-ICW STRAINER-CLN & PREP GASKET SURFACE	4	02APR09 20:00	02APR09 23:59	PJ
37016623	BS-3-1403	BS-1403-ICW STRAINER - BELZONE GASKET SURFACE	2	03APR09 00:00	03APR09 01:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38007075	BS-3-1403	REPLACE ELBOW-REMOVE DEAD WEIGHT SUPPORT	4	03APR09 00:00	03APR09 03:59	PJ
37016623	BS-3-1403	BS-1403-ICW STRAINER - MACHINE GASKET SURFACE	3	03APR09 02:00	03APR09 04:59	PJ
38007075	BS-3-1403	REPLACE ELBOW - PREP/PAINT RUSTY SURFACES	6	03APR09 04:00	03APR09 11:59	PJ
37016623	BS-3-1403	BS-1403-ICW STRAINER - INSTALL COVER	8	03APR09 07:00	03APR09 14:59	PJ
38007075	BS-3-1403	BS-1403-ICW STRAINER - REPLACE 4" ELBOW - PMT	1	04APR09 16:00	04APR09 16:59	PJ
37016623	BS-3-1403	BS-1403-ICW STRAINER - PMT	1	04APR09 16:00	04APR09 16:59	PJ
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - ERECT SCAFFOLD	8	30MAR09 07:00*	30MAR09 14:59	PJ
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV -SETUP TEMP PIPE SUPP	3	02APR09 08:00	02APR09 10:59	MM
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - DISCONN ACT	4	02APR09 12:00	02APR09 15:59	IC
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV- SUPP REMOVAL OF ACT	4	02APR09 16:00	02APR09 19:59	IC
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - PREP VLV TO REMOVE	8	02APR09 20:00	03APR09 03:59	MM
37005651	POV-3-4882	POV-4882 / TPCW HX ISO VLV - O/H ACT	20	02APR09 20:00	03APR09 15:59	IC
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - CLN & PERP PIPE	4	03APR09 08:00	03APR09 11:59	MM
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV-INSTAL & TORQUE BOLTS	8	03APR09 16:00	03APR09 23:59	MM
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV- SUPP INSTALL OF ACT	4	04APR09 00:00	04APR09 03:59	IC
38024057	POV-3-4882	RECONECT ACTUATOR TPCW HX ISO VLV POV-3-4882	4	04APR09 04:00	04APR09 07:59	IC
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - REMOVE PIPE SUPPORT	4	04APR09 04:00	04APR09 07:59	MM
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - REMOVE SCAFFOLD	8	04APR09 08:00	04APR09 15:59	PJ
38024057	POV-3-4882	POV-4882 / TPCW HX ISO VLV - PMT	1	04APR09 16:00	04APR09 16:59	MM
38012000	CV-3-522A	PRI WTR TO RCP A SEAL LKOFF-CAL ACT & ACCESORIES	8	23MAR09 02:00	23MAR09 09:59	VT
38012001	CV-3-522B	PRI WTR TO RCP B SEAL LKOFF-CAL ACT & ACCESORIES	4	23MAR09 22:00*	24MAR09 01:59	VT
38012002	CV-3-522C	PRI WTR TO RCP C SEAL LKOFF-CAL ACT & ACCESORIES	5	24MAR09 02:00	24MAR09 06:59	VT
37006737	3K4B	3AB20 B EDG - DELIVER SYNC SW & VOLT METR TO P&C	1	16MAR09 07:00*	16MAR09 07:59	EM
37006737	3K4B	EDG SYNC SW REPL BY P&C - CLOSE W/O AFTER PMT	1	25MAR09 04:00	25MAR09 04:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	3T237	(P) REMOVE N2 BOTTLES AFTER CRDS LATCHING	1	29MAR09 00:00	29MAR09 00:59	PJ
38012775	3V2A	A CRDM REMOVE LIMIT SWITCH ARMS	4	16MAR09 09:00	16MAR09 12:59	PJ
38012775	3V2A	A CRDM EXH FAN MTR - ERECT SCAFFOLD	8	30MAR09 07:00	30MAR09 14:59	PJ
38012775	3V2A	A CRDM FAN - LUBE & LINKAGE	6	30MAR09 15:00	30MAR09 20:59	PJ
38012775	3V2A	A CRDM EXH FAN MTR - REMOVE SCAFFOLD	5	30MAR09 21:00	31MAR09 01:59	PJ
38012775	3V2A	A CRDM INSTALL LIMIT SWITCH ARMS	2	31MAR09 20:00	31MAR09 21:59	PJ
38012775	3V2A	PMT - A CRDM FAN MOTOR	1	02APR09 02:00	02APR09 02:59	PJ
38012775	3V2A	A CRDM FAN - Close WO 38012775-01	2	02APR09 03:00	02APR09 04:59	PJ
38012776	3V2B	B CRDM REMOVE LIMIT SWITCH ARMS	4	16MAR09 13:00	16MAR09 16:59	PJ
38012776	3V2B	B CRDM EXH FAN MTR - ERECT SCAFF #10870	8	30MAR09 07:00	30MAR09 14:59	PJ
38012776	3V2B	B CRDM FAN - DETERM & PREP TO REMOVE	6	31MAR09 09:00	31MAR09 14:59	PJ
38012776	3V2B	(P)B CRDM FAN - RIG AND FLY OUT OLD MOTOR	2	31MAR09 15:00	31MAR09 16:59	PJ
38012776	3V2B	B CRDM FAN COILS - CLEAN AND INSPECT	8	31MAR09 15:00	31MAR09 22:59	PJ
38012776	3V2B	(P)B CRDM FAN - RIG, FLY IN & SET ON COOLER	2	31MAR09 17:00	31MAR09 18:59	PJ
38012776	3V2B	B CRDM FAN - RETERM NEW MOTOR	8	31MAR09 19:00	01APR09 02:59	PJ
38012776	3V2B	B CRDM EXH FAN MTR - REMOVE SCAFF #10870	5	02APR09 00:00	02APR09 04:59	PJ
38012776	3V2B	PMT - B CRDM FAN MOTOR	1	02APR09 02:00	02APR09 02:59	PJ
38012776	3V2B	B CRDM FAN - Close WO 38012776-01	1	02APR09 03:00	02APR09 03:59	PJ
38012730	SPARE CRDM	CTMT 58'/INSPECT SPARE CRDM MOTOR	4	17MAR09 00:00*	17MAR09 03:59	EM
38012776	TE-3-1480	REMOVE TE-3-1480	4	30MAR09 15:00	31MAR09 08:59	IC
38012776	TE-3-1480	RE-CONNECT TE-3-1480 TO 3B CRDM FAN	4	01APR09 03:00	01APR09 06:59	IC
39002303	3S6	3S6 A CRDM MG SET - PERFORM MG INSPECTION	12	16MAR09 11:00*	17MAR09 13:59	EM
38012792	3S6	3S6 - CLEAN-REPLACE WIRES - 2005-852-CR	6	18MAR09 07:00*	18MAR09 12:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012793	3S6	ADJUST SETPOINT FOR RELAYS 1L & 1H	12	18MAR09 13:00	19MAR09 14:59	EM
38012791	3S6	3S6 A CRDM-MG SET METER AND RELAY CAL	10	20MAR09 17:00	21MAR09 02:59	EM
38012791	3S6	3S6 A CRDM-MG SET FUNCTIONAL RELAY TEST	10	28MAR09 14:00	28MAR09 23:59	EM
39002303	3S6	PMT - 3S6 A CRDM MG SET INSPECTION	2	04APR09 12:00	04APR09 13:59	EM
37023002	3S6 O/B	3A CRDM MG O/B - TRANSPORT BKR TO SWGR & INSTALL	2	16MAR09 13:00	16MAR09 14:59	EM
37023002	3S6 O/B	PMT - 3A CRDM MG SET OUTPUT BREAKER INSPECTION	1	03APR09 17:00	03APR09 17:59	EM
37023002	3S6 O/B	3A CRDM MG OUTPUT BKR: MRM REMOVED BKR TO STORES	4	08APR09 07:00	08APR09 10:59	EM
38000696	3S7	3S7 MG VIBR - PERFORM AS FOUND FLYWHEEL RUNOUT	4	17MAR09 13:00*	17MAR09 16:59	EM
38018660	3S7	3S7 MG O/H - UNCOUPLE MOTOR & GENERATOR	8	17MAR09 17:00	18MAR09 00:59	MM
38012795	3S7	3S7 - CLEAN-REPLACE WIRES - 2005-852-CR	6	18MAR09 07:00	18MAR09 12:59	EM
38018660	3S7	3S7 MG O/H - DETERM MTR & RIG TO FLOOR	8	18MAR09 07:00*	18MAR09 14:59	EM
38018660	3S7	3S7 MG O/H - TRANSPORT MTR TO SHOP FOR O/H	5	18MAR09 15:00	18MAR09 19:59	EM
38018660	3S7	3S7 MG O/H - REMOVE FLYWHEEL	8	19MAR09 07:00*	19MAR09 14:59	EM
38000696	3S7	3S7 MG VIBR - CHECK BASE FOUNDATION BOLT TORQUE	8	19MAR09 15:00*	19MAR09 22:59	EM
38012796	3S7	ADJUST SETPOINT FOR RELAYS 2L & 2H	12	19MAR09 15:00	20MAR09 16:59	EM
38018660	3S7	3S7 MG O/H - OVERHAUL GENERATOR	24	20MAR09 07:00	22MAR09 10:59	EM
38018660	3S7	3S7 MG O/H - OVERHAUL MOTOR	24	20MAR09 07:00*	22MAR09 10:59	EM
38012794	3S7	3S7 B CRDM-MG SET METER & RELAY CAL	10	21MAR09 03:00	21MAR09 12:59	EM
38018660	3S7	3S7 MG O/H - INSTALL FLYWHEEL	8	22MAR09 11:00	23MAR09 08:59	EM
38018660	3S7	3S7 MG O/H - TRANSPORT MTR TO CSR	6	23MAR09 09:00	23MAR09 14:59	EM
38000696	3S7	3S7 MG VIBR - PERFORM AS LEFT FLYWHEEL RUNOUT	6	23MAR09 09:00	23MAR09 14:59	EM
38018660	3S7	3S7 MG O/H - INSTALL & TERM MOTOR	8	23MAR09 15:00	24MAR09 12:59	EM
38018660	3S7	3S7 MG O/H - COUPLE & ALIGN	12	24MAR09 13:00	25MAR09 00:59	MM
38012794	3S7	3S7 B CRDM-MG SET FUNCTIONAL RELAY TEST	10	25MAR09 14:00	25MAR09 23:59	EM
38018660	3S7	PMT - 3S7 MG O/H - PMT MG SET OVERHAUL	2	04APR09 13:00	04APR09 14:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012014	3T237	ASSIST OPS WITH HANGING CLEARANCE ZONE 28-03	2	16MAR09 01:00	16MAR09 02:59	IC
38012014	3T237	DISCONNECT CRDM CABLES @ CRDM CABINETS	4	16MAR09 06:00	16MAR09 09:59	IC
38012014	3T237	ASSIST OPS WITH HANGING CLEARANCE ZONE 28-02	2	16MAR09 10:00	16MAR09 11:59	IC
38013632	3T237	INSTALL RX CAVITY SAFETY RAILS	9	16MAR09 19:00	17MAR09 03:59	PJ
38013632	3T237	(P) B25 BOX TO 58' FOR OLD RPI CALBES	1	17MAR09 02:00	17MAR09 02:59	PJ
38013632	3T237	INSTALL RX CAVITY FME BARRIER 58'	10	17MAR09 04:00	17MAR09 13:59	PJ
38013632	3T237	(P) REMOVE B25 BOX OF OLD RPI CABLES	1	18MAR09 21:00	18MAR09 21:59	PJ
38013632	3T237	REMOVE CAVITY WEST END FME BARRIER FOR HEAD LIFT	3	19MAR09 23:00	20MAR09 01:59	PJ
38013632	3T237	ERECT RX CAVITY WEST END FME BARRIER @ GEN WALL	3	20MAR09 04:00	20MAR09 06:59	PJ
37013419	3T237	RPI CABLES @ RX HEAD CABLE TRAY 1 - ERECT SCAF	24	20MAR09 06:00	21MAR09 05:59	PJ
37013419	3T237	(P) FLY (3) DAVIT HOIST TO TOP OF RX HEAD	1	20MAR09 07:00	20MAR09 07:59	PJ
37013419	3T237	RPI CABLES @ RX HEAD CABLE TRAY 2 - ERECT SCAF	24	21MAR09 06:00	22MAR09 05:59	PJ
38013632	3T237	(P) BOX OF NEW RPI CABLES TO 58'	1	22MAR09 11:00	22MAR09 11:59	PJ
38013632	3T237	(P) REMOVE BOX AFTER RPI CABLES ARE INSTALLED	1	24MAR09 18:00	24MAR09 18:59	PJ
37013419	3T237	RPI CABLES - ITOP PCM 07-039	30	25MAR09 06:00	26MAR09 11:59	RS
37013419	3T237	RPI CABLES @ RX HEAD CABLE TRAY 1 - REMOVE SCAF	20	25MAR09 07:00	26MAR09 02:59	PJ
37013419	3T237	(P) REMOVE (3) DAVIT HOIST FROM CNTMT	1	25MAR09 09:00	25MAR09 09:59	PJ
37013419	3T237	RPI CABLES @ RX HEAD CABLE TRAY 2 - REMOVE SCAF	20	26MAR09 03:00	27MAR09 00:59	PJ
37013419	3T237	RPI CABLES - SATS PCM 07-039	30	26MAR09 12:00	27MAR09 17:59	EN
38013632	3T237	MOVE WEST END FME BARRIER IN TO CAVITY EDGE	3	29MAR09 00:00	29MAR09 02:59	PJ
38013632	3T237	REMOVE UPPER RX CAVITY SAFETY HAND RAILS	2	31MAR09 22:00	31MAR09 23:59	PJ
38012015	3T237	CRDM CABLES INSULATION & CONTINUITY CHECKS	16	01APR09 03:00	01APR09 18:59	IC
38012015	3T237	RPI CABLE INSULATION & CONTINUITY CHECK	20	01APR09 23:00	03APR09 08:59	IC
38012015	3T237	CRDM CABLE REINSTALLATION IN CABINETS	6	03APR09 09:00	03APR09 14:59	IC
38012015	3T237	RPI CABLE REINSTALLATION IN CABINETS	4	03APR09 15:00	03APR09 18:59	IC
38012015	3T237	ASSIST OPS RELEASE CLRNC ZONE 28-03	3	03APR09 19:00	03APR09 21:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012031	3V2	CRDM CABINET INSPECTION (POWER OFF)	40	16MAR09 18:00	20MAR09 17:59	IC
38012031	3V2	CRDM PWR SUPPLY CHECKS & OSC FREQ ADJ. W/ POWER	15	20MAR09 20:00	22MAR09 00:59	IC
38012031	3V2	PMT-ROD CNTRL CABINETS TEST PER OPS OSP-028.7	1	03APR09 22:00	03APR09 22:59	IC
35020413	3Y03	3Y03 INV INSP & BURN IN NEW SUB-COMPONENTS	10	23MAR09 07:00*	23MAR09 16:59	EM
35020413	3Y03	3Y03: REPLACE INVERTER SUB-COMPONENTS	40	25MAR09 07:00*	26MAR09 22:59	EM
35020413	3Y03	3Y03: RPI INV - INVERTER ALARM & LOAD TEST	12	27MAR09 01:00	27MAR09 12:59	EM
35020413	3Y03	3Y03: RPI INV:FINAL PMT (OPS PERFORM OP-028.1)	2	27MAR09 16:00	27MAR09 17:59	EM
38012030	RPI	RPI COLD CALIBRATION (ROD DEVIATION & POSITION)	40	28MAR09 15:00*	01APR09 00:59	IC
38013258	RPI	ROD CONTROL - PREPARE FOR ROD DROP TEST	8	04APR09 20:00	05APR09 03:59	IC
38013258	RPI	HOT RPI CAL - ZERO & 16 STEP DATA COLLECTION	2	06APR09 00:00	06APR09 01:59	IC
38013258	RPI	CRDM STEPPING TEST PROCEDURE SECTION 6.3	2	06APR09 02:00	06APR09 03:59	IC
38013258	RPI	RPI TEST SIGNAL DATA	4	06APR09 04:00	06APR09 07:59	IC
38013258	RPI	ROD DROP TEST PROCEDURE SECTION 6.4	3	06APR09 08:00	06APR09 10:59	IC
38013258	RPI	ROD DROP TEST PROCEDURE SECTION 6.2.12	3	06APR09 11:00	06APR09 13:59	IC
37019294		REPLACE OLD CRDM CABLE TERMINAL STRIPS	8	16MAR09 15:00	16MAR09 22:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38015408		TROUBLESHOOT SBB GROUP 2, HAS NO AUDIBLE NOISE	10	27MAR09 14:00*	27MAR09 23:59	IC
38001092		CBB, TSA 08-002 RESTORATION.	6	29MAR09 15:00	29MAR09 20:59	IC
37003825		CHAR TEST CRDM CABLES	20	01APR09 23:00	03APR09 08:59	IC
37003825		CHAR TEST RPI CABLES	10	03APR09 09:00	03APR09 18:59	IC
38013258		ADM-217 BRIEF PRIOR TO ROD STEPPING	2	05APR09 02:00	05APR09 03:59	IC
38013675	3H3	(P) POLAR CRANE-PERFORM ROUTINE MAINTENANCE	24	21MAR09 05:00	22MAR09 04:59	PJ
38013675	3H3	POLAR CRANE-CLOSE WO 38013675-01	2	04APR09 18:00	04APR09 19:59	PJ
38013804	3H3	(P) Plr Crn - Post Op Insp Per 3-GMI-051.1	10	04APR09 18:00	05APR09 03:59	PJ
37019441	3H3	ANCHOR FOR RESCUE DEVICE - Close WO 37019441	2	04APR09 22:00	04APR09 23:59	PJ
38013804	3H3	PLR CR Post OP INSP - Close WO 38013804-01	1	05APR09 04:00	05APR09 04:59	PJ
38013773	3-626A	PROVIDE SUPPORT FOR TEST OF 3-721A,B,C	2	17MAR09 00:00	17MAR09 01:59	MM
38013773	3-626A	DEMOB AFTER TESTING OF 3-721A,B,C	2	19MAR09 07:00*	19MAR09 08:59	MM
38015583	3-701A	ISO VLV TO CCW PP A INLET - PMT	1	31MAR09 12:00	31MAR09 12:59	VT
37010321	3-708A	RT VLV TO LT-613 OFF CCW SURGE TANK - ERECT LADD	1	16MAR09 15:00	16MAR09 15:59	PJ
37010321	3-708A	RT VLV TO LT-613 OFF CCW TK-SETUP FME BARRIER	6	27MAR09 07:00	27MAR09 12:59	MM
37010321	3-708A	RT VLV TO LT-613 OFF CCW TK-CUT OUT VLV & PREP	8	27MAR09 13:00	28MAR09 10:59	MM
37010321	3-708A	RT VLV TO LT-613 OFF CCW TK-WELD IN NEW VLV	8	28MAR09 11:00	29MAR09 08:59	MM
37010321	3-708A	RT VLV TO LT-613 OFF CCW TK-REMOVE FME BARRIER	4	29MAR09 09:00	29MAR09 12:59	MM
37010321	3-708A	RT VLV TO LT-613 OFF CCW TK-PMT	1	31MAR09 12:00	31MAR09 12:59	MM
37010321	3-708A	RT VLV TO LT-613 OFF CCW SURGE TANK - REMOV SCAF	12	31MAR09 13:00	01APR09 00:59	PJ
37022063	3-730B	DRN VLV CCW FRM RCP COOLERS - REMO & REPL CAP	4	18MAR09 00:00*	18MAR09 03:59	MM
37022063	3-730B	DRN VLV CCW FRM RCP COOLERS - PMT	1	19MAR09 14:00	19MAR09 14:59	MM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
32001596	3-781C	3-781C-DRN VLV CCW TO SAMPLE CLRS-CUT OUT VLV	6	23MAR09 00:00	23MAR09 05:59	MM
32001596	3-781C	3-781C-DRN VLV CCW TO SAMPLE CLRS-PREP PIPE	6	23MAR09 06:00	23MAR09 11:59	MM
32001596	3-781C	3-781C-DRN VLV CCW TO SAMPLE CLRS-WELD NEW VLV	6	23MAR09 12:00	23MAR09 17:59	MM
32001596	3-781C	3-781C-DRN VLV CCW TO SAMPLE CLRS- PMT	1	26MAR09 08:00	26MAR09 08:59	MM
38013627	CSI ZN 127	CSI- 3-127 3-CCH-14 SCAFF ERCT 2 PLATFORMS	6	21MAR09 00:00*	21MAR09 05:59	PJ
38013627	CSI ZN 127	CSI- 3-127 3-CCH-22A, 3-CCH-14 PERF EXAMS	4	23MAR09 09:00*	23MAR09 12:59	EN
38013627	CSI ZN 127	CSI- 3-127 3-CCH-22A, 3-CCH-14 - ANALYZE RESULTS	24	23MAR09 13:00*	25MAR09 16:59	EN
38013627	CSI ZN 127	CSI- 3-127 3-CCH-14 SCAFF REMOVE 2 PLATFORMS	10	25MAR09 17:00*	26MAR09 02:59	PJ
38013627	CSI ZN 144	CSI- 3-144 SR-308 - SCAFFOLD REMOVE	10	06APR09 07:00*	06APR09 16:59	PJ
36019651	CV-3-2903	CNTL VLV CCW TO ECC "B" - AS LEFT DIAG & CAL	8	23MAR09 07:00	23MAR09 14:59	VT
38012038	CV-3-2905	CNTL VLV CCW TO ECC "A" - REMOVE ACT & DISASS	8	23MAR09 15:00	23MAR09 22:59	VT
38012038	CV-3-2905	CNTL VLV CCW TO ECC "A" - O/H ACT & RE-INSTALL	8	23MAR09 23:00	24MAR09 08:59	VT
38012037	CV-3-2905	CNTL VLV CCW TO ECC "A" - AS LEFT DIAG & CAL	8	24MAR09 09:00	24MAR09 16:59	VT
38012043	CV-3-2906	MN CNTL VLV CCW FROM ECC "B" - AS FD DIAG	5	24MAR09 19:00	24MAR09 23:59	VT
38012044	CV-3-2906	MN CNTL VLV CCW FROM ECC "B"-REMOVE ACT & DISASS	8	25MAR09 00:00	25MAR09 09:59	VT
38012044	CV-3-2906	MN CNTL VLV CCW FROM ECC "B"-O/H ACT & RE-INSTAL	8	25MAR09 10:00	25MAR09 17:59	VT
38012043	CV-3-2906	MN CNTL VLV CCW FROM ECC "B"-AS LEFT DIAG & CAL	8	25MAR09 18:00	26MAR09 01:59	VT
38012045	CV-3-2907	MN CNTL VLV CCW TO ECC "C" - AS FD DIAG	5	24MAR09 18:00*	24MAR09 22:59	VT
38012046	CV-3-2907	MN CNTL VLV CCW TO ECC "C" - REMOVE ACT & DISASS	8	24MAR09 23:00	25MAR09 08:59	VT
38012046	CV-3-2907	MN CNTL VLV CCW TO ECC "C"-O/H ACT & RE-INSTALL	8	25MAR09 09:00	25MAR09 16:59	VT

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012045	CV-3-2907	MN CNTL VLV CCW TO ECC "C" - AS LEFT DIAG & CAL	8	25MAR09 17:00	26MAR09 00:59	VT
38012046	CV-3-2907	NEED TO PREFORM ACTUATOR OVREHAUL AND CA SCAF RE	4	26MAR09 02:00	26MAR09 07:59	PJ
38012049	CV-3-2908	MN CNTL VLV CCW FROM ECC "A"-REMOVE ACT & DISASS	8	24MAR09 19:00	25MAR09 02:59	VT
38012049	CV-3-2908	MN CNTL VLV CCW FROM ECC "A"-O/H ACT & RE-INSTAL	8	25MAR09 03:00	25MAR09 12:59	VT
38012047	CV-3-2908	MN CNTL VLV CCW FROM ECC "A"-AS LEFT DIAG & CAL	8	26MAR09 01:00	26MAR09 10:59	VT
38012047	CV-3-2908	NEED TO PREFORM ACTUATOR CALIBRATION SCAF RE	4	31MAR09 13:00*	31MAR09 16:59	PJ
37010321	LT-3-613	SUPPORT 3-708A WORK, REMOVE LT-3-613	8	26MAR09 17:00	27MAR09 00:59	IC
37010321	LT-3-613	SUPPORT 3-708A WORK, RE-INSTALL LT-3-613	8	29MAR09 15:00	29MAR09 22:59	IC
38012338	LT-3-6421	ERECT PROTECTIVE BARRIER FOR DRAINDOWN LEVEL	6	16MAR09 17:00	16MAR09 22:59	PJ
38012338	LT-3-6421	REMOVE PROTECTIVE BARRIER FOR DRAINDOWN LEVEL	10	31MAR09 14:00	31MAR09 23:59	PJ
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - INSTALL STEM BLOCK	2	17MAR09 17:00	17MAR09 18:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - DETERM & REMOVE OPERATOR	4	17MAR09 23:00	18MAR09 02:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - OVERHAUL OPERATOR	16	18MAR09 09:00	19MAR09 00:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - INSTALL & TERM OPERATOR	6	19MAR09 01:00	19MAR09 08:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - REM STEM BLOCK	2	19MAR09 17:00	19MAR09 18:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - MOV STATIC TEST	10	20MAR09 08:00	20MAR09 17:59	VT
38013899	MOV-3-1417	MOV-3-1417 OPR O/H - PMT STROKE	1	20MAR09 18:00	20MAR09 18:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - INSTALL STEM BLOCK	2	17MAR09 19:00	17MAR09 20:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - DETERM & REMOVE OPERATOR	4	18MAR09 03:00	18MAR09 08:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - OVERHAUL OPERATOR	16	18MAR09 09:00	19MAR09 00:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - INSTALL & TERM OPERATOR	6	19MAR09 09:00	19MAR09 14:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - REM STEM BLOCK	2	19MAR09 17:00	19MAR09 18:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - MOV STATIC TEST	10	19MAR09 19:00	20MAR09 04:59	VT
38013900	MOV-3-1418	MOV-3-1418 OPR O/H - PMT STROKE	1	20MAR09 07:00	20MAR09 07:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38004239	MOV-3-626	MOV-3-626 - OPR O/H - DETERM & REMOVE OPERATOR	4	17MAR09 16:00	17MAR09 19:59	VT
38004239	MOV-3-626	MOV-3-626 - OPR O/H - OVERHAUL OPERATOR	16	17MAR09 20:00	18MAR09 13:59	VT
38004239	MOV-3-626	MOV-3-626 - OPR O/H - INSTALL & TERM OPERATOR	6	18MAR09 14:00	18MAR09 19:59	VT
38004239	MOV-3-626	MOV-3-626 - OPR O/H - MOV STATIC TEST	10	18MAR09 21:00	19MAR09 08:59	VT
38004239	MOV-3-626	MOV-3-626 - OPR O/H - PMT STROKE	1	19MAR09 09:00	19MAR09 09:59	VT
38014385	MOV-3-716B	MOV-3-716B MOV & GREASE INSPECTION	6	18MAR09 11:00	18MAR09 16:59	VT
38014385	MOV-3-716B	MOV-716B CCW TO RCP - PMT STROKE	1	18MAR09 17:00	18MAR09 17:59	VT
38014386	MOV-3-730	MOV-3-730 MOV & GREASE INSPECTION	6	18MAR09 18:00	18MAR09 23:59	VT
38014386	MOV-3-730	MOV-730 CCW FRM RCP - CYCLE MOV-PMT	1	19MAR09 00:00	19MAR09 00:59	VT
37020028	MOV-3-749A	MOV-3-749A - PMT STROKE- REPL LIM SW COVER	1	25MAR09 11:00	25MAR09 11:59	VT
36019470	MOV-3-749A	MOV-3-749A - PMT STROKE - GREASE INSPECTION	1	25MAR09 11:00	25MAR09 11:59	VT
38014388	MOV-3-749B	MOV-3-749B - PMT STROKE - MOV & GREASE INSP	1	21MAR09 13:00	21MAR09 13:59	VT
38013632	PEN31	(R) BRING IN HEATERS FOR PEN 31 CONDENSATION	2	18MAR09 23:00	19MAR09 00:59	PJ
38013632	PEN34	(R) BRING IN HEATERS FOR PEN 34 CONDENSATION	2	18MAR09 23:00	19MAR09 00:59	PJ
37022901	RV-3-715	RV-3-715: REMOV & TEST - ERECT SCAF	12	23MAR09 19:00	24MAR09 06:59	PJ
37022901	RV-3-715	RV-3-715 - RV FOR CCW RTN FROM EX LETDWN HX PMT	1	25MAR09 03:00	25MAR09 03:59	VT
37022901	RV-3-715	REMOVE/INSTALL VALVE SCAFF RE	4	25MAR09 04:00	25MAR09 09:59	PJ
38013845	SAFE	SUPPORT *-OSP-030.9 - REMOVE CONTACTS BEFORE OSP	3	02APR09 05:00	02APR09 07:59	EM
38013845	SAFE	SUPPORT *-OSP-030.9 - INSTALL CONTACTS AFTER OSP	3	02APR09 22:00	03APR09 00:59	EM
38012179	SNU-1095	SNUB-CCW FROM RCP "C" - AS FOUND VISUAL	1	19MAR09 07:00*	19MAR09 07:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1095	SNUB-CCW FROM RCP "C" - REMOVE & FUNCTIONAL TEST	5	19MAR09 08:00	19MAR09 12:59	EN
38012179	SNU-1095	SNUB-CCW FROM RCP "C" -REINSTALL & AS LEFT	3	19MAR09 13:00	19MAR09 15:59	EN
38012179	SNU-1096	SNUB-CCW FROM RCP "C" - AS FOUND VISUAL	1	20MAR09 07:00*	20MAR09 07:59	EN
38012179	SNU-1096	SNUB-CCW FROM RCP "C" - HANDSTROKE	1	20MAR09 08:00	20MAR09 08:59	EN
38012179	SNU-1096	SNUB-CCW FROM RCP "C" - REMOVE SCAFFOLD	6	02APR09 09:00*	02APR09 14:59	PJ
38012179	SNU-1097	SNUB-CCW FROM RCP "C" - AS FOUND VISUAL	1	20MAR09 09:00	20MAR09 09:59	EN
38012179	SNU-1097	SNUB-CCW FROM RCP "C" - HANDSTROKE	1	20MAR09 10:00	20MAR09 10:59	EN
38012179	SNU-1098	SNUB-CCW FROM RCP "A" - ERECT SCAFFOLD	16	20MAR09 07:00*	20MAR09 22:59	PJ
38012179	SNU-1098	SNUB-CCW FROM RCP "A" - AS FOUND VISUAL	1	21MAR09 07:00	21MAR09 07:59	EN
38012179	SNU-1098	SNUB-CCW FROM RCP "A" - HANDSTROKE	1	21MAR09 07:00	21MAR09 07:59	EN
38012179	SNU-1098	SNUB-CCW FROM RCP "A" - REMOVE SCAFFOLD	6	28MAR09 18:00*	28MAR09 23:59	PJ
38012179	SNU-1099	SNUB-CCW FROM RCP "A" - ERECT SCAFFOLD	10	18MAR09 21:00*	19MAR09 06:59	PJ
38012179	SNU-1099	SNUB-CCW FROM RCP "A" - AS FOUND VISUAL	1	19MAR09 07:00*	19MAR09 07:59	EN
38012179	SNU-1099	SNUB-CCW FROM RCP "A" - REMOVE & FUNCTIONAL TEST	6	19MAR09 08:00	19MAR09 13:59	EN
38012179	SNU-1099	SNUB-CCW FROM RCP "A" - INSTALL & AS LEFT	4	19MAR09 14:00	19MAR09 17:59	EN
38012179	SNU-1099	SNUB-CCW FROM RCP "A" - REMOVE SCAFFOLD	6	01APR09 07:00*	01APR09 12:59	PJ
38012179	SNU-1100	SNUB-CCW FROM RCP "A" - ERECT SCAFFOLD	12	20MAR09 20:00	21MAR09 07:59	PJ
38012179	SNU-1100	SNUB-CCW FROM RCP "A" - AS FOUND VISUAL	1	21MAR09 08:00	21MAR09 08:59	EN
38012179	SNU-1100	SNUB-CCW FROM RCP "A" - HANDSTROKE	1	21MAR09 08:00	21MAR09 08:59	EN
38012179	SNU-1100	SNUB-CCW FROM RCP "A" - REMOVE SCAFFOLD	6	02APR09 09:00*	02APR09 14:59	PJ
38012179	SNU-1105	SNUB-CCW FROM RCP C TO MTR COOL- AS FOUND VISUAL	1	20MAR09 11:00	20MAR09 11:59	EN
38012179	SNU-1105	SNUB-CCW FROM RCP C TO MTR COOL- HANDSTROKE	1	20MAR09 12:00	20MAR09 12:59	EN
38012179	SNU-1106	SNUB-CCW FRM RCP A UPPER OIL COOLER-ERECT SCAF	10	20MAR09 03:00	20MAR09 12:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1106	SNUB-CCW FRM RCP A UPPER OIL COOLER-AS FOUND VIS	1	20MAR09 13:00	20MAR09 13:59	EN
38012179	SNU-1106	SNUB-CCW FRM RCP A UPPER OIL COOLER-HANDSTROKE	1	20MAR09 14:00	20MAR09 14:59	EN
38012179	SNU-1106	SNUB-CCW FRM RCP A UPPER OIL COOLER-REMOVE SCAF	6	31MAR09 15:00*	31MAR09 20:59	PJ
38012179	SNU-1110	SNUB-CCW FOR RCP C TO MTR COOLER-AS FOUND VISUAL	1	20MAR09 15:00	20MAR09 15:59	EN
38012179	SNU-1110	SNUB-CCW FOR RCP C TO MTR COOLER-HANDSTROKE	1	20MAR09 16:00	20MAR09 16:59	EN
38012179	SNU-1120	SNUB-CCW FROM RCP "B" MTR COOLER- ERECT SCAFFOLD	8	20MAR09 17:00*	21MAR09 00:59	PJ
38012179	SNU-1120	SNUB-CCW FROM RCP "B" MTR COOLER-AS FOUND VISUAL	1	21MAR09 09:00	21MAR09 09:59	EN
38012179	SNU-1120	SNUB-CCW FROM RCP "B" MTR COOLER-HANDSTROKE	1	21MAR09 09:00	21MAR09 09:59	EN
38012179	SNU-1120	SNUB-CCW FROM RCP "B" MTR COOLER-REMOVE SCAFFOLD	6	02APR09 02:00*	02APR09 09:59	PJ
38012179	SNU-1121	SNUB-CCW FROM RCP "A" MTR COOLER-ERECT SCAFFOLD	8	21MAR09 02:00	21MAR09 09:59	PJ
38012179	SNU-1121	SNUB-CCW FROM RCP "A" MTR COOLER-AS FOUND VISUAL	1	21MAR09 10:00	21MAR09 10:59	EN
38012179	SNU-1121	SNUB-CCW FRM RCP A MTR COOL-REMO & FUNCTION TST	5	21MAR09 11:00	21MAR09 15:59	EN
38012179	SNU-1121	SNUB-CCW FROM RCP "A" MTR COOLER-INST & AS LEFT	3	21MAR09 16:00	21MAR09 18:59	EN
38012179	SNU-1121	SNUB-CCW FROM RCP "A" MTR COOLER-REMOVE SCAFFOLD	6	01APR09 00:00*	01APR09 07:59	PJ
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-PREFAB VLV	24	18MAR09 07:00*	20MAR09 10:59	MM
35018980	TCV-3-144	CCW TO NRHX TCV-144 - REMOVE INSULATION AS REQ	4	23MAR09 04:00	23MAR09 09:59	PJ
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-REMOVE ACTUATOR	12	23MAR09 10:00	23MAR09 21:59	VT
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-DISASSEMBLE VALVE	12	23MAR09 22:00	24MAR09 11:59	VT
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-CUTOUT VLV	12	24MAR09 12:00	25MAR09 13:59	MM
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-WELD IN NEW VALVE	16	25MAR09 14:00	27MAR09 09:59	MM
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-INSP NEW VALVE	4	27MAR09 06:00	27MAR09 09:59	EN
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-ASSEMBLE NEW VLV	12	27MAR09 10:00	27MAR09 21:59	VT
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-REINST ACTUATOR	12	27MAR09 22:00	28MAR09 11:59	VT
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX- REPL POSITIONER	12	28MAR09 12:00	28MAR09 23:59	VT
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX- CAL & AS-LEFT	10	29MAR09 00:00	29MAR09 11:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35018980	TCV-3-144	TCV-3-144-TEMP CV CCW FRM NRHX-PMT	1	29MAR09 16:00	29MAR09 16:59	VT
35018980	TCV-3-144	CCW TO NRHX TCV-144 - INSTALL INSULATION AS REQ	4	30MAR09 07:00	30MAR09 10:59	PJ
35018980	TCV-3-144	CCW TO NRHX TCV-3-144 - REMOVE SCAFFOLD	8	30MAR09 11:00	30MAR09 18:59	PJ
38013837		INSTALL TEMP LGIHTING FOR TRI NUKES @ 58'	2	18MAR09 00:00	18MAR09 01:59	PJ
38014443		F&V FT-629,632,635-CCW RETN L.O. COOLER	4	04APR09 08:00	04APR09 11:59	IC
38014406	MOV-3-1425	MOV & GREASE INSPECTION SCAFF ER	4	16MAR09 08:00*	16MAR09 11:59	PJ
38014406	MOV-3-1425	MOV-1425 S/G-C SAMPLE LINE - MOV & GREASE INSP	6	17MAR09 14:00	17MAR09 19:59	VT
36004184	MOV-3-1425	MOV-1425 S/G-C SAMPLE - MOV ST TST & PACKNG ADJ	10	17MAR09 20:00	18MAR09 07:59	VT
38014406	MOV-3-1425	MOV-1425 S/G-C SMPL LINE-PMT STRK MOV GREAS INSP	1	18MAR09 08:00	18MAR09 08:59	VT
36004184	MOV-3-1425	MOV-1425 S/G-C SMPL-PMT STROKE ST TST PKG ADJ	1	18MAR09 08:00	18MAR09 08:59	VT
38014406	MOV-3-1425	MOV & GREASE INSPECTION SCAFF RE	4	25MAR09 09:00	25MAR09 12:59	PJ
38014408	MOV-3-1426	MOV-3-1426 MOV & GREASE INSPECTION	6	17MAR09 07:00	17MAR09 12:59	VT
38014408	MOV-3-1426	MOV-1426 S/G B SAMPLE LINE - PM STROKE GR INSP	1	17MAR09 13:00	17MAR09 13:59	VT
36008249	MOV-3-1426	MOV-1426 - INSTAL NEW HILTI'S FOR CONDUIT SUPORT	12	23MAR09 19:00*	24MAR09 08:59	MM
36008249	MOV-3-1426	MOV-1426 - REATTACH CONDUIT SUPPORT TO WALL	2	25MAR09 07:00*	25MAR09 08:59	EM
38014408	MOV-3-1426	MOV & GREASE INSPECTION SCAFF RE	4	25MAR09 09:00	25MAR09 12:59	PJ
36019343	SFP KEYWAY	SFP KEYWAY INSTALL TO ASSIST OPERATIONS	8	02APR09 07:00*	02APR09 14:59	MM
37006148	3-961C	3-961C HOT LEG/RHR SAMPLE ISO - FINAL DBA INSP	1	06APR09 00:00	06APR09 00:59	EN
34012834	3-969B	SAMPLE CIRC LINE VLV TO VCT, REPLACE VLV	4	23MAR09 04:00	23MAR09 07:59	IC
34012834	3-969B	PMT SAMPLE CIRC LINE VLV TO VCT, ENSURE NO LEAKS	1	03APR09 22:00	03APR09 22:59	IC
37025607	3-988	REPLACE LETDOWN DEMIN INLET SAMPLE VLV	4	23MAR09 23:00	24MAR09 02:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37025607	3-988	PMT: NO LEAKS ON LETDOWN DEMIN INLET SMPL VLV	1	27MAR09 03:00	27MAR09 03:59	IC
37023470	3-989B	PZR LIQ SAMPLE HX INLET ISO VLV -REPL VLV 3-989B	4	23MAR09 00:00	23MAR09 03:59	IC
37011639	3-989C	REPLACE HOT LEG SAMPLE HX INLET VLV	4	26MAR09 23:00*	27MAR09 02:59	IC
37011639	3-989C	PMT HOT LEG SAMPLE HX INLET VLV, ENSURE NO LEAKS	1	03APR09 21:00	03APR09 21:59	IC
37006696	3-991	PMT - PZR STEAM SAMPLE LINE TST CONN- NO LEAKS	1	03APR09 20:00	03APR09 20:59	IC
32020159	3E209B	3E209B PZR LIQ SAMPLE HX - PREFAB NEW HX PIPING	30	20MAR09 07:00*	21MAR09 14:59	PJ
32020159	3E209B	3E209B PZR LIQ SAMPLE HX - DISCONN & REMO OLD HX	4	23MAR09 07:00	23MAR09 10:59	PJ
32020159	3E209B	3E209B PZR LIQ SAMPLE HX-FITUP & WELD NEW HX	8	23MAR09 11:00	23MAR09 18:59	PJ
32020159	3E209B	3E209B PZR LIQ SAMPLE HX - TORQUE FLANGE BOLTING	4	23MAR09 19:00	23MAR09 22:59	PJ
32020159	3E209B	3E209B PZR LIQ SAMPLE HX - RECONN TUBING	4	23MAR09 23:00	24MAR09 02:59	PJ
32020159	3E209B	3E209B PZR LIQ SAMPLE HX - PMT	1	06APR09 09:00	06APR09 09:59	PJ
38014436	CV-3-953	PZR LIQ SAMPLE LINE CV-DISCON-REMO & DISASS ACT	8	23MAR09 07:00*	23MAR09 14:59	VT
38014436	CV-3-953	PZR LIQ SAMPLE LINE CV - O/H-REASS-INSTALL ACT	10	24MAR09 03:00	24MAR09 12:59	VT
38014438	CV-3-953	PZR LIQ SAMPLE LINE CV - CAL ACT & AS LEFT DIAG	8	24MAR09 13:00	24MAR09 20:59	VT
38014435	CV-3-955D	ACCUM B SAMPLE LINE CV - CAL AOV ACT	4	29MAR09 07:00*	29MAR09 10:59	VT
38014433	CV-3-955E	ACCUM C SAMPLE LINE CV - CAL AOV ACT	4	29MAR09 11:00	29MAR09 14:59	VT
38026355	CV-3-956B	PZR LIQ SAMPLE LINE CV - O/H ACTUATOR	24	24MAR09 18:00	25MAR09 17:59	VT
37023472	CV-3-956B	PZR LIQ SAMPLE LINE CV - INSTALL & RECONN ACT	5	25MAR09 18:00	25MAR09 22:59	VT
38014431	CV-3-956B	PZR LIQ SAMPLE LINE CV - CAL AOV & AS LEFT DIAG	8	25MAR09 23:00	26MAR09 06:59	VT
34012788	SV-3-6427A	RCS, A HOT LEG SAMPLE SV-DISCONNECT SOLENOID	6	23MAR09 23:00	24MAR09 04:59	IC
34012788	SV-3-6427A	RCS, A HOT LEG SAMPLE SV-INST & CONN SV / CAL	8	25MAR09 01:00	25MAR09 08:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
34012048	SV-3-6427B	RCS, B HOT LEG SAMPLE SV-DISCONNECT SOLENOID	6	24MAR09 05:00	25MAR09 00:59	IC
34012048	SV-3-6427B	RCS, B HOT LEG SAMPLE SV-INST & CONN SV / CAL	8	25MAR09 23:00	26MAR09 06:59	IC
37017080	SV-3-6428X	REPLACE CNMNT ISOLATION SOLENOID VLV AUX RELAY	4	26MAR09 23:00*	27MAR09 02:59	IC
38012802	3H200	(P) REMOVE MANIP CRANE CABINETS FROM CTMT	2	31MAR09 06:00	31MAR09 07:59	PJ
38013859	FUEL	SFP U/W LIGHTS - RELAMP AS REQD PRIOR TO OFFLOAD	10	18MAR09 20:00*	19MAR09 05:59	EM
38013859	FUEL	SFP U/W LIGHTS RELAMP - CLOSE WO	2	28MAR09 09:00	28MAR09 10:59	EM
39000513	FUEL SIP	FUEL SIPPING - PREPARE SATS AND CLOSE PCM 08-201	6	20MAR09 12:00	20MAR09 17:59	EN
38013632	TRI NUKE	(P)REMOVE LEAD PIGS (TRI-NUC) FROM 58' TO HATCH	1	01APR09 10:00	01APR09 10:59	PJ
38013632		(R)XPORT LEAD PIGS (TRI-NUC) TO RAD WASTE BLDG	1	01APR09 11:00	01APR09 11:59	PJ
38021917	3-120D	3-120D, REGEN HX CHRG INLET DR VLV, REMV INSUL	5	17MAR09 10:00	17MAR09 14:59	PJ
38021917	3-120D	3-120D, REGEN HX CHRG INLET DR VLV, REST INSUL	5	18MAR09 23:00	19MAR09 03:59	PJ
38021917	3-120E	3-120E, REGEN HX OUTLET DR VLV, REMV INSUL	5	17MAR09 15:00	17MAR09 19:59	PJ
38021917	3-120E	3-120E, REGEN HX OUTLET DR VLV, REST INSUL	5	19MAR09 04:00	19MAR09 10:59	PJ
38021917	3-120F	3-120F, REGEN HX OUTLET VENT VLV, REMV INSUL	5	17MAR09 20:00	18MAR09 00:59	PJ
38021917	3-120F	3-120F, REGEN HX OUTLET VENT VLV, REST INSUL	5	19MAR09 11:00	19MAR09 15:59	PJ
38021917	3-285D	3-285D, SEAL INJ TO RCP A TST CONN, REMV INSUL	5	18MAR09 01:00	18MAR09 07:59	PJ
38021917	3-285D	3-285D, SEAL INJ TO RCP A TST CONN, REST INSUL	5	19MAR09 16:00	19MAR09 20:59	PJ
38021917	3-285F	3-285F, SEAL INJ TO RCP C TST CONN, REMV INSUL	5	18MAR09 08:00	18MAR09 12:59	PJ
38021917	3-285F	3-285F, SEAL INJ TO RCP C TST CONN, REST INSUL	5	19MAR09 21:00	20MAR09 01:59	PJ
38021917	3-300A	3-300A, RCP A SEAL WTR INJ LINE DRN, REMV INSUL	5	18MAR09 08:00	18MAR09 12:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38021917	3-300A	3-300A, RCP A SEAL WTR INJ LINE DRN, REST INSUL	5	20MAR09 09:00	20MAR09 13:59	PJ
38021917	3-300D	3-300D, RCP B SEAL WTR INJ LINE DRN, REMV INSUL	5	18MAR09 13:00	18MAR09 17:59	PJ
38021917	3-300D	3-300D, RCP B SEAL WTR INJ LINE DRN, REST INSUL	5	20MAR09 17:00	20MAR09 21:59	PJ
38021917	3-300G	3-300G, RCP C SEAL WTR INJ LINE DRN, REMV INSUL	5	18MAR09 18:00	18MAR09 22:59	PJ
38021917	3-300G	3-300G, RCP C SEAL WTR INJ LINE DRN, REST INSUL	5	21MAR09 15:00	21MAR09 19:59	PJ
38005361	3-533	ISO VLV TO PZR INSTR - ERECT SCAFFOLD	8	22MAR09 08:00*	22MAR09 15:59	PJ
38005361	3-533	ISO VLV TO PZR INSTR - REMOVE INSULATION	4	23MAR09 07:00	23MAR09 10:59	PJ
38005361	3-533	ISO VLV TO PZR INSTR - VERIFY FITUP OF NEW VLV	2	27MAR09 17:00	27MAR09 18:59	EN
38005361	3-533	ISO VLV TO PZR INSTR - INSTALL INSULATION	4	06APR09 10:00	06APR09 13:59	PJ
38005361	3-533	ISO VLV TO PZR INSTR - REMOVE SCAFFOLD	8	06APR09 14:00	06APR09 21:59	PJ
38019535	3C228A	CHECK ALL QSPDS RVLIS CABLES FROM BULKHEAD	6	30MAR09 13:00	30MAR09 18:59	IC
38008402	3E210A	3A S/G 3E210A - REPAIR INSULATION ON OUTLET PIPE	20	18MAR09 02:00	18MAR09 23:59	PJ
38008402	3E210A	3A S/G 3E210A - REPAIR INSULATION ON INLET PIPE	20	23MAR09 16:00	24MAR09 13:59	PJ
38008576	3E210B	3B S/G 3E210B - REPAIR INSULATION ON INLET PIPE	20	24MAR09 14:00	25MAR09 11:59	PJ
38008576	3E210B	3B S/G 3E210B - REPAIR INSULATION ON OUTLET PIPE	20	25MAR09 12:00	26MAR09 09:59	PJ
38008575	3E210C	3C S/G 3E210C - REPAIR INSULATION ON INLET PIPE	20	26MAR09 10:00	27MAR09 07:59	PJ
38008575	3E210C	3C S/G 3E210C - REPAIR INSULATION ON OUTLET PIPE	20	27MAR09 08:00	28MAR09 03:59	PJ
38013837	3P200A	A RCP - INSTALL 3 TEMP LIGHTS	4	17MAR09 11:00	17MAR09 14:59	PJ
38013791	3P200A	A RCP - ERECT SCAFFOLD TO UNCOUPLE PP & MOTOR	24	17MAR09 17:00	18MAR09 16:59	PJ
38013278	3P200A	A RCP MTR-ANALYZE SAMPLE @ OFF SITE FACILITY	136	17MAR09 20:00	23MAR09 11:59	EN
38013837	3P200A	A RCP - TEMP PWR - INSTALL HYTORQ CORD	4	17MAR09 23:00	18MAR09 02:59	PJ
38013278	3P200A	A RCP - COMPLETE / MOD SCAFFOLD TO INSPECT MOTOR	8	19MAR09 23:00	20MAR09 06:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013278	3P200A	A RCP MTR - REPORT RESULTS OF RCP OIL SAMPLE	1	24MAR09 12:00	24MAR09 12:59	EN
38013278	3P200A	A RCP - REMOVE SCAFFOLD AFTER MOTOR INSPECT	12	30MAR09 07:00	30MAR09 18:59	PJ
37026494	3P200A	A RCP REPLACE PROXIMITY & KEYPHASER PROBE CABLES	4	31MAR09 04:00	31MAR09 07:59	RS
38013279	3P200B	B RCP MTR-ANALYZE SAMPLE @ OFF SITE FACILITY	136	17MAR09 20:00	23MAR09 11:59	EN
38013279	3P200B	B RCP - ERECT SCAFFOLD TO UNCOUPLE PP & MOTOR	24	17MAR09 21:00	18MAR09 20:59	PJ
38013279	3P200B	B RCP - COMPLETE / MOD SCAFFOLD TO INSPECT MOTOR	8	20MAR09 03:00	20MAR09 10:59	PJ
38013279	3P200B	B RCP MTR - REPORT RESULTS OF B RCP OIL SAMPLE	1	24MAR09 12:00	24MAR09 12:59	EN
38013279	3P200B	B RCP - REMOVE SCAFFOLD AFTER MOTOR INSPECT	12	30MAR09 07:00	30MAR09 18:59	PJ
37026494	3P200B	B RCP REPLACE PROXIMITY & KEYPHASER PROBE CABLES	4	31MAR09 11:00	31MAR09 14:59	RS
37019811	3P200C	(R) SET C RCP MOTOR CRADLE ON 2ND TRAILER	2	16MAR09 07:00	16MAR09 08:59	PJ
37019811	3P200C	3C RCP MOTOR/SPARE TRANSPORT SUPPORT	30	16MAR09 07:00	17MAR09 14:59	PJ
37019811	3P200C	(R) SET NEW C RCP MOTOR ON TRAILER HORIZONTALLY	5	16MAR09 09:00	16MAR09 13:59	PJ
38012271	3P200C	C RCP- ERECT SCAFFOLD TO UNCOUPLE	36	17MAR09 12:00	18MAR09 23:59	PJ
37020445	3P200C	C RCP MTR-ANALYZE SAMPLE @ OFF SITE FACILITY	136	17MAR09 20:00	23MAR09 11:59	EN
38012271	3P200C	3C RCP MOTOR - ERECT SCAFFOLD PHASE 2	16	19MAR09 07:00	19MAR09 22:59	PJ
37020202	3P200C	RE-TRAIN 3C RCP CABLE GROUND STRAPS(PEN ROOM)	4	19MAR09 19:00*	19MAR09 22:59	EM
38012271	3P200C	(P) C RCP - RAISE DAVIT	1	20MAR09 12:00	20MAR09 12:59	PJ
38012271	3P200C	(P) C RCP - FLY IN DAVIT HOIST & INSTALL	1	20MAR09 13:00	20MAR09 13:59	PJ
38012271	3P200C	(P) C RCP - ERECT HANDRAIL AT MOTOR PLUG HOLE	3	20MAR09 14:00	20MAR09 16:59	PJ
37019811	3P200C	(P) MOVE C RCP MOTOR SHIPPING BRACES TO 58'	1	20MAR09 17:00	20MAR09 17:59	PJ
37019811	3P200C	(P) MOVE C RCP MOTOR TRUNIONS TO 58'	1	21MAR09 02:00	21MAR09 02:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37019811	3P200C	(P) C RCP RIG & REMOVE OLD OIL COOLER FROM CTMT	3	22MAR09 05:00	22MAR09 07:59	PJ
37019811	3P200C	(P) MOVE RCP 2 PT MTR LIFT RIG TO C RCP MOTOR	1	22MAR09 10:00	22MAR09 10:59	PJ
38012271	3P200C	C RCP MOTOR - MODIFY SCAFFOLD FOR MOTOR REMOVAL	2	22MAR09 12:00	22MAR09 13:59	PJ
37019811	3P200C	(R) C RCP REPOSITION EQUIP HATCH CANOPY	6	22MAR09 16:00	22MAR09 21:59	PJ
37019811	3P200C	(R) C RCP SETUP TRACKS @ EQ HATCH FOR MOTOR SWAP	6	22MAR09 22:00	23MAR09 03:59	PJ
37019811	3P200C	(P) C RCP ATT POLAR CRANE AUX HOOK	1	23MAR09 04:00	23MAR09 04:59	PJ
37019811	3P200C	(P)POSITION POLAR CRANE OVER C RCP MOTOR & CONN	1	23MAR09 05:00	23MAR09 05:59	PJ
37019811	3P200C	(P) RAISE OLD C RCP MOTOR TO 58 FOOT	2	23MAR09 06:00	23MAR09 07:59	PJ
37019811	3P200C	(R) MOVE LARGE CRANE TO RAMP FOR C RCP MOTOR	6	23MAR09 07:00*	23MAR09 12:59	PJ
37019811	3P200C	(P) LOWER OLD C RCP MOTOR TO EQ HATCH	2	23MAR09 08:00	23MAR09 09:59	PJ
37019811	3P200C	(P) RE-RIG OLD RCP MOTOR TO GO HORIZONTAL	2	23MAR09 11:00	23MAR09 12:59	PJ
38012271	3P200C	C RCP SCAFFOLD FOR COUPLING REMOVAL	5	23MAR09 11:00	23MAR09 15:59	PJ
37019811	3P200C	(R) MOVE TRAILER WITH C RCP MOTOR CRADLE TO RAMP	5	23MAR09 13:00	23MAR09 17:59	PJ
37019811	3P200C	(P) LOWER OLD RCP MOTOR TO HORIZONTAL POSITION	6	23MAR09 13:00	23MAR09 18:59	PJ
37019811	3P200C	(R) INSTALL RCP MOTOR CRADLE ON TRANSPORT CART	1	23MAR09 19:00	23MAR09 19:59	PJ
37019811	3P200C	(P) LOWER C RCP MOTOR TO CRADLE & REMOVE RIGGING	3	23MAR09 20:00	23MAR09 22:59	PJ
37019811	3P200C	(R) SLIDE OLD C RCP MOTOR OUTSIDE CTMT	1	24MAR09 02:00	24MAR09 02:59	PJ
37019811	3P200C	(R) INSTALL RIGGING TO LIFT OLD MOTOR TO TRAILER	2	24MAR09 03:00	24MAR09 04:59	PJ
37019811	3P200C	(R) LIFT OLD C RCP MOTOR TO TRAILER	1	24MAR09 05:00	24MAR09 05:59	PJ
37019811	3P200C	(R) MOVE 1ST TRAILER W/ OLD MOTOR FROM EQ RAMP	1	24MAR09 06:00	24MAR09 06:59	PJ
37019811	3P200C	(R) MOVE 2ND TRAILER C RCP MOTOR & CLR TO RAMP	5	24MAR09 07:00	24MAR09 11:59	PJ
37020445	3P200C	C RCP MTR - REPORT RESULTS OF C RCP OIL SAMPLE	1	24MAR09 12:00	24MAR09 12:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012271	3P200C	C RCP REMOVE SCAFFOLD AFTER SEAL WORK	4	25MAR09 12:00	25MAR09 15:59	PJ
37019811	3P200C	(R) POSITION 2ND TRAILER W/ NEW MOTOR AT RAMP	1	25MAR09 17:00	25MAR09 17:59	PJ
37019811	3P200C	(R) INSTALL RIGGING TO LIFT NEW MOTOR FM TRAILER	2	25MAR09 18:00	25MAR09 19:59	PJ
37019811	3P200C	(R) LIFT NEW MOTOR & CRADLE TO TRANSPORT CART	1	25MAR09 20:00	25MAR09 20:59	PJ
37019811	3P200C	(R) SLIDE NEW MOTOR INTO CTMT	1	25MAR09 21:00	25MAR09 21:59	PJ
37019811	3P200C	(P) ATTACH RIGGING TO MOTOR TO RAISE TO VERTICAL	1	25MAR09 22:00	25MAR09 22:59	PJ
37019811	3P200C	(P) POSITION MOTOR TO VERTICAL POSITION	3	25MAR09 23:00	26MAR09 01:59	PJ
37019811	3P200C	(P) REMOVE CART & CRADLE FROM UNDER C RCP MOTOR	1	26MAR09 02:00	26MAR09 02:59	PJ
37019811	3P200C	(P) SET C RCP MOTOR DOWN & RE-RIG TO AUX HOOK	1	26MAR09 03:00	26MAR09 03:59	PJ
37019811	3P200C	(P) RAISE C RCP NEW MOTOR TO 58' WITH AUX HOIST	2	26MAR09 04:00	26MAR09 05:59	PJ
37019811	3P200C	(P) LOWER C RCP MOTOR TO CUBICLE WITH MAIN HOOK	2	26MAR09 06:00	26MAR09 07:59	PJ
37019811	3P200C	(R) REMOVE TRACKS THRU EQ HATCH AFTER RCP MOTOR	2	26MAR09 06:00	26MAR09 07:59	PJ
37019811	3P200C	(P) C RCP REMOVE 2 PART LIFT RIG FROM MAIN HOOK	1	26MAR09 08:00	26MAR09 08:59	PJ
37019811	3P200C	(R) REPOSITION EQUIP HATCH CANOPY BACK TO ORIG	6	26MAR09 08:00	26MAR09 13:59	PJ
37019811	3P200C	(P) C RCP RIG & SET NEW OIL COOLER TO MOTOR	2	26MAR09 10:00	26MAR09 11:59	PJ
38012271	3P200C	C RCP MOTOR - MODIFY SCAFFOLD	6	26MAR09 12:00	26MAR09 17:59	PJ
37019811	3P200C	(P) FLY OPS OIL COLLECTION BOX TO C CUBICLE	1	26MAR09 14:00	26MAR09 14:59	PJ
37019811	3P200C	(P) REMOVE RCP MOTOR TRUNIONS FROM CTMT	1	27MAR09 18:00	27MAR09 18:59	PJ
37019811	3P200C	(P) REMOVE OPS OIL COLLECTION BOX FROM CTMT	1	27MAR09 22:00	27MAR09 22:59	PJ
38012271	3P200C	(P) C RCP - REMOVE HANDRAIL AT MOTOR PLUG HOLE	2	28MAR09 16:00	28MAR09 17:59	PJ
38012271	3P200C	(P) C RCP - REMOVE DAVIT HOIST	1	28MAR09 19:00	28MAR09 19:59	PJ
38012271	3P200C	C RCP - REMOVE SCAFFOLD AFTER MOTOR INSPECT	12	30MAR09 08:00	30MAR09 19:59	PJ
37026494	3P200C	C RCP REPLACE PROXIMITY & KEYPHASER PROBE CABLES	4	31MAR09 18:00	31MAR09 21:59	RS

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013837	3T200	INSTALL TEMP PWR FOR HEPA FILTER IN PZR	4	17MAR09 07:00	17MAR09 10:59	PJ
38011799	3T200	PRESSURIZER TEMPERATURE INSTRUMENTS - REMOVE	8	17MAR09 11:00	17MAR09 18:59	IC
38011800	3T200	PZR VLV FLOW MON ACCELEROMETERS- REMOVE	8	17MAR09 11:00	17MAR09 18:59	IC
38021917	3T200	T200 (PRESSURIZER) MANWAY REMV INSUL	4	17MAR09 19:00	17MAR09 22:59	PJ
38012905	3T200	PRES HTRS-INSTAL TEMP HEAT IN HTR JUNCT BOX	4	18MAR09 00:00*	18MAR09 03:59	EM
38011787	3T200	FILL & VENT REF LEGS LT-462 PER GOP-305	2	18MAR09 02:00	18MAR09 03:59	IC
38013624	3T200	T200 (PRESSURIZER) MANWAY PERF EXAMS	1	18MAR09 03:00	18MAR09 03:59	EN
38011921	3T200	PIN PZR SPRING CANS PRIOR TO LEAD SHIELDING	4	18MAR09 20:00	18MAR09 23:59	VT
38012905	3T200	PZR HTR JUNCTION BOX - INSPECT & CLEAN JB	20	19MAR09 07:00*	20MAR09 02:59	EM
38012905	3T200	T200 PZR HTR INSPECTION - ERECT SCAFFOLD	16	20MAR09 10:00	21MAR09 01:59	PJ
38011800	3T200	RCS SAFETY VALVE POSITION INDICATION CALIBRATION	18	21MAR09 07:00*	22MAR09 14:59	IC
38012905	3T200	PRESSURIZER HTRS / HEATER INSPECTION	20	21MAR09 19:00*	22MAR09 14:59	EM
38012905	3T200	T200 PZR HTR INSPECTION - REMOVE SCAFFOLD	5	28MAR09 00:00*	28MAR09 04:59	PJ
38011921	3T200	UNPIN PZR SPRING CANS	3	29MAR09 08:00	29MAR09 10:59	VT
38021917	3T200	*T200 (PRESSURIZER) MANWAY REST. INSUL	4	30MAR09 07:00	30MAR09 10:59	PJ
38011800	3T200	PZR VLV FLOW MONITOR ACCELEROMETERS - REINSTALL	8	01APR09 07:00	01APR09 14:59	IC
38011799	3T200	PRESSURIZER TEMPERATURE INSTRUMENTS - REINSTALL	8	01APR09 07:00	01APR09 14:59	IC
38012905	3T200	PRES HTRS-REMOVE TEMP HEAT FROM HTR JUNCT BOX	2	03APR09 10:00	03APR09 11:59	EM
38011785	3T200	FILL PRZ LEVEL & PRESS TXS REFERENCE LEGS	4	04APR09 00:00*	04APR09 03:59	IC
38011785	3T200	F&V PRZ LVL/PRESS TX & SENSE LINES	4	04APR09 04:00	04APR09 07:59	IC
38012905	3T200	T200 - PRESSURIZR HEATER HOT CHECKS	12	04APR09 21:00	05APR09 08:59	EM
38011799	3T200	PMT - PRESSURIZER TEMPERATURE INSTRUMENTS	1	06APR09 11:00	06APR09 11:59	IC
38013632	3T237	(R) HP LEAD SHIELDING BOXES TO LAYDOWN AREA	1	16MAR09 19:00	16MAR09 19:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	3T237	(P) RX HEAD O-RING BOX TO 58'	1	19MAR09 02:00	19MAR09 02:59	PJ
38013632	3T237	(P) RX HEAD LEAD SHIELD BLOCKS TO RAMP	1	04APR09 11:00	04APR09 11:59	PJ
[redacted]						
37016034	BOTTLE RK	PZR BOTTLE RK-SUPPORT TUBING INST PER PCM07-044	8	21MAR09 07:00	21MAR09 14:59	MM
37016034	BOTTLE RK	PZR BOTTLE RACK - INST TUBING PER PCM07-044	16	21MAR09 07:00*	22MAR09 12:59	IC
37016034	BOTTLE RK	PZR BOTTLE RACK - ITOP PCM07-044	2	22MAR09 13:00*	22MAR09 14:59	IC
37016034	BOTTLE RK	PZR BOTTLE RACK - SATS PCM07-044	16	22MAR09 15:00*	24MAR09 10:59	EN
37016034	BOTTLE RK	PZR BOTTLE RK - LOAD RACK WITH FULL BOTTLES	8	30MAR09 07:00*	30MAR09 14:59	MM
[redacted]						
38013627	CSI ZN 001	CSI ZN 1-RX Head Lifting Lug @ 60 Deg-BUILD SCAF	5	20MAR09 04:00	20MAR09 08:59	PJ
38013627	CSI ZN 001	CSI ZN 1 -RPV HEAD PENETRATION - PERFORM EXAMS	4	20MAR09 07:00	20MAR09 10:59	EN
38013627	CSI ZN 001	CSI ZN 1-RX Hd Lifting Lug @ 60 Deg-Buff & Cln	4	20MAR09 09:00	20MAR09 12:59	PJ
38013627	CSI ZN 001	CSI ZN 1 - RX Head Supp Lug @ 120 Deg-Buff & Cln	4	20MAR09 09:00	20MAR09 12:59	PJ
38013627	CSI ZN 001	CSI ZN 1 -RPV HEAD PENETRATION - ANALYZE	24	20MAR09 11:00	23MAR09 14:59	EN
38013627	CSI ZN 001	CSI ZN 1 -RX Hd Lifting Lug @ 60 Deg-CSI PT EXAM	2	20MAR09 13:00	20MAR09 14:59	EN
38013627	CSI ZN 001	CSI ZN 1 -RX Head Supp Lug @ 120 Deg-CSI PT EXAM	2	20MAR09 15:00	20MAR09 16:59	EN
38013627	CSI ZN 001	CSI ZN 1-RX Hd Lifting Lug @ 60 Deg-Analyze Data	24	21MAR09 14:00*	25MAR09 07:59	EN
38013627	CSI ZN 001	CSI ZN 1-RX Head Supp Lug @ 120 Deg-Analyze Data	24	21MAR09 16:00*	25MAR09 09:59	EN
38013627	CSI ZN 001	CSI ZN 1 - RX Head Lifting Lug @ 60 Deg-REM SCAF	5	25MAR09 10:00	25MAR09 14:59	PJ
38013627	CSI ZN 001	CSI ZN 1 - VT-3 MATING SURFACE ON HEAD - EXAM	4	25MAR09 17:00	25MAR09 20:59	EN
38013627	CSI ZN 001	CSI ZN 1 - VT-3 MATING SURFACE ON HEAD - ANALYZE	24	26MAR09 07:00	28MAR09 10:59	EN
38013627	CSI ZN 001	CSI ZN 1 - VT-3 VESSEL INTERIOR -PERFORM EXAMS	4	26MAR09 10:00	26MAR09 13:59	EN
38013627	CSI ZN 001	CSI ZN 1 - VT-3 MATING SURFACE ON VESSEL - EXAM	4	26MAR09 10:00	26MAR09 13:59	EN
38013627	CSI ZN 001	CSI ZN 1 - VT-3 VESSEL INTERIOR - ANALYZE	20	26MAR09 14:00	28MAR09 13:59	EN
38013627	CSI ZN 001	CSI ZN 1 -VT-3 MATING SURFACE ON VESSEL -ANALYZE	20	26MAR09 14:00	28MAR09 13:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 001	CSI ZN 1 -VT-2 3/4"-RC-1377-1 - PERFORM EXAMS	4	06APR09 07:00	06APR09 10:59	EN
38013627	CSI ZN 001	CSI ZN 1 -VT-2 3/4"-RC-1377-1 - ANALYZE	10	06APR09 11:00	07APR09 10:59	EN
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - SCAFFOLD ERECT	12	19MAR09 08:00*	19MAR09 19:59	PJ
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - REMV INSULATIO	8	19MAR09 20:00	20MAR09 03:59	PJ
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - UT INSP	17	20MAR09 11:00*	23MAR09 07:59	EN
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - ANALYZE	24	23MAR09 08:00*	25MAR09 11:59	EN
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - INSTL INSL	8	30MAR09 08:00*	30MAR09 15:59	PJ
38013627	CSI ZN 007	S/G "A" NOZZLE TO ELBOW WELD #5 - SCAFFOLD REMOV	12	30MAR09 16:00*	31MAR09 03:59	PJ
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - SCAFFOLD ERECT	12	19MAR09 08:00	19MAR09 19:59	PJ
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - RMV INSL	8	19MAR09 20:00	20MAR09 03:59	PJ
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - UT INSP	17	20MAR09 13:00*	23MAR09 09:59	EN
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - ANALYZE	24	23MAR09 10:00*	25MAR09 13:59	EN
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - INSTL INSL	8	25MAR09 14:00	25MAR09 21:59	PJ
38013627	CSI ZN 008	A HTLG ELBOW TO S/G NOZL WLD #4 - SCAFFOLD REMOV	12	01APR09 12:00*	01APR09 23:59	PJ
38013627	CSI ZN 009	PERFORM VT-2 EXAM; "A" CLD LG @ 2" BRANCH	2	06APR09 07:00	06APR09 08:59	EN
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - SCAFFOLD ERECT	12	22MAR09 07:00*	22MAR09 18:59	PJ
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - RMV INSL	8	23MAR09 07:00	23MAR09 14:59	PJ
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - UT INSP	10	23MAR09 15:00	24MAR09 00:59	EN
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - ANALYZE	24	24MAR09 07:00	26MAR09 10:59	EN
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - INSTL INSL	8	31MAR09 11:00	31MAR09 18:59	PJ
38013627	CSI ZN 010	S/G "B" NOZZLE TO ELBOW WELD #5 - SCAFFOLD RMV	12	31MAR09 19:00	01APR09 08:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 - SCAFFOLD ERECT	12	22MAR09 07:00	22MAR09 18:59	PJ
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 -REM INSUL	8	23MAR09 07:00	23MAR09 14:59	PJ
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 -UT Insp	9	23MAR09 15:00	23MAR09 23:59	EN
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 - Analyze	24	24MAR09 07:00*	26MAR09 10:59	EN
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 -INST INSUL	8	26MAR09 11:00	26MAR09 18:59	PJ
38013627	CSI ZN 011	B HTLG ELBOW TO S/G NOZL WLD #4 -REM SCAF	12	01APR09 09:00	01APR09 20:59	PJ
38013627	CSI ZN 012	PERFORM VT-2 EXAM; "B" CLD LG @ 2" BRANCH	6	06APR09 07:00	06APR09 12:59	EN
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - SCAFFOLD ERECT	12	18MAR09 23:00	19MAR09 10:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-SCAFFOLD ERECT	12	18MAR09 23:00	19MAR09 10:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-REMV INSL	8	19MAR09 11:00	19MAR09 18:59	PJ
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - RMV INSL	8	19MAR09 11:00	19MAR09 18:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-BUFF & CLN	8	19MAR09 19:00	20MAR09 02:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-UT EXM	40	20MAR09 09:00*	25MAR09 08:59	EN
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - UT INSP	17	20MAR09 18:00*	22MAR09 00:59	EN
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - ANALYZE	24	23MAR09 07:00*	25MAR09 10:59	EN
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-ANALYZE	24	26MAR09 07:00*	28MAR09 10:59	EN
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - INSTL INSL	8	26MAR09 07:00*	28MAR09 14:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-INSTL INSL	20	31MAR09 11:00	01APR09 08:59	PJ
38013627	CSI ZN 013	31"-RCS-1303 PIPE TO ELBOW WLD #7-SCAFFOLD RMV	12	01APR09 09:00	01APR09 20:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 013	S/G "C" NOZZLE TO ELBOW WELD #5 - SCAFFOLD RMV	12	01APR09 21:00	02APR09 10:59	PJ
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 - SCAFFOLD ERECT	12	19MAR09 11:00*	19MAR09 22:59	PJ
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 -REM INSUL	8	23MAR09 08:00*	23MAR09 15:59	PJ
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 -UT Insp	8	23MAR09 17:00*	24MAR09 00:59	EN
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 - Analyze	24	25MAR09 07:00*	27MAR09 10:59	EN
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 -INST INSUL	8	01APR09 08:00*	01APR09 15:59	PJ
38013627	CSI ZN 014	C HTLG ELBOW TO S/G NOZL WLD #4 -REM SCAF	12	02APR09 11:00	02APR09 22:59	PJ
38013627	CSI ZN 015	PERFORM VT-2 EXAM; "C" CLD LG @ 2" BRANCH	6	06APR09 17:00	06APR09 22:59	EN
38013627	CSI ZN 021	CSI- 3-021 3-RCH-14 - PERFORM VT-3 EXAM	2	19MAR09 11:00*	19MAR09 12:59	EN
38013627	CSI ZN 021	CSI- 3-021 3-RCH-13 - PERFORM VT-3 EXAM	2	19MAR09 12:00*	19MAR09 13:59	EN
38013627	CSI ZN 021	CSI- 3-021 3-RCH-13/14 - ANALYZE RESULTS	24	20MAR09 07:00*	23MAR09 10:59	EN
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - ERECT SCAFFOLD	2	22MAR09 07:00	22MAR09 08:59	PJ
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - INSL REMOVE	4	23MAR09 07:00	23MAR09 10:59	PJ
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - BUFF & CLEAN	2	23MAR09 11:00	23MAR09 12:59	PJ
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - PERFORM EXAMS	27	23MAR09 13:00*	26MAR09 09:59	EN
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - ANALYZE DATA	19	27MAR09 07:00*	28MAR09 15:59	EN
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - INSL INSTALL	10	02APR09 16:00	03APR09 01:59	PJ
38013627	CSI ZN 026	CSI- 3-026 2"-RC-1301-3 - REMOVE SCAFFOLD	3	03APR09 02:00	03APR09 04:59	PJ
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - SCAFFOLD ERECT	4	21MAR09 14:00*	21MAR09 17:59	PJ
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - INSL REMOVE	2	21MAR09 18:00	21MAR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - BUFF & CLEAN	4	21MAR09 20:00	21MAR09 23:59	PJ
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - PERFORM EXAMS	27	23MAR09 09:00*	25MAR09 15:59	EN
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - ANALYZE	19	27MAR09 07:00*	28MAR09 15:59	EN
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - INSL INSTALL	10	02APR09 16:00	03APR09 01:59	PJ
38013627	CSI ZN 027	CSI- 3-027 2"-RC-1302-3 - SCAFFOLD REMV	2	03APR09 02:00	03APR09 03:59	PJ
[illegible]						
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - SCAFFOLD ERECT	10	20MAR09 19:00*	21MAR09 04:59	PJ
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - INSL REMOVE	2	21MAR09 07:00	21MAR09 08:59	PJ
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - BUFF & CLEAN	2	21MAR09 09:00	21MAR09 10:59	PJ
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-1 - PERFORM EXAMS	27	23MAR09 11:00*	26MAR09 07:59	EN
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - ANALYZE	19	27MAR09 07:00*	28MAR09 15:59	EN
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - INSL INSTALL	10	02APR09 16:00	03APR09 01:59	PJ
38013627	CSI ZN 028	CSI- 3-028 2"-RC-1303-3 - SCAFFOLD REMV	2	03APR09 02:00	03APR09 03:59	PJ
[illegible]						
38013627	CSI ZN 059	CSI-3-059 Visual for Leakage at Shutdown	1	16MAR09 07:00*	16MAR09 07:59	EN
38013627	CSI ZN 059	CSI- 3-059 Visual for Leakage at RCS press tst	1	06APR09 05:00	06APR09 05:59	EN
[illegible]						
38021917	CTMT-PRE	INSP LOWER PZR CUBICLE PRIOR TO HEATUP	4	03APR09 08:00	03APR09 11:59	PJ
[illegible]						
37026638	FT-3-414	FT-3-414, INSP TX THREAD ENGAGEMENT	4	18MAR09 09:00*	18MAR09 12:59	IC
38011770	FT-3-414	F-414 RCS FLOW PROTECTION CH I/ TX CAL/ F&V	3	18MAR09 13:00	18MAR09 15:59	IC
[illegible]						
38011775	FT-3-415	F-415 RCS FLOW PROTECTION CH II TX CAL/ F&V	3	18MAR09 22:00	19MAR09 00:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011778	FT-3-416	F-416 RCS FLOW PROTECTION CH III / TX CAL/ F&V	3	19MAR09 04:00	19MAR09 06:59	IC
38011773	FT-3-424	F-424 RCS FLOW PROTECTION CH I/ TX CAL/ F&V	3	18MAR09 16:00	18MAR09 18:59	IC
38011776	FT-3-425	F-425 RCS FLOW PROTECTION CH II/ TX CAL/ F&V	3	17MAR09 02:00	17MAR09 04:59	IC
38011779	FT-3-426	F-426 RCS FLOW PROTECTION CH III/ TX CAL/ F&V	3	17MAR09 05:00	17MAR09 07:59	IC
38011774	FT-3-434	F-434 RCS FLOW PROTECTION CH I/ TX CAL/ F&V	3	18MAR09 19:00	18MAR09 21:59	IC
38011777	FT-3-435	F-435 RCS FLOW PROTECTION CH II/ TX CAL/ F&V	3	19MAR09 01:00	19MAR09 03:59	IC
38011780	FT-3-436	F-436 RCS FLOW PROTECTION CH III/ TX CAL/ F&V	3	19MAR09 07:00	19MAR09 09:59	IC
38011784	LC-3-459*	PZR WATER LVL CTRL CALS / LC-459F & LC-459G	16	20MAR09 04:00	21MAR09 23:59	IC
38011784	LC-3-459*	PMT, LC-459F & LC-459G PRZR LVL	1	06APR09 10:00*	06APR09 10:59	IC
38011781	LT-3-459	T.S. PZR LEVEL PROT. CH I TRANSMITTER/ CAL	3	26MAR09 03:00	26MAR09 05:59	IC
37026637	LT-3-459	LT-3-459, INSP TX THREAD ENGAGEMENT	3	26MAR09 03:00	26MAR09 05:59	IC
38011782	LT-3-460	T.S. PZR LEVEL PROT CH II TRANSMITTER/ CAL	3	26MAR09 06:00	26MAR09 08:59	IC
38011783	LT-3-461	T.S.PZR LEVEL PROT CH III TRANSMITTER/ CAL	3	26MAR09 23:00	27MAR09 01:59	IC
38012057	LT-3-6421	L-6421/ L-6423 RCS DRN DWN LVL TX CALS Pt 1	6	16MAR09 11:00	16MAR09 16:59	IC
38012057	LT-3-6421	FILL & VENT DRAINDOWN LEVEL TRANS LI-6421/6423	1	18MAR09 05:00	18MAR09 05:59	IC
38012057	LT-3-6421	ASSIST OPS PLACING LI-6421/6423 LVL IN SERVICE	4	18MAR09 05:00	18MAR09 08:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012057	LT-3-6421	L-6421/ L-6423 RCS DRN DWN LVL SG ALARMS Pt 2.	6	18MAR09 18:00*	18MAR09 23:59	IC
38021917	MOV-3-535	MOV-535(PZR PORV BLOCK VLV) REMV INSUL	2	18MAR09 00:00	18MAR09 01:59	PJ
38013624	MOV-3-535	MOV-535(PZR PORV BLOCK VLV) PERF EXAMS	1	18MAR09 04:00	18MAR09 04:59	EN
36019505	MOV-3-535	EQ-MOV-535 - DETERM & REMOVE OPERATOR	8	19MAR09 07:00*	19MAR09 14:59	VT
36019505	MOV-3-535	EQ-MOV-535 - OVERHAUL OPERATOR	16	19MAR09 19:00*	20MAR09 12:59	VT
36019505	MOV-3-535	EQ-MOV-535 - INSTALL & TERM OPERATOR	10	20MAR09 13:00	20MAR09 22:59	VT
36019505	MOV-3-535	EQ-MOV-535-BLOCK VALVE - STATIC TEST	10	21MAR09 01:00	21MAR09 12:59	VT
36019505	MOV-3-535	EQ-MOV-535-BLOCK VALVE - CYCLE MOV - PMT	2	21MAR09 23:00	22MAR09 00:59	VT
38021917	MOV-3-535	MOV-535(PZR PORV BLOCK VLV) REST. INSUL	4	30MAR09 11:00	30MAR09 14:59	PJ
38021917	MOV-3-536	MOV-536(PZR PORV BLOCK VLV) REMV INSUL	4	18MAR09 03:00	18MAR09 06:59	PJ
38013624	MOV-3-536	MOV-536(PZR PORV BLOCK VLV) PERF EXAMS	1	18MAR09 12:00	18MAR09 12:59	EN
36019507	MOV-3-536	EQ-MOV-536 - DETERM & REMOVE OPERATOR	8	19MAR09 07:00	19MAR09 14:59	VT
36019507	MOV-3-536	EQ-MOV-536 - OVERHAUL OPERATOR	16	19MAR09 19:00	20MAR09 12:59	VT
36019507	MOV-3-536	EQ-MOV-536 - INSTALL & TERM OPERATOR	10	20MAR09 13:00	20MAR09 22:59	VT
36019507	MOV-3-536	EQ-MOV-536-BLOCK VALVE - STATIC TEST	10	21MAR09 13:00	21MAR09 22:59	VT
36019507	MOV-3-536	EQ-MOV-536-BLOCK VALVE - CYCLE MOV - PMT	2	21MAR09 23:00	22MAR09 00:59	VT
38021917	MOV-3-536	MOV-536(PZR PORV BLOCK VLV) REST. INSUL	4	30MAR09 15:00	30MAR09 18:59	PJ
37000951	P-3-444	PZR PRESS CONT - RMV FR SVC, TAKE AS FND	4	24MAR09 09:00	24MAR09 12:59	IC
37000951	P-3-444	PZR PRESS CONT - INSTALL NUS MODULES & TEST	10	24MAR09 15:00	25MAR09 00:59	IC
37000951	P-3-444	PZR PRESS CONT - INSTALL NUS MODULES - PMT	4	25MAR09 06:00	25MAR09 09:59	IC
37000950	P-3-445	PZR PRESS CONT - INSTALL NUS MODULES & TEST	10	21MAR09 21:00	22MAR09 06:59	IC
37000950	P-3-445	PZR PRESS CONT - RMV FR SVC, TAKE AS FND	4	24MAR09 05:00	24MAR09 08:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37000950	P-3-445	PZR PRESS CONT - INSTALL NUS MODULES - PMT	4	25MAR09 02:00	25MAR09 05:59	IC
36018766	P-3-455	PZR PRESS PROT CH I - RMV FR SVC, TAKE AS FND	4	23MAR09 15:00	23MAR09 18:59	IC
36018766	P-3-455	PZR PRESS PROT CH I - INSTALL NUS MODS & TEST	3	25MAR09 15:00	25MAR09 17:59	IC
36018766	P-3-455	PZR PRESS PROT CH I - INSTALL NUS MODS - PMT	4	28MAR09 03:00	28MAR09 06:59	IC
36018769	P-3-456	PZR PRESS PROT CH II - RMV FR SVC, TAKE AS FND	4	23MAR09 19:00	23MAR09 22:59	IC
36018769	P-3-456	PZR PRESS PROT CH II - INSTALL NUS MODS & TEST	3	25MAR09 18:00	25MAR09 20:59	IC
36018769	P-3-456	PZR PRESS PROT CH II - INSTALL NUS MODS - PMT	4	28MAR09 07:00	28MAR09 10:59	IC
36018761	P-3-457	PZR PRESS PROT CH III - RMV FR SVC, TAKE AS FND	4	24MAR09 15:00	24MAR09 18:59	IC
36018761	P-3-457	PZR PRESS PROT CH III - INSTALL NUS MODS & TEST	3	25MAR09 21:00	25MAR09 23:59	IC
36018761	P-3-457	PZR PRESS PROT CH III - INSTALL NUS MODS - PMT	4	28MAR09 11:00	28MAR09 14:59	IC
38021917	PCV-3-455A	PCV-455A(PZR SPRAY CNTL VLV) REMV INSUL	4	17MAR09 18:00	17MAR09 21:59	PJ
38013624	PCV-3-455A	PCV-455A (PZR SPRAY CNTL VLV) PERF EXAMS	1	18MAR09 02:00	18MAR09 02:59	EN
38012051	PCV-3-455A	PCV-455A PZR SPRAY - CAL AOV ACT & ACCES	4	18MAR09 03:00	18MAR09 06:59	VT
38012051	PCV-3-455A	PCV-455A PZR SPRAY- AS LEFT DIAGNOSTIC TEST	4	18MAR09 09:00	18MAR09 12:59	VT
38021917	PCV-3-455A	PCV-455A(PZR SPRAY CNTL VLV) REST. INSUL	10	28MAR09 15:00	29MAR09 00:59	PJ
39000656	PCV-3-455B	PCV-455B (PZR SPRAY CNTL VLV) INSTALL SCAFFOLD	12	17MAR09 02:00	17MAR09 13:59	PJ
38021917	PCV-3-455B	PCV-455B (PZR SPRAY CNTL VLV) REMV INSUL	5	17MAR09 22:00	18MAR09 02:59	PJ
38013624	PCV-3-455B	PCV-455B(PZR SPRAY CNTL VLV) PERFORM EXAMS	1	18MAR09 17:00	18MAR09 17:59	EN
38014441	PCV-3-455B	PZR SPRAY CONT VLV - DISCONN & REMOVE ACT	4	18MAR09 18:00	18MAR09 21:59	VT
38014441	PCV-3-455B	PZR SPRAY CONT VLV - O/H ACT	12	18MAR09 22:00	19MAR09 11:59	VT
38014441	PCV-3-455B	PZR SPRAY CONT VLV - INSTALL & RECONN ACT	4	24MAR09 01:00	24MAR09 04:59	VT
38012052	PCV-3-455B	PZR SPRAY CONT VLV - CAL ACT	5	24MAR09 05:00	24MAR09 09:59	VT
38012052	PCV-3-455B	PZR SPRAY CONT VLV - AS LEFT DIAG TSTING	5	24MAR09 10:00	24MAR09 14:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38021917	PCV-3-455B	PCV-455B (PZR SPRAY CNTL VLV) RESTORE INSUL	8	29MAR09 01:00	30MAR09 10:59	PJ
39000656	PCV-3-455B	PCV-455B (PZR SPRAY CNTL VLV) REM SCAFFOLD	8	30MAR09 11:00	30MAR09 18:59	PJ
38021917	PCV-3-455C	PCV-455C (PZR PORV) REMV INSUL	4	17MAR09 21:00*	18MAR09 00:59	PJ
38013624	PCV-3-455C	PCV-455C (PZR PORV) PERF EXAMS	6	18MAR09 01:00	18MAR09 06:59	EN
38012053	PCV-3-455C	4PCV-455C PZR PORV/ TAKE "AS FOUNDS" SECT. 6.2	4	19MAR09 04:00	19MAR09 07:59	VT
38012053	PCV-3-455C	PZR PORV / ADJ STROKE & SWITCHES / CAL ACT	4	19MAR09 08:00	19MAR09 11:59	VT
38021917	PCV-3-455C	PCV-455CPZR PORV) RESTORE INSUL	8	30MAR09 18:00*	31MAR09 01:59	PJ
38021917	PCV-3-456	PCV-456 (PZR PORV) REMV INSUL	4	17MAR09 23:00	18MAR09 02:59	PJ
38013624	PCV-3-456	PCV-456(PZR PORV) PERF EXAMS	1	18MAR09 07:00	18MAR09 07:59	EN
38012054	PCV-3-456	PCV-456 PZR PORV/ TAKE "AS FOUNDS" SECT. 6.2	4	19MAR09 12:00	19MAR09 15:59	VT
38012054	PCV-3-456	PZR PORV / ADJ STROKE & SWITCHES / CAL ACT	4	19MAR09 16:00	19MAR09 19:59	VT
38021917	PCV-3-456	PCV-456 (PZR PORV) RESTORE INSUL	8	30MAR09 19:00*	31MAR09 02:59	PJ
37020597	PI-3-417	PI-3-417: GAUGE BROKEN	4	20MAR09 07:00*	20MAR09 10:59	IC
38011801	PT-3-445	PT-445 PZR PRESS CONT LOOP CAL	20	23MAR09 01:00	23MAR09 20:59	IC
38011793	PT-3-455	T.S. PT-455 PRZR PRESS TRANS CAL	6	19MAR09 10:00	19MAR09 15:59	IC
38011794	PT-3-456	PT-456 PZR PRESS PROT / CALIBRATE TRANSMITTER	6	19MAR09 16:00	19MAR09 21:59	IC
38011795	PT-3-457	PT-457 PZR PRESS PROT / CALIBRATE TRANSMITTER	6	19MAR09 22:00	20MAR09 03:59	IC
38006110	R-3-369	R-3-369, ENG. ASSIST W/ TROUBLESHOOTING	8	28MAR09 07:00	28MAR09 14:59	EN
38006110	R-3-369	R-3-369, T/S POINT 5 SPIKING	8	28MAR09 07:00*	28MAR09 14:59	IC
37024185	R-3-369	R-3-369, POINT 4 IS SPIKING	8	28MAR09 07:00*	28MAR09 14:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37015710	R-3-369	R-3-369, POINT 11 SHIFTED LOW	8	28MAR09 07:00*	28MAR09 14:59	IC
[redacted]						
38013632	RV-3-551*	(R) RV-3-55,PZR SFTIES SHIP BOX - STAGE @ RW BAY	1	16MAR09 07:00*	16MAR09 07:59	PJ
38013632	RV-3-551*	(P)RV-3-551, PZR SAFTIES SHIPPING PLATE TO 58 FT	1	18MAR09 05:00	18MAR09 05:59	PJ
38013632	RV-3-551*	(P) EMPTY PZR. RELIEF VALVE STAND	1	18MAR09 06:00	18MAR09 06:59	PJ
38013632	RV-3-551*	(P) EMPTY PZR. RELIEF VALVE STAND	1	18MAR09 06:00	18MAR09 06:59	PJ
38013632	RV-3-551*	(P)RV-551, PZR SAFTIES XPORT PLATE TO EQ HATCH	1	24MAR09 14:00	24MAR09 14:59	PJ
38013632	RV-3-551*	(P) RV-551, OLD PZR SAFTIES TO EQ HATCH	1	24MAR09 15:00	24MAR09 15:59	PJ
38013632	RV-3-551*	(R)RV-3-551, PZR SAFTIES XPORT PLATE TO DRY STO	1	24MAR09 15:00	24MAR09 15:59	PJ
38013632	RV-3-551*	(R)RV-3-551, OLD PZR SAFTIES TO DRY STORAGE	1	24MAR09 16:00	24MAR09 16:59	PJ
[redacted]						
38021917	RV-3-551A	RV-551A (PZR SAFETY VALVE) REMV INSUL	3	17MAR09 21:00	17MAR09 23:59	PJ
38012274	RV-3-551A	RV-551A(PZR SAFETY) - LOOSEN BOLTS	4	22MAR09 08:00	22MAR09 11:59	VT
38012274	RV-3-551A	RV-551A(PZR SAFETY) - REMOVE BOLTS	3	22MAR09 16:00	22MAR09 18:59	VT
38012274	RV-3-551A	RV-551A(PZR SAFETY) - REMOVE REMAINING BOLTS	1	23MAR09 23:00	23MAR09 23:59	VT
38012274	RV-3-551A	(P) RV-551A- LOAD OUT OLD VALVE/LOAD IN NEW	1	24MAR09 02:00	24MAR09 02:59	PJ
38012274	RV-3-551A	PZR SAFETY- PERF CLASS "A" BOLTING INSP	2	24MAR09 03:00	24MAR09 04:59	EN
38012274	RV-3-551A	RV-551A(PZR SAFETY) - INSTALL BOLTS / SECURE	1	24MAR09 09:00	24MAR09 09:59	VT
38012274	RV-3-551A	RV-551A (PZR SAFETY A) - TORQUE BOLTS TO SPECS	10	24MAR09 15:00	25MAR09 00:59	VT
38021917	RV-3-551A	RV-551A (PZR SAFETY VALVE) REST. INSUL	6	31MAR09 12:00	31MAR09 17:59	PJ
[redacted]						
38021917	RV-3-551B	RV-551B (PZR SAFETY VALVE) REMV INSUL	3	18MAR09 00:00	18MAR09 02:59	PJ
38012276	RV-3-551B	RV-551B(PZR SAFETY) - REMOVE BOLTS	3	22MAR09 19:00	22MAR09 21:59	VT
38012276	RV-3-551B	RV-551B(PZR SAFETY) - REMOVE REMAINING BOLTS	1	24MAR09 00:00	24MAR09 00:59	VT
38012276	RV-3-551B	(P) RV-551B- LOAD OUT OLD VALVE/LOAD IN NEW	1	24MAR09 03:00	24MAR09 03:59	PJ
38012274	RV-3-551B	PZR SAFETY- PERF CLASS "A" BOLTING INSP	2	24MAR09 03:00	24MAR09 04:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012276	RV-3-551B	RV-551B(PZR SAFETY) - INSTALL BOLTS / SECURE	1	24MAR09 14:00	24MAR09 14:59	VT
38012276	RV-3-551B	RV-551B (PZR SAFETY B) - TORQUE BOLTS TO SPECS	10	25MAR09 05:00	25MAR09 14:59	VT
38021917	RV-3-551B	RV-551B (PZR SAFETY VALVE) REST. INSUL	6	31MAR09 18:00	31MAR09 23:59	PJ
38012277	RV-3-551C	TAILBOARD-BLOCK OPEN RV-551C FOR VT PATH - DAYS	1	16MAR09 07:00	16MAR09 07:59	PJ
38012277	RV-3-551C	TAILBOARD-BLOCK OPEN RV-551C FOR VT PATH - DAYS	1	16MAR09 07:00*	16MAR09 07:59	VT
38012277	RV-3-551C	TAILBOARD-BLOCK OPEN RV-551C FOR VT PATH-NIGHTS	1	16MAR09 19:00	16MAR09 19:59	PJ
38012277	RV-3-551C	TAILBOARD-BLOCK OPEN RV-551C FOR VT PATH-NIGHTS	1	16MAR09 19:00*	16MAR09 19:59	VT
38012277	RV-3-551C	PZR RV - PROJ ID INSUL TO BE RMVD W/ VLV TEAM	1	17MAR09 08:00	17MAR09 08:59	VT
38012277	RV-3-551C	PZR RV - AMES ID CORRECT VLV WITH OPS PERSONNEL	1	17MAR09 08:00	17MAR09 08:59	VT
38021917	RV-3-551C	RV-551C (PZR SAFETY VALVE) REMV INSUL	2	17MAR09 19:00	17MAR09 20:59	PJ
38012274	RV-3-551C	PZR SAFETY- PERF CLASS "A" BOLTING INSP	2	17MAR09 21:00	17MAR09 22:59	EN
38012277	RV-3-551C	FME MONITOR @ BLOCK OPEN RV-551C FOR RCS VT PATH	5	18MAR09 12:00	18MAR09 16:59	VT
38012277	RV-3-551C	RV-551C,(PZR SAFETY) - REMOVE REMAINING BOLTS	1	24MAR09 01:00	24MAR09 01:59	VT
38012277	RV-3-551C	(P) RV-551C- LOAD OUT OLD VALVE/LOAD IN NEW	1	24MAR09 04:00	24MAR09 04:59	PJ
38012277	RV-3-551C	RV-551C (PZR SAFETY C) - TORQUE BOLTS TO SPECS	10	31MAR09 02:00	31MAR09 11:59	VT
38021917	RV-3-551C	RV-551C (PZR SAFETY VALVE) REST. INSUL	4	01APR09 00:00	01APR09 03:59	PJ
35020544	RVS-3-203	RX VENT DRN TO SUMP - REROUTE TUBING PCM05-090	24	20MAR09 07:00*	21MAR09 08:59	MM
35020544	RVS-3-203	RX VENT DRN TO SUMP - REMO OLD TUBING PCM05-090	12	21MAR09 09:00	21MAR09 20:59	MM
35020544	RVS-3-203	RX VT DRN TO SUMP-CONN NEW TUBE TO RVS-203	1	21MAR09 21:00	21MAR09 21:59	MM
35020544	RVS-3-203	RX VT DRN TO SUMP-ITOP PCM 05-090	1	21MAR09 22:00	21MAR09 22:59	MM
35020544	RVS-3-203	RX VT DRN TO SUMP-SATS PCM 05-090	1	21MAR09 23:00	21MAR09 23:59	EN
38012179	SNU-1043	SNUB- PZR CUB 3-551B - AS FOUND VISUAL	1	18MAR09 07:00*	18MAR09 07:59	EN
38012179	SNU-1043	SNUB- PZR CUB 3-551B - HANDSTROKE	1	18MAR09 07:00	18MAR09 07:59	EN
38012179	SNU-1043	SNUB-PZR CUB 3-551B-REMOVE OLD & INSTALL REBUILT	1	18MAR09 08:00	18MAR09 08:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1043	SNUB- PZR CUB 3-551B - O/H REMOVED SNUB-1044	8	18MAR09 09:00	18MAR09 16:59	EN
[illegible]						
38012179	SNU-1044	SNUB- PZR CUB 3-551B - AS FOUND VISUAL	1	18MAR09 09:00	18MAR09 09:59	EN
38012179	SNU-1044	SNUB- PZR CUB 3-551B - HANDSTROKE	1	18MAR09 09:00	18MAR09 09:59	EN
[illegible]						
38012179	SNU-1045	SNUB - RCS - PZR CUB / 3-455C - AS FOUND VISUAL	1	18MAR09 09:00	18MAR09 09:59	EN
38012179	SNU-1045	SNUB - RCS - PZR CUB / 3-455C - HANDSTROKE	1	18MAR09 09:00	18MAR09 09:59	EN
38012179	SNU-1045	SNUB-RCS-PZR CUB-3-455C-REMO OLD / INST REBUILT	1	18MAR09 10:00	18MAR09 10:59	EN
38012179	SNU-1045	SNUB - RCS - PZR CUB / 3-455C - O/H REMOVED SNUB	8	19MAR09 07:00*	19MAR09 14:59	EN
[illegible]						
38012179	SNU-1046	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	18MAR09 11:00	18MAR09 11:59	EN
38012179	SNU-1046	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	18MAR09 11:00	18MAR09 11:59	EN
38012179	SNU-1046	SNUB - RCS - PZR CUB - REMO OLD / INST REBUILT	1	18MAR09 12:00	18MAR09 12:59	EN
38012179	SNU-1046	SNUB - RCS - PZR CUBICLE - O/H REMOVED SNUB	8	20MAR09 07:00*	20MAR09 14:59	EN
[illegible]						
38012179	SNU-1047	SNUB - RCS - PZR CUB / 3-536 - AS FOUND VISUAL	1	18MAR09 12:00	18MAR09 12:59	EN
38012179	SNU-1047	SNUB - RCS - PZR CUB / 3-536 - HANDSTROKE	1	18MAR09 12:00	18MAR09 12:59	EN
[illegible]						
38012179	SNU-1048	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	18MAR09 13:00	18MAR09 13:59	EN
38012179	SNU-1048	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	18MAR09 13:00	18MAR09 13:59	EN
[illegible]						
38012179	SNU-1049	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	18MAR09 14:00	18MAR09 14:59	EN
38012179	SNU-1049	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	18MAR09 14:00	18MAR09 14:59	EN
[illegible]						
38012179	SNU-1050	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	18MAR09 15:00	18MAR09 15:59	EN
38012179	SNU-1050	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	18MAR09 15:00	18MAR09 15:59	EN
[illegible]						
38012179	SNU-1051	SNUB - RCS - PZR TO PRT - ERECT SCAFFOLD	7	17MAR09 18:00	18MAR09 00:59	PJ
38012179	SNU-1051	SNUB - RCS - 30' PZR TO PRT - AS FOUND VISUAL	1	25MAR09 07:00*	25MAR09 07:59	EN
38012179	SNU-1051	SNUB - RCS - 30' PZR TO PRT - HANDSTROKE	1	25MAR09 07:00	25MAR09 07:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1051	SNUB - RCS - PZR TO PRT - REMOVE SCAFFOLD	6	25MAR09 09:00	25MAR09 14:59	PJ
38012179	SNU-1052	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	25MAR09 08:00	25MAR09 08:59	EN
38012179	SNU-1052	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	25MAR09 08:00	25MAR09 08:59	EN
38012179	SNU-1053	SNUB - RCS - PZR TO PRT - ERECT SCAFFOLD	7	23MAR09 07:00*	23MAR09 13:59	PJ
38012179	SNU-1053	SNUB - RCS - PZR TO PRT - AS FOUND VISUAL	1	25MAR09 09:00	25MAR09 09:59	EN
38012179	SNU-1053	SNUB - RCS-PZR TO PRT - REMOVE & FUNCTIONAL TST	5	25MAR09 09:00	25MAR09 13:59	EN
38012179	SNU-1053	SNUB - RCS-PZR TO PRT - INSTALL & AS LEFT	3	25MAR09 14:00	25MAR09 16:59	EN
38012179	SNU-1053	SNUB - RCS - PZR TO PRT - REMOVE SCAFFOLD	8	25MAR09 17:00	26MAR09 00:59	PJ
38012179	SNU-1054	SNUB - RCS - PZR TO PRT - ERECT SCAFFOLD	7	23MAR09 07:00*	23MAR09 13:59	PJ
38012179	SNU-1054	SNUB - RCS - PZR TO PRT - AS FOUND VISUAL	1	25MAR09 07:00*	25MAR09 07:59	EN
38012179	SNU-1054	SNUB - RCS-PZR TO PRT - REMOVE & FUNCTIONAL TEST	6	25MAR09 08:00	25MAR09 13:59	EN
38012179	SNU-1054	SNUB-RCS - PZR TO PRT - INSTALL & AS LEFT	4	25MAR09 14:00	25MAR09 17:59	EN
38012179	SNU-1054	SNUB - RCS - PZR TO PRT - REMOVE SCAFFOLD	8	25MAR09 18:00	26MAR09 01:59	PJ
38012179	SNU-1055	SNUB - RCS - PZR CUBICLE - ERECT SCAFFOLD	7	23MAR09 16:00*	23MAR09 22:59	PJ
38012179	SNU-1055	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	25MAR09 18:00	25MAR09 18:59	EN
38012179	SNU-1055	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	25MAR09 18:00	25MAR09 18:59	EN
38012179	SNU-1055	SNUB - RCS - PZR CUBICLE - REMOVE SCAFFOLD	8	26MAR09 02:00	26MAR09 11:59	PJ
38012179	SNU-1057	SNUB - RCS - FROM COLD LEG LOOP B - AS FD VISUAL	1	22MAR09 07:00*	22MAR09 07:59	EN
38012179	SNU-1057	SNUB - RCS - FROM COLD LEG LOOP B - HANDSTROKE	1	22MAR09 07:00	22MAR09 07:59	EN
38012179	SNU-1058	SNUB-RCS SYS-(FROM B COLD LEG) - AS FOUND VISUAL	1	22MAR09 08:00	22MAR09 08:59	EN
38012179	SNU-1058	SNUB-RCS SYS(FRM B COLD LEG)- HAND STROKE	1	22MAR09 09:00	22MAR09 09:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1060	SNUB - RCS - PZR CUBICLE - AS FOUND VISUAL	1	18MAR09 16:00	18MAR09 16:59	EN
38012179	SNU-1060	SNUB - RCS - PZR CUBICLE - HANDSTROKE	1	18MAR09 16:00	18MAR09 16:59	EN
38012179	SNU-1069	SNUB-RCS SYS-(FROM C COLD LEG) - AS FOUND VISUAL	1	23MAR09 07:00*	23MAR09 07:59	EN
38012179	SNU-1069	SNUB-RCS SYS(FRM C COLD LEG)- HAND STROKE	1	23MAR09 07:00	23MAR09 07:59	EN
38012179	SNU-1070	SNUB - FROM COLD LEG LOOP C - AS FOUND VISUAL	1	23MAR09 08:00	23MAR09 08:59	EN
38012179	SNU-1070	SNUB - FROM COLD LEG LOOP C -REMOVE & FUNCTIONAL	5	23MAR09 09:00	23MAR09 13:59	EN
38012179	SNU-1070	SNUB - FROM COLD LEG LOOP C -REINSTALL & AS LEFT	3	23MAR09 14:00	23MAR09 16:59	EN
38012179	SNU-1071	SNUB-RCS SYS-(TO C COLD LEG) - AS FOUND VISUAL	1	23MAR09 07:00*	23MAR09 07:59	EN
38012179	SNU-1071	SNUB-RCS SYS(TO C COLD LEG)- REMOVE & FUNCTIONAL	5	23MAR09 08:00	23MAR09 12:59	EN
38012179	SNU-1071	SNUB-RCS SYS(TO C COLD LEG)- REINSTALL & AS LEFT	3	23MAR09 13:00	23MAR09 15:59	EN
38012179	SNU-1072	SNUB-RCS SYS-(TO C COLD LEG) - AS FOUND VISUAL	1	23MAR09 13:00*	23MAR09 13:59	EN
38012179	SNU-1072	SNUB-RCS SYS-(TO C COLD LEG) - HANDSTROKE	1	23MAR09 13:00	23MAR09 13:59	EN
38012179	SNU-1073	SNUB-RCS SYS-(TO C COLD LEG) - AS FOUND VISUAL	1	23MAR09 14:00	23MAR09 14:59	EN
38012179	SNU-1073	SNUB-RCS SYS-(TO C COLD LEG) - HANDSTROKE	1	23MAR09 14:00	23MAR09 14:59	EN
38012179	SNU-1074	SNUB - RCS - TO COLD LEG LOOP C - AS FD VISUAL	1	23MAR09 15:00	23MAR09 15:59	EN
38012179	SNU-1074	SNUB-RCS - TO COLD LEG LOOP C - HANDSTROKE	1	23MAR09 15:00	23MAR09 15:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
39002273	TE-3-4**	AMS PERFORM COLD CHECK ON COLD/HOT WELL TE'S	6	03APR09 00:00	03APR09 05:59	IC
39002273	TE-3-4**	AMS PERFORM HOT CHECK ON COLD/HOT WELL TE'S	6	06APR09 05:00	06APR09 10:59	IC
39002273	TE-3-411D1	PERF. VISUAL INSP OR THERMAL WELL FOR TE-3-411D1	2	19MAR09 13:00	19MAR09 14:59	IC
39002273	TE-3-412B1	PERF. VISUAL INSP OR THERMAL WELL FOR TE-3-412B1	2	19MAR09 07:00*	19MAR09 08:59	IC
39002273	TE-3-412C	PERF. VISUAL INSP OR THERMAL WELL FOR TE-3-412C	2	19MAR09 09:00	19MAR09 10:59	IC
39002273	TE-3-412D	PERF. VISUAL INSP OR THERMAL WELL FOR TE-3-412D	2	19MAR09 11:00	19MAR09 12:59	IC
37021261	TE-3-423A	TE-3-423A - ERECT SCAF	5	19MAR09 17:00	19MAR09 21:59	PJ
37021261	TE-3-423A	TE-3-423A - REM SCAFF	4	23MAR09 00:00	23MAR09 03:59	PJ
37021261	TE-3-430A	TE-3-430A/B, INSP PER CR 07-30435 - ERECT SCAFF	4	19MAR09 22:00	20MAR09 01:59	PJ
37021261	TE-3-430A	TE-3-430A/B, INSP PER CR 07-30435 - REMOVE SCAFF	4	27MAR09 00:00*	27MAR09 03:59	PJ
39005048	TE-3-431D2	TE-3-431D2 INSP. /FAILED TIME REPONSE TESTING	4	21MAR09 00:00	21MAR09 03:59	IC
39005048	TE-3-432B2	TE-3-432B2, INSP - ERECT SCAFF	4	20MAR09 02:00	20MAR09 05:59	PJ
39005048	TE-3-432B2	TE-3-432B2, INSP. /FAILED TIME REPONSE TESTING	4	20MAR09 06:00	20MAR09 23:59	IC
39005048	TE-3-432B2	TE-3-432B2, INSP - REMOVE SCAFF	4	27MAR09 04:00*	27MAR09 09:59	PJ
35022150	TE-3-6498	RTE TE-3-6498(RVLS 3A #6) - ERECT SCAF	4	31MAR09 17:00	31MAR09 20:59	PJ
35022150	TE-3-6498	RTE TE-3-6498(RVLS 3A #6) - REMOVE SCAF	4	01APR09 07:00	01APR09 10:59	PJ
38011897	VT & DRN	INSTL/REMOVE VENTS & DRAIN (PRI)(1ST DAY)	24	16MAR09 01:00	17MAR09 00:59	MM
38011897	VT & DRN	INSTL/REMOVE VENTS & DRAIN (PRI)(2 THRU 6 DAYS)	100	17MAR09 01:00	21MAR09 14:59	MM
38011897	VT & DRN	INSTL/REMOVE VENTS & DRAIN (PRI)(DAY 6 TO END	420	21MAR09 15:00	09APR09 16:59	MM
38011816	ZT-3-6303	EQ PROGRAM- ZT-3-6303 TRANSIENT SHIELD	28	27MAR09 07:00*	29MAR09 14:59	IC
37003838	ZT-3-6303A	ERECT SCAFFOLD- ZT-3-6303 CHRG CONV REP	10	20MAR09 07:00*	20MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37003838	ZT-3-6303A	EQ PROGRAM- ZT-3-6303A CHRG CONV REP	5	27MAR09 07:00	27MAR09 11:59	IC
37003838	ZT-3-6303A	REMOVE SCAFFOLD- ZT-3-6303 CHRG CONV REP	2	30MAR09 07:00	30MAR09 08:59	PJ
37003839	ZT-3-6303B	EQ PROGRAM- ZT-3-6303B GHRG CONV REP	5	27MAR09 12:00	27MAR09 16:59	IC
37003840	ZT-3-6303C	EQ PROGRAM- ZT-3-6303C CHRG CONV REP	5	28MAR09 07:00	28MAR09 11:59	IC
38013632		(R) HP LEAD SHIELDING - 2 BOXES TO LAYDOWN AREA	1	17MAR09 01:00	17MAR09 01:59	PJ
38013632		(R) HP LEAD SHIELDING - UNLOAD 2 BOXES TO CNTMT	2	17MAR09 02:00	17MAR09 03:59	PJ
38011814		RTD X-CAL - CONNECT UP TEST BOXES	5	03APR09 08:00	04APR09 02:59	IC
38011814		RTD X-CAL - RECORD DATA (HOLD AT 240 DEGREES)	1	05APR09 00:00	05APR09 00:59	IC
38011814		RTD X-CAL - RECORD DATA (HOLD @ 340 DEGREES)	1	05APR09 04:00	05APR09 04:59	IC
38011814		RTD X-CAL - RECORD DATA (HOLD AT 450 DEGREES)	1	05APR09 23:00	05APR09 23:59	IC
38011814		RTD X-CAL - RECORD DATA (HOLD @ 547 DEGREES)	1	06APR09 12:00*	06APR09 12:59	IC
38011814		RTD X-CAL - DISCONNECT EQUIPMENT	2	06APR09 13:00	06APR09 14:59	IC
38011963	3H208	UPR INTRNLS- INSTALL AFTER RELOAD MILESTONE	0		28MAR09 15:59	ML
38013624	3T237	*T237 RX VESSEL STUDS - PERF EXAMS	1	18MAR09 12:00	18MAR09 12:59	EN
38011960	3T237	CLEAN AREA ADJACENT TO RX CAVITY- RX HEAD LIFT	4	19MAR09 07:00	19MAR09 10:59	PJ
38011937	3T237	(R) RX STUD RACKS - MOVE TO KELLY BLD	4	19MAR09 13:00	19MAR09 16:59	PJ
38011960	3T237	CLEAN RX CAV & ESTABLISH ACCESS CONTROL	4	19MAR09 17:00	19MAR09 20:59	RP
38013632	3T237	(R) STAGE 55 GAL DRUM @ RAMP FOR OLD RX O-RING	1	22MAR09 11:00	22MAR09 11:59	PJ
38013632	3T237	(P) 55 GAL DRUM FOR OLD RX O-RING TO 58'	1	22MAR09 12:00	22MAR09 12:59	PJ
38011965	3T237	RX VESSEL: SUPPORT SWARP PRIOR TO RELOAD	2	26MAR09 10:00	26MAR09 11:59	EN
38011937	3T237	(R) RX STUD RACKS - MOVE BACK TO RAMP	4	29MAR09 11:00	29MAR09 14:59	PJ
38011963	3T237	(P) REM LOAD CELL FROM PLR CRANE TO EQIP HATCH	1	31MAR09 21:00	31MAR09 21:59	PJ
39000513	FUEL SIP	ERECT SCAFFOLD TO SUPPORT SIPPING MOD ON 58'	20	17MAR09 19:00	18MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
39000513	FUEL SIP	REMOVE SCAFFOLD AFTER INSTALLING SIPPING MOD	10	19MAR09 12:00	19MAR09 21:59	PJ
[redacted]						
38011969	RX CAVITY	(R) INSTACOTE - SETUP EQUIPMENT AT RAMP	4	18MAR09 01:00	18MAR09 04:59	PJ
38011969	RX CAVITY	SETUP/OPR B/AIR BLK BOX FOR INSTACOTE INSTALL	3	19MAR09 13:00	19MAR09 15:59	PJ
38011969	RX CAVITY	R) INSTACOTE - REMOVE EQUIPMENT FROM RAMP	6	20MAR09 10:00	20MAR09 15:59	PJ
[redacted]						
38011817	TE-3-6397	SECURE RX HEAD VENT TEMP ELMNT TO CAVITY	8	04APR09 02:00	04APR09 09:59	IC
[redacted]						
38015174		BMI -INSTALL TEMP POWER & LIGTHING AT SUMP DOOR	2	16MAR09 14:00*	16MAR09 15:59	PJ
38015174		BMI - Move Equipment, to 14'Prior to I&C Work1/2	2	16MAR09 21:00	16MAR09 22:59	PJ
38015174		BMI - Move Equipment, to 14'Prior to I&C Work2/2	2	16MAR09 23:00	17MAR09 00:59	PJ
38015174		BMI - Move tools & Scaffold Material PART 1-2	1	17MAR09 01:00	17MAR09 01:59	PJ
38015174		BMI - RX SUMP INSTALL LIGHTING & POWER IN SUMP	2	17MAR09 07:00	17MAR09 08:59	PJ
38015174		BMI - Move tools & Scaffold Material PART 2-2	2	17MAR09 07:00	17MAR09 08:59	PJ
38015174		BMI - FINAL STAGE OF MATERIALS PRIOR TO SCAF BUI	3	17MAR09 09:00	17MAR09 11:59	PJ
38015174		BMI - RTE ENG PREJOB WALKDOWN	2	17MAR09 19:00	17MAR09 20:59	PJ
38015174		BMI - AREVA N-1 PRE_INSPECTION	2	17MAR09 19:00	17MAR09 20:59	PJ
38015174		BMI - START TO Erect Scaffold first part of win1	2	17MAR09 21:00	17MAR09 22:59	PJ
38015174		BMI - START TO Erect Scaffold first part of win2	2	17MAR09 23:00	18MAR09 00:59	PJ
38015174		BMI - ERECT Scaffold PART 1/7	2	18MAR09 17:00	18MAR09 18:59	PJ
38015174		BMI - ERECT Scaffold PART 2/7	2	18MAR09 19:00	18MAR09 20:59	PJ
38015174		BMI - ERECT Scaffold PART 3/7	2	18MAR09 21:00	18MAR09 22:59	PJ
38015174		BMI - ERECT Scaffold PART 4/7	2	18MAR09 23:00	19MAR09 00:59	PJ
38015174		BMI - ERECT Scaffold PART 5/7	2	19MAR09 01:00	19MAR09 02:59	PJ
38015174		BMI - ERECT Scaffold PART 6/7	2	19MAR09 03:00	19MAR09 04:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38015174		BMI - ERECT Scaffold PART 7/7	2	19MAR09 05:00	19MAR09 06:59	PJ
38015174		BMI - Install Lifting Jig/Start to Lower BMI IA	2	19MAR09 09:00	19MAR09 10:59	PJ
38015174		BMI - Install Lifting Jig/Start to Lower BMI IB	2	19MAR09 11:00	19MAR09 12:59	PJ
38015174		BMI - Install Lifting Jig/Start to Lower BMI ID	2	19MAR09 15:00	19MAR09 16:59	PJ
38015174		BMI - COMPLETE INSULATION REMOVAL OF BMI	16	29MAR09 17:00	30MAR09 08:59	PJ
38015174		BMI - AREVA N-1 INSPECTION	10	30MAR09 10:00	30MAR09 19:59	PJ
38005430		BMI - ISI to Perform BARE METAL INSPECTION (BMV)	24	30MAR09 10:00	31MAR09 09:59	EN
38005430		RX BTM HD INSUL - AREVA INSPECT REACTOR NOZZLES	4	31MAR09 01:00	31MAR09 04:59	PJ
38015174		BMI - Reinstall BMI Insulation & Remove Lifting	24	31MAR09 10:00	01APR09 09:59	PJ
38015174		BMI - RTE ENGINEERING FINAL INS INSPECTION	1	01APR09 10:00	01APR09 10:59	PJ
38015174		BMI - PREP ITOP PCM 08-156	10	01APR09 10:00	01APR09 19:59	PJ
38015174		BMI - SATS PCM 08-156 ON INSULATION	10	01APR09 20:00	02APR09 05:59	EN
38015174		BMI - FINAL INSPECTION OF SCAFFOLD	14	01APR09 22:00	02APR09 11:59	PJ
38015174		BMI - RTE & ENG POST JOB WALKDOWN	2	02APR09 12:00	02APR09 13:59	PJ
38015174		BMI - RP SUPPORT FOR ENG POST JOB WALKDOWN	2	02APR09 12:00	02APR09 13:59	RP
38015174		BMI - REMOVE ALL POWER & LIGTHING FROM SUMP AREA	3	02APR09 14:00	02APR09 16:59	PJ
38015174		BMI - PREP ITOP PCM 08-197 ON SCAFFOLD	10	02APR09 14:00	02APR09 23:59	PJ
38015174		BMI - Remove RIGGING BEAM FROM SUMP DOOR	3	02APR09 17:00	02APR09 19:59	PJ
38015174		BMI - Demob Containment	15	02APR09 17:00	03APR09 07:59	PJ
38015174		BMI - Close Work Orders	4	03APR09 08:00	03APR09 11:59	PJ
38015174		BMI - SATS PCM 08-197 ON SCAFFOLD	10	03APR09 12:00	03APR09 21:59	EN
36009490	FCV-3-113B	BORATED WTR TO CHG PPS SUCT - DISCONN & REMO ACT	4	23MAR09 04:00	23MAR09 07:59	VT
36009490	FCV-3-113B	BORATED WTR TO CHG PPS SUCT - INSTALL & CONN ACT	4	24MAR09 00:00	24MAR09 03:59	VT
36009354	FCV-3-114B	ERECT SCAFFOLD	8	23MAR09 01:00	23MAR09 08:59	PJ
35030356	FCV-3-114B	DILUTED FLOW TO VCT FLOW CV - DISCONN & RMV ACT.	4	23MAR09 09:00*	23MAR09 12:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35030356	FCV-3-114B	DILUTED FLOW TO VCT FLOW CV - O/H & INSTALL ACT	8	24MAR09 08:00	24MAR09 15:59	VT
35030356	FCV-3-114B	DILUTED FLOW TO VCT FLOW CV - AS LEFT CAL	8	24MAR09 16:00	24MAR09 23:59	VT
36009354	FCV-3-114B	REMOVE SCAFFOLD	4	25MAR09 00:00	25MAR09 03:59	PJ
[redacted]						
36018056	MOV-3-350	PMT STROKE -EQ-MOV-3-350	1	24MAR09 20:00	24MAR09 20:59	VT
[redacted]						
37021432	3-120A	CHG TO RCS LINE DRN VLV - VERIFY FIT UP	2	23MAR09 22:00	23MAR09 23:59	EN
37021432	3-120A	CHG TO RCS LINE DRN VLV - VT / PT WELD	2	24MAR09 04:00	24MAR09 05:59	EN
[redacted]						
37018645	3-294A	SEAL WTR INJ FLTR B VT VLV - REMOVE SCAFFOLD	6	03APR09 08:00	03APR09 13:59	PJ
[redacted]						
35010385	3-294B	SEAL WTR INJ FLTR A VT - CUT OUT OLD VLV	4	25MAR09 08:00	25MAR09 11:59	MM
35010385	3-294B	SEAL WTR INJ FLTR A VT - PREP PIPE	4	25MAR09 12:00	25MAR09 15:59	MM
35010385	3-294B	SEAL WTR INJ FLTR A VT - FIT UP NEW VLV	4	25MAR09 16:00	25MAR09 19:59	MM
35010385	3-294B	SEAL WTR INJ FLTR A VT - VERIFY FIT UP	2	25MAR09 20:00	25MAR09 21:59	EN
35010385	3-294B	SEAL WTR INJ FLTR A VT - WELD IN NEW VLV	8	25MAR09 22:00	26MAR09 05:59	MM
35010385	3-294B	SEAL WTR INJ FLTR A VT - VT / PT WELD	2	26MAR09 06:00	26MAR09 07:59	EN
35010385	3-294B	SEAL WTR INJ FLTR A VT - PMT AT F&V	1	03APR09 07:00	03APR09 07:59	MM
35010385	3-294B	SEAL WTR INJ FLTR A VT - PMT AT OVERPRESS	1	06APR09 05:00	06APR09 05:59	MM
[redacted]						
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - CUT OUT OLD VLV	4	26MAR09 08:00	26MAR09 11:59	MM
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - PREP PIPE TO WELD	2	26MAR09 12:00	26MAR09 13:59	MM
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV-VERIFY FITUP @ NEW VLV	2	26MAR09 14:00	26MAR09 15:59	EN
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - FITUP NEW VALVE	2	26MAR09 14:00	26MAR09 15:59	MM
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - WELD IN NEW VLV	6	26MAR09 16:00	26MAR09 21:59	MM
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV-VT / PT WELD @ NEW VLV	2	26MAR09 22:00	26MAR09 23:59	EN
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - PMT @ FILL & VENT	1	03APR09 04:00	03APR09 04:59	MM
38002323	3-294J	SEAL WTR INJ FLTR DRN VLV - PMT @ FILL & VENT	1	06APR09 05:00	06APR09 05:59	MM
[redacted]						
38008902	3-298F	3-289F RCP C SEAL WTR INJ CK VLV - SCAFF ERECT	4	20MAR09 07:00*	20MAR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38008902	3-298F	3-289F RCP C SEAL WATER INJ CHK VLV, SCAFF REM	4	01APR09 07:00*	01APR09 10:59	PJ
37022470	3-298J	RCP C SEAL WTR INJ ISO VLV - ERECT SCAFFOLD	10	20MAR09 17:00*	21MAR09 02:59	PJ
37022470	3-298J	RCP C SEAL WTR INJ ISO VLV - REMOVE SCAFFOLD	8	27MAR09 20:00*	28MAR09 03:59	PJ
37022470	3-298J	RCP C SEAL WTR INJ ISO VLV - FINAL DBA INSP	1	06APR09 09:00	06APR09 09:59	EN
37022475	3-304F	REPLACE 3/4" WELDED VALVE SCAFF ERECT	4	21MAR09 03:00	21MAR09 06:59	PJ
37022475	3-304F	REPLACE 3/4" WELDED VALVE SCAFF REMOVE	4	23MAR09 12:00*	23MAR09 15:59	PJ
39000656	3-312A	CHG TO LP A CK VLV - BOLTING CLASS A- ERECT SCAF	12	23MAR09 18:00*	24MAR09 05:59	PJ
38021917	3-312A	CHG TO LP A CK VLV - BOLTING CLASS A- REMO INSUL	2	24MAR09 07:00	24MAR09 08:59	PJ
38013624	3-312A	CHG TO LP A CK VLV - BOLTING CLASS A- PERF EXAMS	1	24MAR09 09:00	24MAR09 09:59	EN
38021917	3-312A	CHG TO LP A CK VLV - BOLTING CLASS A -REST INSUL	4	24MAR09 10:00	24MAR09 13:59	PJ
39000656	3-312A	CHG TO LP A CK VLV - BOLTING CLASS A- REMO SCAF	8	02APR09 07:00*	02APR09 14:59	PJ
38008906	3-312B	CHG TO RC LOOP C CHK VLV - ERECT SCAFFOLD	10	19MAR09 09:00*	19MAR09 18:59	PJ
38021917	3-312B	CHG TO LP C CK VLV - BOLTING CLASS A -REMV INSUL	2	24MAR09 09:00	24MAR09 10:59	PJ
38013624	3-312B	CHG TO LP C CK VLV - BOLTING CLASS A - PERF EXAM	1	24MAR09 11:00	24MAR09 11:59	EN
38021917	3-312B	CHG TO LP C CK VLV - BOLTING CLASS A -REST INSUL	4	02APR09 00:00*	02APR09 03:59	PJ
38008906	3-312B	CHG TO RC LOOP C CHK VLV - REMOVE SCAFFOLD	8	02APR09 04:00	02APR09 13:59	PJ
39000656	3-312C	CHG TO REGEN HX CK VL-BOLTING CLASS A-ERECT SCAF	12	24MAR09 06:00	24MAR09 17:59	PJ
38021917	3-312C	CHG TO REGEN HX CK VL-BOLTING CLASS A-REMO INSUL	2	24MAR09 18:00	24MAR09 19:59	PJ
38013624	3-312C	CHG TO REGEN HX CK VL-BOLTING CLASS A-PERF EXAMS	1	24MAR09 20:00	24MAR09 20:59	EN
38021917	3-312C	CHG TO REGEN HX CK VL-BOLTING CLASS A-REST INSUL	4	02APR09 00:00*	02APR09 03:59	PJ
39000656	3-312C	CHG TO REGEN HX CK VL-BOLTING CLASS A-REMO SCAF	8	02APR09 04:00*	02APR09 13:59	PJ
38021917	3E202	EXCES L/D HX-CLASS A BOLT-REMO INSU @ HEAD & FLG	4	20MAR09 07:00*	20MAR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624	3E202	EXCESS L/D HX - CLASS A BOLT - INSP CHANNEL HEAD	2	20MAR09 11:00	20MAR09 12:59	EN
38013624	3E202	EXCESS L/D HX - CLASS A BOLT - INSP INLET FLANGE	1	20MAR09 13:00	20MAR09 13:59	EN
38013624	3E202	EXCESS L/D HX - CLASS A BOLT- INSP OUTLET FLANGE	1	20MAR09 14:00	20MAR09 14:59	EN
38021917	3E202	EXCES L/D HX-CLASS A BOLT-INST INSU @ HEAD & FLG	8	01APR09 16:00*	02APR09 01:59	PJ
38013624	3P200A	RCP 'A' SEAL BYPASS FLANGE #2 - REMV INSUL	4	17MAR09 20:00	17MAR09 23:59	PJ
38013624	3P200A	RCP 'A' SEAL LEAKOFF FLANGE #2 - REMV INSUL	4	18MAR09 00:00	18MAR09 03:59	PJ
38013624	3P200A	RCP 'A' SEAL LEAKOFF FLANGE #2 - PERF EXAMS	1	18MAR09 12:00	18MAR09 12:59	EN
38013624	3P200A	RCP 'A' SEAL BYPASS FLANGE #2 - PERF EXAMS	1	18MAR09 12:00	18MAR09 12:59	EN
38013624	3P200A	RCP 'A' SEAL BYPASS FLANGE #2 - REST. INSUL	4	24MAR09 09:00	24MAR09 12:59	PJ
38013624	3P200A	RCP 'A' SEAL LEAKOFF FLANGE #2 - REST. INSUL	4	24MAR09 13:00	24MAR09 16:59	PJ
38013624	3P200B	RCP B SEAL BYPASS FLANGE #2 - REMV INSUL	4	18MAR09 04:00	18MAR09 09:59	PJ
38013624	3P200B	RCP B SEAL LEAKOFF FLANGE #2 - REMV INSUL	4	18MAR09 10:00	18MAR09 13:59	PJ
38013624	3P200B	RCP B SEAL BYPASS FLANGE #2 - PERF EXAMS	1	18MAR09 16:00	18MAR09 16:59	EN
38013624	3P200B	RCP B SEAL LEAKOFF FLANGE #2 - PERF EXAMS	1	18MAR09 17:00	18MAR09 17:59	EN
38013624	3P200B	RCP B SEAL BYPASS FLANGE #2 - REST. INSUL	4	24MAR09 17:00	24MAR09 20:59	PJ
38013624	3P200B	RCP B SEAL LEAKOFF FLANGE #2 - REST. INSUL	4	24MAR09 21:00	25MAR09 00:59	PJ
38013624	3P200C	RCP C SEAL BYPASS FLANGE #2 - REMV INSUL	4	18MAR09 14:00	18MAR09 17:59	PJ
38013624	3P200C	RCP C SEAL LEAKOFF FLANGE #2 - REMV INSUL	4	18MAR09 18:00	18MAR09 21:59	PJ
38013624	3P200C	RCP C SEAL BYPASS FLANGE #2 - PERF EXAMS	1	19MAR09 00:00	19MAR09 00:59	EN
38013624	3P200C	RCP C SEAL LEAKOFF FLANGE #2 - PERF EXAMS	1	19MAR09 01:00	19MAR09 01:59	EN
38013624	3P200C	RCP C SEAL BYPASS FLANGE #2 - REST INSUL	4	25MAR09 01:00	25MAR09 04:59	PJ
38013624	3P200C	RCP C SEAL LEAKOFF FLANGE #2 - REST INSUL	4	25MAR09 07:00	25MAR09 10:59	PJ
38021917	CSI ZN 035	CSI- 3-035 PS-592 IA - INSL REMV	8	18MAR09 07:00*	18MAR09 14:59	PJ
38013627	CSI ZN 035	CSI- 3-035 PS-592 IA - BUFF & CLEAN	8	18MAR09 15:00	18MAR09 22:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 035	CSI- 3-035 PS-592 IA - PERFORM EXAMS	4	20MAR09 09:00*	20MAR09 12:59	EN
38013627	CSI ZN 035	CSI- 3-035 PS-592 IA - ANALYZE	24	21MAR09 07:00*	24MAR09 10:59	EN
38013627	CSI ZN 035	CSI- 3-035 SR-46 - SCAFFOLD ERECT	8	22MAR09 07:00	22MAR09 14:59	PJ
38013627	CSI ZN 035	CSI- 3-035 SR-46 SPRING HANGER - PERFORM EXAMS	2	23MAR09 09:00*	23MAR09 10:59	EN
38013627	CSI ZN 035	CSI- 3-035 SR-46 SPRING HANGER - ANALYZE	24	24MAR09 09:00*	26MAR09 12:59	EN
38021917	CSI ZN 035	CSI- 3-035 PS-592 IA - INSL INSTALL	8	26MAR09 19:00*	27MAR09 02:59	PJ
38013627	CSI ZN 035	CSI- 3-035 SR-46 - SCAFFOLD REMV	8	28MAR09 12:00*	28MAR09 19:59	PJ
[illegible]						
38013627	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 SCAFFOLD ERECT	12	22MAR09 22:00	23MAR09 09:59	PJ
38021917	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 REMOVE INSULATION	8	23MAR09 10:00	23MAR09 17:59	PJ
38013627	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 - BUFF AND CLEAN	8	23MAR09 23:00	24MAR09 08:59	PJ
38013627	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 PERFORM EXAMS	27	24MAR09 09:00*	26MAR09 15:59	EN
38013627	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 - ANALYZE DATA	20	26MAR09 16:00*	28MAR09 15:59	EN
38021917	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 - REINSTALL INSULATION	8	28MAR09 16:00	28MAR09 23:59	PJ
38013627	CSI ZN 045	CSI- 3-045 3"-CH-1301-42 - SCAFFOLD REMOVE	12	29MAR09 00:00	30MAR09 13:59	PJ
[illegible]						
38013627	CSI ZN 050	CSI- 3-050 1"-CH-135*- - PERFORM EXAMS	6	06APR09 07:00	06APR09 12:59	EN
38013627	CSI ZN 050	CSI- 3-050 +"-CH-1439A-1 - ANALYZE DATA	12	06APR09 13:00	07APR09 14:59	EN
[illegible]						
38013627	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 - SCAFF ERECT	10	24MAR09 10:00*	24MAR09 19:59	PJ
38021917	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 -REM INSU	8	24MAR09 20:00	25MAR09 03:59	PJ
38013627	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 - SCAFF ERECT	10	24MAR09 20:00	25MAR09 05:59	PJ
38013627	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 - PERFORM EXAMS	2	25MAR09 07:00*	25MAR09 08:59	EN
38021917	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 -REM INSU	8	25MAR09 07:00	25MAR09 14:59	PJ
38013627	CSI ZN 051	CSI- 3-051 H-4 - SCAFF ERECT	10	25MAR09 07:00	25MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 - ANALYZE DATA	24	25MAR09 09:00*	27MAR09 12:59	EN
38013627	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 - PERFORM EXAMS	2	25MAR09 15:00*	25MAR09 16:59	EN
38021917	CSI ZN 051	CSI- 3-051 H-4 -REM INSU	8	25MAR09 17:00	26MAR09 00:59	PJ
38013627	CSI ZN 051	CSI- 3-051 H-4 - PERFORM EXAMS	2	26MAR09 01:00*	26MAR09 02:59	EN
38013627	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 - ANALYZE DATA	24	26MAR09 07:00*	28MAR09 10:59	EN
38013627	CSI ZN 051	CSI- 3-051 H-4 - ANALYZE DATA	24	26MAR09 07:00*	28MAR09 10:59	EN
38021917	CSI ZN 051	CSI- 3-051 H-4 -INSL INSTALL	8	28MAR09 11:00	28MAR09 18:59	PJ
38013627	CSI ZN 051	CSI- 3-051 H-4 - REM SCAF	10	28MAR09 19:00	29MAR09 04:59	PJ
38021917	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 -INSL INSTALL	10	02APR09 13:00	02APR09 22:59	PJ
38013627	CSI ZN 051	CSI- 3-051 1.5"-CH-1302-FB1 - REM SCAF	10	02APR09 23:00	03APR09 10:59	PJ
38021917	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 - -INSL INSTALL	10	03APR09 11:00	03APR09 20:59	PJ
38013627	CSI ZN 051	CSI- 3-051 2"-CH-1304-FB2 - REM SCAF	10	03APR09 21:00	04APR09 08:59	PJ
38013627	CSI ZN 051	CSI- 3-051 +"-CH-135* - PERFORM EXAMS	1	06APR09 07:00	06APR09 07:59	EN
38013627	CSI ZN 051	CSI- 3-051 +"-CH-135* - ANALYZE DATA	1	06APR09 08:00	06APR09 08:59	EN
38013627	CSI ZN 052	CSI- 3-052 +"-CH-135* - PERFORM EXAMS	6	06APR09 07:00*	06APR09 12:59	EN
38013627	CSI ZN 052	CSI- 3-052 +"-CH-135* - ANALYZE	6	06APR09 13:00*	06APR09 18:59	EN
38021917	CTMTINSUL	INSUL REPRS IN CTMT - DEFICIENCY LIST TO SUPV'N	10	26MAR09 10:00	26MAR09 19:59	PJ
38021917	CTMTINSUL	INSUL REPRS IN CTMT - PREFAB MAT'L FOR REPAIRS	36	26MAR09 20:00	28MAR09 11:59	PJ
38021917	CTMTINSUL	INSUL REPRS IN CTMT - DEFICIENCY REPAIRS	60	28MAR09 12:00	01APR09 03:59	PJ
38021917	CTMTINSUL	INSUL REPRS IN CTMT - FINAL WALKDOWN	10	01APR09 04:00	01APR09 15:59	PJ
38021917	CTMTINSUL	INSUL REPRS IN CTMT - REVISE/ISSUE FINAL LIST	5	01APR09 16:00	01APR09 20:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38021917	CTMTINSUL	INSUL REPRS IN CTMT - FINAL DEFICIENCY REPAIRS	10	01APR09 21:00	02APR09 08:59	PJ
38021917	CV-3-200A	CV-200A (LETDOWN FLOW CNTL VLV) REMV INSUL	2	17MAR09 21:00*	17MAR09 22:59	PJ
38013837	CV-3-200A	CV-200A (LETDOWN FLOW CNTL VLV)SET UP TEMP PWR	4	19MAR09 01:00	19MAR09 04:59	PJ
38013624	CV-3-200A	CV-200A (LETDOWN FLOW CNTL VLV) PERF EXAMS	1	23MAR09 08:00	23MAR09 08:59	EN
38021917	CV-3-200A	CV-200A(LETDOWN FLOW CNTL VLV) REST. INSUL	4	23MAR09 13:00	23MAR09 16:59	PJ
36019672	CV-3-200A	L/D FLOW CONT VLV - CAL AOV ACT & ACCESSORIES	4	23MAR09 13:00	23MAR09 16:59	VT
38021917	CV-3-200B	CV-200B(LETDOWN FLOW CNTL VLV) REMV INSUL	2	17MAR09 21:00*	17MAR09 22:59	PJ
38013837	CV-3-200B	CV-200B (LETDOWN FLOW CNTL VLV)SET UP TEMP PWR	4	17MAR09 23:00*	18MAR09 02:59	PJ
38013624	CV-3-200B	CV-200B(LETDOWN FLOW CNTL VLV) PERFORM EXAM	1	23MAR09 07:00	23MAR09 07:59	EN
38021917	CV-3-200B	CV-200B(LETDOWN FLOW CNTL VLV) REST. INSUL	4	23MAR09 13:00	23MAR09 16:59	PJ
38021917	CV-3-200C	CV-200C(LETDOWN FLOW CNTL VLV) REMV INSUL	2	17MAR09 16:00	17MAR09 17:59	PJ
38013837	CV-3-200C	CV-*-200C (LETDOWN FLOW CNTL VLV)SET UP TEMP PWR	4	17MAR09 18:00	17MAR09 21:59	PJ
38013624	CV-3-200C	CV-200C(LETDOWN FLOW CNTL VLV) PERF EXAMS	1	23MAR09 07:00	23MAR09 07:59	EN
38021917	CV-3-200C	CV-200C(LETDOWN FLOW CNTL VLV) REST. INSUL	4	25MAR09 07:00	25MAR09 10:59	PJ
38021917	CV-3-303A	RCP 'A' #1 SEAL LEAKOFF CV - REMV INSUL	4	18MAR09 04:00	18MAR09 09:59	PJ
38013624	CV-3-303A	RCP 'A' #1 SEAL LEAKOFF CV - PERF EXAMS	1	18MAR09 10:00	18MAR09 10:59	EN
38021917	CV-3-303A	RCP 'A' #1 SEAL LEAKOFF CV - REST. INSUL	4	31MAR09 02:00	31MAR09 07:59	PJ
38021917	CV-3-303B	RCP 'B' #1 SEAL LEAKOFF CV - REMV INSUL	4	18MAR09 14:00	18MAR09 17:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624	CV-3-303B	RCP 'B' #1 SEAL LEAKOFF CV - PERF EXAMS	1	18MAR09 18:00	18MAR09 18:59	EN
38021917	CV-3-303B	RCP 'B' #1 SEAL LEAKOFF CV - REST. INSUL	4	01APR09 20:00*	01APR09 23:59	PJ
38021917	CV-3-303C	RCP 'C' #1 SEAL LEAKOFF CV - REMV INSUL	4	18MAR09 22:00	19MAR09 01:59	PJ
38013624	CV-3-303C	RCP 'C' #1 SEAL LEAKOFF CV - PERF EXAMS	1	19MAR09 02:00	19MAR09 02:59	EN
38021917	CV-3-303C	RCP 'C' #1 SEAL LEAKOFF CV - REST. INSUL	4	30MAR09 07:00*	30MAR09 10:59	PJ
38021917	CV-3-307	RCP SEAL WTR RETRN BYP CV-BOLTING 'B'-REMV INSUL	2	17MAR09 20:00	17MAR09 21:59	PJ
38013624	CV-3-307	RCP SEAL WTR RETRN BYP CV-BOLTING 'B'-PERF.EXAMS	1	17MAR09 22:00	17MAR09 22:59	EN
38021917	CV-3-307	RCP SEAL WTR RETRN BYP CV-BOLTING 'B'-REST INSUL	4	27MAR09 21:00*	28MAR09 00:59	PJ
38021917	CV-3-310A	CV-310A (CHG TO RC LOOP A) REMV INSUL	4	16MAR09 21:00	17MAR09 00:59	PJ
38013624	CV-3-310A	CV-310A (CHG TO RC LOOP A) PERF EXAMS	1	17MAR09 21:00	17MAR09 21:59	EN
38021917	CV-3-310A	CV-310A (CHG TO RC LOOP A) REST. INSUL	4	25MAR09 15:00	25MAR09 18:59	PJ
38021917	CV-3-310B	CV-310B(CHG TO RC LOOP C) REMV INSUL	4	17MAR09 12:00	17MAR09 15:59	PJ
38013624	CV-3-310B	CV-310B(CHG TO RC LOOP C) PERF EXAMS	1	18MAR09 11:00	18MAR09 11:59	EN
38021917	CV-3-310B	CV-310B(CHG TO RC LOOP C) REST. INSUL	4	01APR09 12:00	01APR09 15:59	PJ
38021917	CV-3-311	CV-311(CHG TO PZR AUX SPRAY CNTL) REMV INSUL	4	17MAR09 16:00	17MAR09 19:59	PJ
38013624	CV-3-311	CV-311(CHG TO PZR AUX SPRAY CNTL) PERF EXAMS	1	17MAR09 20:00	17MAR09 20:59	EN
38021917	CV-3-311	CV-311(CHG TO PZR AUX SPRAY CNTL) REST. INSUL	4	25MAR09 11:00	25MAR09 14:59	PJ
38018156	LCV-3-115A	L/D TO VCT / HUP TK LVL CV - DIS CONN AIR TO ACT	4	24MAR09 04:00	24MAR09 07:59	VT
38018156	LCV-3-115A	L/D TO VCT / HUP TK LVL CV - RECONN AIR TO ACT	4	25MAR09 02:00	25MAR09 05:59	VT
38014461	LCV-3-115C	VCT TO CH PP - CYCLE MOV-PMT	1	24MAR09 10:00	24MAR09 10:59	VT
38014463	MOV-3-381	MOV-3-381 GREASE INSP/STEM LUBE	4	20MAR09 07:00*	20MAR09 10:59	VT
38014463	MOV-3-381	MOV-3-381 GREASE INSP/STEM LUBE - PMT STROKE	1	20MAR09 11:00	20MAR09 11:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014466	MOV-3-6386	ERECT SCAFFOLD FOR MOV-6386 GREASE INSPECTION	12	23MAR09 16:00	24MAR09 03:59	PJ
38014466	MOV-3-6386	MOV-3-6386 GREASE INSP/STEM LUBE	4	25MAR09 19:00*	25MAR09 22:59	VT
38014466	MOV-3-6386	MOV-6386 RCP SW RTN - PMT STROKE	1	25MAR09 23:00	25MAR09 23:59	VT
38014466	MOV-3-6386	REMOVE SCAFFOLD FOR MOV-6386 GREASE INSPECTION	3	01APR09 11:00	01APR09 13:59	PJ
36014315	RV-3-209	REMOVE RV-3-209 SCAFFOLD	4	23MAR09 22:00	24MAR09 01:59	PJ
34014582	RV-3-304	ITOP PCM 04-100	1	26MAR09 08:00	26MAR09 08:59	MM
34014582	RV-3-304	EXCES L/D HX RV-COAT NEW SUPPORTS	30	30MAR09 07:00*	31MAR09 14:59	PJ
38012179	SNU-1075	SNUB-CVCS SYS-(CHG & L/D) - AS FOUND VISUAL	1	22MAR09 12:00*	22MAR09 12:59	EN
38012179	SNU-1075	SNUB-CVCS SYS-(CHG & L/D) - HANDSTROKE	1	22MAR09 12:00	22MAR09 12:59	EN
38012179	SNU-1076	SNUB-CVCS SYS-(CHG & L/D) - ERECT SCAFFOLD	12	21MAR09 07:00*	21MAR09 18:59	PJ
38012179	SNU-1076	SNUB-CVCS SYS-(CHG & L/D) - AS FOUND VISUAL	1	22MAR09 13:00	22MAR09 13:59	EN
38012179	SNU-1076	SNUB-CVCS SYS-(CHG & L/D) - HANDSTROKE	1	22MAR09 13:00	22MAR09 13:59	EN
38012179	SNU-1076	SNUB-CVCS SYS-(CHG & L/D) - REMOVE SCAFFOLD	4	01APR09 07:00*	01APR09 10:59	PJ
38012179	SNU-1091	SNUB-CVCS SYS-(CHG TO AUX SPRAY)-ERECT SCAFFOLD	12	21MAR09 07:00*	21MAR09 18:59	PJ
38012179	SNU-1091	SNUB-CVCS SYS-(CHG TO AUX SPRAY)-AS FOUND VISUAL	1	24MAR09 07:00*	24MAR09 07:59	EN
38012179	SNU-1091	SNUB-CVCS SYS-(CHG TO AUX SPRAY)-HANDSTROKE	1	24MAR09 08:00	24MAR09 08:59	EN
38012179	SNU-1091	SNUB-CVCS SYS-(CHG TO AUX SPRAY)-REMOVE SCAFFOLD	6	01APR09 11:00*	01APR09 16:59	PJ
38012179	SNU-1092	SNUB-CVCS SYS-(CHG & L/D) - INSTALL SCAFFOLD	10	21MAR09 19:00	22MAR09 04:59	PJ
38012179	SNU-1092	SNUB-CVCS SYS-(CHG & L/D) - AS FOUND VISUAL	1	24MAR09 09:00	24MAR09 09:59	EN
38012179	SNU-1092	SNUB-CVCS SYS(CHG & L/D)-HANDSTROKE	1	24MAR09 10:00	24MAR09 10:59	EN
38012179	SNU-1092	SNUB-CVCS SYS(CHG & L/D)- REMOVE SCAFFOLD	6	30MAR09 11:00*	30MAR09 16:59	PJ
38012179	SNU-1093	SNUB-CVCS SYS-(CHG & L/D) - ERECT SCAFFOLD	10	22MAR09 05:00	22MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1093	SNUB-CVCS SYS-(CHG & L/D) - AS FOUND VISUAL	1	24MAR09 07:00*	24MAR09 07:59	EN
38012179	SNU-1093	SNUB-CVCS SYS(CHG & L/D)-REMOVE & FUNCTIONAL TST	6	24MAR09 08:00	24MAR09 13:59	EN
38012179	SNU-1093	SNUB-CVCS SYS(CHG & L/D)-REINST & AS LEFT	4	24MAR09 14:00	24MAR09 17:59	EN
38012179	SNU-1093	SNUB-CVCS SYS(CHG & L/D)-REMOVE SCAFFOLD	6	28MAR09 18:00*	28MAR09 23:59	PJ
[illegible]						
38012179	SNU-1094	SNUB-CVCS SYS-(CHG & L/D) - ERECT SCAFFOLD	10	21MAR09 21:00	22MAR09 06:59	PJ
38012179	SNU-1094	SNUB-CVCS SYS-(CHG & L/D) - AS FOUND VISUAL	1	22MAR09 07:00*	22MAR09 07:59	EN
38012179	SNU-1094	SNUB-CVCS SYS(CHG & L/D)-HANDSTROKE	2	22MAR09 08:00	22MAR09 09:59	EN
38012179	SNU-1094	SNUB-CVCS SYS(CHG & L/D)-REMOVE SCAFFOLD	6	28MAR09 10:00*	28MAR09 15:59	PJ
[illegible]						
38012179	SNU-1103	SNUB-CVCS SYS-CHG & L/D @ 3-306C-AS FOUND VISUAL	1	22MAR09 10:00*	22MAR09 10:59	EN
38012179	SNU-1103	SNUB-CVCS SYS-CHG & L/D @ 3-306C-HANDSTROKE	1	22MAR09 10:00	22MAR09 10:59	EN
[illegible]						
38012179	SNU-1104	SNUB-CVCS SYS-(L/D FROM RCP B) - AS FOUND VISUAL	1	22MAR09 11:00	22MAR09 11:59	EN
38012179	SNU-1104	SNUB-CVCS SYS(L/D FRM RCP B)-HANDSTROKE	1	22MAR09 11:00	22MAR09 11:59	EN
[illegible]						
38012179	SNU-1136	SNUB-CVCS SYS-CHG & L/D @ CV-311-AS FOUND VISUAL	1	21MAR09 09:00	21MAR09 09:59	EN
38012179	SNU-1136	SNUB-CVCS SYS-CHG & L/D @ CV-311-HANDSTROKE	1	21MAR09 09:00	21MAR09 09:59	EN
[illegible]						
38012179	SNU-1137	SNUB-CVCS SYS-CHG & L/D @ CV-311-AS FOUND VISUAL	1	21MAR09 10:00	21MAR09 10:59	EN
38012179	SNU-1137	SNUB-CVCS SYS-CHG & L/D @ CV-311-REMOV & FUNCTI	5	21MAR09 11:00	21MAR09 15:59	EN
38012179	SNU-1137	SNUB-CVCS SYS-CHG & L/D @ CV-311-INST & AS LEFT	3	21MAR09 16:00	21MAR09 18:59	EN
[illegible]						
37020795	SV-3-200*	SV'S FOR CVCS L/D ISO VLVS-ENG W/D CTNMT FOR MRA	4	17MAR09 17:00*	17MAR09 20:59	EN
37020795	SV-3-200*	SV'S FOR CVCS L/D ISO VLVS-ENG W/D CTNMT FOR MRA	24	18MAR09 07:00	20MAR09 14:59	EN
[illegible]						
37020795	SV-3-200B	SV-3-200B - DETERM & DISCONNECT	3	23MAR09 13:00	23MAR09 15:59	IC
37020795	SV-3-200B	SV-3-200B - RECONNECT TUBING & RETERM	6	24MAR09 11:00	24MAR09 16:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37020795	SV-3-200B	SV-3-200B - PERF PMI-047.51	2	25MAR09 01:00	25MAR09 02:59	IC
37020795	SV-3-200C	SV-3-200C - DETERM & DISCONNECT	3	23MAR09 16:00	23MAR09 18:59	IC
38011818	SV-3-200C	EQ PROGRAM- SV-200C REPLACEMENT	14	24MAR09 03:00	24MAR09 16:59	IC
37020795	SV-3-200C	SV-3-200C - RECONNECT TUBING & RETERM	6	24MAR09 17:00	24MAR09 22:59	IC
37020795	SV-3-200C	SV-3-200C - PERF PMI-047.51	2	24MAR09 23:00	25MAR09 00:59	IC
38011819	SV-3-310B	EQ PROGRAM- SV-310B REPLACEMENT	10	23MAR09 16:00	24MAR09 15:59	IC
38012430	52/BYA	52/BYA INSPECT CUBICLE & SWAP BREAKER STAMP #7	10	18MAR09 22:00*	19MAR09 07:59	EM
38012430	52/BYA	52/BYA BKR - NEW BKR TO SWGR & INSTALL STAMP #7	2	19MAR09 06:00	19MAR09 07:59	EM
38012430	52/BYA	52/BYA - PMT 0-PME-049.1 STEP 6.25 AND 6.28	10	25MAR09 06:00	25MAR09 15:59	EM
38012430	52/BYA	52/BYA - PERFORM TIMING TST WITH *-OSP-049.1	2	03APR09 17:00	03APR09 18:59	EM
38012430	52/BYA	RX TRIP BYP BKR - MRM REMOVED BKR TO STORES	8	08APR09 07:00	08APR09 14:59	EM
38012441	52/BYB	52/BYB INSPECT CUBICLE & SWAP BREAKER STAMP #9	10	17MAR09 22:00*	18MAR09 07:59	EM
38012441	52/BYB	52/BYB BKR - NEW BKR TO SWGR & INSTALL STAMP #9	2	18MAR09 06:00	18MAR09 07:59	EM
38012441	52/BYB	52/BYB - PMT 0-PME-049.1 STEP 6.25 AND 6.29	10	25MAR09 06:00	25MAR09 15:59	EM
38012441	52/BYB	52/BYB - SUPPORT *-OSP-049.1	2	03APR09 20:00	03APR09 21:59	EM
38012441	52/BYB	RX TRIP BYP BKR - MRM REMOVED BKR TO STORES	8	08APR09 07:00	08APR09 14:59	EM
38012429	52/RTA	52/RTA INSPECT CUBICLE & SWAP BREAKER STAMP #10	10	17MAR09 07:00*	17MAR09 16:59	EM
38012429	52/RTA	52/RTA BKR - NEW BKR TO SWGR & INSTALL STAMP #10	2	17MAR09 15:00	17MAR09 16:59	EM
38012429	52/RTA	52/RTA - PMT 0-PME-049.2 & 0-PME-049.1 STEP 6.25	10	25MAR09 06:00	25MAR09 15:59	EM
38012429	52/RTA	52/RTA - PERFORM TIMING TST WITH *-OSP-049.1	2	03APR09 17:00	03APR09 18:59	EM
38012429	52/RTA	RX TRIP BKR - MRM REMOVED BKR TO STORES	8	08APR09 07:00	08APR09 14:59	EM

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38009583	52/RTB	52/RTB INSPECT CUBICLE & SWAP BREAKER STAMP #13	10	16MAR09 22:00*	17MAR09 09:59	EM
38009583	52/RTB	52/RTB BKR - NEW BKR TO SWGR & INSTALL STAMP #13	2	17MAR09 08:00	17MAR09 09:59	EM
38009583	52/RTB	52/RTB - PMT 0-PME-049.2 & 0-PME-049.1 STEP 6.25	10	25MAR09 06:00	25MAR09 15:59	EM
38009583	52/RTB	52/RTB - PERFORM TIMING TST WITH *-OSP-049.1	2	03APR09 20:00	03APR09 21:59	EM
38009583	52/RTB	RX TRIP BKR - MRM REMOVED BKR TO STORES	8	08APR09 07:00	08APR09 14:59	EM
37026850	LR-3-459	LR-3-459, T/S PERIODIC ERRATIC IND.	8	19MAR09 15:00	19MAR09 22:59	IC
32013740	LR-3-459	LR-3-459, REPL REC WITH NEW MODEL	12	19MAR09 15:00	20MAR09 16:59	IC
32013748	LR-3-477	LR-3-477, REPL REC WITH NEW MODEL	10	20MAR09 23:00*	21MAR09 08:59	IC
36021154	PI-3-464A	PI-3-464A, LABELLING IS INCORRECT	1	21MAR09 15:00	21MAR09 15:59	IC
37019720	RT-1-A	RT-1-A: CRACKED COIL CASE	12	21MAR09 16:00	23MAR09 07:59	IC
39005020	UVTD-1-A	TRAIN "A" RPS UVTD RELAYS - CAL UVTD-1-A & 2-A	10	20MAR09 09:00*	21MAR09 08:59	IC
39005021	UVTD-1-B	TRAIN "B" RPS UVTD RELAYS - CAL UVTD-1-B & 2-B	10	21MAR09 09:00	22MAR09 08:59	IC
N.REQ		RX TRIP & BYP BKRS & 3A MG OUTPUT BKR TO SHOP	6	16MAR09 09:00*	16MAR09 14:59	EM
36025243		TRAIN "A" RPS RELAY INSPECTION	20	17MAR09 09:00	19MAR09 08:59	EN
36025243		TRAIN "A" RPS RELAY INSPECTION	20	17MAR09 09:00	19MAR09 08:59	IC
36025243		TRAIN "B" RPS RELAY INSPECTION	20	19MAR09 09:00	21MAR09 08:59	EN
36025243		TRAIN "B" RPS RELAY INSPECTION	20	19MAR09 09:00	21MAR09 08:59	IC
38012085		RPS DC RELAY COIL INSP.	6	21MAR09 09:00	21MAR09 14:59	EN
38012085		RPS DC RELAY COIL INSP.	6	21MAR09 09:00	21MAR09 14:59	IC
38012086		RX PROTECTION RACKS / INSPECT & CLEAN	18	22MAR09 22:00	23MAR09 15:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012393		I&C SETUP MAN RX TRIP TEST PER 0-PME-049.2 ATT-2	3	25MAR09 01:00	25MAR09 03:59	IC
38012393		E/M - TECH SPEC MAN RX TRIP TEST 0-PME-049.2	10	25MAR09 06:00	25MAR09 15:59	EM
38013632	3-876	FULL FLOW TEST *-876 B&C - SET UP HEPA	4	17MAR09 17:00	17MAR09 20:59	PJ
38021917	3-876	FULL FLOW TST 876B,C & 4" PIPE - REMV INSUL	4	17MAR09 21:00	18MAR09 00:59	PJ
38013837	3-876	*-876B & C (RHR TO LOOP C COLD LEG) TEMP PWR	4	18MAR09 21:00	19MAR09 00:59	PJ
38021917	3-876	FULL FLOW TST 876B,C & 4" PIPE - REPLACE INSUL	6	01APR09 04:00	01APR09 11:59	PJ
38013632	3-876	FULL FLOW TEST *-876 B&C - REMOVE HEPA	4	01APR09 12:00	01APR09 15:59	PJ
38013624	3-885	RHR LO HEAD SI ROUTING VLV - REMV INSUL	4	18MAR09 03:00	18MAR09 06:59	PJ
38013624	3-885	RHR LO HEAD SI ROUTING VLV - PERFORM EXAMS	1	18MAR09 09:00	18MAR09 09:59	EN
38013624	3-885	RHR LO HEAD SI ROUTING VLV - REST. INSUL	6	24MAR09 07:00*	24MAR09 12:59	PJ
38013627	CSI ZN 036	CSI- 3-036 RCH-12 & RCH-11 - PERFORM EXAMS	2	23MAR09 08:00*	23MAR09 09:59	EN
38013627	CSI ZN 036	CSI- 3-036 RCH-12 & RCH-11 - ANALYZE	24	24MAR09 07:00*	26MAR09 10:59	EN
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - SCAFF ERECT	10	19MAR09 07:00*	19MAR09 16:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - INSL REMV	8	19MAR09 17:00	20MAR09 00:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - SCAFF ERECT	10	19MAR09 17:00	20MAR09 02:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - BUFF & CLN	8	20MAR09 01:00	20MAR09 10:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - SCAFF ERECT	10	20MAR09 03:00	20MAR09 12:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - INSL REMV	8	20MAR09 03:00	20MAR09 12:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - BUFF & CLN	8	20MAR09 13:00	20MAR09 20:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - INSL REMV	8	20MAR09 13:00	20MAR09 20:59	PJ
38013627	CSI ZN 039	CSI- 3-039 SR-4 - SCAFF ERECT	10	20MAR09 13:00	20MAR09 22:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - PERFORM UT EXAM	35	20MAR09 17:00	24MAR09 21:59	EN
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - BUFF & CLN	8	20MAR09 21:00	21MAR09 04:59	PJ
38013627	CSI ZN 039	CSI- 3-039 3-SIH-116A - SCAFF ERECT	10	20MAR09 23:00	21MAR09 08:59	PJ
38013627	CSI ZN 039	CSI- 3-039 SR-4 - INSL REMV	8	20MAR09 23:00	21MAR09 08:59	PJ
38013627	CSI ZN 039	CSI- 3-039 3-SIH-116A - PERFORM VT-3 EXAM	2	21MAR09 09:00*	21MAR09 10:59	EN
38013627	CSI ZN 039	CSI- 3-039 SR-4 - BUFF & CLN	8	21MAR09 09:00	21MAR09 16:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - PERFORM UT EXAM	35	23MAR09 09:00*	26MAR09 13:59	EN
38013627	CSI ZN 039	CSI- 3-039 3-SIH-116A - ANALYZE DATA	24	23MAR09 15:00*	26MAR09 08:59	EN
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - PERFORM UT EXAM	24	24MAR09 18:00*	26MAR09 21:59	EN
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - ANALYZE DATA	19	25MAR09 07:00	26MAR09 15:59	EN
38013627	CSI ZN 039	CSI- 3-039 SR-4 - PERFORM EXAMS	2	25MAR09 09:00*	25MAR09 10:59	EN
38013627	CSI ZN 039	CSI- 3-039 SR-4 - ANALYZE DATA	24	26MAR09 07:00*	28MAR09 10:59	EN
38013627	CSI ZN 039	CSI- 3-039 3-SIH-116A - SCAFF REMV	10	26MAR09 11:00	26MAR09 20:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - ANALYZE DATA	19	26MAR09 14:00	28MAR09 12:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - INSL INSTALL	8	26MAR09 16:00	26MAR09 23:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 14 - SCAFF REMV	10	27MAR09 00:00	27MAR09 11:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - ANALYZE DATA	19	27MAR09 07:00*	28MAR09 15:59	EN
38013627	CSI ZN 039	CSI- 3-039 SR-4 - INSL INSTALL	8	28MAR09 11:00	28MAR09 18:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - INSL INSTALL	8	28MAR09 13:00	28MAR09 20:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - INSL INSTALL	8	28MAR09 16:00	28MAR09 23:59	PJ
38013627	CSI ZN 039	CSI- 3-039 SR-4 - SCAFF REMV	10	28MAR09 19:00	29MAR09 04:59	PJ
38013627	CSI ZN 039	CSI- 3-039 8"-RHR-1305 WELD 2A - SCAFF REMV	10	28MAR09 21:00	30MAR09 08:59	PJ
38013627	CSI ZN 039	CSI- 3-039 10"-SI-1303 WELD 16 - SCAFF REMV	10	29MAR09 00:00	30MAR09 11:59	PJ
37022066	FCV-3-605	RHR BYP FLOW CONT VLV - CLEAN DBA	4	23MAR09 07:00	23MAR09 10:59	VT
37022066	FCV-3-605	RHR BYP FLOW CONT VLV - FINAL DBA INSP & PMT	1	26MAR09 12:00	26MAR09 12:59	VT
38011821	FT-3-605	VENT FT-605 PRIOR TO OSP-050.2	3	20MAR09 02:00	20MAR09 04:59	IC
38024654	GL-2008/05	GL-2008-01 P-5 & P-6 Set Up Work Area	5	17MAR09 07:00	17MAR09 11:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 Vent Valve Fit Up	1	17MAR09 12:00	17MAR09 12:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 NDE Fit Up Inspection	1	17MAR09 13:00	17MAR09 13:59	EN
38024654	GL-2008/05	GL-2008-01 P-5 Weld Vent Valve	8	17MAR09 14:00	17MAR09 21:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 NDE Weld Inspection	1	17MAR09 22:00	17MAR09 22:59	EN
38024654	GL-2008/05	GL-2008-01 P-5 Install EDM Pipe Bracket	1	17MAR09 23:00	17MAR09 23:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 EDM	2	18MAR09 00:00	18MAR09 01:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 & P-6 Demob Work Area	5	18MAR09 20:00	19MAR09 00:59	PJ
38024654	GL-2008/05	GL-2008-01 P-5 ANGLE IRON COATINGS(1ST)	28	19MAR09 01:00	20MAR09 08:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38024655	GL-2008/06	GL-2008-01 P-6 Vent Valve Fit Up	1	18MAR09 02:00	18MAR09 02:59	PJ
38024655	GL-2008/06	GL-2008-01 P-6 NDE Fit Up Inspection	1	18MAR09 03:00	18MAR09 03:59	EN
38024655	GL-2008/06	GL-2008-01 P-6 Weld Vent Valve	8	18MAR09 04:00	18MAR09 11:59	PJ
38024655	GL-2008/06	GL-2008-01 P-6 NDE Weld Inspection	1	18MAR09 12:00	18MAR09 12:59	EN
38024655	GL-2008/06	GL-2008-01 P-6 Install EDM Pipe Bracket	1	18MAR09 13:00	18MAR09 13:59	PJ
38024655	GL-2008/06	GL-2008-01 P-6 EDM	2	18MAR09 18:00	18MAR09 19:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15, P-16, & P-17 Set Up Work Area	5	20MAR09 14:00	20MAR09 18:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15 Install EDM Pipe BRACKET	1	20MAR09 19:00	20MAR09 19:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15 EDM	2	20MAR09 20:00	20MAR09 21:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15 Vent Valve Fit Up	1	20MAR09 22:00	20MAR09 22:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15 NDE Fit Up Inspection	1	20MAR09 23:00	20MAR09 23:59	EN
38024656	GL-2008/15	GL-2008-01 P-15 Weld Vent Valve	8	21MAR09 00:00	21MAR09 07:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15 NDE Weld Inspection	1	21MAR09 08:00	21MAR09 08:59	EN
38024656	GL-2008/15	GL-2008-01 P-15 Remove Scaffold	5	21MAR09 09:00	21MAR09 13:59	PJ
38024656	GL-2008/15	GL-2008-01 P-15, P-16, & P-17 Demob Work Area	5	22MAR09 13:00	22MAR09 17:59	PJ
38024657	GL-2008/16	GL-2008-01 P-16 Install EDM Pipe BRACKET	1	21MAR09 09:00	21MAR09 09:59	PJ
38024657	GL-2008/16	GL-2008-01 P-16 EDM	2	21MAR09 10:00	21MAR09 11:59	PJ
38024657	GL-2008/16	GL-2008-01 P-16 Vent Valve Fit Up	1	21MAR09 12:00	21MAR09 12:59	PJ
38024657	GL-2008/16	GL-2008-01 P-16 NDE Fit Up Inspection	1	21MAR09 13:00	21MAR09 13:59	EN
38024657	GL-2008/16	GL-2008-01 P-16 Weld Vent Valve	8	21MAR09 14:00	21MAR09 21:59	PJ
38024657	GL-2008/16	GL-2008-01 P-16 NDE Weld Inspection	1	21MAR09 22:00	21MAR09 22:59	EN
38024657	GL-2008/16	GL-2008-01 P-16 Remove Scaffold	5	21MAR09 23:00	22MAR09 03:59	PJ
38024658	GL-2008/17	GL-2008-01 P-17 Install EDM Pipe BRACKET	1	21MAR09 23:00	21MAR09 23:59	PJ
38024658	GL-2008/17	GL-2008-01 P-17 EDM	2	22MAR09 00:00	22MAR09 01:59	PJ
38024658	GL-2008/17	GL-2008-01 P-17 Vent Valve Fit Up	1	22MAR09 02:00	22MAR09 02:59	PJ
38024658	GL-2008/17	GL-2008-01 P-17 NDE Fit Up Inspection	1	22MAR09 03:00	22MAR09 03:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38024658	GL-2008/17	GL-2008-01 P-17 Weld Vent Valve	8	22MAR09 04:00	22MAR09 11:59	PJ
38024658	GL-2008/17	GL-2008-01 P-17 NDE Weld Inspection	1	22MAR09 12:00	22MAR09 12:59	EN
38024658	GL-2008/17	GL-2008-01 P-17 Remove Scaffold	5	22MAR09 13:00	22MAR09 17:59	PJ
[redacted]						
38023601	GL-2008/30	GL-2008-VALVE INSTALATION ITOP PCM 08-067	1	21MAR09 09:00	21MAR09 09:59	PJ
38023601	GL-2008/30	GL-2008-VALVE INSTALATION SATS PCM 08-067	0	21MAR09 10:00	21MAR09 09:59	EN
38023601	GL-2008/30	GL-2008-01 P-30 Set Up Work Area	2	22MAR09 18:00	22MAR09 19:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Vent Valve Fit Up	1	22MAR09 20:00	22MAR09 20:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 NDE Fit Up Inspection	1	22MAR09 21:00	22MAR09 21:59	EN
38023601	GL-2008/30	GL-2008-01 P-30 Weld Vent Valve 1/4	2	22MAR09 22:00	22MAR09 23:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Weld Vent Valve 2/4	2	23MAR09 00:00	23MAR09 01:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Weld Vent Valve 3/4	2	23MAR09 02:00	23MAR09 03:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Weld Vent Valve 4/4	2	23MAR09 04:00	23MAR09 05:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 NDE Weld Inspection	1	23MAR09 06:00	23MAR09 06:59	EN
38023601	GL-2008/30	GL-2008-01 P-30 Install EDM Pipe Bracket	1	23MAR09 07:00	23MAR09 07:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 EDM	2	23MAR09 08:00	23MAR09 09:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Demob Work Area	3	23MAR09 10:00	23MAR09 12:59	PJ
38023601	GL-2008/30	GL-2008-01 P-30 Remove Scaffold	5	23MAR09 13:00	23MAR09 17:59	PJ
38023601	GL-2008/30	GL-2008-VALVE INSTALATION COMPLETE	0	23MAR09 18:00		PJ
[redacted]						
38026833	GL2008-Z01	GL 2008- Zones 1 SET UP TEM POWER	1	16MAR09 05:00	16MAR09 05:59	PJ
38026833	GL2008-Z01	GL 2008- HHSI - Zones 1, 16 SET UP TEM POWER	1	16MAR09 08:00	16MAR09 08:59	PJ
38026833	GL2008-Z01	GL 2008- HHSI - Zones 1, 16 SET EQUIP & ID PTS	1	16MAR09 08:00	16MAR09 08:59	PJ
38026833	GL2008-Z01	GL 2008- HHSI - Zones 1 REMOVE INSULATION	1	16MAR09 12:00	16MAR09 12:59	PJ
38026833	GL2008-Z01	GL 2008- HHSI - Zones 1 & 16 LADDER SUPPORT	1	16MAR09 12:00	16MAR09 12:59	PJ
38026836	GL2008-Z01	GL 2008- HHSI - Zones 1 & 16 UT	1	16MAR09 12:00	16MAR09 12:59	EN
38026833	GL2008-Z01	GL 2008- HHSI - Zones1 2 3 16 DEMOB ALL ZONES	1	16MAR09 14:00	16MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026833	GL2008-Z02	GL 2008- Zones 2 REMOVE INSULATION	1	16MAR09 04:00	16MAR09 04:59	PJ
38026834	GL2008-Z02	GL 2008- Zones 2 PERFORM UT	1	16MAR09 05:00	16MAR09 05:59	EN
38026833	GL2008-Z02	GL 2008- HHSI - Zones 2 REMOVE INSULATION	1	16MAR09 11:00	16MAR09 11:59	PJ
38026833	GL2008-Z02	GL 2008- HHSI - Zones 2 LADDER SUPPORT	1	16MAR09 11:00	16MAR09 11:59	PJ
38026836	GL2008-Z02	GL 2008- HHSI - Zones 2 UT	1	16MAR09 11:00	16MAR09 11:59	EN
38026833	GL2008-Z03	GL 2008- Zones 3,13,2 Set Equipt Up & ID Points	1	16MAR09 01:00	16MAR09 01:59	PJ
38026833	GL2008-Z03	GL 2008- Zones 6,3,13,2 SET UP TEM POWER	1	16MAR09 02:00	16MAR09 02:59	PJ
38026833	GL2008-Z03	GL 2008- Zones 3,13,2,16 SET UP TEM POWER	1	16MAR09 03:00	16MAR09 03:59	PJ
38026833	GL2008-Z03	GL 2008- Zones 3,13 REMOVE INSULATION	1	16MAR09 04:00	16MAR09 04:59	PJ
38026833	GL2008-Z03	GL 2008 ZONE 3,13, 2 REMOVE TRASH & EQUIP	1	16MAR09 05:00	16MAR09 05:59	PJ
38026834	GL2008-Z03	GL 2008- Zones 3,13 PERFORM UT	1	16MAR09 05:00	16MAR09 05:59	EN
38026833	GL2008-Z03	GL 2008- HHSI - OBTAIN RP BRIEFING	1	16MAR09 07:00	16MAR09 07:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - OBTAIN RP BRIEFING ENGINEERING	1	16MAR09 07:00	16MAR09 07:59	PJ
38023601	GL2008-Z03	GL 2008- P 30 RWST BUILD TENT	10	16MAR09 07:00*	16MAR09 16:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - Zones 2, 3 SET UP TEM POWER	1	16MAR09 08:00	16MAR09 08:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - Zones 2, 3 SET EQUIP & ID PTS	1	16MAR09 08:00	16MAR09 08:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - Zones 2, 3 SET LADDERS	1	16MAR09 08:00	16MAR09 08:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026833	GL2008-Z03	GL 2008- HHSI - Zones 1&16 SET LADDERS	1	16MAR09 08:00	16MAR09 08:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - Zones 3 REMOVE INSULATION	1	16MAR09 09:00	16MAR09 09:59	PJ
38026833	GL2008-Z03	GL 2008- HHSI - Zones 3 LADDER SUPPORT	1	16MAR09 09:00	16MAR09 09:59	PJ
38026836	GL2008-Z03	GL 2008- HHSI - Zones 3 UT	1	16MAR09 09:00	16MAR09 09:59	EN
38026833	GL2008-Z06	GL 2008- Zones 9 & 6 - SET UP TEM POWER	1	16MAR09 01:00	16MAR09 01:59	PJ
38026833	GL2008-Z06	GL 2008- Zones 9 & 6 Set Equipt Up & ID Points	1	16MAR09 01:00	16MAR09 01:59	PJ
38026833	GL2008-Z06	GL 2008- Zones 6 REMOVE INSULATION	1	16MAR09 02:00	16MAR09 02:59	PJ
38026834	GL2008-Z06	GL 2008- Zones 6 PERFORM UT	1	16MAR09 03:00	16MAR09 03:59	EN
38026833	GL2008-Z06	GL 2008 ZONE 6 REMOVE TRASH & EQUIP	1	16MAR09 05:00	16MAR09 05:59	PJ
38026833	GL2008-Z09	GL 2008- Zones 9 REMOVE INSULATION	1	16MAR09 02:00	16MAR09 02:59	PJ
38026834	GL2008-Z09	GL 2008- Zones 9 PERFORM UT	1	16MAR09 03:00	16MAR09 03:59	EN
38026833	GL2008-Z09	GL 2008 Tie Up Loose Ends On Temp Power	1	16MAR09 04:00	16MAR09 04:59	PJ
38026833	GL2008-Z09	GL 2008 Tie Up Loose Ends On Temp Power	1	16MAR09 05:00	16MAR09 05:59	PJ
38026833	GL2008-Z09	GL 2008 ZONE 9 REMOVE TRASH & EQUIP	1	16MAR09 05:00	16MAR09 05:59	PJ
38026834	GL2008-Z09	GL 2008 LETTER COMPLET RHR ZONES	1	16MAR09 07:00	16MAR09 07:59	PJ
38026833	GL2008-Z18	GL 2008 Final Clean Up Inspection	1	16MAR09 05:00	16MAR09 05:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026833	GL2008-Z16	GL 2008- Zones 16 REMOVE INSULATION	1	16MAR09 05:00	16MAR09 05:59	PJ
38026834	GL2008-Z16	GL 2008- Zones 16 PERFORM UT	1	16MAR09 06:00	16MAR09 06:59	EN
38026834	GL2008-Z16	GL 2008 - INITIAL UT On RHR COMPLETE	0		16MAR09 06:59	PJ
38026833	GL2008-Z16	GL 2008- HHSI - Zones 16 REMOVE INSULATION	1	16MAR09 12:00	16MAR09 12:59	PJ
38026833	GL2008-Z16	GL 2008- HHSI - Zones 3,2,1,16 DEMOB & CLEAN UP	1	16MAR09 14:00	16MAR09 14:59	PJ
38026833	GL2008-Z16	GL 2008- HHSI - Zones 3,2,1,16 DEMOB TEMP POWER	1	16MAR09 14:00	16MAR09 14:59	PJ
[redacted]						
36019856	MOV-3-744A	MOV-3-744A BOLTING 'B' - PERF.EXAMS	1	16MAR09 00:00	16MAR09 00:59	EN
38014469	MOV-3-744A	ERECT SCAFFOLD - MOV-744A MAINTENANCE	8	22MAR09 22:00	23MAR09 05:59	PJ
37020555	MOV-3-744A	MOV-3-744A: MTR REPLACMNT PMT STROKE	1	25MAR09 07:00	25MAR09 07:59	VT
38014469	MOV-3-744A	REMOVE SCAFFOLD - MOV-744A MAINTENANCE	3	25MAR09 08:00	25MAR09 10:59	PJ
[redacted]						
36019856	MOV-3-744B	MOV-3-744B BOLTING 'B' - PERF.EXAMS	1	16MAR09 00:00	16MAR09 00:59	EN
37024514	MOV-3-744B	ERECT SCAF & RIGGING BEAM - MOV-744B MAINT	8	22MAR09 22:00	23MAR09 05:59	PJ
37024514	MOV-3-744B	MOV-744B PMT STROKE	1	25MAR09 16:00	25MAR09 16:59	VT
37024514	MOV-3-744B	REMOVE SCAFFOLD - MOV-744B MAINTENANCE	3	25MAR09 17:00	25MAR09 19:59	PJ
[redacted]						
38013624	MOV-3-750	MOV-750(NORM RHR INL FROM RCS MOV) REMV INSUL	4	18MAR09 03:00	18MAR09 06:59	PJ
38013624	MOV-3-750	MOV-750 - PERFORM EXAMS	1	18MAR09 16:00	18MAR09 16:59	EN
38013624	MOV-3-750	MOV-750 (NORM RHR INL FROM RCS MOV) REST. INSUL	6	24MAR09 23:00	25MAR09 04:59	PJ
[redacted]						
38013624	MOV-3-751	MOV-751(NORM RHR INL FROM RCS MOV)REMV INSUL	4	17MAR09 23:00	18MAR09 02:59	PJ
38013624	MOV-3-751	MOV-751(NORM RHR INL FROM RCS MOV) PERF EXAMS	1	18MAR09 03:00	18MAR09 03:59	EN
38013624	MOV-3-751	MOV-751(NORM RHR INL FROM RCS MOV)REST. INSUL	10	24MAR09 13:00	24MAR09 22:59	PJ
[redacted]						
38014532	MOV-3-860A	MOV-860A GREASE INSPECTION / STEM LUBE	4	17MAR09 09:00	17MAR09 12:59	VT
38014532	MOV-3-860A	MOV-860A PMT STROKE - GREASE INSPECTION	1	17MAR09 13:00	17MAR09 13:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014534	MOV-3-860B	EQ-MOV-860B GREASE INSP / STEM LUBE	4	17MAR09 09:00	17MAR09 12:59	VT
38014534	MOV-3-860B	EQ-MOV-860B - PMT STROKE	1	17MAR09 13:00	17MAR09 13:59	VT
38014536	MOV-3-861A	MOV-3-861A: PMT STROKE	1	16MAR09 21:00	16MAR09 21:59	VT
38014538	MOV-3-861B	MOV-3-861B: PMT STROKE	1	27MAR09 01:00	27MAR09 01:59	VT
38014538	MOV-3-861B	MOV-861B OP INSP - REM SCAFFOLD	4	27MAR09 02:00	27MAR09 05:59	PJ
38014546	MOV-3-862A	MOV-3-862A ERECT SCAFFOLD	6	21MAR09 17:00	21MAR09 22:59	PJ
38014546	MOV-3-862A	MOV-862A RHR SUCT - OVERHAUL OPERATOR	20	22MAR09 09:00*	23MAR09 04:59	VT
38014546	MOV-3-862A	MOV-862A RHR SUCT - CYCLE MOV-PMT	1	24MAR09 09:00	24MAR09 09:59	VT
38014546	MOV-3-862A	MOV-3-862A REMOVE SCAFFOLD	3	05APR09 00:00	05APR09 02:59	PJ
38014549	MOV-3-862B	MOV-862B RHR SUCT - CYCLE MOV-PMT	1	25MAR09 11:00	25MAR09 11:59	VT
38014549	MOV-3-862B	MOV-3-862B REMOVE SCAFFOLD	3	05APR09 00:00	05APR09 02:59	PJ
38014551	MOV-3-863A	PMT - MOV-863A RHR PP RECIRC TO RWST - CYCLE MOV	1	21MAR09 11:00	21MAR09 11:59	VT
38014554	MOV-3-863B	PMT - RHR RECIRC MOV-863B - CYCLE MOV	1	21MAR09 18:00	21MAR09 18:59	VT
38014564	MOV-3-872	PMT - T.S. MOV-872 - OPERATOR INSP PMT STROKE	1	21MAR09 01:00	21MAR09 01:59	VT
38012325	P54	CONT RECIRC SUMP-INST FME COVERS AT OUTAGE START	8	17MAR09 03:00	17MAR09 12:59	MM
38012325	P54	CONT RECIRC SUMPS - PERFORM INSP IAW 0-SMM-050.1	5	26MAR09 19:00*	26MAR09 23:59	MM
38012325	P54	CONT RECIRC SUMPS N&S-PERF REPAIRS IAW SMM-050.1	10	04APR09 00:00	04APR09 11:59	MM
38012325	P54	CONT RECIRC SUMP-PERF FINAL INSP IAW 0-SMM-050.1	4	04APR09 12:00	04APR09 15:59	MM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
[illegible]						
38026835	SCAN GL	GL-2008-01 AREVA SCAN RHR AND HHSI	2	16MAR09 15:00	16MAR09 16:59	PJ
38026835	SCAN GL	GL-2008-01 AREVA SCAN RHR AND HHSI	85	17MAR09 07:00	20MAR09 19:59	PJ
38026835	SCAN GL	GL-2008-01 Install Scan Targets To Support AREVA	85	17MAR09 07:00	20MAR09 19:59	PJ
[illegible]						
38012179	SNU-1111	SNUB-RHR SYS O/S BIO WALL @ RX SUMP-AS FD VISUAL	1	21MAR09 07:00*	21MAR09 07:59	EN
38012179	SNU-1111	SNUB-RHR SYS O/S BIO WALL @ RX SUMP-HANDSTROKE	1	21MAR09 07:00	21MAR09 07:59	EN
[illegible]						
38012179	SNU-1112	SNUB-RHR SYS O/S BIO WALL @ PER HTCH - AS FD VIS	1	21MAR09 08:00	21MAR09 08:59	EN
38012179	SNU-1112	SNUB-RHR SYS O/S BIO WALL @ PER HTCH-HD STROKE	1	21MAR09 08:00	21MAR09 08:59	EN
[illegible]						
34022607	3-90-024	S/G A BLOWDOWN CNTL VLV INLET ISO VLV 007	20	03APR09 03:00	04APR09 00:59	PJ
[illegible]						
38013686	3H10	3H10 JIB CRANE INSP - ELECTRICAL	8	16MAR09 15:00	16MAR09 22:59	PJ
38013686	3H10	3H10 JIB CRANE INSP - MECHANICAL	8	16MAR09 23:00	17MAR09 08:59	PJ
[illegible]						
38013632	3H200	(P) MANIP CABS & PWR PNL TO MANIP CRN (3 PICKS)	2	17MAR09 12:00	17MAR09 13:59	PJ
38013632	3H200	(P) AIR SUPPLY HOSES(H)	2	17MAR09 14:00	17MAR09 15:59	PJ
38013632	3H200	(P) MANIPULATOR CRANE AIR HOSES BOX	1	17MAR09 19:00	17MAR09 19:59	PJ
[illegible]						
38013837	3H3	(P)POLAR CRANE (INITIAL INSP)SETUP TEMP LIGHT(H)	2	16MAR09 03:00	16MAR09 04:59	PJ
37019441	3H3	POLAR CRANE - INSTALL RESCUE DEVICE ANCHOR	2	16MAR09 03:00	16MAR09 04:59	PJ
38013675	3H3	(P) POLAR CRANE-PERFORM PRE-SERVICE INITIAL INSP	14	16MAR09 03:00	16MAR09 16:59	PJ
38013804	3H3	POLAR CRANE - POST-OPERATION INSPECTION	10	04APR09 18:00	05APR09 03:59	PJ
37019441	3H3	POLAR CRANE - REMOVE RESCUE DEVICE ANCHOR	2	04APR09 20:00	04APR09 21:59	PJ
[illegible]						
38013286	3H6	CTMT ELEV - ASSIST VENDOR W/ANNUAL INSP IF REQD	6	17MAR09 07:00	17MAR09 12:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013286	3H6	CTMT ELEV - VENDOR PERFORM ANNUAL INSPECTION	6	17MAR09 07:00*	17MAR09 12:59	EM
38013286	3H6	CTMT ELEV - CLOSE VENDOR ASSIST W/O @ CTMT CLOSE	1	04APR09 16:00	04APR09 16:59	EM
38013628	3S10	CTMT EQUIPMENT HATCH - OPEN AT OUTAGE START	2	16MAR09 15:00	16MAR09 16:59	PJ
38013804	3S10	CTMT EQUIPMENT HATCH - OPEN AT OUTAGE START	0		16MAR09 16:59	PJ
38013628	3S10	(R)EQUIP HATCH - INSTALL HANDRAILS	1	16MAR09 17:00	16MAR09 17:59	PJ
38013628	3S10	EQUIP HATCH OPEN - INSTALL GRATING	1	16MAR09 17:00	16MAR09 17:59	PJ
38013628	3S10	CTMT EQUIPMENT HATCH - PERF CLOSURE TEST (MIDS)	1	16MAR09 21:00	16MAR09 21:59	PJ
38013628	3S10	CTMT EQUIPMENT HATCH - PERF CLOSURE TEST (DAYS)	1	17MAR09 08:00	17MAR09 08:59	PJ
38013628	3S10	HATCH CLOSE - INSPECT & CLEAN MATING SURFACES	10	04APR09 06:00	04APR09 15:59	PJ
38013628	3S10	EQUIP HATCH -REMOVE HANDRAILS	4	04APR09 12:00	04APR09 15:59	PJ
38013628	3S10	CTMT EQUIPMENT HATCH - CLOSE AT OUTAGE END	2	04APR09 16:00	04APR09 17:59	PJ
38013628	3S10	CTMT EQ HATCH OPEN/CLOSE - CLOSE WO 38013628-01	1	04APR09 18:00	04APR09 18:59	PJ
38013632	3T200	(R) PZR HEPA FILTER - STAGE @ EQ HATCH C ZONE	1	16MAR09 03:00	16MAR09 03:59	PJ
38013632	3T200	(P)INST 1600 CFM HEPA FILTER BY PZR @ 58 FT(J)	1	17MAR09 19:00	17MAR09 19:59	PJ
38013632	3T200	(P) HEPA FILTER FOR PRZ - REM FROM CTMT	1	31MAR09 09:00	31MAR09 09:59	PJ
38013632	3T200	(R) PZR HEPA FILTER - REM FROM RAMP TO STORAGE	1	31MAR09 10:00	31MAR09 10:59	PJ
38013632	3T237	(P) RX CREW RIGGING BOX TO 58' (BOX 7)	1	16MAR09 23:00	16MAR09 23:59	PJ
38013632	3T237	(P) RX CAVITY UNDERWATER DROP LIGHTS TO 58'	1	17MAR09 00:00	17MAR09 00:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	3T237	(P) POLAR CRANE LOAD CELL & LINK TO 58' (2)PICKS	1	17MAR09 01:00	17MAR09 01:59	PJ
38013632	3T237	(P) RX HEAD MIRROR INSULATION RACK #1 TO 58'	1	17MAR09 09:00	17MAR09 09:59	PJ
38013632	3T237	(P) RX HEAD MIRROR INSULATION RACK #2 TO 58'	1	17MAR09 10:00	17MAR09 10:59	PJ
38013632	3T237	(P) MOVE RP DESK TO 58'	1	17MAR09 11:00	17MAR09 11:59	PJ
38013632	3T237	(P) RX HEAD HOIST (4), 2 PER STAND, TO 58	2	17MAR09 11:00	17MAR09 12:59	PJ
38013632	3T237	(P) RX CAVITY SEAL RING HARDWARE BOX TO 58'	1	17MAR09 13:00	17MAR09 13:59	PJ
38013632	3T237	(P) AIR HOSES & AIR WHIP BOX(H)	1	17MAR09 13:00	17MAR09 13:59	PJ
38013632	3T237	(P) RX CAVITY SEAL RING RUBBER BOX TO 58'	1	17MAR09 14:00	17MAR09 14:59	PJ
38013632	3T237	(P) RX HEAD STUD EXTENTION STANDS-MAILBOXES(H)	1	17MAR09 15:00	17MAR09 15:59	PJ
38013632	3T237	(P) RX STUDS RUNNING/TURNOUT TOOL BOX	1	17MAR09 16:00	17MAR09 16:59	PJ
38013632	3T237	(P) MOVE HP CABINET & EQUIPMENT TO 58'	1	17MAR09 16:00	17MAR09 16:59	PJ
38013632	3T237	(P) RX HEAD STUD TENSIONER HOSE BOX	1	17MAR09 17:00	17MAR09 17:59	PJ
38013632	3T237	(P) RX STUD TENSIONERS & EPN BOX TO 58'	2	17MAR09 17:00	17MAR09 18:59	PJ
38013632	3T237	(P) 8 RX HEAD STUD RACKS - FLY TO 58'	3	17MAR09 18:00	17MAR09 20:59	PJ
38013632	3T237	(R) STUD HOLE CLEANING TOOL-JIB HOIST	1	17MAR09 20:00	17MAR09 20:59	PJ
38013632	3T237	(P) OPS UNLATCH TOOL PLACE IN RX CAVITY ON N WAL	1	18MAR09 03:00	18MAR09 03:59	PJ
38013632	3T237	(P) BUTTON HEIGHT TOOL TO 58' NEAR C ECF	1	18MAR09 04:00	18MAR09 04:59	PJ
38013632	3T237	(P) T - HANDLES FOR UPPER INTERNALS	1	18MAR09 10:00	18MAR09 10:59	PJ
38013632	3T237	(P) AREVA UNDERWATER CAMERA BOX	1	18MAR09 17:00	18MAR09 17:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	3T237	(P) RX HEAD STAND LEAD SHIELDING BOX 58' BY RX	1	19MAR09 01:00	19MAR09 01:59	PJ
38013632	3T237	(P) FLY RX STUD RACKS TO EQUIPMENT HATCH	5	19MAR09 08:00	19MAR09 12:59	PJ
38021982	3T237	(P) WESTINGHOUSE FLOW RESTR LONG TOOLS TO 58'	1	21MAR09 03:00	21MAR09 03:59	PJ
38021982	3T237	(P) WESTINGHOUSE FLOW RESTR TOOL BOXES TO 58'	1	21MAR09 04:00	21MAR09 04:59	PJ
38021982	3T237	(P) FLY DRUM FOR FLOW RESTRICTOR TO 58'	1	21MAR09 04:00	21MAR09 04:59	PJ
38021982	3T237	(P) REMOVE FLOW RESTRICTOR DRUM FROM CTMT	1	25MAR09 10:00	25MAR09 10:59	PJ
38021982	3T237	(P) RMV WESTINGHOUSE FLOW RESTR TOOL BOXES	1	25MAR09 11:00	25MAR09 11:59	PJ
38021982	3T237	(P) RMV WESTINGHOUSE FLOW RESTR LONG TOOLS	1	25MAR09 12:00	25MAR09 12:59	PJ
38013632	3T237	(P) FLY RX STUD RACKS BTWN HATCH & CAVITY	10	29MAR09 19:00	30MAR09 04:59	PJ
38013632	3T237	(R) STUD TRANSPORT RACKS - RAMP TO STORAGE	6	30MAR09 07:00	30MAR09 12:59	PJ
38013632	3T237	(P) MOVE CRDS LATCH TOOLS TO RAMP	1	30MAR09 11:00	30MAR09 11:59	PJ
38013632	3T237	(P) MOVE RX HEAD INSUL RACKS TO RAMP (2)	1	31MAR09 10:00	31MAR09 10:59	PJ
38013632	3T237	(P) UPPER CAVITY LADDER CAGE REMOVE FROM CTMT	1	01APR09 15:00	01APR09 15:59	PJ
38013632	3T237	(P) STUD TNSNR A/SUP HOSE BX - MOVE OUT OF CTMT	1	03APR09 03:00	03APR09 03:59	PJ
38013283	480 LARGE1	(P) 480V LC LARGE B S/G FW LINE INTO CNTMT(J)	1	16MAR09 19:00	16MAR09 19:59	PJ
38013283	480 LARGE1	(P) 480V LC LARGE B S/G FW LINE OUT OF CNTMT(J)	1	03APR09 00:00	03APR09 00:59	PJ
38013283	480 LARGE2	(P) 480V LC LARGE TO CONTAINMENT (J)	1	16MAR09 18:00	16MAR09 18:59	PJ
38013283	480 LARGE2	(P) 480V LC LARGE FROM CNTM TO RAMP(J)	1	03APR09 01:00	03APR09 01:59	PJ
38013283	480 SMALL1	(P) 480V LC SMALL TO 58' BY D NCC (J)	1	16MAR09 20:00	16MAR09 20:59	PJ
38013283	480 SMALL1	(P) 480V LC SMALL FROM CNTMT TO RAMP(J)	1	03APR09 02:00	03APR09 02:59	PJ
38013283	480 SMALL2	(P) 480V LC SMALL 58' BY C ECF(J)	1	16MAR09 20:00	16MAR09 20:59	PJ
38013283	480 SMALL2	(P) 480 VLC SMALL TO RAMP(J)	1	03APR09 03:00	03APR09 03:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37025664	AREA1IB	CONT. COATNGS 14',BUILD ENCLSR,AREA 1 INSIDE BIO	40	17MAR09 23:00	19MAR09 18:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',PREP FLOOR,AREA 1 INSIDE BIO	50	19MAR09 19:00	22MAR09 00:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',PRIME FLOOR,AREA 1 INSIDE BIO	10	22MAR09 01:00	23MAR09 12:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',CURE TIME,AREA 1 INSIDE BIO	10	23MAR09 13:00	23MAR09 22:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',2nd INSP,AREA 1 INSIDE BIO	2	23MAR09 23:00	24MAR09 00:59	QC
37025664	AREA1IB	CONT. COATNGS 14',COAT FLOOR,AREA 1 INSIDE BIO	10	23MAR09 23:00	24MAR09 10:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',CURE TIME,AREA 1 INSIDE BIO	10	24MAR09 11:00	24MAR09 20:59	PJ
37025664	AREA1IB	CONT. COATNGS 14',DEMOB ENCLSR,AREA 1 INSIDE BIO	10	24MAR09 21:00	25MAR09 08:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',BUILD ENCLSR,AREA 2 INSIDE BIO	40	22MAR09 01:00	24MAR09 20:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',PREP FLOOR,AREA 2 INSIDE BIO	50	24MAR09 21:00	27MAR09 02:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',PRIME FLOOR,AREA 2 INSIDE BIO	10	27MAR09 03:00	27MAR09 14:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',CURE TIME,AREA 2 INSIDE BIO	10	27MAR09 15:00	28MAR09 00:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',2nd INSP,AREA 2 INSIDE BIO	2	28MAR09 01:00	28MAR09 02:59	QC
37025664	AREA2IB	CONT. COATNGS 14',COAT FLOOR,AREA 2 INSIDE BIO	10	28MAR09 01:00	28MAR09 12:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',CURE TIME,AREA 2 INSIDE BIO	10	28MAR09 13:00	28MAR09 22:59	PJ
37025664	AREA2IB	CONT. COATNGS 14',DEMOB ENCLSR,AREA 2 INSIDE BIO	10	28MAR09 23:00	30MAR09 10:59	PJ
37025664	AREA30	CONT. COATNGS 30'-6,PREP AND COAT	332	16MAR09 15:00	02APR09 16:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',BUILD ENCLSR,AREA 3 INSIDE BIO	40	27MAR09 03:00	28MAR09 22:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',PREP FLOOR,AREA 3 INSIDE BIO	55	28MAR09 23:00	01APR09 11:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',PRIME FLOOR,AREA 3 INSIDE BIO	10	01APR09 12:00	01APR09 21:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',CURE TIME,AREA 3 INSIDE BIO	10	01APR09 22:00	02APR09 09:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',2nd INSP,AREA 3 INSIDE BIO	2	02APR09 10:00	02APR09 11:59	QC
37025664	AREA3IB	CONT. COATNGS 14',COAT FLOOR,AREA 3 INSIDE BIO	10	02APR09 10:00	02APR09 19:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',CURE TIME,AREA 3 INSIDE BIO	10	02APR09 20:00	03APR09 07:59	PJ
37025664	AREA3IB	CONT. COATNGS 14',DEMOB ENCLSR,AREA 3 INSIDE BIO	4	03APR09 08:00	03APR09 11:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
[illegible]						
37025664	AREA58	CONT. COATNGS 58', PREP AND COAT	332	16MAR09 15:00	02APR09 16:59	PJ
[illegible]						
38012177	CLIPS	GRATING CLIPS INSIDE CTMT- CLOSE WO 38012177-01	4	04APR09 18:00	04APR09 21:59	PJ
[illegible]						
38013632	CNT RG TB	(R) RIGGING BOX PLACE @ EQUIP HATCH C ZONE	1	16MAR09 18:00*	16MAR09 18:59	PJ
38013632	CNT RG TB	(R) RAMP CREW HEADSETS/SUPPLIES	1	16MAR09 18:00	16MAR09 18:59	PJ
38013632	CNT RG TB	(R) EQUIP HATCH FAST CLOSURE FOOTLOCKER BOX	1	16MAR09 18:00	16MAR09 18:59	PJ
38013632	CNT RG TB	(P) REMOVE RIGGING BOX FROM CONT TO RAMP	1	03APR09 05:00	03APR09 05:59	PJ
[illegible]						
37025664	COAT	CONTAINMENT COATINGS 14', SET-UP/MOBILIZE, P1	9	16MAR09 15:00	16MAR09 23:59	PJ
37025664	COAT	CONTAINMENT COATINGS 14', SET-UP/MOBILIZE, P2	15	17MAR09 08:00	17MAR09 22:59	PJ
37025664	COAT	CONTAINMENT COATINGS INITIAL WALKDOWN	10	20MAR09 07:00	20MAR09 16:59	PJ
37025664	COAT	CONTAINMENT COATINGS FINAL WALKDOWN	10	03APR09 07:00*	03APR09 16:59	PJ
[illegible]						
38013282	CT TMP PWR	PROVIDE TEMP POWER 4-GME-102.16	100	16MAR09 18:00	20MAR09 21:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP - WIRE WMS&LANE ON 58' ELEV.	18	16MAR09 21:00	17MAR09 16:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP -WIRE SPIDERS ON ELEV 14'-0"	18	17MAR09 17:00	18MAR09 12:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR CABLE-ENERGIZE FEED TO CTMT	4	18MAR09 13:00	18MAR09 16:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR CABLE-DEENERGIZE FEED TO CTMT	2	30MAR09 07:00	30MAR09 08:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR CABLE-ROLLBACK 4/0 TO 200A DISC	6	30MAR09 09:00	30MAR09 14:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP REMV FEED TO SPIDER (30'-6")	6	30MAR09 15:00	30MAR09 20:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP REMV FEED TO SPIDER (14'-0")	6	30MAR09 15:00	30MAR09 20:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR - REMV 200A DISCONN/XFER SWTCH	4	30MAR09 21:00	31MAR09 00:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP - REMV WMS&LANE ON 58' ELEV.	4	30MAR09 21:00	31MAR09 00:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP -REMV SPIDERS ON ELEV 30'-6"	4	31MAR09 01:00	31MAR09 04:59	PJ
38013283	CT TMP PWR	CTMT TEMP PWR EQUIP -REMV SPIDERS ON ELEV 14'-0"	4	31MAR09 01:00	31MAR09 04:59	PJ
38013283	CT TMP PWR	(R) CTMT TEMP PWR EQUIP - REM FROM RAMP TO DSW	4	31MAR09 01:00	31MAR09 04:59	PJ
38013282	CT TMP PWR	CTMT TEMP PWR CABLE-- ROLLBACK OUTSIDE CTMT	12	31MAR09 07:00	31MAR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013283	CT TMP PWR	CTMT TEMP PWR CABLE– CLOSE W.O. 38013283 01	12	03APR09 04:00	03APR09 17:59	PJ
38013282	CT TMP PWR	CTMT T/PWR CBL OTSD CTMT - CLOSE WO 38013282-01	1	07APR09 20:00	07APR09 20:59	PJ
[illegible]						
39005092	CTMT A/C	CONT A/C - INSTL/MNTN DRIP PAN "DIAPER" SEAL TBL	36	16MAR09 08:00	17MAR09 19:59	PJ
39005092	CTMT A/C	CONT A/C - MAINTAIN DRIP PAN "DIAPER"	325	17MAR09 08:00	03APR09 00:59	PJ
39005092	CTMT A/C	CONT A/C - INSTL/MNTN DRIP PAN "DIAPER" ON 30'6	36	17MAR09 20:00	19MAR09 07:59	PJ
38021917	CTMT A/C	CONT A/C - INSULATE NCC/CCW LINES	80	18MAR09 20:00	23MAR09 11:59	PJ
39005092	CTMT A/C	CONT A/C - INSTL/MAINTAIN DRIP PAN "DIAPER" 14FT	15	19MAR09 08:00	19MAR09 22:59	PJ
38021917	CTMT A/C	CONT A/C - REMOVE INSULATION CC/CCW LINES	10	30MAR09 09:00	30MAR09 18:59	PJ
39005092	CTMT A/C	CONT A/C - REMOVE DRIP PAN "DIAPER"	12	03APR09 01:00	03APR09 14:59	PJ
[illegible]						
N.REQ	CTMT-PRE	PRE CTMT CLOSEOUT INSP BY PROJ SUPV 0-SMM-051.3	4	02APR09 12:00	02APR09 15:59	PJ
N.REQ	CTMT-PRE	PRE CTMT CLOSEOUT INSP BY ELECT SUPV 0-SMM-051.3	4	02APR09 12:00	02APR09 15:59	EM
[illegible]						
38013632	CTMTHRBOX	(P) MOVE CTMT HAND RAIL BOX TO CTMT 58 FT(H)	1	16MAR09 18:00	16MAR09 18:59	PJ
38013632	CTMTHRBOX	(P) REMOVE CTMT HAND RAIL BOX FROM CTMT	1	01APR09 12:00	01APR09 12:59	PJ
[illegible]						
38021917	CTMTINSUL	INSUL REPRS IN CTMT - WALKDOWN & DEVELOP LIST	16	23MAR09 07:00*	23MAR09 22:59	PJ
38021917	CTMTINSUL	INSUL REPRS - INFORM ALARA OF NEW INSUL REPAIRS	1	24MAR09 03:00	24MAR09 03:59	PJ
[illegible]						
38013632	ENG BOX	AREVA UNDERWATER CAMERA BOX TO RAMP - JIB HOIST	1	30MAR09 07:00	30MAR09 07:59	PJ
[illegible]						
38013632	HEPA CONO	(P)STAGE HEPA/HOSES FOR RX HD WORK/CETNA RMVL(H)	2	17MAR09 11:00	17MAR09 12:59	PJ
38013632	HEPA CONO	(P) HEPA FOR CETNA REMOVAL - REM FROM CTMT	1	31MAR09 11:00	31MAR09 11:59	PJ
38013632	HEPA CONO	(R) HEPA FOR CETNA REM-REM FROM RAMP TO STRG	1	04APR09 18:00	04APR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	HEPA DTNSN	(P) 2 HEPA FILTERS TO 58' FOR DETENSIONING	1	17MAR09 16:00	17MAR09 16:59	PJ
38013632	HEPA DTNSN	(P) 2000 CFM CHARCOAL HEPA FOR IODINE/HEAD LIFT	1	17MAR09 16:00	17MAR09 16:59	PJ
38013632	HEPA DTNSN	(P) HEPA FLTRS FOR DETNSNG - REM FROM CTMT	1	03APR09 02:00	03APR09 02:59	PJ
38013632	NCC TL BOX	(P) NCC STEPS & FME COVERS(H)	1	18MAR09 00:00	18MAR09 00:59	PJ
38013632	NCC TL BOX	(P) NCC TOOL BOX(WHITE) -	1	18MAR09 03:00	18MAR09 03:59	PJ
38013632	NCC TL BOX	(P) NCC TOOL BOX(WHITE) - MOVE OUT OF CTMT	1	03APR09 20:00	03APR09 20:59	PJ
38013632	NCC TL BOX	(R) NCC TOOL BOX(WHITE) - RAMP TO STORAGE	1	04APR09 18:00	04APR09 18:59	PJ
38013626	PEN65A	PEN #65A - INSTALL TEMP AIR LINE SPOOL PIECE	10	16MAR09 15:00	17MAR09 00:59	PJ
38013626	PEN65A	PEN #65A - REMOVE TEMP AIR LINE SPOOL PIECE	10	01APR09 22:00	02APR09 07:59	PJ
38011824	PS-3-2007	PS-2007,PS-2056 CONTAINMENT PRESS SW CH I CALS	8	20MAR09 16:00	21MAR09 15:59	IC
38011827	PS-3-2008	PS-2008,PS-2057 CONTAINMENT PRESS SW CH II CALS	8	21MAR09 16:00	21MAR09 23:59	IC
38011826	PS-3-2009	PS-2009,PS-2058 CONTAINMENT PRESS SW CH III CALS	8	22MAR09 00:00	22MAR09 21:59	IC
38013632	RCP EH JH	(R) EQ HATCH JIB HOISTS BOX-RAMP TO STORAGE	1	04APR09 18:00	04APR09 18:59	PJ
38013632	RCPTOOLBOX	(R) RCP HAND TOOL BOXES (3)	1	17MAR09 13:00	17MAR09 13:59	PJ
38013632	RCPTOOLBOX	(P) RCP TOOL BOX AND SEAL BOX	1	17MAR09 14:00	17MAR09 14:59	PJ
38013632	RCPTOOLBOX	(P) RCP MTR TOOL BOX REMOVE FROM CTMT	1	03APR09 04:00	03APR09 04:59	PJ
38013632	RSELNGROD	(P) MOVE STUD ELONGATION ROD BOX TO UPPER CAVITY	1	30MAR09 05:00	30MAR09 05:59	PJ
38013632	RSELNGROD	(P) STUD ELONGATION ROD BOX - REM FROM CTMT	1	31MAR09 08:00	31MAR09 08:59	PJ
38013632	RSHP DRUM	(P) STUD HOLE PLUG DRUM TO 58'(J)	1	17MAR09 15:00	17MAR09 15:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	RSHP DRUM	(P) STUD HOLE PLUG DRUM - REMOVE FROM CTMT	1	30MAR09 10:00	30MAR09 10:59	PJ
[illegible]						
38013632	RV-3-551*	(R) RV-*-551, NEW PZR SAFTIES - STAGE @ EQ HATCH	1	23MAR09 02:00*	23MAR09 02:59	PJ
38013632	RV-3-551*	(P) RV-3-551, NEW PZR SAFTIES - TO 58 FT	1	23MAR09 03:00	23MAR09 03:59	PJ
[illegible]						
38013632	RX STD ACC	(R) STUD RUNNER EQUIP & ACCSRY BOX -RAMP TO STRG	1	31MAR09 09:00	31MAR09 09:59	PJ
[illegible]						
38018070	RXLINER	Mobilize Equip in Cntmt	24	16MAR09 18:00	17MAR09 17:59	PJ
38018070	RXLINER	(R) Move WSS painting equip to ramp	2	17MAR09 18:00	17MAR09 19:59	PJ
38018070	RXLINER	(P) Move WSS RX LINER RIGGING TO CRANE PLATFORM	1	17MAR09 19:00	17MAR09 19:59	PJ
38018070	RXLINER	Rx Liner Paint - Mob Equip in Containment	18	17MAR09 20:00	18MAR09 13:59	PJ
38018070	RXLINER	PREP & PAINT THE LINER PLATE SCAFF ER	96	17MAR09 20:00	21MAR09 19:59	PJ
38018070	RXLINER	Rx Liner Paint - Rig baskets, install tent	60	18MAR09 14:00	21MAR09 01:59	PJ
38018070	RXLINER	Rx Liner Paint - Finalize tent, setup neg air	24	21MAR09 02:00	22MAR09 01:59	PJ
38018070	RXLINER	Rx Liner Paint - Abate Asbestos	12	22MAR09 02:00	22MAR09 13:59	PJ
38018070	RXLINER	Rx Liner Paint - Prep liner plate	160	22MAR09 14:00	29MAR09 05:59	PJ
38018070	RXLINER	WORK/MATERIAL STORAGE PLATFORM FOR RX LI SCAF SE	4	23MAR09 07:00	23MAR09 10:59	PJ
38018070	RXLINER	(P) Move WSS paint equip around containment	2	24MAR09 19:00	24MAR09 20:59	PJ
38018070	RXLINER	Rx Liner Paint - Prep liner plate - CONTACT QC	1	29MAR09 06:00	29MAR09 06:59	PJ
38018070	RXLINER	Rx Liner Paint - Alcohol wipe, apply primer coat	36	29MAR09 07:00	30MAR09 18:59	PJ
38018070	RXLINER	Rx Liner Paint - Cure primer coat	10	30MAR09 19:00	31MAR09 04:59	PJ
38018070	RXLINER	Rx Liner Paint - Inspect Primer - CONTACT QC	1	31MAR09 05:00	31MAR09 05:59	PJ
38018070	RXLINER	Rx Liner Paint - Apply top coat	24	31MAR09 06:00	01APR09 05:59	PJ
38018070	RXLINER	Rx Liner Paint - Inspect Top Coat - CONTACT QC	1	01APR09 06:00	01APR09 06:59	PJ
38018070	RXLINER	Rx Liner Paint - Clean up around area	12	01APR09 06:00	01APR09 17:59	PJ
38018070	RXLINER	PREP & PAINT THE LINER PLATE SCAFF RE	36	01APR09 07:00	02APR09 20:59	PJ
38018070	RXLINER	Rx Liner Paint - Demob area, exit containment	24	01APR09 18:00	02APR09 17:59	PJ
38018070	RXLINER	(P), Remove WSS paint equip from containment	2	02APR09 18:00	02APR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38018070	RXLINER	WORK/MATREIAL STORAGE PLATFORM FOR RX LI SCAF RE	4	02APR09 20:00	02APR09 23:59	PJ
38013632	TB IC 01	(R)I&C TOOL BOX - ROLL FM RAMP TO 30'6 EL.BY PZR	1	16MAR09 19:00	16MAR09 19:59	PJ
38013632	TB IC 02	(P) RVLMS BOX - FM RAMP TO CTMT 58' EL.	1	16MAR09 23:00	16MAR09 23:59	PJ
38013632	TB IC 02	(P) RVLMS BOX - FM RAMP TO CTMT 58' EL.	1	03APR09 04:00	03APR09 04:59	PJ
38013632	TB MM 02	(P) RX BLUE TOOL BOX TO 58' BY RX HD STAND	1	16MAR09 22:00	16MAR09 22:59	PJ
38013632	TB MM 02	(P) RX BLACK TOOL BOX TO 58'	1	17MAR09 00:00	17MAR09 00:59	PJ
38013632	TB MM 02	(R) GAS BOTTLE TRANSPORT CAGE	1	17MAR09 17:00	17MAR09 17:59	PJ
38013632	TB MM 02	(P) RX BLUE TOOL BOX MOVE FROM HEAD STAND	1	26MAR09 15:00	26MAR09 15:59	PJ
38013632	TB MM 02	(P) RX BLACK TOOL BOX TO RAMP	1	01APR09 13:00	01APR09 13:59	PJ
38013632	TB MM 02	(P) RX BLUE TOOL BOX TO RAMP	1	03APR09 05:00	03APR09 05:59	PJ
38013632	TB OP 01	(P) OPS TOOL BOX - MOVE TO 58'	1	18MAR09 04:00	18MAR09 04:59	PJ
38013632	TB OP 01	(P) OPS TOOL BOX - MOVE TO RAMP	1	03APR09 04:00	03APR09 04:59	PJ
38021917	TLAG	CONTAINMENT THERMOLAG & FLAMEMASTIC INSPECTION	10	16MAR09 17:00	17MAR09 02:59	PJ
38013632	TRI NUKE	(R)TRI-NUKE EQUIPMENT BOX & 3 PIGS' TO RAMP	1	16MAR09 17:00	16MAR09 17:59	PJ
38013839	TRI NUKE	(P)INSTALL TRI NUKE UNITS IN CAVITY (600 & 260)	1	18MAR09 02:00	18MAR09 02:59	PJ
38013839	TRI NUKE	(P) TRI-NUKE UNITS-REMOVE FROM CAVITY(600 & 260)	4	01APR09 04:00	01APR09 09:59	PJ
38013632	UP ENDER	(P) LOWER CAVITY LADDER TO 58'	1	17MAR09 21:00	17MAR09 21:59	PJ
38013632	UP ENDER	(P) LOWER CAVITY HANDRAIL SYSTEM BOX 40 TO 58'	1	17MAR09 21:00	17MAR09 21:59	PJ
38013632	UP ENDER	(P) LOWER CAVITY LADDER TO RAMP	1	01APR09 14:00	01APR09 14:59	PJ
38013632	UP ENDER	(P) LOWER CAVITY HANDRAIL SYSTEM BOX 40 TO RAMP	1	01APR09 14:00	01APR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013632	UWORNGRVBX	(P) U/WATER O-RING GROOVE BOX -MOVE INTO CTMT	1	27MAR09 13:00	27MAR09 13:59	PJ
38013632	UWORNGRVBX	(P) U/WATER O-RING GROOVE BOX -MOVE OUT OF CTMT	1	03APR09 03:00	03APR09 03:59	PJ
38013632	V&D BOX	(R) VENTS AND DRAIN BOX - HATCH TO STORAGE	1	03APR09 20:00	03APR09 20:59	PJ
36001335	3V20	PMT - 30663 - CONT PURGE EXH - STR MAINT	2	16MAR09 15:00	16MAR09 16:59	EM
38012089	POV-3-2600	POV-2600 PURGE SUPPLY POSITION CHECK	12	17MAR09 05:00	17MAR09 16:59	VT
38014445	POV-3-2600	POV-3-2600 - AS FD DIAG	6	19MAR09 20:00*	20MAR09 01:59	VT
38014446	POV-3-2600	POV-2600 CONT PURGE SUPPLY - DISASS ACTUATOR	16	20MAR09 12:00	21MAR09 03:59	VT
38014446	POV-3-2600	POV-2600 CONT PURGE SUPPLY - INSP ACTUATOR PARTS	12	21MAR09 04:00	21MAR09 17:59	VT
38014446	POV-3-2600	POV-2600 CONT PURGE SUPPLY-REPA / INST NEW PARTS	12	21MAR09 22:00*	22MAR09 11:59	VT
38014446	POV-3-2600	POV-2600 CONT PURGE SUPPLY - REASS ACT AFTER O/H	16	22MAR09 12:00	23MAR09 03:59	VT
34016626	POV-3-2600	POV-3-2600, REPAIR REG DIAPHRAGM LEAKS	6	23MAR09 14:00	23MAR09 19:59	VT
38014445	POV-3-2600	POV-3-2600 - CAL AOV & AS LEFT DIAG	8	23MAR09 20:00	24MAR09 03:59	VT
34016626	POV-3-2600	POV-3-2600, REG DIAPHRAGM COATINGS	20	26MAR09 07:00*	27MAR09 02:59	PJ
38014446	POV-3-2600	POV-3-2600 - REMOVE SCAFFOLD AFTER O/H	12	07APR09 00:00*	07APR09 13:59	PJ
38012089	POV-3-2601	POV-2601 PURGE SUPPLY POSITION CHECK	12	16MAR09 17:00	17MAR09 04:59	VT
38014447	POV-3-2601	POV-3-2601 ERECT SCAFFOLD FOR O/H	12	23MAR09 12:00*	23MAR09 23:59	PJ
38020877	POV-3-2601	CONTAINMENT PURGE SUPPly: POV-3-2601 -AS FD DIAG	5	28MAR09 01:00	28MAR09 07:59	VT
38014447	POV-3-2601	POV-2601 CONT PURGE SUPPLY - INSP ACTUATOR PARTS	12	29MAR09 10:00	29MAR09 21:59	VT
38014447	POV-3-2601	POV-2601 CONT PURGE SUPPLY-REPA / INST NEW PARTS	12	29MAR09 22:00	30MAR09 11:59	VT
38014447	POV-3-2601	POV-2601 CONT PURGE SUPPLY - REASS ACT AFTER O/H	16	30MAR09 12:00	31MAR09 03:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38020877	POV-3-2601	POV-3-2601 - CAL AOV & AS LEFT DIAG	8	31MAR09 14:00	31MAR09 21:59	VT
38014447	POV-3-2601	POV-3-2601 REMOVE SCAFFOLD AFTER O/H	12	31MAR09 22:00	01APR09 11:59	PJ
38012089	POV-3-2602	POV-2602 PURGE AIR RETURN O/S - POSITION CHECK	12	25MAR09 19:00*	26MAR09 08:59	VT
38012089	POV-3-2603	POV-2603 PURGE AIR RETURN POSITION CHECK	12	22MAR09 23:00	23MAR09 12:59	VT
38012088	POV-3-2603	PERFORM VALVE ACTUATOR CALIBRATION SCAF ERECT	4	29MAR09 01:00	29MAR09 04:59	PJ
38012088	POV-3-2603	POV-3-2603 AOV ACT/ACCESS CAL	6	29MAR09 13:00	29MAR09 18:59	VT
38012088	POV-3-2603	PREFORM VALVE ACTUATOR CALIBRATION SCAF REMOVE	4	30MAR09 07:00	30MAR09 10:59	PJ
34021270	SV-3-2805	REPLACE SEALTITE FLEX TO SV-3-2805	3	30MAR09 07:00	30MAR09 09:59	VT
38013705	3V30A	3V30A,B,C - LUBE ECC MOTOR	4	17MAR09 12:00*	17MAR09 15:59	EM
38013702	3V30C	3V30C TRANSPORT MTR & CANISTER ASSY TO HATCH	2	19MAR09 07:00	19MAR09 08:59	PJ
38013702	3V30C	3v30C DETERM & PREP FOR REMOVAL	10	19MAR09 07:00*	19MAR09 16:59	PJ
38013702	3V30C	3V30C TRANSPORT OLD MTR & CAN TO DRY STOR WRHSE	2	19MAR09 17:00	19MAR09 18:59	PJ
38013702	3V30C	3V30C INSTALL AND TERM OH MTR & CANISTER	8	19MAR09 17:00	20MAR09 00:59	PJ
38013702	3V30C	3V30C FINAL TERMINATIONS/RAYCHEM	4	20MAR09 04:00	20MAR09 09:59	PJ
38013702	3V30C	3V30C MOTOR OVERHAUL TOUCH UP PAINTING	35	20MAR09 10:00	21MAR09 22:59	PJ
38013702	3V30C	3V30C PMT VIBRATION TEST MOTOR	1	03APR09 01:00	03APR09 01:59	EN
38013702	3V30C	3V30C PMT FAN MOTOR MAINTENANCE	2	03APR09 01:00	03APR09 02:59	PJ
38013718	3V3A	3V3A,B,C: LUBE ECF MOTORS	4	17MAR09 12:00	17MAR09 15:59	EM
36019357	DPI-3-3413	INSP/FILL ECF FILTER MANOMETERS DPI-3413	3	20MAR09 23:00	21MAR09 15:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
[illegible]						
36019357	DPI-3-3414	INSP/FILL ECF FILTER MANOMETERS DPI-3414	3	20MAR09 17:00*	20MAR09 19:59	IC
[illegible]						
36019357	DPI-3-3415	INSP/FILL ECF FILTER MANOMETERS DPI-3415	3	20MAR09 20:00	20MAR09 22:59	IC
[illegible]						
38006757	FS-3-1422	PERFORM TRAIN A ECF FLOW SW/ AGASTAT CAL.	15	22MAR09 07:00	23MAR09 11:59	IC
38006757	FS-3-1422	PMT - TRAIN A ECF FLOW SW/ AGASTAT CAL.	15	24MAR09 23:00	25MAR09 13:59	IC
[illegible]						
38027393	SV-3-2909	SV-3-2909, TROUBLESHOOT INDICATION PROBLEMS	12	20MAR09 23:00	22MAR09 00:59	IC
[illegible]						
38005750	SV-3-2910	SV-3-2910, DUAL INDICATION	12	19MAR09 08:00*	20MAR09 09:59	IC
[illegible]						
38013808	3V1A	3V1A - INSTALL ROUGHING FILTERS	6	16MAR09 18:00	16MAR09 23:59	PJ
38013808	3V1A	3V1A - SQUIRREL CAGE ACCESS ERECT SCAFFLD	4	25MAR09 11:00	25MAR09 14:59	PJ
38013808	3V1A	3V1A - ERECT ACCESS SCAFFOLD FOR COOLER	4	26MAR09 01:00	26MAR09 04:59	PJ
38013808	3V1A	3V1A - 36 MONTH PM - ERECT SCAFFOLD	4	26MAR09 05:00	26MAR09 08:59	PJ
38013808	3V1A	3V1A - REMOVE ACCESS COVERS	4	26MAR09 09:00	26MAR09 12:59	PJ
38013808	3V1A	3V1A - SET UP HEPA	4	26MAR09 13:00	26MAR09 16:59	PJ
38013808	3V1A	3V1A - SET UP TEMP PWR	4	26MAR09 13:00	26MAR09 16:59	PJ
38013808	3V1A	3V1A - SUPPORT H.P. WITH A NCC DECON.	4	26MAR09 17:00	26MAR09 20:59	PJ
38013808	3V1A	3V1A DETERM MOTOR	10	26MAR09 17:00	27MAR09 02:59	PJ
38013808	3V1A	3V1A - REMOVE BELT GUARD/BELTS	8	26MAR09 21:00	27MAR09 04:59	PJ
38013808	3V1A	3V1A - RIGGING BEAM ERECT SCAFFLD	4	27MAR09 05:00	27MAR09 08:59	PJ
38013808	3V1A	UNBOLT 'A' MOTOR FOR REMOVAL	1	27MAR09 09:00	27MAR09 09:59	PJ
38013808	3V1A	(P) OLD "A" NCC MOTOR(FLY OUT)	1	27MAR09 10:00	27MAR09 10:59	PJ
38013808	3V1A	(P)REPLACE "A" NCC MOTOR(FLY IN)	1	27MAR09 11:00	27MAR09 11:59	PJ
38013808	3V1A	3V1A - PERFORM INITIAL VISUAL INSPECTION	1	27MAR09 12:00	27MAR09 12:59	PJ
38013808	3V1A	3V1A RETERM MOTOR	5	27MAR09 12:00	27MAR09 16:59	PJ
38013808	3V1A	3V1A - REPLACE BEARINGS	30	27MAR09 13:00	28MAR09 18:59	PJ
38013808	3V1A	3V1A - REPL ELECTROLUBERS/LUBE BEARINGS	6	28MAR09 19:00	29MAR09 00:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37022835	3V1A	3V1A - BRUSH CLEAN COILS	8	29MAR09 01:00	29MAR09 08:59	PJ
38013808	3V1A	3V1A - INSP/ ADJ/ REPR/ DAMPER	8	29MAR09 09:00	29MAR09 16:59	PJ
38013808	3V1A	3V1A - REINSTALL ACCESS COVERS	4	29MAR09 17:00	29MAR09 20:59	PJ
38013808	3V1A	3V1A - REPLC DRIVE BELTS/FAN GUARD	12	30MAR09 23:00	31MAR09 10:59	PJ
34020894	3V1A	PMT - 30518 - 3A NCC - LOOSE TERMINAL BOARD.	2	01APR09 03:00	01APR09 04:59	EM
36019904	3V1A	PMT - 30518 - 3A NCC - STR INSP	2	01APR09 03:00	01APR09 04:59	EM
38013808	3V1A	3V1A - RECHECK BELT TENSION POST RUN-IN	2	01APR09 04:00	01APR09 05:59	PJ
38013808	3V1A	3V1A - TOUCH-UP PAINT	2	01APR09 06:00	01APR09 07:59	PJ
38013808	3V1A	3V1A - 36 MONTH PM - REMOVE SCAFFOLD	3	01APR09 08:00	01APR09 10:59	PJ
38013808	3V1A	3V1A - SQUIRREL CAGE ACCESS REMOV SCAFFLD	3	01APR09 11:00	01APR09 13:59	PJ
38013808	3V1A	3V1A - REMOVE ACCESS SCAFFOLD FOR COOLER	3	01APR09 14:00	01APR09 16:59	PJ
38013808	3V1A	3V1A - 3A NCC REMV RIGGING BEAM	3	01APR09 17:00	01APR09 19:59	PJ
38013808	3V1A	3V1A - PMT- 3V1A 36 MONTH PM	1	01APR09 22:00	01APR09 22:59	PJ
38013808	3V1A	A NCC - CLOSE WO 38013808-01	1	01APR09 23:00	01APR09 23:59	PJ
38013808	3V1A	3V1A INSP/CLEAN - REMV ROUGHING FILTERS	2	02APR09 02:00	02APR09 03:59	PJ
38013809	3V1B	3V1B - INSTALL ROUGHING FILTERS	6	17MAR09 00:00	17MAR09 07:59	PJ
38013809	3V1B	3V1B - SQUIRREL CAGE ACCESS ERECT SCAFFLD	4	22MAR09 18:00*	22MAR09 21:59	PJ
38013809	3V1B	3V1B - ERECT ACCESS SCAFFOLD FOR COOLER	4	22MAR09 22:00	23MAR09 01:59	PJ
38013809	3V1B	3V1B - 36 MONTH PM - ERECT SCAFFOLD	4	23MAR09 02:00	23MAR09 05:59	PJ
38013809	3V1B	3V1B - REMOVE ACCESS COVERS	4	23MAR09 07:00	23MAR09 10:59	PJ
38013809	3V1B	3V1B - SET UP HEPA	4	23MAR09 11:00	23MAR09 14:59	PJ
38013809	3V1B	3V1B -SET UP TEMP PWR	4	23MAR09 11:00	23MAR09 14:59	PJ
38013809	3V1B	3V1B - SUPPORT H.P. WITH B NCC DECON	4	23MAR09 15:00	23MAR09 18:59	PJ
38011828	3V1B	3V1B RELAY: 10 YR INSPECTION	3	23MAR09 19:00	23MAR09 21:59	IC
38013809	3V1B	3V1B - REMOVE BELT GUARD/BELTS	8	23MAR09 19:00	24MAR09 02:59	PJ
38013809	3V1B	3V1B - LUBE NCC FAN BEARINGS	8	24MAR09 03:00	24MAR09 12:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013809	3V1B	3V1B - INSP/ADJ/REPR DAMPER	8	24MAR09 13:00	24MAR09 20:59	PJ
38013809	3V1B	3V1B - REINST ACCESS COVERS	4	24MAR09 21:00	25MAR09 00:59	PJ
38013809	3V1B	3V1B - REPLC DRIVE BELTS/FAN GUARD	12	25MAR09 01:00	25MAR09 14:59	PJ
38013809	3V1B	3V1B - TOUCH-UP PAINT	10	25MAR09 15:00	26MAR09 00:59	PJ
38013809	3V1B	3V1B - RECHECK BELT TENSION POST RUN-IN	2	28MAR09 00:00	28MAR09 01:59	PJ
38013809	3V1B	3V1B - 36 MONTH PM - REMOVE SCAFFOLD	3	28MAR09 02:00	28MAR09 04:59	PJ
38013809	3V1B	3V1B - SQUIRREL CAGE ACCESS REMOV SCAFFLD	3	28MAR09 05:00	28MAR09 07:59	PJ
38013809	3V1B	3V1B - REMOVE ACCESS SCAFFOLD FOR COOLER	3	28MAR09 08:00	28MAR09 10:59	PJ
38013809	3V1B	3V1B - PMT- 3V1B 36 MONTH PM	1	28MAR09 11:00	28MAR09 11:59	PJ
38013809	3V1B	B NCC - CLOSE WO 38013809 01	1	28MAR09 12:00	28MAR09 12:59	PJ
38013809	3V1B	3V1B - INSP/CLEAN - REMV ROUGHING FILTERS	2	02APR09 02:00	02APR09 03:59	PJ
38013843	3V1C	3V1C - ACCESS SQUIRREL CAGE ERECT SCAFFOLD	8	16MAR09 21:00	17MAR09 04:59	PJ
38013843	3V1C	3V1C - ERECT ACCESS SCAFFOLD FOR COOLER	8	16MAR09 21:00	17MAR09 04:59	PJ
38011303	3V1C	3V1C - MACHINE NEW SHAFT PER PCM 98-043	20	16MAR09 21:00*	17MAR09 16:59	PJ
38013843	3V1C	3V1C - INSTALL ROUGHING FILTERS	6	17MAR09 08:00	17MAR09 13:59	PJ
38013843	3V1C	3V1C - 36 MONTH PM - ERECT SCAFFOLD	4	18MAR09 01:00	18MAR09 04:59	PJ
38013843	3V1C	3V1C - REMOVE ACCESS COVERS	4	18MAR09 07:00	18MAR09 10:59	PJ
38013843	3V1C	3V1C - SET UP HEPA	4	18MAR09 11:00	18MAR09 14:59	PJ
38013843	3V1C	3V1C -SET UP TEMP PWR	4	18MAR09 11:00	18MAR09 14:59	PJ
38013843	3V1C	3V1C - SUPPORT H.P. WITH C NCC DECON	4	18MAR09 15:00	18MAR09 18:59	PJ
38013843	3V1C	3V1C DETERM MOTOR	10	18MAR09 15:00	19MAR09 00:59	PJ
38013843	3V1C	3V1C - REMV BELT GUARD/ BELTS	8	18MAR09 19:00	19MAR09 02:59	PJ
38013843	3V1C	3V1C - ERECT RIGGING BEAM FOR COOLER MTR	5	19MAR09 16:00	19MAR09 20:59	PJ
38025300	3V1C	3V1C - ERECT RIGGING BEAM FOR SHAFT REPLACEMENT	4	19MAR09 21:00	20MAR09 00:59	PJ
38013843	3V1C	UNBOLT 'C' MOTOR FOR REMOVAL	1	20MAR09 01:00	20MAR09 01:59	PJ
38025300	3V1C	3V1C - INSTALL COIL PROTECTION	2	20MAR09 01:00	20MAR09 02:59	PJ
38025300	3V1C	3V1C - BLOCKUP BLOWER WHEEL	2	20MAR09 03:00	20MAR09 04:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013843	3V1C	(P) FLY OUT OLD "C" NCC MOTOR	1	20MAR09 14:00	20MAR09 14:59	PJ
38013843	3V1C	(P) FLY IN "C" NCC MOTOR	1	20MAR09 15:00	20MAR09 15:59	PJ
38013843	3V1C	3V1C RETERM MOTOR	1	20MAR09 16:00	20MAR09 16:59	PJ
38013843	3V1C	3V1C - REMOVE OLD NCC FAN BEARINGS	6	20MAR09 16:00	20MAR09 21:59	PJ
38025300	3V1C	3V1C - RIG AND SUPPORT SHAFT	4	20MAR09 22:00	21MAR09 01:59	PJ
38013843	3V1C	3V1C - MODIFY/INSTAL NEW BEARINGS PER PCM 09-017	20	20MAR09 22:00	21MAR09 17:59	PJ
38025300	3V1C	3V1C - REMOVE SHAFT	6	21MAR09 02:00	21MAR09 07:59	PJ
38025300	3V1C	3V1C - RIG IN NEW SHAFT	4	21MAR09 08:00	21MAR09 11:59	PJ
38011303	3V1C	3V1C - INSTALL NEW SHAFT PCM 98-043	6	21MAR09 12:00	21MAR09 17:59	PJ
38011303	3V1C	3V1C - INSTALL NEW BEARINGS PER PCM 09-017	10	21MAR09 18:00	22MAR09 03:59	PJ
38025300	3V1C	3V1C - REINSTALL FAN SHEAVE	4	22MAR09 06:00	22MAR09 09:59	PJ
38025300	3V1C	3V1C - REMOVE RIGGING BEAM FOR SHAFT REPLACEMENT	4	22MAR09 10:00	22MAR09 13:59	PJ
38013843	3V1C	3V1C - REPL ELECTROLUBERS	4	22MAR09 14:00	22MAR09 17:59	PJ
38025300	3V1C	3V1C - REMOVE COIL PROTECTION	4	22MAR09 18:00	22MAR09 21:59	PJ
38025300	3V1C	3V1C - REMOVE BLOCKS FROM BLOWER WHEEL	1	22MAR09 22:00	22MAR09 22:59	PJ
37022833	3V1C	3V1C - CLEAN COOLING COILS	8	22MAR09 22:00	23MAR09 05:59	PJ
38013843	3V1C	3V1C - REINSTALL ACCESS COVERS	4	23MAR09 06:00	23MAR09 09:59	PJ
38013843	3V1C	3V1C - REPLC DRIVE BELTS/FAN GUARD	12	23MAR09 10:00	23MAR09 21:59	PJ
38025300	3V1C	3V1C - PMT 3V1C COOLER	1	24MAR09 00:00	24MAR09 00:59	PJ
38025300	3V1C	3V1C - PMT 30742 BREAKER	1	24MAR09 00:00	24MAR09 00:59	EM
38013843	3V1C	3V1C - RECHECK BELT TENSION POST RUN-IN	2	24MAR09 14:00	24MAR09 15:59	PJ
38013843	3V1C	3V1C - TOUCH-UP PAINT	10	24MAR09 16:00	25MAR09 01:59	PJ
38013843	3V1C	3V1C - 36 MONTH PM - REMOVE SCAFFOLD	3	25MAR09 02:00	25MAR09 04:59	PJ
38013843	3V1C	3V1C - ACCESS SQUIRREL CAGE REMOVE SCAFFOLD	3	25MAR09 05:00	25MAR09 07:59	PJ
38013843	3V1C	3V1C - REMOVE ACCESS SCAFFOLD FOR COOLER	3	25MAR09 08:00	25MAR09 10:59	PJ
38013843	3V1C	3V1C - REMOVE RIGGING BEAM FOR COOLER	5	25MAR09 11:00	25MAR09 15:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013843	3V1C	3V1C - PMT 36 MONTH PM	4	25MAR09 18:00	25MAR09 21:59	PJ
38013843	3V1C	3V1C - CLOSE WO 38013843-01	2	25MAR09 22:00	25MAR09 23:59	PJ
38013843	3V1C	3V1C - INSP/CLEAN - REMV ROUGHING FILTERS	2	02APR09 02:00	02APR09 03:59	PJ
38013832	3V1D	3V1D - SQUIRREL CAGE ACCESS ERECT SCAFFL	6	17MAR09 05:00	17MAR09 10:59	PJ
38013832	3V1D	3V1D - ERECT ACCESS SCAFFOLD FOR COOLER	6	17MAR09 05:00	17MAR09 10:59	PJ
38013832	3V1D	3V1D - INSTALL ROUGHING FILTERS	6	17MAR09 14:00	17MAR09 19:59	PJ
38013832	3V1D	3V1D - 36 MONTH PM - ERECT SCAFFOLD	4	18MAR09 05:00	18MAR09 08:59	PJ
38013832	3V1D	3V1D - REMOVE ACCESS COVERS	4	18MAR09 09:00	18MAR09 12:59	PJ
38013832	3V1D	3V1D - SET UP HEPA	4	18MAR09 13:00	18MAR09 16:59	PJ
38013832	3V1D	3V1D -SET UP TEMP PWR	4	18MAR09 13:00	18MAR09 16:59	PJ
38013832	3V1D	3V1D - SUPPORT H.P. WITH D NCC DECON	2	18MAR09 17:00	18MAR09 18:59	PJ
38013832	3V1D	3V1D - REMV BELT GUARD/ BELTS	8	18MAR09 21:00	19MAR09 04:59	PJ
38013832	3V1D	3V1D - LUBE NCC FAN BEARINGS	8	19MAR09 07:00	19MAR09 14:59	PJ
38013832	3V1D	3V1D - CLEAN COOLING COILS	8	19MAR09 15:00	19MAR09 22:59	PJ
38013832	3V1D	3V1D - INSP/ ADJ/ REPR/ DAMPER	8	19MAR09 23:00	20MAR09 06:59	PJ
38013832	3V1D	3V1D - REINSTALL ACCESS COVERS	4	20MAR09 09:00	20MAR09 12:59	PJ
38013832	3V1D	3V1D - REINST BELTS/GUARD	12	20MAR09 13:00	21MAR09 00:59	PJ
38013832	3V1D	3V1D - RECHECK BELT TENSION POST RUN-IN	2	21MAR09 17:00	21MAR09 18:59	PJ
38013832	3V1D	3V1D - TOUCH-UP PAINT	10	21MAR09 19:00	22MAR09 04:59	PJ
38013832	3V1D	3V1D - 36 MONTH PM - REMOVE SCAFFOLD	4	22MAR09 05:00	22MAR09 08:59	PJ
38013832	3V1D	3V1D - SQUIRREL CAGE ACCESS REM SCAFFL	3	22MAR09 09:00	22MAR09 11:59	PJ
38013832	3V1D	3V1D - REMOVE ACCESS SCAFFOLD FOR COOLER	3	22MAR09 12:00	22MAR09 14:59	PJ
38013832	3V1D	PMT 3V1D - 36 MONTH PM	1	23MAR09 07:00	23MAR09 07:59	PJ
38013832	3V1D	D NCC - CLOSE WO 38013832-01	1	23MAR09 08:00	23MAR09 08:59	PJ
38013832	3V1D	3V1D - INSP/CLEAN - REMV ROUGHING FILTERS	2	02APR09 02:00	02APR09 03:59	PJ
38013748	3V1S	INSPECT SPARE NCC MOTOR	6	27MAR09 12:00	27MAR09 17:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013748	3V1S	CLOSE WO - INSPECT SPARE NCC MOTOR 38013748	2	27MAR09 18:00	27MAR09 19:59	PJ
37022086	FS-3-1400	REPLACE FS-3-1400, ERECT SCAFFOLD	4	27MAR09 09:00	27MAR09 12:59	PJ
37022086	FS-3-1400	FS-3-1400: SWITCH REPLACEMENT	8	27MAR09 13:00	28MAR09 10:59	IC
37022086	FS-3-1400	REPLACE FS-3-1400, REMOVE SCAFFOLD	4	28MAR09 11:00	28MAR09 14:59	PJ
38009726	TE-3-1497	TE-3-1497, T/S LOW TEMPERATURE IND.	10	27MAR09 17:00*	28MAR09 16:59	IC
37022558	FLUX MAP	SEAL TABLE - PT DEFECT AT D-3 PRIOR TO WELD	2	19MAR09 10:00	19MAR09 11:59	EN
37022558	FLUX MAP	SEAL TABLE - PT DEFECT AT D-3 POST WELD REPAIR	2	30MAR09 03:00	30MAR09 04:59	EN
38011841	FLUXMAP	INSTALL FLUX MAP TEMPORARY PROTECTIVE COVERS	4	16MAR09 15:00	16MAR09 18:59	IC
38013837	FLUXMAP	FLUX MAP/ THIMBLES - SET UP TEMP WATER/ AIR	4	17MAR09 18:00	17MAR09 21:59	PJ
38011843	FLUXMAP	ERECT SCAFFOLD FOR SEAL TABLE WORK	12	17MAR09 18:00	18MAR09 05:59	PJ
38013837	FLUXMAP	FLUX MAP/ THIMBLES - SET UP TEMP PWR	2	20MAR09 22:00	20MAR09 23:59	PJ
37000765	FLUXMAP	FLUX MAP SYS, REPAIR CONNECTORS (5/10)	30	22MAR09 07:00	24MAR09 16:59	IC
38011843	FLUXMAP	REMOVE SCAFFOLD AFTER SEAL TABLE WORK	8	30MAR09 07:00	30MAR09 14:59	PJ
38013632	FLUXMAP	REMOVE SCAFFOLD (TABLE) FOR ECT EQUIPMENT	3	03APR09 15:00*	03APR09 17:59	PJ
38011841	FLUXMAP	FLUX MAP TEMP PROTECTIVE COVERS - REMOVE	2	04APR09 10:00	04APR09 11:59	IC
38012114	FLUXMAP	CHAR TEST ALL FLUX MAP DETECTORS	10	07APR09 16:00	08APR09 15:59	IC
38008709	FLUXMAPA	FLUX MAP "DET A" DOES STOP IN AUTO	8	22MAR09 07:00	22MAR09 14:59	IC
38011849	FLUXMAPA	FLUX MAPPER "A" INSPECT/OVERHAUL PM	25	22MAR09 07:00	24MAR09 11:59	IC
38011849	FLUXMAPA	PMT FLUX MAPPER DRIVE A	2	07APR09 06:00	07APR09 07:59	IC
38011850	FLUXMAPB	FLUX MAPPER "B" INSPECT/OVERHAUL PM	25	24MAR09 12:00	26MAR09 16:59	IC
38011850	FLUXMAPB	PMT FLUX MAPPER DRIVE B	2	07APR09 08:00	07APR09 09:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38004027	FLUXMAPC	FLUX MAP SYS DET 'C', INVESTIGATE SHORT	12	27MAR09 07:00	27MAR09 18:59	IC
38011851	FLUXMAPC	FLUX MAPPER "C" INSPECT/OVERHAUL PM	25	27MAR09 07:00	29MAR09 11:59	IC
38011851	FLUXMAPC	PMT FLUX MAPPER DRIVE C	2	07APR09 10:00	07APR09 11:59	IC
38011853	FLUXMAPD	FLUX MAPPER "D" INSPECT/OVERHAUL PM	25	29MAR09 12:00	31MAR09 16:59	IC
38011853	FLUXMAPD	PMT FLUX MAPPER DRIVE D	2	07APR09 12:00	07APR09 13:59	IC
38011855	FLUXMAPE	FLUX MAPPER "E" INSPECT/OVERHAUL PM	25	01APR09 07:00	03APR09 11:59	IC
38011855	FLUXMAPE	PMT FLUX MAPPER DRIVE E	2	07APR09 14:00	07APR09 15:59	IC
38012092	N-3-31	N-31 NIS SOURCE RANGE CH I OFFLINE CAL	16	17MAR09 15:00	18MAR09 06:59	IC
38012092	N-3-31	PMT - N-31 NIS SOURCE RANGE CH I OFFLINE CAL	1	18MAR09 08:00	18MAR09 08:59	IC
38012094	N-3-32	N-32 NIS SOURCE RANGE CH II OFFLINE CAL	16	16MAR09 21:00	17MAR09 12:59	IC
38012094	N-3-32	PMT - N-32 NIS SOURCE RANGE CH II OFFLINE CAL	1	17MAR09 14:00	17MAR09 14:59	IC
38011831	N-3-35	NIS N35/36 IR/ PERFORM COMPENSATING VOLTS ADJ.	2	16MAR09 00:00	16MAR09 01:59	IC
38012109	N-3-35	N-35/36 NIS IR CABLE INSPECT/TEST PT OFFLOAD	15	19MAR09 01:00	19MAR09 15:59	IC
37020214	N-3-35	N-3-35,T/S OUTER SHIELDS BEING GROUNDED	10	29MAR09 16:00	30MAR09 15:59	IC
38012111	N-3-35	N-35/36 NIS IR CABLE TEST AFTER RELOAD	5	30MAR09 17:00*	30MAR09 21:59	IC
38011832	N-3-35	NIS N-35 IR -INSTALL NEW SETPOINTS PRIOR TO S/U	4	01APR09 07:00*	01APR09 10:59	IC
38012096	N-3-36	NIS N-36 IR -INSTALL NEW SETPOINTS PRIOR TO S/U	4	01APR09 12:00	01APR09 15:59	IC
36020943	N-3-41	INSPECT/REPLACE BISTABLE SUPPRESSORS	10	22MAR09 15:00*	23MAR09 00:59	IC
38012098	N-3-41	N-41 NIS POWER RG CH I\ INSTALL CURRENTS @ S/D	4	26MAR09 15:00	26MAR09 18:59	IC
38012103	N-3-41	N-41 NIS PR -CURRENTS/VOLTS/TRIP & TAVE DELTA T	4	09APR09 03:00	09APR09 06:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38010365	N-3-41A	WALKDOWN DEGRADED FIELD CABLES	5	18MAR09 23:00*	19MAR09 03:59	EN
38010365	N-3-41A	WALKDOWN DEGRADED FIELD CABLES	5	18MAR09 23:00*	19MAR09 03:59	IC
33015996	N-3-41A	N-3-41A-REPL INTERCONNECT CABLES	30	20MAR09 15:00	23MAR09 00:59	IC
33015997	N-3-41B	N-3-41B-REPL INTERCONNECT CABLES	30	23MAR09 15:00	26MAR09 00:59	IC
38012099	N-3-42	N-42 NIS POWER RG CH III INSTALL CURRENTS @ S/D	4	27MAR09 07:00	27MAR09 10:59	IC
38012104	N-3-42	N-42 NIS PR -CURRENTS/VOLTS/TRIP & TAVE DELTA T	4	09APR09 08:00	09APR09 11:59	IC
38010366	N-3-42A	WALKDOWN DEGRADED FIELD CABLES	5	19MAR09 04:00*	19MAR09 08:59	EN
38010366	N-3-42A	WALKDOWN DEGRADED FIELD CABLES	5	19MAR09 04:00	19MAR09 08:59	IC
38012101	N-3-43	N-43 NIS POWER RG CH III INSTALL CURRENTS @ S/D	4	27MAR09 11:00	27MAR09 14:59	IC
38012105	N-3-43	N-43 NIS PR -CURRENTS/VOLTS/TRIP & TAVE DELTA T	4	09APR09 13:00	09APR09 16:59	IC
38010367	N-3-43A	WALKDOWN DEGRADED FIELD CABLES	5	19MAR09 23:00	20MAR09 03:59	EN
38010367	N-3-43A	WALKDOWN DEGRADED FIELD CABLES	5	19MAR09 23:00	20MAR09 03:59	IC
38012102	N-3-44	N-44 NIS POWER RG CH IV INSTALL CURRENTS @ S/D	4	27MAR09 15:00	27MAR09 18:59	IC
38012106	N-3-44	N-44 NIS PR -CURRENTS/VOLTS/TRIP & TAVE DELTA T	4	08APR09 22:00	09APR09 01:59	IC
38010368	N-3-44A	WALKDOWN DEGRADED FIELD CABLES	5	20MAR09 04:00	20MAR09 08:59	EN
38010368	N-3-44A	WALKDOWN DEGRADED FIELD CABLES	5	20MAR09 04:00	20MAR09 08:59	IC
38012107	ND-3-6649	GAMMAMETRICS-PERF SMI-059.10 FOR SR CHECK MODE 3	1	16MAR09 02:00	16MAR09 02:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011858	ND-3-6649A	GAMMAMETRICS-PERF SMI-059.10 FOR SR CHECK MODE 5	3	16MAR09 15:00	16MAR09 17:59	IC
38012108	ND-3-6649A	GAMMA-METRICS CAL (WITHIN 8 HRS OF 1ST CORE ALT)	3	20MAR09 05:00	20MAR09 07:59	IC
37020786	ND-3-6649A	GAMMA-METRICS (RESET DURING STRTUP IF REQUESTED)	4	26MAR09 13:00	26MAR09 16:59	IC
38011858	ND-3-6649B	GAMMAMETRICS-PERF SMI-059.10 FOR SR CHECK MODE 5	3	16MAR09 18:00	16MAR09 20:59	IC
37021802	NI-3-6649A	NY-3-6649A, SPIKED HIGH TO 1000 CPM	20	30MAR09 15:00*	01APR09 00:59	IC
37025746	NI-3-6649B	TROUBLESHOOT 'B' SOURCE RANGE GAMMETRICS	20	28MAR09 15:00*	30MAR09 00:59	IC
37023341	PCV-3-848	PCV-3-848: REPLACE REGULATOR	6	27MAR09 15:00*	28MAR09 10:59	IC
38011298	THIMBLE TB	ENG WALKDOWN PCM 08-029 THIMBLE TUBES	4	17MAR09 01:00	17MAR09 04:59	EN
38011298	THIMBLE TB	(P) FLY THIMBLE REMOVAL EQUIPMENT TO 58 FT LVL	1	18MAR09 11:00	18MAR09 11:59	PJ
38011298	THIMBLE TB	(P) FLY DRUM FOR COLD END THIMBLES TO 58 FT LVL	1	18MAR09 12:00	18MAR09 12:59	PJ
38011298	THIMBLE TB	(P) FLY NEW TRASH CAN FOR THIMBLES TO 58'	1	21MAR09 03:00	21MAR09 03:59	PJ
38011298	THIMBLE TB	(P) REM DRUM OF COLD END THIMBLES FROM CTMT	4	24MAR09 07:00	24MAR09 10:59	PJ
38011298	THIMBLE TB	TRANSPORT NEW THIMBLE WAGON WHEEL TO RAMP	3	24MAR09 09:00	24MAR09 11:59	PJ
38011298	THIMBLE TB	(P) REMOVE THIMBLE REMOVAL EQUIPMENT FROM CTMT	1	24MAR09 11:00	24MAR09 11:59	PJ
38011298	THIMBLE TB	(P) FLY NEW THIMBLE WAGON WHEEL TO 58 FT LVL	2	24MAR09 12:00	24MAR09 13:59	PJ
38011298	THIMBLE TB	(P) MOVE NEW THIMBLE WHEEL TO HEAD AREA LAYDOWN	2	26MAR09 20:00	26MAR09 21:59	PJ
38011298	THIMBLE TB	(P) REMOVE THIMBLE WHEEL FROM CTMT	2	29MAR09 23:00	30MAR09 00:59	PJ
38011298	THIMBLE TB	NEW THIMBLE TUBES - SATS PCM 08-029	4	03APR09 00:00	03APR09 03:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012110		NIS POWER RANGES CABLE INSULATION TESTING	12	19MAR09 16:00	20MAR09 17:59	IC
38012113		NIS PWR RANGES CABLE INSULATION TESTING	10	29MAR09 16:00	30MAR09 15:59	IC
36019624	3P218A	P218A RCDT MTR DETERM OLD MTR	6	21MAR09 19:00	22MAR09 00:59	EM
36019624	3P218A	P218A RCDT MTR REMOVE OLD MOTOR FROM CTMT	6	22MAR09 02:00*	22MAR09 07:59	EM
36019624	3P218A	P218A RCDT MTR - RIG IN NEW MOTOR	8	27MAR09 07:00*	27MAR09 14:59	EM
36019624	3P218A	P218A RCDT MTR - INSTALL & TERM NEW MOTOR	8	27MAR09 15:00	27MAR09 22:59	EM
36019624	3P218A	PMT - P218A RCDT MTR DETERM-REPLACE-RETERM	2	29MAR09 06:00	29MAR09 07:59	EM
38013757	3P218B	P218B RCDT MTR DETERM OLD MTR	6	21MAR09 19:00	22MAR09 00:59	EM
38013757	3P218B	P218B RCDT MTR REMOVE OLD MOTOR FROM CTMT	6	22MAR09 02:00*	22MAR09 07:59	EM
38013757	3P218B	P218B RCDT MTR - RIG IN NEW MOTOR	8	27MAR09 07:00	27MAR09 14:59	EM
38013757	3P218B	P218B RCDT MTR - INSTALL & TERM NEW MOTOR	8	27MAR09 15:00	27MAR09 22:59	EM
38013757	3P218B	PMT - P218B RCDT MTR DETERM-REPLACE-RETERM	2	29MAR09 06:00	29MAR09 07:59	EM
38012335	3P23	SET UP HEPA /TOOLS/ PRIMARY WATER FOR SUMP CLNG	3	16MAR09 21:00	16MAR09 23:59	PJ
38012335	3P23	SET UP HEPA /TOOLS/ PRIMARY WATER FOR SUMP CLNG	2	17MAR09 00:00	17MAR09 01:59	PJ
38012335	3P23	SET UP HEPA /TOOLS/ PRIMARY WATER FOR SUMP CLNG	2	17MAR09 16:00	17MAR09 17:59	PJ
38012335	3P23	DESLUDGE CONTAINMENT SUMP AREA	1	17MAR09 18:00	17MAR09 18:59	PJ
38015174	3P23	OBTAIN SPECIAL RP BRIEF PRIOR TO MIMS WORK	1	18MAR09 15:00*	18MAR09 15:59	IC
38013755	3P23	CONT SUMP FINAL INSP - SET UP PRI WTR FOR INSP	6	29MAR09 23:00	30MAR09 04:59	EM
38013755	3P23	*P23A/B CONT SUMP PP FINAL INSPECTION	10	30MAR09 05:00	30MAR09 14:59	EM
38012335	3P23A	CONTAIN SUMP PP "A"-CLN/INSP/REMV DEBRI FRM SUMP	1	29MAR09 06:00	29MAR09 06:59	PJ
38012336	3P23B	CONTAIN SUMP PP "B"-CLN/INSP/REMV DEBRI FRM SUMP	1	29MAR09 06:00	29MAR09 06:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36019690	CV-3-2821	CONT SUMP PP DISCH ISO CV : CAL ACT	6	30MAR09 07:00	30MAR09 12:59	VT
38012116	CV-3-4658A	RCDT TO VT HDR ISO VLV-DISCONN & REMOVE ACTUATOR	4	26MAR09 00:00*	26MAR09 03:59	VT
38012116	CV-3-4658A	RCDT TO VT HDR ISO VLV - DISASS & INSP ACTUATOR	8	26MAR09 04:00	26MAR09 13:59	VT
38012116	CV-3-4658A	RCDT TO VT HDR ISO VLV - O/H & REASS ACTUATOR	8	26MAR09 14:00	26MAR09 21:59	VT
38012116	CV-3-4658A	RCDT TO VT HDR ISO VLV - INSTALL & RECONN ACT	4	26MAR09 22:00	27MAR09 01:59	VT
38012115	CV-3-4658A	RCDT TO VT HEADER ISO VLV - AS LEFT CAL	8	27MAR09 02:00	27MAR09 11:59	VT
38012118	CV-3-4658B	RCDT TO VT HDR ISO VLV-DISCONN & REMOVE ACTUATOR	4	27MAR09 02:00	27MAR09 07:59	VT
38012118	CV-3-4658B	RCDT TO VT HDR ISO VLV - DISASS	8	27MAR09 08:00	27MAR09 15:59	VT
38012118	CV-3-4658B	RCDT TO VT HDR ISO VLV-DISCONN / REMOVE / DISASS	8	27MAR09 16:00	27MAR09 23:59	VT
38012118	CV-3-4658B	RCDT TO VT HDR ISO VLV - O/H / INSTALL / RECONN	4	28MAR09 00:00	28MAR09 03:59	VT
38012117	CV-3-4658B	RCDT TO VT HEADER ISO VLV - AS LEFT CAL	8	28MAR09 04:00	28MAR09 13:59	VT
38012122	CV-3-4659B	RCDT TO GA ISO VLV - DISCONN & REMOVE ACTUATOR	4	27MAR09 14:00*	27MAR09 17:59	VT
38012122	CV-3-4659B	RCDT TO GA ISO VLV - DISASS & INSP ACTUATOR	8	27MAR09 18:00	28MAR09 01:59	VT
38012122	CV-3-4659B	RCDT TO GA ISO VLV - O/H & REASS ACTUATOR	8	28MAR09 02:00	28MAR09 11:59	VT
38012122	CV-3-4659B	RCDT TO GA ISO VLV - INSTALL & RECONN ACTUATOR	4	28MAR09 12:00	28MAR09 15:59	VT
38012121	CV-3-4659B	RCDT TO GA ISO VLV - AS LEFT DIAG & CAL	8	28MAR09 16:00	28MAR09 23:59	VT
38012123	CV-3-4658A	RCDT PP DISCH TO HDUP TK ISO VLV - CAL AOV ACT	4	29MAR09 00:00	29MAR09 03:59	VT
38012125	CV-3-516	PRT TO GA ISO VLV - CAL AOV ACT / ACC	8	19MAR09 21:00*	20MAR09 04:59	VT
38010712	CV-3-523	PRT TO SUCT OF RCDT PPS ISO-DISCONN & REMOVE ACT	6	26MAR09 12:00*	26MAR09 17:59	VT
38010712	CV-3-523	PRT TO SUCT OF RCDT PPS ISO-O/H ACT & INSTALL	6	26MAR09 18:00	26MAR09 23:59	VT
38010712	CV-3-523	PRT TO SUCT OF RCDT PPS ISO - AS LEFT & CAL ACT	8	27MAR09 00:00	27MAR09 09:59	VT

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38010713	CV-3-549	PRT TO VENT HDR CONT VLV - ERECT SCAFFOLD	8	27MAR09 02:00	27MAR09 09:59	PJ
38010713	CV-3-549	PRT TO VENT HDR CONT VLV - DISCONN & REMOVE ACT	6	27MAR09 10:00*	27MAR09 15:59	VT
38010713	CV-3-549	PRT TO VENT HDR CONT VLV - O/H ACT & INSTALL	6	27MAR09 16:00	27MAR09 21:59	VT
38010713	CV-3-549	PRT TO VENT HDR CONT VLV - CAL & AS LEFT DIAG	8	27MAR09 22:00	28MAR09 07:59	VT
38010713	CV-3-549	OVREHAUL AND CALIBRATE VALVE ACTUATOR SCAF SE	4	02APR09 08:00*	02APR09 11:59	PJ
38012126	L-3-1003	RCDT LVL L-3-1003 LOOP CAL	10	19MAR09 15:00*	20MAR09 00:59	IC
38014456	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - PERF AS FD DIAG	5	26MAR09 07:00*	26MAR09 11:59	VT
38014457	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - DISASS ACT & VLV	6	26MAR09 12:00	26MAR09 17:59	VT
38014457	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - O/H ACT & VLV	8	26MAR09 18:00	27MAR09 01:59	VT
38014457	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - O/H VLV	4	27MAR09 02:00	27MAR09 07:59	VT
38014457	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - REASS ACT & VLV	6	27MAR09 08:00	27MAR09 13:59	VT
38014456	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - PERF AS LEFT DIAG	8	27MAR09 14:00	27MAR09 21:59	VT
38014457	LCV-3-1003	PRT DRAIN TO SUMP ISO VLV - PMT	1	30MAR09 07:00	30MAR09 07:59	VT
38013856	RX SUMP	RX SUMP - PROJECTS- INST TEMP POWER & LIGHTING	4	17MAR09 07:00	17MAR09 10:59	PJ
38012179	SNU-1101	SNUB-WASTE DISP SYS @ 3-308 - AS FOUND VISUAL	1	24MAR09 11:00	24MAR09 11:59	EN
38012179	SNU-1101	SNUB-WASTE DISP SYS @ 3-308 - HANDSTROKE	1	24MAR09 12:00	24MAR09 12:59	EN
38012179	SNU-1102	SNUB-WASTE DISP SYS @ 3-308 & 387-ASFOUND VISUAL	1	24MAR09 13:00	24MAR09 13:59	EN
38012179	SNU-1102	SNUB-WASTE DISP SYS @ 3-308 & 387 - HANDSTROKE	1	24MAR09 14:00	24MAR09 14:59	EN
38015174		OBTAIN SPECIAL RP BRIEF PRIOR TO BMI,SUMP WORK	1	17MAR09 15:00	17MAR09 15:59	PJ
38015174		OBTAIN SPECIAL RP BRIEF PRIOR TO BMI,SUMP WORK	1	17MAR09 18:00	17MAR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37019650		FLOOR DRAIN ON 58' NEAR PZR - REPLACE DRN GRATE	8	30MAR09 07:00*	30MAR09 14:59	PJ
38013624	3-957	*-957 (HOT LEG S.I. X-TIE ISOL VLV) SETUP LADDER	1	18MAR09 12:00	18MAR09 12:59	PJ
38013624	3-957	*-957 (HOT LEG S.I. X-TIE ISOL VLV)-REMOVE INSUL	4	18MAR09 13:00	18MAR09 16:59	PJ
38013624	3-957	*-957 (HOT LEG S.I. X-TIE ISOL VLV) PERF EXAMS	1	18MAR09 17:00	18MAR09 17:59	EN
38013624	3-957	*-957 (HOT LEG S.I. X-TIE ISOL VLV)-INSTAL INSUL	4	31MAR09 18:00*	31MAR09 21:59	PJ
38013624	3-957	*-957 (HOT LEG S.I. X-TIE ISOL VLV) REMV LADDER	1	31MAR09 22:00	31MAR09 22:59	PJ
38013627	CSI ZN 041	CSI- 3-041 SR-18 SCAFFOLD ERECT	12	22MAR09 10:00*	22MAR09 21:59	PJ
38013627	CSI ZN 041	CSI- 3-041 SR-18 PERFORM VT-3 EXAM	2	23MAR09 09:00*	23MAR09 10:59	EN
38013627	CSI ZN 041	CSI- 3-041 SR-18 - ANALYZE DATA	20	24MAR09 15:00*	26MAR09 14:59	EN
38013627	CSI ZN 041	CSI- 3-041 SR-18 SCAFFOLD REMOVE	12	26MAR09 15:00	27MAR09 02:59	PJ
38013627	CSI ZN 042	CSI- 3-042 2"-SI-1303 -PERFORM EXAMS	2	06APR09 07:00	06APR09 08:59	EN
38013627	CSI ZN 042	CSI- 3-042 2"-SI-1303 - ANALYZE DATA	2	07APR09 13:00	07APR09 14:59	EN
38013627	CSI ZN 081	CSI- 3-081 3-SIH-90 - PERFORM EXAMS	3	19MAR09 08:00*	19MAR09 10:59	EN
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - SCAFFOLD ERECT	10	19MAR09 18:00*	20MAR09 03:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - INSUL REMV	8	20MAR09 04:00	20MAR09 13:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - BUFF & CLEAN	5	20MAR09 14:00	20MAR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - PERFORM EXAMS	37	20MAR09 19:00	25MAR09 01:59	EN
38013627	CSI ZN 081	CSI- 3-081 3-SIH-90 - ANALYZE DATA	24	21MAR09 07:00*	24MAR09 10:59	EN
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - SCAFFOLD ERECT	10	21MAR09 21:00*	22MAR09 06:59	PJ
38013627	CSI ZN 081	CSI- 3-081 3-SIH-95 - SCAFFOLD ERECT	10	22MAR09 04:00*	22MAR09 13:59	PJ
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - SCAFFOLD ERECT	6	22MAR09 18:00*	22MAR09 23:59	PJ
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - INSUL REMV	8	23MAR09 07:00	23MAR09 14:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - INSUL REMV	8	23MAR09 07:00	23MAR09 14:59	PJ
38013627	CSI ZN 081	CSI- 3-081 3-SIH-95 - PERFORM EXAMS	3	23MAR09 09:00*	23MAR09 11:59	EN
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - BUFF & CLEAN	5	23MAR09 15:00	23MAR09 19:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - BUFF & CLEAN	5	23MAR09 15:00	23MAR09 19:59	PJ
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - PERFORM EXAMS	37	23MAR09 20:00	27MAR09 02:59	EN
38013627	CSI ZN 081	CSI- 3-081 3-SIH-95- ANALYZE DATA	24	24MAR09 10:00*	26MAR09 13:59	EN
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - PERFORM EXAMS	30	24MAR09 17:00*	27MAR09 02:59	EN
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6- ANALYZE DATA	20	27MAR09 12:00*	30MAR09 11:59	EN
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1- ANALYZE DATA	20	27MAR09 12:00*	30MAR09 11:59	EN
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2- ANALYZE DATA	24	28MAR09 07:00*	29MAR09 06:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - INSUL INSTL	8	30MAR09 07:00	30MAR09 14:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - INSUL INSTL	8	30MAR09 12:00	30MAR09 19:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - INSUL INSTL	8	30MAR09 12:00	30MAR09 19:59	PJ
38013627	CSI ZN 081	CSI- 3-081 10"-SI-2304-2 - SCAFFOLD REMV	10	30MAR09 15:00	31MAR09 00:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2302-6 - SCAFFOLD REMV	10	30MAR09 20:00	31MAR09 07:59	PJ
38013627	CSI ZN 081	CSI- 3-081 8"-SI-2303-1 - SCAFFOLD REMV	10	30MAR09 20:00	31MAR09 07:59	PJ
38013627	CSI ZN 081	CSI- 3-081 3-SIH-95 - SCAFFOLD REMV	10	01APR09 07:00*	01APR09 16:59	PJ
38013627	CSI ZN 096	CSI- 3-096 SR-123 INSL REMV	8	18MAR09 07:00*	18MAR09 14:59	PJ
38013627	CSI ZN 096	CSI- 3-096 SR-123 BUFF & CLEAN	8	18MAR09 15:00	18MAR09 22:59	PJ
38013627	CSI ZN 096	CSI- 3-096 SR-123 PERFORM EXAMS	2	20MAR09 09:00*	20MAR09 10:59	EN
38013627	CSI ZN 096	CSI- 3-096 SR-123 - ANALYZE DATA	24	21MAR09 07:00*	24MAR09 10:59	EN
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 SCAFFOLD ERECT	10	21MAR09 15:00*	22MAR09 00:59	PJ
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 INSL REMV	8	23MAR09 07:00	23MAR09 14:59	PJ
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 BUFF & CLEAN	8	24MAR09 21:00	25MAR09 04:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 PERFORM EXAMS	48	25MAR09 07:00*	27MAR09 14:59	EN
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 - ANALYZE DATA	20	27MAR09 15:00*	30MAR09 14:59	EN
38013627	CSI ZN 096	CSI- 3-096 SR-123 INSL INSTL	8	28MAR09 18:00*	29MAR09 01:59	PJ
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 INSL INSTL	8	30MAR09 15:00	30MAR09 22:59	PJ
38013627	CSI ZN 096	CSI- 3-096 3" & 2" -SI-2304 SCAFFOLD RMV	10	01APR09 11:00*	01APR09 20:59	PJ
[redacted]						
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- SCAFFOLD ERECT	48	23MAR09 00:00*	24MAR09 23:59	PJ
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- INSL RMV	12	25MAR09 00:00	25MAR09 13:59	PJ
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- BUFF & CLEAN	8	25MAR09 14:00	25MAR09 21:59	PJ
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- PERFORM EXAMS	40	25MAR09 22:00	27MAR09 21:59	EN
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301 - ANALYZE DATA	24	28MAR09 07:00	31MAR09 10:59	EN
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- INSL INSTL	12	31MAR09 11:00	31MAR09 22:59	PJ
38013627	CSI ZN 097	CSI- 3-097 31" & 26" -MSA-2301- SCAFFOLD RMV	12	31MAR09 23:00	01APR09 12:59	PJ
[redacted]						
38014574	MOV-3-856B	MOV-3-856B: OPR INSP & STEM LUBE	6	18MAR09 00:00	18MAR09 07:59	VT
38014574	MOV-3-856B	MOV-856B: PMT STROKE	1	18MAR09 08:00	18MAR09 08:59	VT
[redacted]						
37016301	MOV-3-864A	MOV-864A MOV & GREASE INSPECTION	6	22MAR09 19:00*	23MAR09 00:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37016301	MOV-3-864A	MOV-864A PMT STROKE	1	23MAR09 01:00	23MAR09 01:59	VT
38014580	MOV-3-864B	MOV-864B MOV AND GREASE INSP	6	23MAR09 04:00	23MAR09 11:59	VT
38014580	MOV-3-864B	MOV-864B PMT STROKE	1	23MAR09 12:00	23MAR09 12:59	VT
38014582	MOV-3-866A	MOV-866A LUBE-ERECT SCAFFOLD	12	24MAR09 12:00	24MAR09 23:59	PJ
38014582	MOV-3-866A	MOV-866A : PMT STROKE	1	25MAR09 04:00	25MAR09 04:59	VT
38014582	MOV-3-866A	MOV-866A LUBE-REMOVE SCAFFOLD	6	31MAR09 12:00*	31MAR09 17:59	PJ
38014583	MOV-3-866B	MOV-866B LUBE-ERECT SCAFFOLD	10	24MAR09 21:00	25MAR09 06:59	PJ
38014583	MOV-3-866B	MOV-866B : PMT STROKE	1	25MAR09 11:00	25MAR09 11:59	VT
38014583	MOV-3-866B	MOV-866B GREASE INSP/STEM LUBE-REMV SCAF	10	27MAR09 23:00*	28MAR09 10:59	PJ
38014586	MOV-3-869	MOV-869: PMT STROKE	1	23MAR09 20:00	23MAR09 20:59	VT
38026835	SCAN GL	GL-2008-01 Install Scan Targets To Support AREVA	2	16MAR09 15:00	16MAR09 16:59	PJ
38012338	TOOLS	SUPPORT OSP-202.4- RWST RECIRC PIPING LEAK CHECK	6	17MAR09 16:00	17MAR09 21:59	MM
38012338	TOOLS	INSTALL DECK PLATE IAW OSP-202.4 RWST RECIRC	9	17MAR09 22:00	18MAR09 08:59	MM
38012338	TOOLS	REMOVE SCAFFOLDING/HANDRAILS AROUND RHR TRENCH	4	05APR09 04:00	06APR09 09:59	PJ
38012338		BUILD SCAFFOLD/HANDRAIL OVER TRENCH SCAF SE	4	04APR09 16:00*	04APR09 19:59	PJ
38012338		REMOVE SCAFFOLDING/HANDRAILS AROUND TRENCH	4	04APR09 20:00	04APR09 23:59	PJ
38012338		REMOVE SCAFFOLD/HANDRAIL OVER TRENCH	4	05APR09 00:00	05APR09 03:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012127	MG-6	SAFEGUARDS: MG6 RELAY TESTING	20	23MAR09 04:00	25MAR09 03:59	IC
38013847	SAFE	SAFEGUARDS SUPPORT WORK ORDER - CLOSE WORK ORDER	1	05APR09 19:00	05APR09 19:59	EM
38013847	SAFE A	SAFEGUARDS TEST - SUPPORT OSP-203.1 FOR TRAIN A	8	01APR09 02:00	01APR09 09:59	EM
38013847	SAFE B	ADM 217/TABLETOP BRIEF FOR B 7.1 SAFEGUARDS	1	26MAR09 18:00	26MAR09 18:59	EM
38013847	SAFE B	SAFEGUARDS TEST - SUPPORT OSP-203.2 7.1 TRAIN B	8	26MAR09 19:00	27MAR09 02:59	EM
38013847	SAFE B	ADM 217/TABLETOP BRIEF FOR B 7.3 SAFEGUARDS	1	27MAR09 13:00	27MAR09 13:59	EM
38013624	3-875A	SI TO LP A CK VLV - BOLTING CLASS A - ERECT SCAF	12	17MAR09 02:00	17MAR09 13:59	PJ
38021917	3-875A	SI TO LP A CK VLV-DUMP TST & BOLT "A"-REMV INSUL	4	18MAR09 04:00	18MAR09 09:59	PJ
38013624	3-875A	SI TO LP A CK VLV - BOLTING CLASS A - PERF EXAMS	1	18MAR09 10:00	18MAR09 10:59	EN
38013624	3-875A	SI TO LP A CK VLV-DUMP TST & CLASS A-REST INSUL	6	20MAR09 08:00	20MAR09 13:59	PJ
38013624	3-875A	SI TO LP A CK VLV - BOLTING CLASS A - REMO SCAF	8	01APR09 00:00*	01APR09 09:59	PJ
38013624	3-875B	SI TO LP B CK VLV - BOLTING CLASS A - ERECT SCAF	12	17MAR09 02:00	17MAR09 13:59	PJ
38013624	3-875B	SI TO LP B CK VLV - BOLTING CLASS A - PERF EXAMS	1	17MAR09 22:00	17MAR09 22:59	EN
38021917	3-875B	SI TO LP B CK VLV-DUMP TST & BOLT "A"-REMV INSUL	4	18MAR09 10:00	18MAR09 13:59	PJ
38013624	3-875B	SI TO LP B CK VLV-DUMP TST & BOLT "A"-INST INSUL	6	02APR09 18:00*	02APR09 23:59	PJ
38013624	3-875B	SI TO LP B CK VLV - BOLTING CLASS A - REMOV SCAF	8	03APR09 00:00	03APR09 09:59	PJ
38013624	3-875C	SI TO LP C CK VLV - BOLTING CLASS A - ERECT SCAF	12	16MAR09 18:00	17MAR09 05:59	PJ
38021917	3-875C	SI TO LP C CK VLV-DUMP TST & BOLT "A"-REMV INSUL	4	18MAR09 10:00	18MAR09 13:59	PJ
38013624	3-875C	SI TO LP C CK VLV - BOLTING CLASS A - PERF EXAMS	1	18MAR09 14:00	18MAR09 14:59	EN
38013624	3-875C	SI TO LP C CK VLV-DUMP TST & BOLT "A"-INST INSUL	4	20MAR09 08:00	20MAR09 11:59	PJ
38013624	3-875C	SI TO LP C CK VLV - BOLTING CLASS A - REMOV SCAF	8	31MAR09 18:00*	01APR09 01:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624	3-875D	*-875D (SI ACCUM A DISCH CHK VLV) - REMOVE INSUL	4	18MAR09 12:00	18MAR09 15:59	PJ
38013624	3-875D	*-875D (SI ACCUM A DISCH CHK VLV) PERFORM EXAMS	1	18MAR09 16:00	18MAR09 16:59	EN
38013624	3-875D	*-875D (SI ACCUM A DISCH CHK VLV) - INSTAL INSUL	4	22MAR09 01:00	22MAR09 04:59	PJ
38013624	3-875E	*-875E (SI ACCUM B DISCH CHK VLV) SETUP LADDER	4	23MAR09 07:00*	23MAR09 10:59	PJ
38013624	3-875E	*-875E (SI ACCUM B DISCH CHK VLV) REMOVE INSUL	4	23MAR09 11:00*	23MAR09 14:59	PJ
38013624	3-875E	*-875E (SI ACCUM B DISCH CHK VLV) PERF EXAMS	1	23MAR09 15:00	23MAR09 15:59	EN
38013624	3-875E	*-875E (SI ACCUM B DISCH CHK VLV) INSTALL INSUL	4	31MAR09 18:00*	31MAR09 21:59	PJ
38013624	3-875E	*-875E (SI ACCUM B DISCH CHK VLV) REMOVE LADDER	4	31MAR09 22:00	01APR09 01:59	PJ
38013624	3-875F	*-875F (SI ACCUM C DISCH CHK VLV) SETUP LADDER	1	16MAR09 21:00	16MAR09 21:59	PJ
38013624	3-875F	*-875F (SI ACCUM C DISCH CHK VLV) REMOVE INSUL	4	16MAR09 22:00	17MAR09 01:59	PJ
38013624	3-875F	*-875F (SI ACCUM C DISCH CHK VLV) PERF EXAMS	1	18MAR09 16:00	18MAR09 16:59	EN
38013624	3-875F	*-875F (SI ACCUM C DISCH CHK VLV) INSTALL INSUL	4	01APR09 08:00*	01APR09 11:59	PJ
38013624	3-875F	*-875F (SI ACCUM C DISCH CHK VLV) REMV LADDER	1	01APR09 12:00	01APR09 12:59	PJ
38013624	3-876A	RHR TO LP A CD LEG CK VL-CLASS A BOLT-SETUP LAD	1	16MAR09 22:00	16MAR09 22:59	PJ
38013624	3-876A	RHR TO LP A CD LEG CK VL-CLASS A BOLT-REMV INSUL	6	18MAR09 09:00	18MAR09 14:59	PJ
38013624	3-876A	RHR TO LP A CD LEG CK -CLASS A BOLT - PERF EXAMS	1	18MAR09 15:00	18MAR09 15:59	EN
38013624	3-876A	RHR TO LP A CD LEG CK -CLASS A BOLT - REST INSUL	8	31MAR09 07:00*	31MAR09 14:59	PJ
38013624	3-876A	RHR TO LP A CD LEG CK - CLASS A BOLT-REMV LADDER	4	02APR09 00:00*	02APR09 03:59	PJ
38013624	3-876C	RHR TO LP C CD LEG CK VL-CLASS A BOLT-REMV INSUL	4	16MAR09 21:00	17MAR09 00:59	PJ
38013624	3-876C	RHR TO LP C CD LEG CK VL-CLASS A BOLT-PERF EXAM	1	17MAR09 01:00	17MAR09 01:59	EN
38013624	3-876C	RHR TO LP C CD LEG CK VL-CLASS A BOLT-REST INSUL	4	01APR09 02:00*	01APR09 07:59	PJ
38013624	3-876E	ALT LO HD SI TO LP A CD LG CK-CLASS A -SETUP LAD	2	23MAR09 07:00*	23MAR09 08:59	PJ
38013624	3-876E	ALT LO HD SI TO LP A CD LG -CLASS A - REMV INSUL	4	23MAR09 17:00	23MAR09 20:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624	3-876E	ALT LO HD SI TO LP A CD LG - CLASS A - PERF EXAM	1	23MAR09 21:00	23MAR09 21:59	EN
38013624	3-876E	ALT LO HD SI TO LP A CD LG - CLASS A - REST INSU	6	28MAR09 18:00*	28MAR09 23:59	PJ
38013624	3-876E	ISI CLASS 1 BOLTING - CLOSE WO 38013624-01	1	29MAR09 00:00	29MAR09 00:59	PJ
38013624	3-876E	ALT LO HD SI TO LP A CD LG CK-CLASS A - REMO LAD	2	01APR09 07:00*	01APR09 08:59	PJ
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT - CUT OFF OLD GLAND	4	22MAR09 07:00	22MAR09 10:59	VT
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT - CUT OFF OLD GLAND	4	22MAR09 07:00*	22MAR09 10:59	VT
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT - INST NEW GLAND	4	22MAR09 11:00	22MAR09 14:59	VT
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT- REPACK VLV & CYCLE	2	22MAR09 15:00	22MAR09 16:59	VT
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT - FINAL DBA INSP	1	30MAR09 16:00	30MAR09 16:59	EN
37022055	3-882B	3-882B - ACCUM B DRN TO RCDT - PMT	1	30MAR09 16:00	30MAR09 16:59	VT
37025515	3-883H	ISO VLV FOR ACCUM C N2 SUPPLY - ERECT SCAF	10	22MAR09 07:00*	22MAR09 16:59	PJ
37025515	3-883H	ISO VLV FOR ACCUM C N2 SUPPLY -REMOVE SCAF	10	02APR09 10:00*	02APR09 19:59	PJ
38021917	3T229	ACC DISCG TEST - SET UP HEPA	2	16MAR09 17:00	16MAR09 18:59	PJ
38021917	3T229	ACC DUMP TEST WALK DOWN RECONCILE/W ISI SCOPE	10	16MAR09 17:00	17MAR09 02:59	PJ
38012131	3T229	ACCUM DUMP TEST - SUPPORT EQUIPMENT INSTALLATION	30	17MAR09 07:00*	18MAR09 12:59	IC
38021917	3T229	ACC DUMP TEST *-875D, -E, & -F REMV INSUL	3	18MAR09 01:00	18MAR09 03:59	PJ
38012131	3T229	ACCUM DUMP TEST - SUPPORT TESTING W\ TECH DEPT	2	20MAR09 06:00	20MAR09 07:59	IC
38012131	3T229	ACCUM DUMP TEST - REMOVE TEST EQUIPMENT	8	22MAR09 23:00*	23MAR09 06:59	IC
38021917	3T229	ACC DUMP TEST *-875 A THRU F-REPLACE INSULATION	22	01APR09 04:00	02APR09 03:59	PJ
38012131	3T229	BACKFILL/FILL & VENT ACCUM. LVL TXS SENSE LINES	4	06APR09 00:00	06APR09 03:59	IC
38014459	CV-3-851A	CALIBRATE VALVE ACTUATOR SCAFF ER	4	20MAR09 23:00	21MAR09 02:59	PJ
38026359	CV-3-851A	ACCUM A MKUP CV - REMOVE ACT & O/H	16	21MAR09 03:00	21MAR09 20:59	VT
38026359	CV-3-851A	ACCUM A MKUP CV - INSTALL ACT	8	21MAR09 21:00	22MAR09 04:59	VT
38014459	CV-3-851A	ACCUM A MKUP CV - CAL AOV ACT	8	22MAR09 07:00	22MAR09 14:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014459	CV-3-851A	CALIBRATE VALVE ACTUATOR SCAFF RE	4	02APR09 01:00*	02APR09 04:59	PJ
38008847	CV-3-853A	CV-3-853A, INSP / REPAIR AIR DEFECTS CR 08-10365	4	23MAR09 03:00	23MAR09 06:59	VT
38008846	CV-3-853B	CV-3-853B, INSP DEFECTS CR 08-10365	6	22MAR09 21:00	23MAR09 02:59	VT
38008845	CV-3-853C	CV-3-853C-INSP FOR DEFTS & AIR LEAKS -CR08-10365	4	22MAR09 15:00	22MAR09 18:59	VT
37025514	CV-3-853C	CV-3-853C-ADJ PACKING	2	22MAR09 19:00	22MAR09 20:59	VT
37025514	CV-3-853C	CV-3-853C-CYCLE VLV FOR PACKING ADJ	2	22MAR09 19:00	22MAR09 20:59	VT
38012132	LT-3-920	LT-3-920/ LT-3-922 ACCUM "A" PM CAL	3	25MAR09 23:00*	26MAR09 15:59	IC
38012133	LT-3-924	LT-3-924/ LT-3-926 ACCUM "B" PM CAL	3	26MAR09 22:00	27MAR09 00:59	IC
38012134	LT-3-928	LT-3-928/930 ACCUM "C" PM CAL	3	27MAR09 21:00	27MAR09 23:59	IC
36018682	MOV-3-865	MOV-865A/B/C: INSTALL STEM BLOCKS	3	20MAR09 19:00*	20MAR09 21:59	VT
36018682	MOV-3-865	MOV-865A/B/C: REMOVE STEM BLOCKS	3	24MAR09 23:00	25MAR09 01:59	VT
36018680	MOV-3-865A	ERECT SCAFFOLD - MOV-865A OPERATOR OVERHAUL	10	16MAR09 19:00	17MAR09 04:59	PJ
36018680	MOV-3-865A	MOV-865A: DETERM AND REMOVE OPERATOR IF REQ	4	21MAR09 00:00	21MAR09 03:59	VT
36018680	MOV-3-865A	MOV-865A: OPERATOR OVERHAUL	30	21MAR09 04:00	22MAR09 13:59	VT
36018680	MOV-3-865A	MOV-865A: INSTALL AND TERM OPERATOR	8	22MAR09 14:00	22MAR09 21:59	VT
36018680	MOV-3-865A	REMOVE SCAFFOLD - MOV-865A OPERATOR OVERHAUL	8	26MAR09 10:00	26MAR09 17:59	PJ
35018592	MOV-3-865B	ERECT SCAFFOLD - MOV-865B OPERATOR OVERHAUL	10	16MAR09 19:00	17MAR09 04:59	PJ
35018592	MOV-3-865B	MOV-865B-ACCUM B DISCH MOV-REMV INSUL @ ELBOWS	6	22MAR09 10:00	22MAR09 15:59	PJ
35018592	MOV-3-865B	MOV-865B: DETERM AND REMOVE OPERATOR	6	22MAR09 22:00	23MAR09 03:59	VT
35018592	MOV-3-865B	MOV-865B: REMOVE SPRING CAN - ENG SUPPORT	8	22MAR09 22:00	23MAR09 05:59	EN
35018592	MOV-3-865B	MOV-865B: OPERATOR OVERHAUL	30	23MAR09 07:00	24MAR09 14:59	VT
35018592	MOV-3-865B	MOV-865B: INSTALL AND RETERM OPERATOR	6	24MAR09 15:00	24MAR09 20:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35018592	MOV-3-865B	MOV-865B: MOV STATIC TEST	10	25MAR09 16:00*	26MAR09 01:59	VT
35018592	MOV-3-865B	MOV-865B: PMT STROKE - OPERATOR OVERHAUL	1	26MAR09 02:00	26MAR09 02:59	VT
35018592	MOV-3-865B	MOV-865B-ACCUM B DISCH MOV-INSTAL INSUL @ ELBOWS	6	26MAR09 13:00	26MAR09 18:59	PJ
35018592	MOV-3-865B	REMOVE SCAFFOLD - MOV-865B OPERATOR OVERHAUL	8	26MAR09 13:00	26MAR09 20:59	PJ
36018682	MOV-3-865C	ERECT SCAFFOLD - MOV-865C OPERATOR OVERHAUL	10	16MAR09 19:00	17MAR09 04:59	PJ
36019917	MOV-3-865C	30733 STARTER MAINT MOV-865C C ACCUM	16	18MAR09 07:00*	18MAR09 22:59	EM
36018682	MOV-3-865C	MOV-865C: DETERM AND REMOVE OPERATOR	6	22MAR09 04:00*	22MAR09 11:59	VT
36018682	MOV-3-865C	MOV-865C: OPERATOR OVERHAUL	30	22MAR09 12:00	23MAR09 19:59	VT
36018682	MOV-3-865C	MOV-865C : TERM OPERATOR	6	23MAR09 20:00	24MAR09 01:59	VT
36018682	MOV-3-865C	MOV-865C: MOV STATIC TEST	10	25MAR09 04:00	25MAR09 15:59	VT
36018682	MOV-3-865C	MOV-865C: PMT STROKE OPERATOR OVERHAUL	1	26MAR09 02:00	26MAR09 02:59	VT
36019917	MOV-3-865C	PMT - 30733 STARTER MAINT MOV-865C C ACCUM	2	26MAR09 02:00	26MAR09 03:59	EM
36018682	MOV-3-865C	REMOVE SCAFFOLD - MOV-865C OPERATOR OVERHAUL	6	26MAR09 03:00	26MAR09 10:59	PJ
38011891	PT-3-921	PT-3-921, ACCUM "A" TRANS CAL	3	26MAR09 16:00	26MAR09 18:59	IC
38011891	PT-3-923	PT-3-923, ACCUM "A" TRANS CAL	3	26MAR09 19:00	26MAR09 21:59	IC
38011891	PT-3-925	PT-3-925, ACCUM "B" TRANS CAL	3	27MAR09 15:00	27MAR09 17:59	IC
38011891	PT-3-927	PT-3-927, ACCUM "B" TRANS CAL	3	27MAR09 18:00	27MAR09 20:59	IC
38011891	PT-3-929	PT-3-929, ACCUM "C" TRANS CAL	3	28MAR09 00:00	28MAR09 16:59	IC
38011891	PT-3-931	PT-3-931, ACCUM "C" TRANS CAL	3	28MAR09 17:00	28MAR09 19:59	IC
38011890		F&V ACCUM LVL LOOPS (LT-920 - 930)	4	04APR09 04:00	04APR09 07:59	IC
38012136	RV-3-6587	RV-6587 - N2 B/U TO PORV - REMOVE VALVE	3	22MAR09 07:00*	22MAR09 09:59	VT
38012136	RV-3-6587	RV-6587 - N2 B/U TO PORV - INSTALL SPARE VALVE	3	22MAR09 10:00	22MAR09 12:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012136	RV-3-6587	RV-6587 - N2 B/U TO PORV - O/H REMOVED VALVE	3	22MAR09 19:00	22MAR09 21:59	VT
38012136	RV-3-6587	RV-6587 - N2 B/U TO PORV - LEAK CHECK PMT	1	22MAR09 21:00	22MAR09 21:59	VT
38012137	RV-3-6587	RV-6588 - N2 B/U TO PORV - O/H REMOVED VALVE	3	22MAR09 22:00	23MAR09 00:59	VT
38012137	RV-3-6588	RV-6588 - N2 B/U TO PORV - REMOVE VALVE	3	22MAR09 13:00	22MAR09 15:59	VT
38012137	RV-3-6588	RV-6588 - N2 B/U TO PORV - INSTALL SPARE VALVE	3	22MAR09 16:00	22MAR09 18:59	VT
38012137	RV-3-6588	RV-6588 - N2 B/U TO PORV - LEAK CHECK PMT	1	22MAR09 21:00	22MAR09 21:59	VT
38011894	RAD-3-6311	T.S. CTMT HI RANGE RADIATION MON CHANNEL A CAL	15	22MAR09 23:00	24MAR09 03:59	IC
38011894	RAD-3-6311	T.S. CTMT HI RANGE RADIATION MON CHANNEL B CAL	15	24MAR09 04:00	25MAR09 08:59	IC
38011894	RAD-3-6311	CTMT HI RANGE RADIATION MON/ CHECK W/ SOURCE	4	25MAR09 23:00	26MAR09 02:59	IC
38011900	RAD-3-6458	RAD-6458 HD LK DET SYS-BREAK TUBING @ 58' EL.	2	17MAR09 23:00	18MAR09 00:59	IC
38011900	RAD-3-6458	RAD-6458 HD LK DET / INSPECT & REPLACE PAPER	8	28MAR09 23:00	29MAR09 06:59	IC
38011900	RAD-3-6458	CRDM B/ RECONNECT TUBING & OUTLET TEMP ELEMENT	3	01APR09 07:00	01APR09 23:59	IC
38011900	RAD-3-6458	RECONNECT TUBING AT 58' EL. NEAR RX CAVITY	4	02APR09 00:00	02APR09 03:59	IC
38011900	RAD-3-6458	PMT RAD-6458 HD LK DET SYSTEM	1	03APR09 10:00	03APR09 10:59	IC
35004153	RAI-3-6458	CHAR CNTMT RAD MNTR RATE MTR CBLS AFTER DISCNTD	10	18MAR09 23:00*	19MAR09 08:59	IC
38012140	RAI-3-6458	RAI-3-6458 (SOURCE CK) BELTS/CAL	12	02APR09 04:00	03APR09 05:59	IC
38011896	RD-3-140*	SET CTMT ARMS CHANNELS SETPOINTS TO S/D VALUES	2	16MAR09 02:00	16MAR09 03:59	IC
38011898	RD-3-140*	RESET CTMT ARMS CHANNELS SETPOINTS FOR STARTUP	2	06APR09 05:00	06APR09 06:59	IC
38011899	RD-3-1401	AREA RADIATION MONITORING SYSTEM- SHINE W/SOURCE	4	17MAR09 09:00	17MAR09 12:59	IC
38011899	RD-3-1402	AREA RADIATION MONITORING SYSTEM- SHINE W/SOURCE	4	19MAR09 04:00	19MAR09 07:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011899	RD-3-1403	AREA RADIATION MONITORING SYSTEM- SHINE W/SOURCE	4	21MAR09 23:00	22MAR09 02:59	IC
38013845	R-3-11	OPS SUPPORT CTMT VENT ISO SYS *-OSP-067.1	3	18MAR09 10:00	18MAR09 12:59	EM
35019989	SV-3-2911	ITOP PCM 05-088	1	23MAR09 00:00	23MAR09 00:59	IC
35019989	SV-3-2911	SATS PCM 05-088	1	23MAR09 01:00	23MAR09 01:59	IC
38025783	3-890A	3-890A CHK VLV INSPECT VLV INTERNAL SCAFFOLD REM	4	01APR09 22:00	02APR09 01:59	PJ
33021616	MOV-3-880A	30741 STR INSP MOV-880A	15	18MAR09 21:00	19MAR09 11:59	EM
38014590	MOV-3-880A	MOV-880A GREASE INSP/STEM LUBE	4	19MAR09 12:00	19MAR09 17:59	VT
38014590	MOV-3-880A	MOV-880A - PMT STROKE	1	19MAR09 18:00	19MAR09 18:59	VT
33021616	MOV-3-880A	PMT - 30741 STR INSP MOV-880A	2	23MAR09 08:00	23MAR09 09:59	EM
38014590	MOV-3-880A	GENREAL MOV & GREASE INSPECTION SCAFF RE	4	04APR09 20:00*	04APR09 23:59	PJ
38014591	MOV-3-880B	EQ-MOV-880B MOV & GREASE INSPECTION	6	18MAR09 21:00	19MAR09 02:59	VT
38014591	MOV-3-880B	MOV-880B: PMT STROKE	1	19MAR09 03:00	19MAR09 03:59	VT
38011911	3E210	FILL & VENT STM GEN STEAM FLOW TXS	6	04APR09 14:00	04APR09 19:59	IC
38013624	3E210A	S/G A HT LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	18MAR09 12:00	18MAR09 15:59	PJ
38013624	3E210A	S/G A HT LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	18MAR09 16:00	18MAR09 16:59	EN
38013624	3E210A	S/G A HT LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	18MAR09 17:00	18MAR09 20:59	PJ
38013624	3E210A	S/G A CD LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	18MAR09 21:00	19MAR09 00:59	PJ
38013624	3E210A	S/G A CD LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	19MAR09 01:00	19MAR09 01:59	EN
38013624	3E210A	S/G A CD LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	31MAR09 07:00*	31MAR09 10:59	PJ
38013624	3E210B	S/G B CD LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	19MAR09 02:00	19MAR09 07:59	PJ
38013624	3E210B	S/G B CD LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	19MAR09 08:00	19MAR09 08:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013624	3E210B	S/G B HT LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	19MAR09 09:00	19MAR09 12:59	PJ
38013624	3E210B	S/G B HT LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	19MAR09 13:00	19MAR09 13:59	EN
38013624	3E210B	S/G B HT LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	19MAR09 14:00	19MAR09 17:59	PJ
38013624	3E210B	S/G B CD LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	02APR09 08:00*	02APR09 11:59	PJ
[redacted]						
38013624	3E210C	S/G C CD LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	19MAR09 18:00	19MAR09 21:59	PJ
38013624	3E210C	S/G C CD LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	19MAR09 22:00	19MAR09 22:59	EN
38013624	3E210C	S/G C CD LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	19MAR09 23:00	20MAR09 02:59	PJ
38013624	3E210C	S/G C HT LEG MANWAY-CLASS A BOLT INSP-REMOV INSU	4	20MAR09 03:00	20MAR09 08:59	PJ
38013624	3E210C	S/G C HT LEG MANWAY-CLASS A BOLT INSP-PERF EXAMS	1	20MAR09 09:00	20MAR09 09:59	EN
38013624	3E210C	S/G C HT LEG MANWAY-CLASS A BOLT INSP-INSTA INSU	4	20MAR09 10:00	20MAR09 13:59	PJ
[redacted]						
38013627	CSI ZN 104	CSI- 3-104 78101B-H-321-01 -BLD SCAF	8	20MAR09 07:00*	20MAR09 14:59	PJ
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - REM INSU	4	20MAR09 15:00	20MAR09 18:59	PJ
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - BUFF & CLEAN	6	20MAR09 19:00	21MAR09 00:59	PJ
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - PERFORM EXAMS	4	21MAR09 01:00*	21MAR09 08:59	EN
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18 -SCAFFOLD ERCT	8	21MAR09 19:00*	22MAR09 02:59	PJ
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18 - REM INSU	4	22MAR09 03:00	23MAR09 08:59	PJ
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18 - BUFF & CLEAN	6	23MAR09 09:00	23MAR09 14:59	PJ
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - ANALYZE DATA	24	24MAR09 07:00*	26MAR09 10:59	EN
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18- PERFORM EXAMS	30	25MAR09 09:00*	28MAR09 08:59	EN
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - INSUI INSTL	4	26MAR09 11:00	26MAR09 14:59	PJ
38013627	CSI ZN 104	CSI- 3-104 78102B-H-420-03 - REM SCAF	8	28MAR09 21:00*	29MAR09 04:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18 - ANALYZE DATA	20	30MAR09 07:00*	31MAR09 16:59	EN
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18- INSUI INSTL	4	31MAR09 17:00	31MAR09 20:59	PJ
38013627	CSI ZN 104	CSI- 3-104 6"-BDB-2302-18 - REM SCAF	8	31MAR09 21:00	01APR09 04:59	PJ
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20 - BLD SCAF	8	19MAR09 08:00*	19MAR09 15:59	PJ
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20 - REM INSUL	4	19MAR09 16:00	19MAR09 19:59	PJ
38013627	CSI ZN 109	CSI- 3 -109 14"-FWA-2301-20 - BUFF & CLEAN	4	19MAR09 20:00	19MAR09 23:59	PJ
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20 - PERFORM EXAMS	48	21MAR09 10:00*	27MAR09 07:59	EN
38013627	CSI ZN 109	CSI- 3-109 UT A S/G AUGEMENTED -EXAM PERFORM	48	21MAR09 10:00*	27MAR09 07:59	EN
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20 - ANALYZE DATA	19	27MAR09 08:00*	28MAR09 16:59	EN
38013627	CSI ZN 109	CSI- 3-109 UT A S/G AUGEMENTED -Analyze	19	27MAR09 08:00*	28MAR09 16:59	EN
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20- INST INSU	8	28MAR09 17:00	29MAR09 00:59	PJ
38013627	CSI ZN 109	CSI- 3-109 14"-FWA-2301-20- REM SCAF	8	29MAR09 01:00	30MAR09 10:59	PJ
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303-16 & 17 - BLD SCAF	8	19MAR09 08:00*	19MAR09 15:59	PJ
38013627	CSI ZN 110	CSI- 3-110 UT B S/G AUGMENTED EXAM - PERFORM	48	21MAR09 18:00*	27MAR09 01:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303 - REM INSUL	4	23MAR09 09:00	23MAR09 12:59	PJ
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303 - BUFF & CLEAN	4	23MAR09 13:00	23MAR09 16:59	PJ
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303 - PERFORM EXAMS	48	23MAR09 17:00*	28MAR09 00:59	EN
38013627	CSI ZN 110	CSI- 3-110 UT B S/G AUGMENTED EXAM - ANALYZE	20	27MAR09 07:00*	28MAR09 16:59	EN
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303 - ANALYZE DATA	20	28MAR09 07:00*	30MAR09 16:59	EN
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303-16 & 17 REM SCAF	8	28MAR09 17:00	29MAR09 00:59	PJ
38013627	CSI ZN 110	CSI- 3-110 14"-FWB-2303- INST INSU	10	01APR09 17:00	02APR09 02:59	PJ
38011902	LT-3-474	TS S/G LVL CH I (NR) TXS CAL	3	17MAR09 23:00*	18MAR09 01:59	IC
38011903	LT-3-475	TS S/G LVL CH II (NR) TXS CAL	3	18MAR09 08:00	19MAR09 00:59	IC
38011904	LT-3-476	TS S/G LVL CH III (NR) TXS CAL	3	20MAR09 03:00	20MAR09 05:59	IC
38011902	LT-3-484	TS S/G LVL CH I (NR) TXS CAL	3	18MAR09 02:00	18MAR09 04:59	IC
38011903	LT-3-485	TS S/G LVL CH II (NR) TXS CAL	3	19MAR09 01:00	19MAR09 03:59	IC
38011904	LT-3-486	TS S/G LVL CH III (NR) TXS CAL	3	19MAR09 07:00	19MAR09 23:59	IC
38011902	LT-3-494	TS S/G LVL CH I (NR) TXS CAL	3	18MAR09 05:00	18MAR09 07:59	IC
38011903	LT-3-495	TS S/G LVL CH II (NR) TXS CAL	3	19MAR09 04:00	19MAR09 06:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011904	LT-3-498	TS S/G LVL CH III (NR) TXS CAL	3	20MAR09 00:00	20MAR09 02:59	IC
36013769	R-011-01	3A SGFP SUCT LINE - REMOVE INSULATION	4	17MAR09 03:00	17MAR09 06:59	PJ
36013769	R-011-01	3A SGFP SUCT LINE- NDE PIPE AFTER GRINDIND	1	30MAR09 11:00	30MAR09 11:59	EN
36013769	R-011-01	3A SGFP SUCT LINE - INSTALL INSULATION	4	31MAR09 12:00	31MAR09 15:59	PJ
36013769	R-011-01	3A SGFP SUCT LINE - REMOVE SCAFFOLD	8	31MAR09 16:00	31MAR09 23:59	PJ
38012179	SNU-1031	SNUB-S/G SYS-(A S/G CUBE) - AS FOUND VISUAL	1	17MAR09 07:00*	17MAR09 07:59	EN
38012179	SNU-1031	SNUB-S/G SYS-(A S/G CUBE) - HAND STROKE	1	17MAR09 08:00	17MAR09 08:59	EN
38012179	SNU-1032	SNUB-S/G SYS-(A S/G CUBE) - AS FOUND VISUAL	1	17MAR09 09:00	17MAR09 09:59	EN
38012179	SNU-1032	SNUB-S/G SYS-(A S/G CUBE) - HAND STROKE	1	17MAR09 10:00	17MAR09 10:59	EN
38012179	SNU-1033	SNUB-S/G SYS-(A S/G CUBE) - AS FOUND VISUAL	1	17MAR09 11:00	17MAR09 11:59	EN
38012179	SNU-1033	SNUB-S/G SYS-(A S/G CUBE) - HAND STROKE	1	17MAR09 12:00	17MAR09 12:59	EN
38012179	SNU-1034	SNUB-S/G SYS-(B S/G CUBE) - AS FOUND VISUAL	1	17MAR09 13:00	17MAR09 13:59	EN
38012179	SNU-1034	SNUB-S/G SYS-(B S/G CUBE) - HAND STROKE	1	17MAR09 14:00	17MAR09 14:59	EN
38012179	SNU-1035	SNUB-S/G SYS-(C S/G CUBE) - AS FOUND VISUAL	1	17MAR09 15:00	17MAR09 15:59	EN
38012179	SNU-1035	SNUB-S/G SYS-C S/G CUBE) - HAND STROKE	1	17MAR09 16:00	17MAR09 16:59	EN
38012179	SNU-1036	SNUB-S/G SYS-(C S/G CUBE) - AS FOUND VISUAL	1	17MAR09 16:00	17MAR09 16:59	EN
38012179	SNU-1036	SNUB-S/G SYS-C S/G CUBE) - HAND STROKE	1	17MAR09 16:00	17MAR09 16:59	EN
38011901		F&V LEVEL TRANSMITTERS 474-498(NR/ALT)	6	04APR09 08:00	04APR09 13:59	IC
38012372	3-10-004	MN STM LINE A NON-RETURN CK VLV - REMOVE INSU	4	16MAR09 07:00	16MAR09 10:59	PJ
38012372	3-10-004	MN STM LINE A NON-RETURN CK VLV - INSTALL INSU	4	06APR09 07:00	06APR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36020760	3-10-219	U3 MAIN ST LINE B TO/EXTERNAL CORROSION; CLEAN A	34	07APR09 21:00	09APR09 10:59	PJ
36020758	3-10-319	U3 MAIN ST LINE C TO/EXTERNAL CORROSION; CLEAN A	34	06APR09 09:00	07APR09 20:59	PJ
38004262	3-5304	POV-2606 INST AIR THROTTLE VLV - ADJ PACKING	2	02APR09 01:00	02APR09 02:59	VT
38004262	3-5304	POV-2606 INST AIR THROTTLE VLV - PMT	1	02APR09 09:00	02APR09 09:59	VT
38011419	3C02	PCM 08-025- BREACH CR ENVELOPE PREJOB	1	18MAR09 06:00	18MAR09 06:59	PJ
38011419	3C02	PCM 08-025- ENTER 84 HR LCO CRE BREACH& FPI	2	18MAR09 07:00*	18MAR09 08:59	PJ
38011419	3C02	PCM 08-025- BREACH CR ENVELOPE/ OPEN PENETS	4	18MAR09 09:00	18MAR09 12:59	PJ
38011419	3C02	PCM 08-025- PULL CBLS TO OP CNSL	2	18MAR09 13:00	18MAR09 14:59	PJ
38011419	3C02	PCM 08-025- QC SUPPT SEAL CNDT/ OP CNSL	2	18MAR09 15:00	18MAR09 16:59	QC
38011419	3C02	PCM 08-025- SEAL PENNS / OP CNSL	4	18MAR09 15:00	18MAR09 18:59	PJ
38011419	3C02	PCM 08-025- 24HR CURE TIME OP CNSL	24	18MAR09 19:00	19MAR09 18:59	PJ
38011419	3C02	PCM 08-025- SMOKE TEST OP CNSL	1	18MAR09 20:00	18MAR09 20:59	PJ
38011419	3C02	PCM 08-025- EXIT CRE BREACH 84 HR LCO	1	18MAR09 21:00	18MAR09 21:59	PJ
38011419	3C02	PCM 08-025- QC SUPPT SEAL CNDT/ OP CNSL	1	19MAR09 19:00	19MAR09 19:59	QC
38011419	3C02	PCM 08-025- EXIT CRE BREACH FPI	1	19MAR09 20:00	19MAR09 20:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP-RIG & REMOV OUTER MANWAY	10	18MAR09 07:00	18MAR09 16:59	PJ
35022639	3T25A	MSR "A" PARTITION PLATE INSP- REMOVE MANWAY	6	19MAR09 19:00	20MAR09 00:59	PJ
35022639	3T25A	MSR "A" PARTITION PLATE INSP - REMOV PART PLATES	6	19MAR09 19:00	20MAR09 00:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP - REMOV INNER MANWAY	8	19MAR09 19:00	20MAR09 02:59	PJ
35022639	3T25A	MSR "A" PARTITION PLATE INSP - ENG PERF INSP	4	20MAR09 01:00	20MAR09 04:59	EN
35022639	3T25A	MSR "A" PARTITION PLATE INSP-CLN GASKET SURFACE	4	20MAR09 07:00	20MAR09 10:59	PJ
33022370	3T25A	MSR "A" PIPE STUB - PERFORM PIPE STUB FAC INSP	5	20MAR09 07:00	20MAR09 11:59	EN
33022349	3T25A	MSR "A" SHELL SIDE INSP- SUPPORT ENG DURING INSP	8	20MAR09 07:00	20MAR09 14:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP- PERFORM SHELL SIDE INSP	8	20MAR09 07:00	20MAR09 14:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35022639	3T25A	MSR "A" PART PLATE INSP-REASS & DTRMN GASKET REQ	4	20MAR09 11:00	20MAR09 14:59	PJ
35022639	3T25A	MSR "A" PART PLATE INSP - REASS PART PLATES	6	20MAR09 15:00	20MAR09 20:59	PJ
33022384	3T25A	RTE MSR "A" REPAIRS (EMERGENT)	99	20MAR09 15:00	26MAR09 01:59	PJ
35022639	3T25A	MSR "A" PART PLATE INSP- INSTALL MANWAY & TORQUE	6	20MAR09 21:00	21MAR09 02:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP - INSTALL INNER MANWAY	10	26MAR09 02:00	26MAR09 13:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP - INSTALL OUTER MANWAY	10	26MAR09 14:00	26MAR09 23:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP - PMT	1	06APR09 10:00	06APR09 10:59	PJ
35022639	3T25A	MSR "A" PART PLATE INSP - PMT	1	06APR09 10:00	06APR09 10:59	PJ
35022639	3T25A	MSR "A" PARTITION PLATE INSPECTION - REMOVE SCAF	6	06APR09 11:00	06APR09 16:59	PJ
33022349	3T25A	MSR "A" SHELL SIDE INSP - REMOVE RIGGING BEAM	6	07APR09 10:00*	07APR09 15:59	PJ
37020526	3T25B	ERECT WORK SCAFFOLD #10505	10	19MAR09 09:00	19MAR09 18:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP-RIG & REMOV OUTER MANWAY	8	19MAR09 19:00	20MAR09 02:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP - REMOV INNER MANWAY	6	21MAR09 07:00	21MAR09 12:59	PJ
33022370	3T25B	MSR "B" PIPE STUB - PERFORM PIPE STUB FAC INSP	5	21MAR09 13:00	21MAR09 17:59	EN
33022352	3T25B	MSR "B" SHELL SIDE INSP- SUPPORT ENG DURING INSP	8	21MAR09 13:00	21MAR09 20:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP- PERFORM SHELL SIDE INSP	8	21MAR09 13:00	21MAR09 20:59	EN
37020526	3T25B	MSR "B" INSPECT/REPAIR EXIT ENCLOSURE	99	21MAR09 21:00	27MAR09 09:59	PJ
33022379	3T25B	RTE MSR "B" REPAIRS (EMERGENT)	99	21MAR09 21:00	27MAR09 09:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP - INSTALL INNER MANWAY	10	27MAR09 10:00	27MAR09 19:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP - INSTALL OUTER MANWAY	10	27MAR09 20:00	28MAR09 07:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP - PMT	1	04APR09 08:00	04APR09 08:59	PJ
37020526	3T25B	REMOVE WORK SCAFFOLD #10505	4	04APR09 09:00	04APR09 12:59	PJ
33022352	3T25B	MSR "B" SHELL SIDE INSP - REMOVE RIGGING BEAM	6	04APR09 09:00	04APR09 14:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP-RIG & REMOV OUTER MANWAY	10	20MAR09 03:00	20MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
33022357	3T25C	MSR "C" SHELL SIDE INSP - REMOV INNER MANWAY	10	21MAR09 17:00	22MAR09 02:59	PJ
33022370	3T25C	MSR "C" PIPE STUB - PERFORM PIPE STUB FAC INSP	5	23MAR09 07:00	23MAR09 11:59	EN
33022357	3T25C	MSR "C" SHELL SIDE INSP- SUPPORT ENG DURING INSP	8	23MAR09 07:00	23MAR09 14:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP- PERFORM SHELL SIDE INSP	8	23MAR09 07:00	23MAR09 14:59	EN
33022382	3T25C	MSR "C" SHELL SIDE INSP- RTE REPAIRS (EMERGENT)	99	23MAR09 15:00	28MAR09 01:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP - INSTALL INNER MANWAY	10	28MAR09 02:00	28MAR09 13:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP - INSTALL OUTER MANWAY	8	28MAR09 14:00	28MAR09 21:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP - PMT	1	04APR09 08:00	04APR09 08:59	PJ
33022357	3T25C	MSR "C" SHELL SIDE INSP - REMOVE RIGGING BEAM	6	04APR09 15:00	04APR09 20:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP-RIG & REMOV OUTER MANWAY	8	20MAR09 15:00	20MAR09 22:59	PJ
35022638	3T25D	MSR "D" PARTITION PLATE INSP- REMOVE MANWAY	6	22MAR09 01:00	23MAR09 08:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP - REMOV INNER MANWAY	8	22MAR09 01:00	23MAR09 10:59	PJ
33022370	3T25D	MSR "D" PIPE STUB - PERFORM PIPE STUB FAC INSP	5	23MAR09 11:00	23MAR09 15:59	EN
33022370	3T25D	MSR "D" SHELL SIDE INSP- SUPPORT ENG DURING INSP	8	23MAR09 11:00	23MAR09 18:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP- PERFORM SHELL SIDE INSP	8	23MAR09 11:00	23MAR09 18:59	EN
38000555	3T25D	MSR "D" SHELL SIDE MANWAY-REPAIR MANWAY STM LEAK	16	23MAR09 19:00	24MAR09 12:59	PJ
33022388	3T25D	RTE MSR "D" REPAIRS (EMERGENT)	99	23MAR09 19:00	28MAR09 07:59	PJ
35022638	3T25D	MSR "D" PARTITION PLATE INSP - REMOV PART PLATES	6	24MAR09 11:00	24MAR09 16:59	PJ
35022638	3T25D	MSR "D" PARTITION PLATE INSP - ENG PERF INSP	4	24MAR09 17:00	24MAR09 20:59	EN
37020527	3T25D	MSR "D" EXIT ENCLOSURE-INSTAL TUBE & FME PROTECT	6	24MAR09 20:00	25MAR09 01:59	PJ
35022638	3T25D	MSR "D" PARTITION PLATE INSP-CLN GASKET SURFACE	4	24MAR09 21:00	25MAR09 00:59	PJ
35022638	3T25D	MSR "D" PART PLATE INSP-REASS & DTRMN GASKET REQ	4	25MAR09 01:00	25MAR09 04:59	PJ
37020527	3T25D	MSR "D" EXIT ENCLOSURE - PERFORM INSP	4	25MAR09 02:00	25MAR09 05:59	EN
37020527	3T25D	MSR "D" EXIT ENCLOSURE - SUPPORT INSP	4	25MAR09 02:00	25MAR09 07:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35022638	3T25D	MSR "D" PART PLATE INSP - REASS PART PLATES	6	25MAR09 07:00	25MAR09 12:59	PJ
37020527	3T25D	MSR "D" EXIT ENCLOSURE-PERF REPRS PER CR07-28645	10	25MAR09 08:00	25MAR09 17:59	PJ
35022638	3T25D	MSR "D" PART PLATE INSP- INSTALL MANWAY & TORQUE	6	25MAR09 13:00	25MAR09 18:59	PJ
37020527	3T25D	MSR "D" EXIT ENCLOSURE-REMOV TUBE & FME PROTECT	4	25MAR09 18:00	25MAR09 21:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP - INSTALL INNER MANWAY	10	28MAR09 08:00	28MAR09 17:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP - INSTALL OUTER MANWAY	8	28MAR09 18:00	29MAR09 01:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP - PMT	1	04APR09 08:00	04APR09 08:59	PJ
35022638	3T25D	MSR "D" PART PLATE INSP - PMT	1	04APR09 08:00	04APR09 08:59	PJ
33022370	3T25D	MSR "D" SHELL SIDE INSP - REMOVE RIGGING BEAM	6	04APR09 21:00	05APR09 02:59	PJ
35022638	3T25D	MSR "D" PARTITION PLATE INSPECTION - REMOVE SCAF	8	05APR09 03:00	06APR09 12:59	PJ
38003597	AN-I-7/2	ANNUN FOR MSIV NTGN SUPP LO PRES COMING IN EARLY	10	27MAR09 15:00*	28MAR09 00:59	IC
37014673	CV-3-1607	MN STM LINE B DUMP TO ATMOS - REMOV INSU	4	17MAR09 07:00*	17MAR09 10:59	PJ
37014673	CV-3-1607	MN STM LINE B DUMP TO ATMOS - PMT	1	04APR09 08:00	04APR09 08:59	VT
37014673	CV-3-1607	MN STM LINE B DUMP TO ATMOS - INSTALL INSU	4	04APR09 09:00	04APR09 12:59	PJ
36019700	CV-3-2830	MN STM DUMP TO COND CONT VLV - AS FD DIAG	5	02APR09 07:00*	02APR09 11:59	VT
37021808	CV-3-2830	MN STM DUMP TO COND CONT VLV-REPAIR ACT OIL LEAK	24	02APR09 12:00	03APR09 11:59	VT
36019700	CV-3-2830	MN STM DUMP TO COND CV - AS LT DIAG & CAL ACT	8	03APR09 18:00	04APR09 01:59	VT
36019703	CV-3-2910	MN STM TO MSR A CV - REMOVE ACT & DISASS	10	30MAR09 12:00*	30MAR09 21:59	VT
36019703	CV-3-2910	MN STM TO MSAR A CV - O/H ACT & RE-INSTALL	10	30MAR09 22:00	31MAR09 07:59	VT
36019702	CV-3-2910	MN STM TO MSR A CV - AS LEFT CAL	8	31MAR09 08:00	31MAR09 15:59	VT
36019706	CV-3-2911	MN STM TO MSR B CV - REMOVE ACT & DISASS	10	31MAR09 08:00	31MAR09 17:59	VT
36019706	CV-3-2911	MN STM TO MSR B CV - O/H ACT & RE-INSTALL	10	31MAR09 18:00	01APR09 03:59	VT
36019704	CV-3-2911	MN STM TO MSR B CV - AS LEFT CAL	8	01APR09 04:00	01APR09 13:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012142	CV-3-2912	MN STM TO MSR C CV - REMOVE ACT & DISASS	10	01APR09 04:00	01APR09 15:59	VT
38012142	CV-3-2912	MN STM TO MSR C CV - O/H ACT & RE-INSTALL	10	01APR09 16:00	02APR09 01:59	VT
36019707	CV-3-2912	MN STM TO MSR C CV - AS LEFT CAL	8	02APR09 02:00	02APR09 11:59	VT
38012143	CV-3-2913	MN STM TO MSR D CV - AS LEFT CAL	8	31MAR09 16:00	31MAR09 23:59	VT
36019847	E X-UNDER	RTE EAST X-UNDER REPAIRS (EMERGENT)	100	18MAR09 23:00	24MAR09 12:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE REMOVE LAGGING	5	21MAR09 12:00	21MAR09 16:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE REMOVE INSULATION	5	21MAR09 17:00	21MAR09 21:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE BUFF AND CLEAN	10	21MAR09 22:00	23MAR09 09:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE PERFORM EXAMS	5	23MAR09 10:00	23MAR09 14:59	EN
38027015	FAC LOC 46	LOC # 45 CL BREAK - HP TURBINE ANALYZE DATA	3	25MAR09 07:00	25MAR09 09:59	EN
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE REST INSULATION	10	06APR09 07:00*	06APR09 16:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE REST LAGGING	12	06APR09 17:00	07APR09 04:59	PJ
38027015	FAC LOC 45	LOC # 45 CL BREAK - HP TURBINE REMOVE SCAFFOLD	10	07APR09 07:00	07APR09 16:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE REMOVE LAGGING	5	24MAR09 11:00	24MAR09 15:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE REMOVE INSULATION	5	24MAR09 16:00	24MAR09 20:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE BUFF AND CLEAN	10	24MAR09 21:00	25MAR09 08:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE PERFORM EXAMS	5	25MAR09 09:00	25MAR09 13:59	EN
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE ANALYZE DATA	3	27MAR09 07:00	27MAR09 09:59	EN
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE REST INSULATION	10	03APR09 14:00*	03APR09 23:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE REST LAGGING	12	04APR09 00:00	04APR09 13:59	PJ
38027015	FAC LOC 46	LOC # 46 CL.BREAK - HP TURBINE REMOVE SCAFFOLD	10	04APR09 14:00	04APR09 23:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 47	LOC # 47 CL.BREAK - ERECT ASBESTOS TENT	5	20MAR09 19:00	20MAR09 23:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE REMOVE LAGGING	5	21MAR09 00:00	21MAR09 04:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE REMOVE INSULATION	5	21MAR09 07:00	21MAR09 11:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE BUFF AND CLEAN	10	21MAR09 12:00	21MAR09 21:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE PERFORM EXAMS	8	21MAR09 22:00	23MAR09 09:59	EN
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE ANALYZE DATA	6	24MAR09 14:00	25MAR09 09:59	EN
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE REST INSULATION	10	04APR09 10:00*	04APR09 19:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE REST LAGGING	12	04APR09 20:00	06APR09 09:59	PJ
38027015	FAC LOC 47	LOC # 47 CL.BREAK - HP TURBINE REMOVE SCAFFOLD	10	06APR09 10:00	06APR09 19:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER REMOVE LAGGING	5	24MAR09 16:00	24MAR09 20:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER REMOVE INSULATION	5	24MAR09 21:00	25MAR09 01:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER BUFF AND CLEAN	10	25MAR09 02:00	25MAR09 13:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER PERFORM EXAMS	5	25MAR09 14:00	25MAR09 18:59	EN
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER ANALYZE DATA	3	27MAR09 07:00	27MAR09 09:59	EN
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER REST INSULATION	10	02APR09 09:00*	02APR09 18:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER REST LAGGING	12	02APR09 19:00	03APR09 08:59	PJ
38027015	FAC LOC 48	LOC # 48 MS DUMP HEADER REMOVE SCAFFOLD	10	03APR09 09:00	03APR09 18:59	PJ
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C REMOVE LAGGING	5	20MAR09 16:00	20MAR09 20:59	PJ
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C REMOVE INSULATION	5	20MAR09 21:00	21MAR09 01:59	PJ
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C BUFF AND CLEAN	10	21MAR09 02:00	21MAR09 13:59	PJ
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C PERFORM EXAMS	5	21MAR09 14:00*	21MAR09 18:59	EN
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C ANALYZE DATA	3	24MAR09 07:00	24MAR09 09:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C REST INSULATION	10	07APR09 08:00*	07APR09 17:59	PJ
38027015	FAC LOC 49	LOC # 49 MS DUMP HDR - RHTR C REST LAGGING	12	07APR09 18:00	08APR09 07:59	PJ
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - ERECT SCAFF	10	20MAR09 03:00*	20MAR09 14:59	PJ
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - REMOVE INSULATION	5	20MAR09 15:00	20MAR09 19:59	PJ
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - BUFF AND CLEAN	5	20MAR09 20:00	21MAR09 00:59	PJ
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - PERFORM UT EXAMS	2	21MAR09 01:00	21MAR09 02:59	EN
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - ANALYZE DATA	2	23MAR09 11:00	23MAR09 12:59	EN
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - REST INSULATION	5	23MAR09 13:00	23MAR09 17:59	PJ
38027015	FAC LOC 65	LOC # 65 EXT STM TURB MEZ - REMOVE SCAFFOLD	10	31MAR09 11:00*	31MAR09 20:59	PJ
38011905	FT-3-474	T.S. FT-474 S/G 4A STEAM FLOW CAL	3	27MAR09 15:00*	27MAR09 17:59	IC
38011906	FT-3-475	T.S. FT-475 S/G 4A STEAM FLOW CAL	3	27MAR09 18:00	27MAR09 20:59	IC
38011907	FT-3-484	T.S. FT-484 S/G 4B STEAM FLOW CAL	3	27MAR09 21:00	27MAR09 23:59	IC
38011908	FT-3-485	T.S. FT-485 S/G 4B STEAM FLOW CAL	3	28MAR09 00:00	28MAR09 16:59	IC
38011909	FT-3-494	T.S. FT-494 S/G 4C STEAM FLOW CAL	3	28MAR09 17:00	28MAR09 19:59	IC
38011910	FT-3-495	CALIBRATE STEAM GENERATOR STEAM FLOW TRANSMITTER	3	28MAR09 20:00	28MAR09 22:59	IC
38011419	HY-3-1606	HY-3-1606- INST SUPP & INSTR. TUBING AT 3C02 CAB	2	27MAR09 13:00	27MAR09 14:59	IC
38011419	HY-3-1607	HY-3-1607- INST SUPP & INSTR. TUBING AT 3C02 CAB	2	27MAR09 15:00	27MAR09 16:59	IC
38011419	HY-3-1608	HY-3-1608- INST SUPP & INSTR. TUBING AT 3C02 CAB	2	28MAR09 07:00	28MAR09 08:59	IC
38010289	HY-3-1608	HY-3-1608: REGULATOR LEAKS AT OUTPUT	2	28MAR09 15:00	28MAR09 16:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014596	MOV-3-1400	MOV-1400 OPERATOR - DETERM & REMOVE	4	17MAR09 09:00	17MAR09 12:59	VT
38014596	MOV-3-1400	MOV-1400 OVERHAUL OPERATOR	16	17MAR09 21:00	18MAR09 14:59	VT
38014596	MOV-3-1400	MOV-1400 INSTAL & TERM OPERATOR	6	19MAR09 09:00	19MAR09 14:59	VT
37023315	MOV-3-1400	MOV-3-1400 - INSTALL PROTECTIVE COVER	1	27MAR09 23:00	27MAR09 23:59	VT
38014598	MOV-3-1401	MOV-1401 OPERATOR - DETERM & REMOVE	4	17MAR09 13:00	17MAR09 16:59	VT
38014598	MOV-3-1401	MOV-1401 OVERHAUL OPERATOR	16	17MAR09 21:00	18MAR09 14:59	VT
38014598	MOV-3-1401	MOV-1401 INSTAL & TERM OPERATOR	6	19MAR09 15:00	19MAR09 20:59	VT
38014598	MOV-3-1401	MOV-1401 MOV STATIC TEST	8	20MAR09 07:00	20MAR09 14:59	VT
38014598	MOV-3-1401	MOV-1401 MS BYP - PMT CYCLE MOV	1	20MAR09 15:00	20MAR09 15:59	VT
37023318	MOV-3-1401	MOV-3-1401 - INSTALL PROTECTIVE COVER	1	27MAR09 23:00	27MAR09 23:59	VT
38014610	MOV-3-1402	MOV-1402 OPERATOR - DETERM & REMOVE	4	17MAR09 17:00	17MAR09 20:59	VT
38014610	MOV-3-1402	MOV-1402 OVERHAUL OPERATOR	16	18MAR09 15:00	19MAR09 08:59	VT
38014610	MOV-3-1402	MOV-1402 INSTAL & TERM OPERATOR	6	19MAR09 21:00	20MAR09 02:59	VT
38014610	MOV-3-1402	MOV-1402 MOV STATIC TEST	6	20MAR09 16:00	20MAR09 21:59	VT
38014610	MOV-3-1402	MOV-1402 MS BYP - PMT CYCLE MOV	1	20MAR09 22:00	20MAR09 22:59	VT
37023406	MOV-3-1402	MOV-3-1402 - INSTALL PROTECTIVE COVER	1	27MAR09 23:00	27MAR09 23:59	VT
37023857	MOV-3-1431	MOV-1431 A MSR ISO VLV - MOV & GREASE INSP	6	30MAR09 07:00*	30MAR09 12:59	VT
37023857	MOV-3-1431	MOV-1431 A MSR ISO VLV - mc2 STATIC TEST	6	31MAR09 11:00	31MAR09 16:59	VT
37023857	MOV-3-1431	MOV-1431 A MSR ISO VLV - PMT STROKE	2	01APR09 13:00	01APR09 14:59	VT
37023858	MOV-3-1432	MOV-1432 B MSR ISO VLV - MOV & GREASE INSP	6	30MAR09 13:00	30MAR09 18:59	VT
37023858	MOV-3-1432	MOV-1432 B MSR ISO VLV - mc2 STATIC TEST	6	31MAR09 17:00	31MAR09 22:59	VT
37023858	MOV-3-1432	MOV-1432 B MSR ISO VLV - PMT STROKE	2	01APR09 13:00	01APR09 14:59	VT
35013269	MOV-3-1433	STM TO MSR "C" MOV - REMOVE INSUL	4	26MAR09 11:00*	26MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35013269	MOV-3-1433	STM TO MSR "C" MOV - PREP AND COAT VLV	20	26MAR09 15:00	27MAR09 12:59	PJ
38026402	MOV-3-1433	STM TO MSR "C" MOV - PAINT / COAT VLV BASE	20	27MAR09 13:00	28MAR09 10:59	PJ
37023859	MOV-3-1433	MOV-1433 C MSR ISO VLV - MOV & GREASE INSP	6	30MAR09 19:00	31MAR09 00:59	VT
37023859	MOV-3-1433	MOV-3-1433 C MSR ISO VLV - mc2 STATIC TEST	6	31MAR09 23:00	01APR09 04:59	VT
37023859	MOV-3-1433	MOV-1433 C MSR ISO VLV - PMT STROKE	2	01APR09 13:00	01APR09 14:59	VT
35013269	MOV-3-1433	STM TO MSR "C" MOV - INSTALL INSUL	4	04APR09 09:00	04APR09 12:59	PJ
[redacted]						
35013270	MOV-3-1434	STM TO MSR "C" MOV - REMOVE INSUL	4	26MAR09 15:00	26MAR09 18:59	PJ
35013270	MOV-3-1434	STM TO MSR "C" MOV - REMOVE INSULATION	10	26MAR09 19:00	27MAR09 04:59	PJ
35013270	MOV-3-1434	STM TO MSR "C" MOV - PAINT / COAT VLV BASE	20	27MAR09 07:00	28MAR09 02:59	PJ
37023860	MOV-3-1434	MOV-1434 D MSR ISO VLV - MOV & GREASE INSP	6	31MAR09 01:00	31MAR09 06:59	VT
37023860	MOV-3-1434	MOV-3-1434 D MSR ISO VLV - mc2 STATIC TEST	6	01APR09 07:00	01APR09 12:59	VT
37023860	MOV-3-1434	MOV-1434 D MSR ISO VLV - PMT STROKE	2	01APR09 13:00	01APR09 14:59	VT
35013270	MOV-3-1434	STM TO MSR "C" MOV - INSTALL INSUL	4	04APR09 09:00	04APR09 12:59	PJ
[redacted]						
38011419	P-3-160*	ENG PERF. PRE-IMPLEMENTATION WALKDOWN PCM 08-025	2	18MAR09 09:00	18MAR09 10:59	EN
38011419	P-3-160*	I&C PERF. PRE-IMPLEMENTATION WALKDOWN PCM 08-025	2	18MAR09 09:00	18MAR09 10:59	IC
38011419	P-3-160*	AQUIRE NEW CONTROLLERS CONFIGURED PRE-OUTAGE	1	18MAR09 11:00	18MAR09 11:59	IC
38011419	P-3-160*	ENG - LOAD NEW SOFTWARE IN DCS PER PCM 08-025	3	20MAR09 07:00	20MAR09 09:59	EN
38011419	P-3-160*	PERFORM PRE-HEAT UP TESTING OF SDTA MOD	8	29MAR09 14:00	30MAR09 11:59	IC
38011419	P-3-160*	TP08-019 - 340F TESTING ON SDTA CONTROLLERS- PMT	2	05APR09 05:00	05APR09 06:59	IC
38011419	P-3-160*	TP08-019 - ANALIZE DATA AFTER 340F TESTING- PMT	8	05APR09 07:00	05APR09 14:59	IC
38011419	P-3-160*	TP08-019 - 547F TESTING ON SDTA CONTROLLERS- PMT	2	06APR09 05:00	06APR09 06:59	IC
38011419	P-3-160*	ITOP MEP 08-025 STM DP TO ATM	2	06APR09 07:00	06APR09 08:59	IC
38011419	P-3-160*	SATS MEP 08-025 STM DP TO ATM	4	06APR09 09:00	06APR09 12:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011419	P-3-1606	REMOVE OBSOLETE COMPONENTS IN LOOP P-3-1606	5	19MAR09 07:00	19MAR09 11:59	IC
38011419	P-3-1606	P-3-1606 - PERFORM DCS SYSTEM MODIFICATIONS	3	19MAR09 15:00	19MAR09 17:59	IC
38011419	P-3-1606	REMOVE PNEUMATIC TRANSMITTER P-3-1606	3	20MAR09 00:00	20MAR09 16:59	IC
38011419	P-3-1606	REPLACE P-3-1606 WITH NEW PI GAUGE	3	21MAR09 19:00	21MAR09 21:59	IC
38011419	P-3-1606	INSTALL NEW COMPONENTS IN LOOP P-3-1606	10	22MAR09 07:00	22MAR09 16:59	IC
38011419	P-3-1606	P-3-1606- TERMINATE NEW CABLES AT 3C02	3	25MAR09 17:00	25MAR09 19:59	IC
38011419	P-3-1606	P-3-1606 - TERMINATE NEW CABLES AT DDPS CABINET	3	26MAR09 16:00	26MAR09 18:59	IC
38011419	P-3-1606	P-3-1606 - INST. RESISTORS AND JUMPERS AT 3C02	2	27MAR09 07:00	27MAR09 08:59	IC
38011419	P-3-1606	TEST NEW COMPONENTS IN LOOP P-3-1606 & P-3-1606X	5	28MAR09 09:00	28MAR09 13:59	IC
38011419	P-3-1607	P-3-1607 - PERFORM DCS SYSTEM MODIFICATIONS	3	19MAR09 18:00	19MAR09 20:59	IC
38011419	P-3-1607	REMOVE PNEUMATIC TRANSMITTER P-3-1607	3	20MAR09 17:00	20MAR09 19:59	IC
38011419	P-3-1607	REMOVE OBSOLETE COMPONENTS IN LOOP P-3-1607	5	21MAR09 07:00	21MAR09 11:59	IC
38011419	P-3-1607	REPLACE P-3-1607 WITH NEW PI GAUGE	3	21MAR09 22:00	22MAR09 00:59	IC
38011419	P-3-1607	INSTALL NEW COMPONENTS IN LOOP P-3-1607	10	23MAR09 07:00	23MAR09 16:59	IC
38011419	P-3-1607	P-3-1607- TERMINATE NEW CABLES AT 3C02	3	25MAR09 20:00	25MAR09 22:59	IC
38011419	P-3-1607	P-3-1607 - TERMINATE NEW CABLES AT DDPS CABINET	3	26MAR09 19:00	26MAR09 21:59	IC
38011419	P-3-1607	P-3-1607 - INST. RESISTORS AND JUMPERS AT 3C02	2	27MAR09 09:00	27MAR09 10:59	IC
38011419	P-3-1607	TEST NEW COMPONENTS IN LOOP P-3-1607 & P-3-1607X	5	28MAR09 14:00	29MAR09 08:59	IC
38011419	P-3-1607X	REMOVE ROSEMOUNT TRANSMITTER 1607X	3	20MAR09 23:00	21MAR09 15:59	IC
38011419	P-3-1607X	REPLACE P-3-1607X ROSEMOUNT TRANSMITTER	3	24MAR09 15:00*	24MAR09 17:59	IC
38011419	P-3-1608	P-3-1608 - PERFORM DCS SYSTEM MODIFICATIONS	3	19MAR09 21:00	19MAR09 23:59	IC
38011419	P-3-1608	REMOVE PNEUMATIC TRANSMITTER P-3-1608	3	20MAR09 20:00	20MAR09 22:59	IC
38011419	P-3-1608	REMOVE OBSOLETE COMPONENTS IN LOOP P-3-1608	5	21MAR09 12:00	21MAR09 16:59	IC
38011419	P-3-1608	REPLACE P-3-1608 WITH NEW PI GAUGE	3	22MAR09 15:00	22MAR09 17:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011419	P-3-1608	INSTALL NEW COMPONENTS IN LOOP P-3-1608	10	25MAR09 07:00	25MAR09 16:59	IC
38011419	P-3-1608	P-3-1608- TERMINATE NEW CABLES AT 3C02	3	25MAR09 23:00	26MAR09 15:59	IC
38011419	P-3-1608	P-3-1608 - TERMINATE NEW CABLES AT DDPS CABINET	3	26MAR09 22:00	27MAR09 00:59	IC
38011419	P-3-1608	P-3-1608 - INST. RESISTORS AND JUMPERS AT 3C02	2	27MAR09 11:00	27MAR09 12:59	IC
38011419	P-3-1608	TEST NEW COMPONENTS IN LOOP P-3-1608 & P-3-1608X	5	29MAR09 09:00	29MAR09 13:59	IC
38011419	P-3-1608X	REMOVE ROSEMOUNT TRANSMITTER 1608X	3	21MAR09 16:00	21MAR09 18:59	IC
38011419	P-3-1608X	INSTALL MTG BRACKET FOR ROSEMOUNT TRANSMTR 1608X	3	21MAR09 19:00	21MAR09 21:59	MM
38011419	P-3-1608X	REPLACE P-3-1608X ROSEMOUNT TRANSMITTER	3	24MAR09 18:00	24MAR09 20:59	IC
38011913	POV-3-2604	MSIV A - ACTUATOR SURVEILLANCE / STROKE TEST	10	17MAR09 01:00	17MAR09 12:59	VT
37019998	POV-3-2604	MSIV "A" - CLEAN & COAT RUSTY SOLENOIDS	20	23MAR09 07:00	24MAR09 02:59	PJ
38011914	POV-3-2604	POV-2604 MSIV A EQ SOLENOID VALVE INSPECTION	3	24MAR09 03:00	24MAR09 05:59	VT
38011915	POV-3-2605	POV-2605 MSIV B - ACT SURVEILLANCE / STROKE TST	10	17MAR09 13:00	17MAR09 22:59	VT
38012012	POV-3-2605	POV-2605 MSIV "B" - DISCONN & REMOVE ACT	8	17MAR09 16:00	17MAR09 23:59	VT
37019997	POV-3-2605	MSIV "B" - CLEAN & COAT RUSTY SOLENOIDS	20	25MAR09 07:00*	26MAR09 02:59	PJ
38012012	POV-3-2605	MSIV "B" - INSTALL & CONN ACT	10	25MAR09 19:00*	26MAR09 04:59	VT
38011916	POV-3-2605	POV-2605 MSIV B EQ SOLENOID VALVE INSPECTION	3	26MAR09 05:00	26MAR09 07:59	VT
38011917	POV-3-2606	MSIV C - ACTUATOR SURVEILLANCE / STROKE TEST	10	17MAR09 23:00	18MAR09 10:59	VT
38011918	POV-3-2606	POV-2606 MSIV C EQ SOLENOID VALVE INSPECTION	3	24MAR09 10:00	24MAR09 12:59	VT
37020218	PT-3-1606X	PT-3-1606X: DRAIN VALVE FITTING GALLED	6	22MAR09 18:00*	22MAR09 23:59	IC
37020218	PT-3-1606X	PT-3-1606X: DRAIN VALVE FITTING GALLED PMT	2	05APR09 05:00*	05APR09 06:59	IC
35013230	RV-3-1400	U3 MAIN ST LINE A ST/RV-3-1400: XCI - CORROSION	34	03APR09 19:00	06APR09 08:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35013241	RV-3-1401	U3 MAIN STM- A ST/RV-3-1401: XCI - CORROSION	34	19MAR09 07:00*	20MAR09 18:59	PJ
35013242	RV-3-1402	U3 MAIN ST LINE A ST/RV-3-1402: XCI - CORROSION	34	19MAR09 09:00*	20MAR09 20:59	PJ
35013243	RV-3-1403	U3 MAIN STM LINE A ST/RV-3-1403: XCI - CORROSION	34	20MAR09 21:00	23MAR09 10:59	PJ
35013244	RV-3-1405	U3 MAIN STM-LINE B ST/RV-3-1405: XCI - CORROSION	34	21MAR09 19:00	24MAR09 08:59	PJ
35013245	RV-3-1406	U3 MAIN ST LINE B ST/RV-3-1406: XCI - CORROSION	34	20MAR09 07:00*	21MAR09 18:59	PJ
35013266	RV-3-1407	U3 MAIN STM LINE B ST/RV-3-1407: XCI - CORROSION	34	20MAR09 19:00	23MAR09 08:59	PJ
35013247	RV-3-1408	U3 MAIN STM LINE B ST/RV-3-1408: XCI - CORROSION	34	16MAR09 07:00	17MAR09 18:59	PJ
35013239	RV-3-1410	U3 MAIN STM- C ST/RV-3-1410: XCI - CORROSION	30	17MAR09 19:00	19MAR09 02:59	PJ
35013248	RV-3-1411	U3 MAIN STM-C ST/RV-3-1411: XCI - CORROSION	34	16MAR09 07:00	17MAR09 18:59	PJ
35013237	RV-3-1412	U3 MAIN STM- C ST/RV-3-1412: XCI - CORROSION	34	17MAR09 19:00	19MAR09 08:59	PJ
35013236	RV-3-1413	U3 MAIN ST LINE C ST/RV-3-1413: XCI - CORROSION	34	02APR09 07:00*	03APR09 18:59	PJ
36019479	RV-3-2606C	MSIV PRESS REG RV - INSTALL NEW RV	3	24MAR09 07:00	24MAR09 09:59	VT
36019479	RV-3-2606C	MSIV PRESS REG RV - INSTALL NEW RV - PMT	1	04APR09 08:00	04APR09 08:59	VT
38012179	SNU-1010	SNUB-WEST MAIN STM LINE (18 FT)-AS FOUND VISUAL	1	16MAR09 07:00*	16MAR09 07:59	EN
38012179	SNU-1010	SNUB-WEST MN STM LINE(18 FT)-REMOVE & FUNCTIONAL	4	16MAR09 08:00	16MAR09 11:59	EN
38012179	SNU-1010	SNUB-WEST MN STM LINE (18 FT) - REBUILD & GREASE	5	16MAR09 12:00	16MAR09 16:59	EN
38012179	SNU-1010	SNUB-WEST MN STM LINE(18 FT) - INSTALL & AS LEFT	2	16MAR09 17:00	16MAR09 18:59	EN
38012179	SNU-1012	SNUB-WEST MAIN STM LINE (18 FT)-AS FOUND VISUAL	1	16MAR09 07:00*	16MAR09 07:59	EN
38012179	SNU-1012	SNUB-WEST MN STM LINE (18 FT)-REMVE & FUNCTIONAL	4	16MAR09 08:00	16MAR09 11:59	EN
38012179	SNU-1012	SNUB-WEST MN STM LINE (18 FT)-REBUILD & GREASE	5	16MAR09 12:00	16MAR09 16:59	EN
38012179	SNU-1012	SNUB-WEST MN STM LINE (18 FT)-INSTALL & AS LEFT	2	16MAR09 17:00	16MAR09 18:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1012	SNUB-WEST MAIN STM LINE (18 FT)-REMOVE SCAFFOLD	8	28MAR09 07:00*	28MAR09 14:59	PJ
38012179	SNU-1084	(R) SETUP TO PERFORM WEIGHT TEST OF MANBASKET	2	18MAR09 16:00	18MAR09 17:59	PJ
38012179	SNU-1084	(P) RIG MANBASKET AND PERFORM WEIGHT TEST	1	18MAR09 18:00	18MAR09 18:59	PJ
38012179	SNU-1084	(P)RIG MANBASKET TO ALLOW INSP OF SN-1084 PIN	1	19MAR09 07:00*	19MAR09 07:59	PJ
38012179	SNU-1084	SNUB-MS SYS-(58FT MS FROM C S/G)-AS FOUND VISUAL	1	19MAR09 07:00	19MAR09 07:59	EN
38012179	SNU-1084	SNUB-MS SYS-(58FT MS FROM C S/G)-HANDSTROKE	1	19MAR09 08:00	19MAR09 08:59	EN
38012179	SNU-1131	SNUB- MN STM-STM DUMP TO COND VLVS-AS FD VISUAL	1	16MAR09 07:00*	16MAR09 07:59	EN
38012179	SNU-1131	SNUB- MN STM-STM DP TO COND VLVS-REMO & FUNCT	4	16MAR09 08:00	16MAR09 11:59	EN
38012179	SNU-1131	SNUB- MN STM-STM DP TO COND VLVS-O/H SNUB IF REQ	8	16MAR09 12:00	16MAR09 17:59	EN
38012179	SNU-1131	SNUB-MN STM-STM DP TO COND VLV-FUNCT-INST-AS LEF	2	16MAR09 18:00	17MAR09 07:59	EN
38012179	SNU-1131	SNUB- MN STM-STM DP TO COND VLVS-REMOVE SCAF	6	28MAR09 12:00*	28MAR09 17:59	PJ
37016202	ST-3-1	ST-3-1 STM TRAP MN STM LINE A TO COND-REPL ST	25	23MAR09 07:00*	24MAR09 09:59	PJ
37016202	ST-3-1	ST-3-1 ST MN STM LINE A TO COND-INST VLVS @ COND	15	26MAR09 16:00	27MAR09 06:59	PJ
37016202	ST-3-1	ST-3-1 ST MN STM LINE A TO COND @ PLATFORM-PMT	1	06APR09 07:00	06APR09 07:59	PJ
37016202	ST-3-1	ST-3-1 ST MN STM LINE A TO COND @ COND - PMT	1	06APR09 07:00	06APR09 07:59	PJ
36002502	ST-3-11J	ST-3-11J - MSR B ST DRN VLV - REPLACE VLV	10	17MAR09 11:00	17MAR09 20:59	PJ
36002502	ST-3-11J	ST-3-11J - MSR B ST DRN VLV - PMT	1	07APR09 11:00	07APR09 11:59	PJ
36002502	ST-3-11J	ST-3-11J - MSR B ST DRN VLV - ERECT SCAFFOLD	8	07APR09 12:00	07APR09 19:59	PJ
37016204	ST-3-2	ST-3-2 STM TRAP MN STM LINE B TO COND-REPL ST	25	24MAR09 10:00	25MAR09 12:59	PJ
37016204	ST-3-2	ST-3-2 ST MN STM LINE A TO COND-INST VLVS @ COND	15	27MAR09 09:00	27MAR09 23:59	PJ
37016204	ST-3-2	ST-3-2 ST MN STM LINE A TO COND @ PLATFORM- PMT	1	06APR09 07:00	06APR09 07:59	PJ
37016204	ST-3-2	ST-3-2 ST MN STM LINE A TO COND @ COND - PMT	1	06APR09 07:00	06APR09 07:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38015680	ST-3-3	ST-3-3 STM TRAP MN STM LINE C TO COND-REPL ST	25	25MAR09 13:00	26MAR09 15:59	PJ
38015680	ST-3-3	ST-3-3 ST MN STM LINE C TO COND-INST VLVS @ COND	15	28MAR09 00:00	28MAR09 16:59	PJ
37016204	ST-3-3	ST-3-3 ST MN STM LINE C TO COND @ COND - PMT	1	06APR09 07:00	06APR09 07:59	PJ
37016204	ST-3-3	ST-3-3 ST MN STM LINE C TO COND @ PLATFORM - PMT	1	06APR09 07:00	06APR09 07:59	PJ
38015680	ST-3-3	PT3-24 FAC PIPING REPL ITOP PCM 08-017	16	06APR09 08:00*	06APR09 23:59	PJ
38015680	ST-3-3	PT3-24 FAC PIPING REPL SATS PCM 08-017	16	07APR09 00:00	07APR09 17:59	EN
37024912	ST-3-54J	ST-3-54 DRN TRAP ISO VLV - REMOVE SCAFFOLD	10	08APR09 03:00	08APR09 14:59	PJ
35029818	ST-3-56J	ST-3-56J - REPLACE VALVE REMOVE SCAFFOLD	4	06APR09 03:00	06APR09 08:59	PJ
38014477	STM DUMP	STM DUMP CONTROL MODULE CALIBRATION	35	21MAR09 07:00	24MAR09 11:59	IC
38012153	STM DUMP	STM DUMP TO COND. LOGIC FUNCTIONAL CK	30	31MAR09 23:00	03APR09 08:59	IC
33017366	SV-3-1441	SV TO CV-3-2830 : REPLACE SV-3-1441	6	03APR09 12:00	03APR09 17:59	VT
37020039	SV-3-2614A	SV-3-2614A SEALTITE CONDUIT REPLACEMENT	5	17MAR09 23:00	18MAR09 03:59	IC
37020039	SV-3-2614A	PMT - SV-3-2614A SEALTITE CONDUIT REPLACEMENT	1	18MAR09 04:00	18MAR09 04:59	IC
36019845	W X-UNDER	RTE WEST X-UNDER REPAIRS (EMERGENT)	100	18MAR09 23:00	24MAR09 12:59	PJ
36019845	X-UNDER	X-UNDER - FINAL PREPS TO OPEN AFTER CLR HUNG	5	17MAR09 11:00	17MAR09 15:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MANWAY M.H. 1E - OPEN MANWAY	10	17MAR09 18:00*	18MAR09 03:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MNWY M.H. 1E-INSTA AIR MVR & LIGHTS	2	18MAR09 04:00	18MAR09 07:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MANWAY M.H. 1E- PERF FAC INSPECTION	5	18MAR09 18:00	18MAR09 22:59	EN
37016023	X-UNDER 1E	X-UNDR PERM MANWAY MH 1E - PREP MANWAY TO INSTAL	6	27MAR09 11:00	27MAR09 16:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MANWAY MH 1E - INST & TORQUE MANWAY	8	27MAR09 17:00	28MAR09 00:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MANWAY M.H. 1E - PMT MANWAY	1	06APR09 11:00	06APR09 11:59	PJ
37016023	X-UNDER 1E	X-UNDER PERM MANWAY M.H. 1E - INSTALL INSUL	4	06APR09 15:00	06APR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37016023	X-UNDER 1W	X-UNDER PERM MANWAY M.H. 1W - OPEN MANWAY	10	17MAR09 18:00*	18MAR09 03:59	PJ
37016023	X-UNDER 1W	X-UNDER PERM MANWAY M.H. 1W - INSTALL AIR MOVER	2	18MAR09 04:00	18MAR09 07:59	PJ
37016023	X-UNDER 1W	X-UNDER PERM MANWAY M.H. 1W- PERF FAC INSPECTION	5	18MAR09 18:00	18MAR09 22:59	EN
37016023	X-UNDER 1W	X-UNDR PERM MANWAY MH 1W - PREP MANWAY TO INSTAL	6	27MAR09 17:00	27MAR09 22:59	PJ
37016023	X-UNDER 1W	X-UNDER PERM MANWAY MH 1W - INST & TORQUE MANWAY	8	27MAR09 23:00	28MAR09 08:59	PJ
37016023	X-UNDER 1W	X-UNDER PERM MANWAY M.H. 1W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37016023	X-UNDER 1W	X-UNDER PERM MANWAY M.H. 1W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H. 2E - OPEN MANWAY	5	18MAR09 07:00*	18MAR09 11:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H. 2E - INSTALL AIR MOVER	2	18MAR09 12:00	18MAR09 13:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H.2E-INSTAL LADDER @ RISER	2	18MAR09 14:00	18MAR09 15:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H. 2E- PERF FAC INSPECTION	5	19MAR09 00:00	19MAR09 06:59	EN
38000556	X-UNDER 2E	X-UNDER PIPE-PERM MANWAY MH-2E -FURM PERM REPAIR	8	19MAR09 09:00	19MAR09 16:59	PJ
37016023	X-UNDER 2E	X-UNDR PERM MANWAY MH 2E - PREP MANWAY TO INSTAL	6	28MAR09 01:00	28MAR09 06:59	PJ
37016023	X-UNDER 2E	X-UNDR PERM MANWAY MH 2E - INSTA & TORQUE MANWAY	8	28MAR09 09:00	28MAR09 16:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H. 2E - PMT MANWAY	1	06APR09 12:00	06APR09 12:59	PJ
37016023	X-UNDER 2E	X-UNDER PERM MANWAY M.H. 2E - INSTALL INSUL	4	06APR09 19:00	06APR09 22:59	PJ
37016023	X-UNDER 2W	X-UNDER PERM MANWAY M.H. 2W - OPEN MANWAY	5	19MAR09 20:00	20MAR09 00:59	PJ
37016023	X-UNDER 2W	X-UNDER PERM MANWAY M.H. 2W - INSTALL AIR MOVER	2	20MAR09 01:00	20MAR09 02:59	PJ
37016023	X-UNDER 2W	X-UNDER PERM MANWAY M.H. 2W- PERF FAC INSPECTION	5	20MAR09 15:00	20MAR09 19:59	EN
37016023	X-UNDER 2W	X-UNDR PERM MANWAY MH 2W - PREP MANWAY TO INSTAL	12	24MAR09 13:00	25MAR09 00:59	PJ
37016023	X-UNDER 2W	X-UNDR PERM MANWAY MH 2W - INSTA & TORQUE MANWAY	8	25MAR09 01:00	25MAR09 10:59	PJ
37016023	X-UNDER 2W	X-UNDER PERM MANWAY M.H. 2W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37016023	X-UNDER 2W	X-UNDER PERM MANWAY M.H. 2W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37016023	X-UNDER 3E	X-UNDER PERM MANWAY M.H. 3E - OPEN MANWAY	5	18MAR09 12:00	18MAR09 16:59	PJ
37016023	X-UNDER 3E	X-UNDER PERM MANWAY M.H. 3E - INSTALL AIR MOVER	2	18MAR09 17:00	18MAR09 18:59	PJ
37016023	X-UNDER 3E	X-UNDER PERM MANWAY M.H. 3E- PERF FAC INSPECTION	5	19MAR09 07:00	19MAR09 11:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37016023	X-UNDER 3E	X-UNDR PERM MANWAY MH 3E - PREP MANWAY TO INSTAL	6	28MAR09 17:00	28MAR09 22:59	PJ
37016023	X-UNDER 3E	X-UNDR PERM MANWAY MH 3E - INSTA & TORQUE MANWAY	8	28MAR09 23:00	30MAR09 08:59	PJ
37016023	X-UNDER 3E	X-UNDER PERM MANWAY M.H. 3E - PMT MANWAY	1	06APR09 13:00	06APR09 13:59	PJ
37016023	X-UNDER 3E	X-UNDER PERM MANWAY M.H. 3E - INSTALL INSUL	4	06APR09 23:00	07APR09 02:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H. 3W - OPEN MANWAY	5	20MAR09 01:00	20MAR09 07:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H. 3W - INSTALL AIR MOVER	2	20MAR09 08:00	20MAR09 09:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H.3W-INSTA LADDER @ RISER	2	20MAR09 10:00	20MAR09 11:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H. 3W- PERF FAC INSPECTION	5	20MAR09 20:00	21MAR09 00:59	EN
37016023	X-UNDER 3W	X-UNDR PERM MANWAY MH 3W - PREP MANWAY TO INSTAL	6	25MAR09 01:00	25MAR09 08:59	PJ
37016023	X-UNDER 3W	X-UNDR PERM MANWAY MH 3W - INSTA & TORQUE MANWAY	8	25MAR09 09:00	25MAR09 16:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H. 3W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37016023	X-UNDER 3W	X-UNDER PERM MANWAY M.H. 3W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E - REMOV INSUL	4	18MAR09 07:00	18MAR09 10:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E - OPEN MANWAY	8	20MAR09 08:00	20MAR09 15:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E - INSTALL AIR MOVER	2	20MAR09 16:00	20MAR09 17:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E- PERF FAC INSPECTION	5	21MAR09 07:00	21MAR09 11:59	EN
37016023	X-UNDER 4E	X-UNDR PERM MANWAY MH 4E - PREP MANWAY TO INSTAL	6	30MAR09 09:00	30MAR09 14:59	PJ
37016023	X-UNDER 4E	X-UNDR PERM MANWAY MH 4E - INSTA & TORQUE MANWAY	8	30MAR09 15:00	30MAR09 22:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E - PMT MANWAY	1	06APR09 14:00	06APR09 14:59	PJ
37016023	X-UNDER 4E	X-UNDER PERM MANWAY M.H. 4E - INSTALL INSUL	4	07APR09 03:00	07APR09 08:59	PJ
37016023	X-UNDER 4W	X-UNDER PERM MANWAY M.H. 4W - OPEN MANWAY	10	17MAR09 18:00*	18MAR09 03:59	PJ
37016023	X-UNDER 4W	X-UNDER PERM MANWAY M.H. 4W - INSTALL AIR MOVER	2	18MAR09 04:00	18MAR09 07:59	PJ
37016023	X-UNDER 4W	X-UNDER PERM MANWAY M.H. 4W- PERF FAC INSPECTION	5	18MAR09 18:00	18MAR09 22:59	EN
37016023	X-UNDER 4W	X-UNDR PERM MANWAY MH 4W - PREP MANWAY TO INSTAL	6	25MAR09 11:00	25MAR09 16:59	PJ
37016023	X-UNDER 4W	X-UNDR PERM MANWAY MH 4W - INSTA & TORQUE MANWAY	8	25MAR09 17:00	26MAR09 00:59	PJ
37016023	X-UNDER 4W	X-UNDER PERM MANWAY M.H. 4W - PMT MANWAY	1	06APR09 14:00	06APR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37016023	X-UNDER 4W	X-UNDER PERM MANWAY M.H. 4W - INSTALL INSUL	4	07APR09 03:00	07APR09 08:59	PJ
37002235	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E - REMOV INSUL	4	16MAR09 11:00	16MAR09 14:59	PJ
37002235	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E - CUT OPEN MANWAY	10	18MAR09 07:00*	18MAR09 16:59	PJ
37016023	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E- INSTALL AIR MOVER	2	18MAR09 17:00	18MAR09 18:59	PJ
37016023	X-UNDER 5E	X-UNDER TEMP MANWAY M.H.5E-INSTA LADDER @RISER	2	18MAR09 19:00	18MAR09 20:59	PJ
37016023	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E- PERF FAC INSPECTION	5	19MAR09 07:00	19MAR09 11:59	EN
37002235	X-UNDER 5E	X-UNDR TEMP MANWAY MH 5E-PREP PIPE TO WELD MANWY	20	26MAR09 07:00*	27MAR09 16:59	PJ
37002235	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E - WELD IN MANWAY	36	28MAR09 07:00	31MAR09 12:59	PJ
37002235	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37002235	X-UNDER 5E	X-UNDER TEMP MANWAY M.H. 5E - INSTALL INSUL	4	07APR09 09:00	07APR09 12:59	PJ
37002235	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W - REMOV INSUL	4	16MAR09 11:00	16MAR09 14:59	PJ
37002235	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W - CUT OPEN MANWAY	10	18MAR09 18:00*	19MAR09 03:59	PJ
37016023	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W- INSTALL AIR MOVER	2	19MAR09 04:00	19MAR09 07:59	PJ
37016023	X-UNDER 5W	X-UNDER TEMP MANWAY M.H.5W-INSTA LADDER @ RISER	2	19MAR09 08:00	19MAR09 09:59	PJ
37016023	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W- PERF FAC INSPECTION	5	19MAR09 18:00	19MAR09 22:59	EN
37002235	X-UNDER 5W	X-UNDR TEMP MANWAY MH 5W-PREP PIPE TO WELD MANWY	32	25MAR09 18:00*	27MAR09 03:59	PJ
37002235	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W - WELD IN MANWAY	72	27MAR09 18:00*	31MAR09 23:59	PJ
37002235	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37002235	X-UNDER 5W	X-UNDER TEMP MANWAY M.H. 5W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37002235	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E - REMOV INSUL	4	16MAR09 15:00	16MAR09 18:59	PJ
37002235	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E - CUT OPEN MANWAY	10	19MAR09 07:00*	19MAR09 16:59	PJ
37016023	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E- INSTALL AIR MOVER	2	19MAR09 17:00	19MAR09 18:59	PJ
37016023	X-UNDER 6E	X-UNDER TEMP MANWAY M.H.6E-INSTA LADDER @ RISER	2	19MAR09 19:00	19MAR09 20:59	PJ
37016023	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E- PERF FAC INSPECTION	5	20MAR09 07:00	20MAR09 11:59	EN
37002235	X-UNDER 6E	X-UNDR TEMP MANWAY MH 6E-PREP PIPE TO WELD MANWY	20	31MAR09 18:00*	01APR09 15:59	PJ
37002235	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E - WELD IN MANWAY	36	01APR09 16:00	03APR09 07:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37002235	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E - PMT MANWAY	1	06APR09 11:00	06APR09 11:59	PJ
37002235	X-UNDER 6E	X-UNDER TEMP MANWAY M.H. 6E - INSTALL INSUL	4	07APR09 13:00	07APR09 16:59	PJ
37002235	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W - REMOV INSUL	4	16MAR09 19:00	16MAR09 22:59	PJ
37002235	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W - CUT OPEN MANWAY	10	19MAR09 18:00*	20MAR09 03:59	PJ
37016023	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W- INSTALL AIR MOVER	2	20MAR09 04:00	20MAR09 07:59	PJ
37016023	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W-INSTA LADDER @ RISER	2	20MAR09 08:00	20MAR09 09:59	PJ
37016023	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W- PERF FAC INSPECTION	5	20MAR09 18:00	20MAR09 22:59	EN
37002235	X-UNDER 6W	X-UNDR TEMP MANWAY MH 6W-PREP PIPE TO WELD MANWY	20	01APR09 00:00	01APR09 21:59	PJ
37002235	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W - WELD IN MANWAY	36	01APR09 22:00	03APR09 13:59	PJ
37002235	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37002235	X-UNDER 6W	X-UNDER TEMP MANWAY M.H. 6W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37002235	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E - REMOV INSUL	4	16MAR09 19:00	16MAR09 22:59	PJ
37002235	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E - CUT OPEN MANWAY	10	18MAR09 07:00*	18MAR09 16:59	PJ
37016023	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E- INSTALL AIR MOVER	2	18MAR09 17:00	18MAR09 18:59	PJ
37016023	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E- PERF FAC INSPECTION	5	19MAR09 07:00	19MAR09 11:59	EN
37002235	X-UNDER 7E	X-UND TEMP MANWAY MH 7E-PREP PIPE TO WELD MANWAY	20	26MAR09 07:00*	27MAR09 16:59	PJ
37002235	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E - WELD IN MANWAY	36	28MAR09 07:00	31MAR09 12:59	PJ
37002235	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E - PMT MANWAY	1	06APR09 12:00	06APR09 12:59	PJ
37002235	X-UNDER 7E	X-UNDER TEMP MANWAY M.H. 7E - INSTALL INSUL	4	07APR09 17:00	07APR09 20:59	PJ
37002235	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W - REMOV INSUL	4	16MAR09 19:00	16MAR09 22:59	PJ
37002235	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W - CUT OPEN MANWAY	10	18MAR09 18:00*	19MAR09 03:59	PJ
37016023	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W- INSTALL AIR MOVER	2	19MAR09 04:00	19MAR09 07:59	PJ
37016023	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W- PERF FAC INSPECTION	5	19MAR09 18:00	19MAR09 22:59	EN
37002235	X-UNDER 7W	X-UND TEMP MANWAY MH 7W-PREP PIPE TO WELD MANWAY	20	25MAR09 23:00*	27MAR09 08:59	PJ
37002235	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W - WELD IN MANWAY	36	27MAR09 23:00	31MAR09 04:59	PJ
37002235	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37002235	X-UNDER 7W	X-UNDER TEMP MANWAY M.H. 7W - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY TURB M.H. NE - REMOV INSUL	4	16MAR09 19:00	16MAR09 22:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY TURB M.H. NE - OPEN MANWAY	5	19MAR09 07:00*	19MAR09 11:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY M.H. NE - INSTALL AIR MOVER	2	19MAR09 12:00	19MAR09 13:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY M.H. NE-INSTA LADDER @ RISER	2	19MAR09 14:00	19MAR09 15:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY M.H. NE- PERF FAC INSPECTION	5	20MAR09 00:00	20MAR09 08:59	EN
36019841	X-UNDER NE	RTE X-UNDER REPAIRS MH-NE HP (EMERGENT)	50	24MAR09 13:00	26MAR09 18:59	PJ
37016023	X-UNDER NE	X-UNDR PERM MANWAY MH NE-PREP MANWAY TO INSTALL	6	26MAR09 19:00	27MAR09 00:59	PJ
37016023	X-UNDER NE	X-UNDR PERM MANWAY MH NE-INST & TORQUE MANWAY	8	27MAR09 01:00	27MAR09 10:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY TURB M.H. NE - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37016023	X-UNDER NE	X-UNDER PERM MANWAY TURB M.H. NE - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY TURB M.H. NW - REMOV INSUL	4	16MAR09 23:00	17MAR09 02:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY TURB M.H. NW - OPEN MANWAY	8	19MAR09 12:00	19MAR09 19:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY M.H. NW - INSTALL AIR MOVER	2	19MAR09 20:00	19MAR09 21:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY M.H. NW-INSTA LADDER @ RISER	2	19MAR09 22:00	19MAR09 23:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY M.H. NW- PERF FAC INSPECTION	5	20MAR09 10:00	20MAR09 14:59	EN
36019840	X-UNDER NW	RTE X-UNDER REPAIRS MH-NW HP (EMERGENT)	50	24MAR09 13:00	26MAR09 18:59	PJ
37016023	X-UNDER NW	X-UNDR PERM MANWAY MH NW-PREP MANWAY TO INSTALL	6	26MAR09 19:00	27MAR09 00:59	PJ
37016023	X-UNDER NW	X-UNDR PERM MANWAY MH NW-INST & TORQUE MANWAY	8	27MAR09 01:00	27MAR09 10:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY TURB M.H. NW - PMT MANWAY	1	06APR09 10:00	06APR09 10:59	PJ
37016023	X-UNDER NW	X-UNDER PERM MANWAY TURB M.H. NW - INSTALL INSUL	4	06APR09 11:00	06APR09 14:59	PJ
38026402	XCI-12-1	XCI 12-1 - MN STM PIPE TO ST-3-6 - REMOVE INSUL	4	25MAR09 01:00*	25MAR09 04:59	PJ
38026402	XCI-12-1	XCI 12-1 - MN STM PIPE TO ST-3-6 - BUFF & CLEAN	4	25MAR09 11:00	25MAR09 14:59	PJ
38026402	XCI-12-1	XCI 12-1 - MN STM PIPE TO ST-3-6 - INSTALL INSUL	3	06APR09 07:00*	06APR09 09:59	PJ
38026402	XCI-12-2	XCI 12-2 - MN STM PIPE TO ST-3-6 - REMOVE INSUL	4	25MAR09 07:00	25MAR09 10:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026402	XCI-12-2	XCI 12-2 - MN STM PIPE TO ST-3-6 - BUFF & CLEAN	4	25MAR09 15:00	25MAR09 18:59	PJ
38026402	XCI-12-2	XCI 12-2 - MN STM PIPE TO ST-3-6 - INSTALL INSUL	3	06APR09 10:00	06APR09 12:59	PJ
38026402	XCI-13-1	XCI 13-1-MSR A&B X-CONN TO ST-3-1405-REMOV INSUL	10	25MAR09 11:00	25MAR09 20:59	PJ
38026402	XCI-13-1	XCI 13-1-MSR A&B X-CONN TO ST-3-1405-BUFF & CLN	4	26MAR09 00:00	26MAR09 03:59	PJ
38026402	XCI-13-1	XCI 13-1-MSR A&B X-CONN TO ST-3-1405-INSTA INSUL	3	07APR09 19:00*	07APR09 21:59	PJ
38026402	XCI-13-2	XCI 13-2-MSR A&B X-CONN TO ST-3-1405-REMOV INSUL	3	25MAR09 21:00	25MAR09 23:59	PJ
38026402	XCI-13-2	XCI 13-2-MSR A&B X-CONN TO ST-3-1405-BUFF & CLN	4	26MAR09 04:00	26MAR09 09:59	PJ
38026402	XCI-13-2	XCI 13-2-MSR A&B X-CONN TO ST-3-1405-INSTA INSUL	3	07APR09 22:00	08APR09 00:59	PJ
38026402	XCI-14-1	XCI 14-1-MSR C&D X-CONN TO ST-3-1406-REMOV INSUL	6	26MAR09 00:00	26MAR09 07:59	PJ
38026402	XCI-14-1	XCI 14-1-MSR C&D X-CONN TO ST-3-1406-BUFF & CLN	4	26MAR09 14:00	26MAR09 17:59	PJ
38026402	XCI-14-1	XCI 14-1-MSR C&D X-CONN TO ST-3-1406-INSTA INSUL	3	02APR09 00:00*	02APR09 02:59	PJ
38026402	XCI-14-2	XCI 14-2-MSR C&D X-CONN TO ST-3-1406-REMOV INSUL	6	26MAR09 08:00	26MAR09 13:59	PJ
38026402	XCI-14-2	XCI 14-2-MSR C&D X-CONN TO ST-3-1406-BUFF & CLN	3	26MAR09 18:00	26MAR09 20:59	PJ
38026402	XCI-14-2	XCI 14-2-MSR C&D X-CONN TO ST-3-1406-INSTA INSUL	3	02APR09 03:00	02APR09 07:59	PJ
38026402	XCI-15-1	XCI 15-1-MSR A&C MN STM TO ST-3-10 - REMOV INSUL	3	26MAR09 14:00	26MAR09 16:59	PJ
38026402	XCI-15-1	XCI 15-1-MSR A&C MN STM TO ST-3-10 - BUFF & CLN	4	26MAR09 20:00	26MAR09 23:59	PJ
38026402	XCI-15-1	XCI 15-1-MSR A&C MN STM TO ST-3-10 - INSTA INSUL	3	04APR09 16:00*	04APR09 18:59	PJ
38026402	XCI-15-2	XCI 15-2-MSR A&C MN STM TO ST-3-10 - REMOV INSUL	3	26MAR09 17:00	26MAR09 19:59	PJ
38026402	XCI-15-2	XCI 15-2-MSR A&C MN STM TO ST-3-10 - BUFF & CLN	4	27MAR09 00:00	27MAR09 03:59	PJ
38026402	XCI-15-2	XCI 15-2-MSR A&C MN STM TO ST-3-10 - INSTA INSUL	3	04APR09 19:00*	04APR09 21:59	PJ
38026402	XCI-16	XCI-16 MSR A PIPE FRM MS TO 3-10-193-REMOV INSUL	3	26MAR09 20:00	26MAR09 22:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026402	XCI-16	XCI-16 MSR A PIPE FRM MS TO 3-10-193-BUFF & CLN	4	26MAR09 23:00	27MAR09 02:59	PJ
38026402	XCI-16	XCI-16 MSR A PIPE FRM MS TO 3-10-193-INSTAL INSU	3	07APR09 12:00*	07APR09 14:59	PJ
38026402	XCI-17	XCI-17 MSR C PIPE FRM MS TO 3-10-195-SCAFF ERECT	3	26MAR09 23:00	27MAR09 01:59	PJ
38026402	XCI-17	XCI-17 MSR C PIPE FRM MS TO 3-10-195-REMOV INSUL	3	27MAR09 02:00	27MAR09 04:59	PJ
38026402	XCI-17	XCI-17 MSR C PIPE FRM MS TO 3-10-195-BUFF & CLN	3	27MAR09 07:00	27MAR09 09:59	PJ
38026402	XCI-17	XCI-17 MSR C PIPE FRM MS TO 3-10-195-INSTAL INSU	3	02APR09 14:00*	02APR09 16:59	PJ
38026402	XCI-17	XCI-17 MSR C PIPE FRM MS TO 3-10-195-SCAFF REMOV	3	02APR09 17:00	02APR09 19:59	PJ
39001245		Turb Test Taps - Prefab of Connectors for Turb.	288	16MAR09 07:00*	31MAR09 08:59	PJ
39001246		Turb Test Taps - Eng. Supervisor Walkdown of Con	2	16MAR09 12:00*	16MAR09 13:59	PJ
39001246		Turb Test Taps - Route Cables from Rosemounts to	208	16MAR09 14:00	26MAR09 23:59	PJ
39001246		Turb Test Taps -QC Insp. as Required of Containm	208	16MAR09 14:00	26MAR09 23:59	PJ
39001246		Turb Test Taps - Sign on ECO for Cont. Work per	2	17MAR09 16:00*	17MAR09 17:59	PJ
39001246		Turb Test Taps - Install 6 Taps in Containment	70	18MAR09 07:00	25MAR09 16:59	PJ
39001245		Turb Test Taps - Sign on ECO forTurb. Deck Work	2	19MAR09 08:00*	19MAR09 09:59	PJ
39001245		Turb Test Taps - Install 19 Taps on Turb. Deck f	209	19MAR09 10:00	30MAR09 20:59	PJ
39001245		Turb Test Taps - Install Scaff #11030 Turb Bldg	12	19MAR09 17:00*	20MAR09 04:59	PJ
39001245		Turb Test Taps - Route Cables for Turb. Deck Wor	208	20MAR09 07:00*	31MAR09 16:59	PJ
39001245		Turb Test Taps - Terminations to Transducers on	120	25MAR09 07:00	31MAR09 16:59	PJ
39001245		Turb Test Taps - Install Scaff #11066 Ctmt Bldg	12	25MAR09 16:00*	26MAR09 03:59	PJ
39001246		Turb Test Taps - Inst. Scaff #11067 Ctmt S/G "A"	12	25MAR09 19:00*	26MAR09 08:59	PJ
38011912		TURB RATE OF LOAD DECR INST LOOP CAL	24	26MAR09 01:00	28MAR09 04:59	IC
39001246		Turb Test Taps - Remove Flamastic & Test for Asb	72	26MAR09 04:00	30MAR09 11:59	PJ
39001245		Turb Test Taps - Install Supports (near MSRs) fo	40	26MAR09 07:00	28MAR09 00:59	PJ
39001246		Turb Test Taps - Inst. Scaff #11068 Ctmt S/G "B"	12	26MAR09 09:00*	26MAR09 20:59	PJ
39001246		Turb Test Taps - Inst. Scaff #11069 Ctmt S/G "C"	12	26MAR09 21:00*	27MAR09 10:59	PJ
39001246		Turb Test Taps - Test 6 Taps in Containment	30	27MAR09 07:00	30MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
39001245		Turb Test Taps - QC Inspect Supports as Required	40	28MAR09 01:00	30MAR09 20:59	PJ
39001246		Turb Test Taps - Test Electr. Continuity across	20	30MAR09 12:00	31MAR09 09:59	PJ
39001246		Turb Test Taps - Sign off/Release ECO for Cont.	2	30MAR09 17:00	30MAR09 18:59	PJ
39001246		Turb Test Taps - Remv Scaff #11067 Ctmt S/G "A"	8	30MAR09 19:00	31MAR09 02:59	PJ
39001245		Turb Test Taps - Sign-off/Release ECO for Turb.	2	30MAR09 21:00	30MAR09 22:59	PJ
39001246		Turb Test Taps - Remv Scaff #11068 Ctmt S/G "B"	8	31MAR09 03:00*	31MAR09 12:59	PJ
39001245		Turb Test Taps - Remv Scaff #11066 Ctmt Bldg	12	31MAR09 10:00	31MAR09 21:59	PJ
39001246		Turb Test Taps - Terminations to Transmitters on	50	31MAR09 10:00	02APR09 15:59	PJ
39001246		Turb Test Taps - Remv Scaff #11069 Ctmt S/G "C"	8	31MAR09 13:00*	31MAR09 20:59	PJ
39001245		Turb Test Taps - Electr. Testing of Transducers	48	31MAR09 17:00	02APR09 20:59	PJ
39001246		Turb Test Taps - Electr. Testing of Transmitters	40	02APR09 16:00	04APR09 11:59	PJ
39001245		Turb Test Taps - Remv Scaff #11030 Turb Bldbg	12	02APR09 21:00*	03APR09 10:59	PJ
38003105	3-20-111	ISO VLV COND INLET TO 5A HTR - NDE WELD AREA	4	22MAR09 01:00	22MAR09 04:59	EN
38003105	3-20-111	ISO VLV FOR COND INLET TO 5A HTR - REMOVE SCAF	10	08APR09 03:00	08APR09 14:59	PJ
33022953	3-20-552	CK VLE COND PP C DISCH - ERECT RIGGING BEAM	12	24MAR09 19:00	25MAR09 06:59	PJ
33022953	3-20-552	CK VLE COND PP C DISCH - REMOVE RIGGING BEAM	12	29MAR09 21:00	30MAR09 10:59	PJ
36013373	3-CH-1	COND PIPING HANGER ON MEZZ LVL - REMOVE SCAFFOLD	8	25MAR09 10:00	25MAR09 17:59	PJ
37020520	3E1A	LP HTR 1A-REMOVE FOUNDATION BOLTS PER CR07-27520	20	20MAR09 13:00	21MAR09 10:59	PJ
37020520	3E1A	LP HTR 1A-INSTAL NEW FOUNDATION BOLTS CR07-27520	20	21MAR09 11:00	23MAR09 08:59	PJ
37020521	3E1B	LP HTR 1B-REMOVE FOUNDATION BOLTS PER CR07-27604	20	23MAR09 09:00	24MAR09 04:59	PJ
37020521	3E1B	LP HTR 1B-INSTAL NEW FOUNDATION BOLTS CR07-27604	20	24MAR09 07:00	25MAR09 02:59	PJ
37020522	3E2A	LP HTR 2A-REMOVE FOUNDATION BOLTS PER CR07-27520	20	25MAR09 03:00	26MAR09 00:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37020522	3E2A	LP HTR 2A-INSTAL NEW FOUNDATION BOLTS CR07-27520	20	26MAR09 01:00	26MAR09 22:59	PJ
37020523	3E2B	LP HTR 2B-REMOVE FOUNDATION BOLTS PER CR07-27604	20	26MAR09 23:00	27MAR09 20:59	PJ
37020523	3E2B	LP HTR 2B-INSTAL NEW FOUNDATION BOLTS CR07-27604	20	27MAR09 21:00	28MAR09 18:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A REMOVE LAGGING	5	23MAR09 10:00	23MAR09 14:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A REMOVE INSULATION	5	23MAR09 15:00	23MAR09 19:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A BUFF AND CLEAN	10	23MAR09 20:00	24MAR09 07:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A PERFORM EXAMS	5	24MAR09 08:00*	24MAR09 12:59	EN
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A ANALYZE DATA	3	26MAR09 07:00	26MAR09 09:59	EN
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A REST INSULATION	10	06APR09 07:00*	06APR09 16:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A REST LAGGING	12	06APR09 17:00	07APR09 04:59	PJ
38027015	FAC LOC 09	LOC # 9 FWH 2A - FWH 3A REMOVE SCAFFOLD	10	07APR09 07:00	07APR09 16:59	PJ
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A REMOVE LAGGING	5	21MAR09 17:00	21MAR09 21:59	PJ
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A REMOVE INSULATION	5	21MAR09 22:00	22MAR09 02:59	PJ
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A BUFF AND CLEAN	10	22MAR09 03:00	23MAR09 14:59	PJ
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A PERFORM EXAMS	8	23MAR09 15:00	23MAR09 22:59	EN
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A ANALYZE DATA	6	25MAR09 07:00	25MAR09 12:59	EN
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A REST INSULATION	10	04APR09 08:00*	04APR09 17:59	PJ
38027015	FAC LOC 10	LOC # 10 FWH 4A - FWH 5A REST LAGGING	12	04APR09 18:00	06APR09 07:59	PJ
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B REMOVE LAGGING	5	24MAR09 17:00	24MAR09 21:59	PJ
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B REMOVE INSULATION	5	24MAR09 22:00	25MAR09 02:59	PJ
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B BUFF AND CLEAN	10	25MAR09 03:00	25MAR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B PERFORM EXAMS	5	25MAR09 15:00*	25MAR09 19:59	EN
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B ANALYZE DATA	3	27MAR09 07:00	27MAR09 09:59	EN
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B REST INSULATION	10	07APR09 08:00*	07APR09 17:59	PJ
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B REST LAGGING	12	07APR09 18:00	08APR09 07:59	PJ
38027015	FAC LOC 11	LOC # 11 FWH 4B - FWH 5B REMOVE SCAFFOLD	10	08APR09 08:00	08APR09 17:59	PJ
38012473	RV-3-3413	LP HTR 3B RV - REMOVE VALVE	4	20MAR09 04:00	20MAR09 09:59	VT
38012473	RV-3-3413	LP HTR 3B RV - INSTALL SPARE VALVE	4	20MAR09 10:00	20MAR09 13:59	VT
38012473	RV-3-3413	LP HTR 3B RV - PMT	1	08APR09 04:00	08APR09 04:59	VT
38012475	RV-3-3414	LP HTR 5A RV - REMOVE VALVE	4	31MAR09 06:00	31MAR09 09:59	VT
38012475	RV-3-3414	LP HTR 5A RV - INSTALL SPARE VALVE	4	31MAR09 10:00	31MAR09 13:59	VT
38012475	RV-3-3414	LP HTR 5A RV - PMT	1	08APR09 04:00	08APR09 04:59	VT
38012478	RV-3-3415	LP HTR 5B RV - REMOVE VALVE	4	31MAR09 16:00	31MAR09 19:59	VT
38012478	RV-3-3415	LP HTR 5B RV - INSTALL SPARE VALVE	4	31MAR09 20:00	31MAR09 23:59	VT
38012478	RV-3-3415	LP HTR 5B RV - PMT	1	08APR09 04:00	08APR09 04:59	VT
38014653		COND HOTWELL CAMPBELL DRAINS-INSTALL DRAIN HOSES	4	16MAR09 00:00*	16MAR09 03:59	PJ
38012420	3-20-118	INSPECT/OVERHAUL SCAFF ER	6	16MAR09 08:00*	16MAR09 13:59	PJ
38012420	3-20-118	INSPECT/OVREHAUL SCAFF RE	4	04APR09 01:00*	04APR09 04:59	PJ
36019779	3AC14	3B SGFP MTR - INSTAL MTR INSP GROUND @3AC14	4	18MAR09 07:00	18MAR09 10:59	EM
36019779	3AC14	3B SGFP - 3AC14 - REMOVE GROUND & MEGGER MTR	3	23MAR09 16:00	23MAR09 18:59	EM
38014666	3AC14	MOV-1421-SETUP 3AC14 - MOV STROKE & B TRN SFGDS	4	26MAR09 15:00	26MAR09 18:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38014666	3AC14	3AC14:MOV-1421 RESTORE BKR AFTR B SFGDS 7.1&7.2	4	28MAR09 14:00	28MAR09 17:59	EM
38014666	3AC14	MOV-1421-B SGFP-SETUP BKR 3AC14 FOR A SFGDS 7.1	4	30MAR09 18:00	30MAR09 21:59	EM
38014666	3AC14	MOV-1421-B SGFP-RESTOR 3AC14 AFTR A TRN ATACH 17	4	02APR09 08:00	02APR09 11:59	EM
38011920	3E210A	FILL & VENT SIG FEED FLOW TXS	8	06APR09 00:00	06APR09 07:59	IC
35004954	3E32	B/D HX-IMPLEMENT PC/M 05-026 TO ISO HX-CUT PIPE	10	19MAR09 03:00*	19MAR09 14:59	PJ
35004954	3E32	B/D HX-IMPLE PC/M 05-026 TO ISO HX- PREP PIPING	10	19MAR09 15:00	20MAR09 00:59	PJ
35004954	3E32	B/D HX-IMPLE PCM 05-026 TO ISO HX-WELD PIPE CAPS	12	20MAR09 01:00	20MAR09 14:59	PJ
35004954	3E32	B/D HX-IMPLE PCM 05-026 TO ISO HX - PMT	1	01APR09 12:00	01APR09 12:59	PJ
35004954	3E32	ITOP B/D HX-IMPLE PC/M 05-026 TO ISO HX	1	01APR09 13:00	01APR09 13:59	PJ
35004954	3E32	SATS PCM 05-026	1	01APR09 14:00	01APR09 14:59	EN
35004954	3E32	B/D HX-IMPLE PC/M 05-026 TO ISO HX-REMOVE SCAFF	10	02APR09 12:00*	02APR09 21:59	PJ
35004954	3E32	B/D HX-IMPLE PC/M 05-026 TO ISO HX-REMOVE SCAFF	10	02APR09 12:00*	02APR09 21:59	PJ
38013766	3P1A	A SGFP MTR - PERFORM 18 MONTH MOTOR INSPECTION	12	17MAR09 07:00*	17MAR09 18:59	EM
38013766	3P1A	A SGFP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	17MAR09 20:00	17MAR09 20:59	EM
38014935	3P1A	CLEAN & INSPECT STRAINER - ERECT SCAFFOLD	8	30MAR09 11:00	30MAR09 18:59	PJ
38014935	3P1A	CLEAN & INSPECT STRAINER - REMOVE SCAFFOLD	8	31MAR09 17:00	01APR09 00:59	PJ
38013766	3P1A	PMT - 3A SGFP - MOTOR INSPECTION - VIBRATIONS	1	08APR09 16:00	08APR09 16:59	EN
38013766	3P1A	PMT - A SGFP MTR - MOTOR INSPECTION	1	08APR09 16:00	08APR09 16:59	EM
36019779	3P1B	B SGFP MTR - PERFORM 18 MONTH MOTOR INSPECTION	12	18MAR09 15:00*	19MAR09 02:59	EM
36019779	3P1B	B SGFP MTR - VERIFY MOTOR HEATERS ENERGIZED	1	19MAR09 04:00	19MAR09 04:59	EM
36025228	3P1B	CLEAN & INSPECT STRAINER - ERECT SCAFFOLD	10	31MAR09 07:00	31MAR09 16:59	PJ
36025228	3P1B	CLEAN & INSPECT STRAINRE - REMOVE SCAFFOLD	10	01APR09 15:00	02APR09 00:59	PJ
38025372	3P1B	SGFP B MTR-OB BRG OIL RTRN LK - REPAIR OIL LEAK	12	03APR09 04:00	03APR09 17:59	MM
38025372	3P1B	SGFP B MTR-OB BRG OIL RTRN LK OIL LEAK - PMT	1	04APR09 02:00	04APR09 02:59	MM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36019779	3P1B	PMT - B SGFP - MOTOR INSPECTION - VIBRATIONS	1	08APR09 16:00	08APR09 16:59	EN
36019779	3P1B	PMT - B SGFP MTR - MOTOR INSPECTION	1	08APR09 16:00	08APR09 16:59	EM
[illegible]						
38012546	3P34A	30549 3A SFGP AUX LO PP BKR MAINT	6	01APR09 19:00*	02APR09 00:59	EM
38012545	3P34A	30549 3A SFGP AUX LO PP STARTER MAINT	15	01APR09 19:00*	02APR09 09:59	EM
38012546	3P34A	PMT - 30549 3A SFGP AUX LO PP BKR MAINT	2	06APR09 01:00	06APR09 02:59	EM
38012545	3P34A	PMT - 30549 3A SFGP AUX LO PP STARTER MAINT	2	06APR09 01:00	06APR09 02:59	EM
[illegible]						
38012501	3V14A	30561 STR INSP 3A SGFP EXH FAN	15	05APR09 07:00*	05APR09 21:59	EM
38012501	3V14A	PMT - 30561 STR INSP 3A SGFP EXH FAN	2	06APR09 01:00	06APR09 02:59	EM
[illegible]						
38020745	A-325-01	B/D PIPING ANCHOR SUPPORT - ERECT SCAFFOLD	10	17MAR09 07:00*	17MAR09 16:59	PJ
38020745	A-325-01	B/D PIPE ANCHOR SUPPORT-RIG & REMOVE OLD SUPPORT	12	17MAR09 17:00	18MAR09 04:59	PJ
38020745	A-325-01	B/D PIPE ANCHOR SUPPORT-RIG & INSTAL NEW SUPPORT	20	18MAR09 07:00	19MAR09 02:59	PJ
38020745	A-325-01	B/D PIPE ANCHOR SUPPORT-GROUT NEW SUPPORT	5	19MAR09 03:00	19MAR09 07:59	PJ
38020745	A-325-01	B/D PIPE ANCHOR SUPPORT-PAINT NEW SUPPORT	30	19MAR09 08:00	20MAR09 15:59	PJ
38020745	A-325-01	B/D PIPING ANCHOR SUPPORT - REMOVE SCAFFOLD	10	06APR09 07:00*	06APR09 16:59	PJ
38020745	A-325-01	B/D PIPING ANCHOR SUPPORT - ITOP PCM 05-121	10	06APR09 07:00*	06APR09 16:59	PJ
38020745	A-325-01	B/D PIPING ANCHOR SUPPORT - SATS PCM 05-121	10	06APR09 17:00*	07APR09 02:59	EN
[illegible]						
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - BLD SCAF	8	20MAR09 18:00*	21MAR09 01:59	PJ
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - INSL RMV	6	21MAR09 02:00	21MAR09 09:59	PJ
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - BUF & CLN	4	23MAR09 15:00	23MAR09 18:59	PJ
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM PERF EXAMS	48	23MAR09 19:00*	28MAR09 02:59	EN
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - ANALYZE	24	28MAR09 07:00*	31MAR09 10:59	EN
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - INSL INSTL	6	31MAR09 11:00	31MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627	CSI ZN 111	CSI- 3-111 "C" S/G AUGMENTED EXM - REMO SCAF	8	31MAR09 17:00	01APR09 00:59	PJ
38013627	CSI ZN 115	CSI- 3-115 7884-R-014-02 INSL RMV	10	18MAR09 07:00*	18MAR09 16:59	PJ
38013627	CSI ZN 115	CSI- 3-115 7884-R-014-02 PERF EXAMS	3	19MAR09 07:00*	19MAR09 09:59	EN
38013627	CSI ZN 115	CSI- 3-115 7884-R-014-02 - ANALYZE RESULTS	24	20MAR09 07:00*	23MAR09 10:59	EN
38013627	CSI ZN 115	CSI- 3-115 7884-R-014-02 INSL INSTL	10	23MAR09 11:00	23MAR09 20:59	PJ
37004907	CV-3-1418	FD WTR PP B RECIRC TO COND - DISASS & INSP	3	17MAR09 00:00	17MAR09 02:59	VT
37004907	CV-3-1418	FD WTR PP B RECIRC TO COND-REPA AIR LEAK & REASS	3	17MAR09 03:00	17MAR09 07:59	VT
37004907	CV-3-1418	FD WTR PP B RECIRC TO COND - CAL ACTUATOR	5	17MAR09 08:00	17MAR09 12:59	VT
38012188	CV-3-2206	SGFP A SEAL WTR TEMP CV - ACTUATOR CAL	4	30MAR09 11:00*	30MAR09 14:59	VT
38012189	CV-3-2207	SGFP A SEAL WTR TEMP CV / ACT CAL	4	30MAR09 15:00	30MAR09 18:59	VT
38012190	CV-3-2208	SGFP B SEAL WTR TEMP CV - ACT CAL	4	30MAR09 19:00	30MAR09 22:59	VT
38012191	CV-3-2209	SGFP B SEAL WTR TEMP CV / ACT CAL	4	30MAR09 23:00	31MAR09 02:59	VT
38008909	CV-3-2900	S/G "A" FD WTR CK VLV - DISCONN & REMOVE ACT	3	19MAR09 09:00	19MAR09 11:59	VT
38008909	CV-3-2900	S/G "A" FD WTR CK VLV - INSTALL & RECONN ACT	3	20MAR09 15:00	20MAR09 17:59	VT
36019186	CV-3-2902	CV-3-2902: BROKEN SEALTIGHT - REPLACE	5	18MAR09 06:00	19MAR09 00:59	IC
36019186	CV-3-2902	PMT- CV-3-2902: BROKEN SEALTIGHT - REPLACE	1	19MAR09 15:00	19MAR09 15:59	IC
38005427	CV-3-6275B	S/G B BLOWDOWN CNTL VLV - AS FD & T/S BINDING	8	17MAR09 03:00	17MAR09 12:59	VT
38005427	CV-3-6275B	S/G B BLOWDOWN CNTL VLV - DISCONN & REMOVE ACT	8	17MAR09 13:00	17MAR09 20:59	VT
38005427	CV-3-6275B	S/G B BLOWDOWN CNTL VLV - INSTALL & RECONN ACT	8	19MAR09 09:00	19MAR09 16:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38005427	CV-3-6275B	S/G B BLOWDOWN CNTL VLV - AS LEFT & CAL ACT	8	19MAR09 21:00*	20MAR09 04:59	VT
38005427	CV-3-6275B	S/G B BLOWDOWN CNTL VLV - REMOVE SCAFFOLD	8	04APR09 01:00*	04APR09 10:59	PJ
31007635	DWDS-3-115	REPLACE VLV & PIPING - REMOVE OLD PIPING	20	18MAR09 11:00	19MAR09 08:59	PJ
31007635	DWDS-3-115	REPLACE VLV & PIPING - INSTALL NEW PIPING	30	19MAR09 09:00	20MAR09 16:59	PJ
31007635	DWDS-3-115	COND MAKEUP PIPING REPLACEMENT - REMOVE SCAFFOLD	20	02APR09 16:00*	03APR09 15:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - ERECT SCAFF	10	25MAR09 08:00	25MAR09 17:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - REMOVE LAGGING	5	25MAR09 18:00	25MAR09 22:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - REMOVE INSULATION	5	25MAR09 23:00	26MAR09 03:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - BUFF AND CLEAN	10	26MAR09 04:00	26MAR09 15:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - PERFORM EXAMS	5	26MAR09 16:00*	26MAR09 20:59	EN
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - ANALYZE DATA	3	28MAR09 07:00	28MAR09 09:59	EN
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - REST INSULATION	10	28MAR09 10:00	28MAR09 19:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - REST LAGGING	12	28MAR09 20:00	30MAR09 09:59	PJ
38027015	FAC LOC 03	LOC # 3 S/G B S NOZZLE - TEE - REMOVE SCAFFOLD	10	31MAR09 11:00*	31MAR09 20:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - ERECT SCAFF	10	23MAR09 16:00*	24MAR09 03:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - REMOVE LAGGING	5	24MAR09 04:00	24MAR09 10:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - REMOVE INSULATION	5	24MAR09 11:00	24MAR09 15:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - BUFF AND CLEAN	10	24MAR09 16:00	25MAR09 01:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - PERFORM EXAMS	5	25MAR09 02:00	25MAR09 10:59	EN
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - ANALYZE DATA	3	26MAR09 15:00	27MAR09 07:59	EN
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - REST INSULATION	10	27MAR09 08:00	27MAR09 17:59	PJ
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - REST LAGGING	12	27MAR09 18:00	28MAR09 07:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 04	LOC # 4 S/G C S NOZZLE - TEE - REMOVE SCAFFOLD	10	28MAR09 08:00	28MAR09 17:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE ERECT SCAFF	10	23MAR09 18:00*	24MAR09 03:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE REMOVE LAGGING	5	24MAR09 04:00	24MAR09 10:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE REMOVE INSULATION	5	24MAR09 11:00	24MAR09 15:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE BUFF AND CLEAN	10	24MAR09 16:00	25MAR09 01:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE PERFORM EXAMS	8	25MAR09 02:00	25MAR09 13:59	EN
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE ANALYZE DATA	6	27MAR09 07:00	27MAR09 12:59	EN
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE REST INSULATION	10	27MAR09 13:00	27MAR09 22:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE REST LAGGING	12	27MAR09 23:00	28MAR09 12:59	PJ
38027015	FAC LOC 05	LOC # 5 S/G C S NOZZLE - TEE REMOVE SCAFFOLD	10	28MAR09 18:00	29MAR09 03:59	PJ
38027015	FAC LOC 06	LOC # 6 SG BLDWN TNK - TEE BUFF AND CLEAN	10	19MAR09 07:00	19MAR09 16:59	PJ
38027015	FAC LOC 06	LOC # 6 SG BLDWN TNK - TEE PERFORM EXAMS	5	19MAR09 17:00*	19MAR09 21:59	EN
38027015	FAC LOC 06	LOC # 6 SG BLDWN TNK - TEE ANALYZE DATA	3	21MAR09 07:00	21MAR09 09:59	EN
38027015	FAC LOC 06	LOC # 6 SG BLDWN TNK - TEE REST INSULATION	10	02APR09 00:00*	02APR09 11:59	PJ
38027015	FAC LOC 06	LOC # 6 SG BLDWN TNK - TEE REST LAGGING	12	02APR09 12:00	02APR09 23:59	PJ
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE REMOVE LAGGING	5	24MAR09 21:00	25MAR09 01:59	PJ
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE REMOVE INSULATION	5	25MAR09 02:00	25MAR09 08:59	PJ
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE BUFF AND CLEAN	10	25MAR09 09:00	25MAR09 18:59	PJ
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE PERFORM EXAMS	8	25MAR09 19:00*	26MAR09 02:59	EN
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE ANALYZE DATA	3	27MAR09 11:00	27MAR09 13:59	EN
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE REST INSULATION	10	27MAR09 14:00	27MAR09 23:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE REST LAGGING	12	28MAR09 00:00	28MAR09 13:59	PJ
38027015	FAC LOC 07	LOC # 7 SG BLDWN TNK - TEE REMOVE SCAFFOLD	10	28MAR09 14:00	28MAR09 23:59	PJ
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) REMOVE LAGGING	5	25MAR09 18:00	25MAR09 22:59	PJ
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) REMOVE INSULATION	5	25MAR09 23:00	26MAR09 03:59	PJ
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) BUFF AND CLEAN	10	26MAR09 04:00	26MAR09 15:59	PJ
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) PERFORM EXAMS	5	26MAR09 16:00	26MAR09 20:59	EN
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) ANALYZE DATA	3	28MAR09 07:00	28MAR09 09:59	EN
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) REST INSULATION	10	03APR09 09:00	03APR09 18:59	PJ
38027015	FAC LOC 08	LOC # 8 BLDWN (not modeled) REST LAGGING	12	03APR09 19:00*	04APR09 08:59	PJ
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A REMOVE LAGGING	5	24MAR09 12:00	24MAR09 16:59	PJ
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A REMOVE INSULATION	5	24MAR09 17:00	24MAR09 21:59	PJ
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A BUFF AND CLEAN	10	24MAR09 22:00	25MAR09 09:59	PJ
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A PERFORM EXAMS	5	25MAR09 10:00	25MAR09 14:59	EN
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A ANALYZE DATA	3	27MAR09 07:00	27MAR09 09:59	EN
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A REST INSULATION	10	08APR09 08:00*	08APR09 17:59	PJ
38027015	FAC LOC 25	LOC # 25 FWPP 3A - FWH 6A REST LAGGING	12	08APR09 18:00	09APR09 07:59	PJ
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A REMOVE LAGGING	5	17MAR09 12:00	17MAR09 16:59	PJ
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A REMOVE INSULATION	5	19MAR09 01:00	19MAR09 07:59	PJ
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A BUFF AND CLEAN	10	19MAR09 08:00	19MAR09 17:59	PJ
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A PERFORM EXAMS	8	19MAR09 18:00*	20MAR09 01:59	EN
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A ANALYZE DATA	3	21MAR09 10:00	21MAR09 12:59	EN
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A REST INSULATION	10	02APR09 08:00*	02APR09 17:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A REST LAGGING	12	02APR09 18:00	03APR09 07:59	PJ
38027015	FAC LOC 26	LOC # 26 FWPP 3A - FWH 6A REMOVE SCAFFOLD	10	03APR09 08:00	03APR09 17:59	PJ
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER REMOVE LAGGING	5	21MAR09 00:00	21MAR09 04:59	PJ
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER REMOVE INSULATION	5	21MAR09 07:00	21MAR09 11:59	PJ
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER BUFF AND CLEAN	10	21MAR09 12:00	21MAR09 21:59	PJ
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER PERFORM EXAMS	5	21MAR09 22:00*	22MAR09 02:59	EN
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER ANALYZE DATA	3	24MAR09 11:00	24MAR09 13:59	EN
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER REST INSULATION	10	24MAR09 14:00	24MAR09 23:59	PJ
38027015	FAC LOC 27	LOC # 27 FWH 6B - HEADER REST LAGGING	12	04APR09 18:00*	06APR09 07:59	PJ
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN REMOVE LAGGING	5	23MAR09 19:00	23MAR09 23:59	PJ
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN REMOVE INSULATION	5	24MAR09 00:00	24MAR09 04:59	PJ
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN BUFF AND CLEAN	10	24MAR09 07:00	24MAR09 16:59	PJ
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN PERFORM EXAMS	5	24MAR09 17:00*	24MAR09 21:59	EN
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN ANALYZE DATA	3	26MAR09 07:00	26MAR09 09:59	EN
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN REST INSULATION	10	30MAR09 07:00*	30MAR09 16:59	PJ
38027015	FAC LOC 28	LOC # 28 A CLASS CHG - CNT PEN REST LAGGING	12	04APR09 19:00*	06APR09 08:59	PJ
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN REMOVE LAGGING	5	25MAR09 19:00	25MAR09 23:59	PJ
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN REMOVE INSULATION	5	26MAR09 00:00	26MAR09 04:59	PJ
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN BUFF AND CLEAN	10	26MAR09 07:00	26MAR09 16:59	PJ
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN PERFORM EXAMS	5	26MAR09 17:00*	26MAR09 21:59	EN
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN ANALYZE DATA	3	28MAR09 07:00	28MAR09 09:59	EN
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN REST INSULATION	10	02APR09 10:00*	02APR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 29	LOC # 29 C CLASS BRK-CNT PEN REST LAGGING	12	02APR09 20:00	03APR09 09:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C ERECT SCAFF	12	23MAR09 20:00	24MAR09 07:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C REMOVE LAGGING	5	24MAR09 08:00*	24MAR09 12:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C REMOVE INSULATION	5	24MAR09 14:00	24MAR09 18:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C BUFF AND CLEAN	10	24MAR09 19:00	25MAR09 04:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C PERFORM EXAMS	8	25MAR09 07:00	25MAR09 14:59	EN
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C ANALYZE DATA	6	27MAR09 07:00	27MAR09 12:59	EN
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C REST INSULATION	10	27MAR09 13:00	27MAR09 22:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C REST LAGGING	12	27MAR09 23:00	28MAR09 12:59	PJ
38027015	FAC LOC 30	LOC # 30 CLASS CHG - S/G C REMOVE SCAFFOLD	10	28MAR09 13:00	28MAR09 22:59	PJ
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND REMOVE LAGGING	5	21MAR09 03:00	21MAR09 09:59	PJ
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND REMOVE INSULATION	5	21MAR09 10:00	21MAR09 14:59	PJ
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND BUFF AND CLEAN	10	21MAR09 15:00	22MAR09 00:59	PJ
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND PERFORM EXAMS	5	22MAR09 01:00*	23MAR09 09:59	EN
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND ANALYZE DATA	10	24MAR09 14:00	25MAR09 13:59	EN
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND REST INSULATION	10	02APR09 00:00*	02APR09 11:59	PJ
38027015	FAC LOC 31	LOC # 31 FW RECIRC 3P1A - COND REST LAGGING	12	02APR09 12:00	02APR09 23:59	PJ
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND REMOVE LAGGING	5	21MAR09 03:00	21MAR09 09:59	PJ
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND REMOVE INSULATION	5	21MAR09 10:00	21MAR09 14:59	PJ
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND BUFF AND CLEAN	10	21MAR09 15:00	22MAR09 00:59	PJ
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND PERFORM EXAMS	5	22MAR09 01:00	23MAR09 09:59	EN
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND ANALYZE DATA	3	24MAR09 14:00	24MAR09 16:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND REST INSULATION	10	02APR09 00:00*	02APR09 11:59	PJ
38027015	FAC LOC 32	LOC # 32 FW RECIRC 3P1B - COND REST LAGGING	12	02APR09 12:00	02APR09 23:59	PJ
38012720	FC-3-478	FC-3-478, MODIFY CONTROLLER GAIN & RESET	10	23MAR09 07:00*	23MAR09 16:59	IC
38012719	FC-3-488	FC-3-488, MODIFY CONTROLLER GAIN & RESET	10	25MAR09 07:00	25MAR09 16:59	IC
38012718	FC-3-498	FC-3-498, MODIFY CONTROLLER GAIN & RESET	10	25MAR09 07:00	25MAR09 16:59	IC
38021917	FCV-3-4**	MN FW ALL - REMOVE INSULATION ALL MN FCV'S/BV'S	15	18MAR09 07:00	18MAR09 21:59	PJ
38021917	FCV-3-4**	MN FW ALL - REINST/ MOD THERMO ALL MN FCV'S/BV'S	3	25MAR09 14:00	25MAR09 16:59	PJ
38012187	FCV-3-4*8	MN FEEDWATER SYS PERFORMANCE TESTING/ PMI-074.1	30	27MAR09 00:00	29MAR09 23:59	IC
38012187	FCV-3-4*8	CONNECT LAMBDA TUNING TEST EQUIP PRIOR TO MODE 3	6	30MAR09 00:00	30MAR09 19:59	IC
38012181	FCV-3-478	SG'A' MN FW / DISCONN & REMOVE OLD ACTUATOR	8	18MAR09 22:00	19MAR09 07:59	VT
38012181	FCV-3-478	SG 'A' MN FW - INSPECT STEM & REPACK	6	19MAR09 08:00	19MAR09 13:59	VT
38012181	FCV-3-478	SG'A' MN FW / INSTALL & RECONN NEW ACTUATOR	8	19MAR09 14:00	19MAR09 21:59	VT
38012181	FCV-3-478	SG'A' MN FW / INSTALL NEW POSITIONER & BOLTING	8	19MAR09 22:00	20MAR09 07:59	VT
37023856	FCV-3-478	SG'A' MN FW / REPAIR AIR LEAK AT FLEX HOSE	4	20MAR09 08:00	20MAR09 11:59	VT
38012720	FCV-3-478	FCV-3-478, MOD POSITIONER CHARACTERIZATION CURVE	6	20MAR09 15:00	20MAR09 20:59	IC
38012181	FCV-3-478	SG'A' MN FW / CALIBRATE ACTUATOR & ACC	4	20MAR09 21:00	21MAR09 00:59	VT
38012181	FCV-3-478	SG 'A' MN FW-ADJ PACK DURING AS LEFT DIAGNOSTIC	4	21MAR09 01:00	21MAR09 04:59	VT
38012181	FCV-3-478	SG'A' MN FW / PERFORM AS-LEFT DIAGNOSTIC TEST	4	21MAR09 01:00	21MAR09 04:59	VT
36019712	FCV-3-479	S/G A BYP FW FCV - EVALUATE AS LEFT DIAG TEST	3	20MAR09 13:00	20MAR09 15:59	MM
38012184	FCV-3-488	SG'B' MN FW - PERFORM AS FD DIAGNOSTIC TESTING	8	21MAR09 01:00	21MAR09 10:59	VT
38012184	FCV-3-488	SG'B' MN FW - EVALUATE DIAGNOSTIC TEST AS FD	3	21MAR09 11:00	21MAR09 13:59	MM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012184	FCV-3-488	SG'B' MN FW - DISCONN & REMOVE OLD ACTUATOR	8	21MAR09 11:00	21MAR09 18:59	VT
38012184	FCV-3-488	B S/G MN FW VLV - INSPECT STEM	1	21MAR09 22:00	21MAR09 22:59	MM
38012184	FCV-3-488	SG'B' MN FW - INSTALL NEW ACT AND CONN	8	22MAR09 01:00	22MAR09 10:59	VT
38012184	FCV-3-488	FCV-3-488: POSITIONER REPLACEMENT	8	22MAR09 11:00	22MAR09 18:59	VT
38012719	FCV-3-488	FCV-3-488, MOD POSITIONER CHARACTERIZATION CURVE	6	24MAR09 17:00	24MAR09 22:59	IC
38012184	FCV-3-488	SG'B' MN FW - CAL ACTUATOR & ACCESS	4	24MAR09 23:00	25MAR09 02:59	VT
38012184	FCV-3-488	SG 'B' MN FW - ADJ PACKING DURING DIAGNOSTIC	2	25MAR09 03:00	25MAR09 04:59	VT
38012184	FCV-3-488	SG'B' MN FW - PERFORM AS LEFT DIAGNOSTIC TESTING	4	25MAR09 03:00	25MAR09 08:59	VT
38012184	FCV-3-488	SG'B' MN FW - EVALUATE DIAGNOSTIC TEST AS LEFT	2	25MAR09 09:00	25MAR09 10:59	MM
[redacted]						
36019718	FCV-3-489	SG'B' MN FW BYP-EVALUATE DIAGNOSTIC TEST AS LEFT	3	19MAR09 21:00	19MAR09 23:59	MM
[redacted]						
38012193	FCV-3-498	SG'C' MN FW - DISCONN OLD ACTUATOR & REMOVE	8	22MAR09 19:00	23MAR09 02:59	VT
38012193	FCV-3-498	C S/G FW FLOW - INSPECT STEM	4	23MAR09 08:00	23MAR09 11:59	MM
38012193	FCV-3-498	SG'C' MN FW - INSTALL NEW ACTUATOR & CONN	8	23MAR09 12:00	23MAR09 19:59	VT
38012193	FCV-3-498	FCV-3-498: POSITIONER REPLACEMENT	8	23MAR09 20:00	24MAR09 03:59	VT
38012718	FCV-3-498	FCV-3-498, MOD POSITIONER CHARACTERIZATION CURVE	6	24MAR09 15:00	24MAR09 20:59	IC
38012193	FCV-3-498	SG'C' MN FW / CAL ACTUATOR & ACCES	4	25MAR09 10:00*	25MAR09 13:59	VT
38012193	FCV-3-498	SG'C' MN FW - ADJUST PACKING DURING AS LEFT DIAG	4	25MAR09 14:00	25MAR09 17:59	VT
38012193	FCV-3-498	SG'C' MN FW - PERF AS LEFT DIAG TEST	8	25MAR09 14:00	25MAR09 21:59	VT
38012193	FCV-3-498	SG C MN FW - EVALUATE DIAGNOSTIC TEST AS LEFT	2	25MAR09 22:00	25MAR09 23:59	MM
38012193	FCV-3-498	PMT- SG'C' MN FW / ACTUATOR & CALIBRATE	1	27MAR09 03:00	27MAR09 03:59	VT
[redacted]						
36019725	FCV-3-499	SG C MN FW BYP-EVALUATE DIAGNOSTIC TEST AS FD	2	18MAR09 13:00	18MAR09 14:59	MM
38015698	FCV-3-499	SG C MN FW BYP : REPAIR REQULATOR AIR LEAK	2	18MAR09 23:00	19MAR09 00:59	VT
38015698	FCV-3-499	SG C MN FW BYP : REPAIR REQULATOR AIR LEAK - PMT	1	19MAR09 10:00	19MAR09 10:59	VT
36019725	FCV-3-499	SG C MN FW BYP-EVALUATE DIAGNOSTIC TEST AS LEFT	3	19MAR09 11:00	19MAR09 13:59	MM
[redacted]						
37021207	FI-3-1412	SGFP MIN FLOW INDCTR- BNCH CAL FI-3-1412 & 1417	5	29MAR09 04:00*	29MAR09 08:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37021207	FI-3-1412	SGFP A MIN FLOW-INSTAL IND FI-3-1412 / PCM06-002	5	29MAR09 09:00	29MAR09 13:59	IC
37021207	FI-3-1417	SGFP B MIN FLOW-INSTAL IND FI-3-1417 / PCM06-002	5	29MAR09 09:00	29MAR09 13:59	IC
38011922	L-3-488	S/G LVL LOOP B INSTS CAL - PERFORM LOOP CAL	12	26MAR09 09:00	26MAR09 20:59	IC
38012720	LC-3-478A	LC-3-478A, MODIFY CONTROLLER GAIN & RESET	10	24MAR09 07:00	24MAR09 16:59	IC
37021913	LC-3-478B	LOOP A FD WTR CV LEVEL SUMMATOR - REPL SUMMATOR	8	17MAR09 07:00	17MAR09 14:59	IC
38012719	LC-3-488A	LC-3-488A, MODIFY CONTROLLER GAIN & RESET	10	22MAR09 07:00*	22MAR09 16:59	IC
38012718	LC-3-498A	LC-3-498A, MODIFY CONTROLLER GAIN & RESET	10	26MAR09 07:00	26MAR09 16:59	IC
38014664	MOV-3-1420	MOV-1420(A SGFP)OPER GREASE INSP - REMOVE SCAFF	8	04APR09 07:00*	04APR09 14:59	PJ
38012551	MOV-3-1421	30623 TDR CAL MOV-1421	8	17MAR09 04:00*	17MAR09 09:59	EM
38012551	MOV-3-1421	PMT - 30623 TDR CAL MOV-1421	4	23MAR09 21:00	24MAR09 00:59	EM
38014666	MOV-3-1421	MOV-1421(B SGFP)OPER GREASE INSP - ERECT SCAFF	10	27MAR09 19:00	28MAR09 04:59	PJ
38014666	MOV-3-1421	MOV-1421-B SGFP DISCH - OPER INSP & LUBE STEM	6	28MAR09 07:00*	28MAR09 12:59	VT
38014666	MOV-3-1421	PMT-MOV-1421-B SGFP-GREASE INSP	1	28MAR09 13:00	28MAR09 13:59	VT
38014666	MOV-3-1421	MOV-1421(B SGFP)OPER GREASE INSP - REMOVE SCAFF	4	05APR09 01:00	05APR09 04:59	PJ
37025033	PS-3-2047	SGFP A START LUBE OIL PS - REPAIR MINOR OIL LEAK	6	03APR09 15:00*	03APR09 20:59	IC
37025033	PS-3-2047	SGFP A START LUBE OIL PS - PMT OIL LEAK	1	08APR09 07:00*	08APR09 07:59	IC
37020167	RO-3-3402	SGFP B RECIRC ORFI DS OF RO-3402-CUT OUT 6X8 EXP	20	23MAR09 07:00*	24MAR09 02:59	PJ
37020167	RO-3-3402	SGFP B RECIR ORFI DS OF RO-3402-WELD NEW 6X8 EXP	24	24MAR09 03:00	25MAR09 04:59	PJ
37020167	RO-3-3402	SGFP B RECIRC ORFI D/S OF RO-3-3402-REMO SCAF	8	04APR09 00:00*	04APR09 09:59	PJ
37020167	RO-3-3402	SGFP B RECIR ORFI DS OF RO-3402 - PMT	1	08APR09 04:00	08APR09 04:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38009666	SGB-3-077	S/G A BLOWDOWN CNTL VLV INLET ISO VLV 007	24	21MAR09 07:00*	23MAR09 08:59	PJ
38012179	SNU-1037	SNUB-FW SYS(PEN 27C TO SG C-OUT/BIO)-ERECT SCAF	12	25MAR09 17:00	26MAR09 04:59	PJ
38012179	SNU-1037	SNUB-FW SYS(PEN 27C TO SG C-OUT/BIO)-AS FD VISUL	1	26MAR09 07:00*	26MAR09 07:59	EN
38012179	SNU-1037	SNUB-FW SYS(PEN 27C TO SG C-OUT/BIO)-HAND STROKE	1	26MAR09 07:00	26MAR09 07:59	EN
38012179	SNU-1038	SNUB-FW SYS-(PEN 27C TO S/G C)-ERECT SCAFFOLD	16	23MAR09 16:00*	24MAR09 09:59	PJ
38012179	SNU-1038	SNUB-FW SYS-(PEN 27C TO S/G C)-AS FOUND VISUAL	1	26MAR09 08:00	26MAR09 08:59	EN
38012179	SNU-1038	SNUB-FW SYS-(PEN 27C TO S/G C)- HAND STROKE	1	26MAR09 08:00	26MAR09 08:59	EN
38012179	SNU-1038	SNUB-FW SYS-(PEN 27C TO S/G C)-REMOVE SCAFFOLD	6	26MAR09 09:00	26MAR09 14:59	PJ
38012179	SNU-1039	SNUB-FW SYS-(PEN 27C TO S/G C)-ERECT SCAFFOLD	16	17MAR09 18:00	18MAR09 11:59	PJ
38012179	SNU-1039	SNUB-FW SYS-(PEN 27C TO S/G C)-AS FOUND VISUAL	1	26MAR09 09:00	26MAR09 09:59	EN
38012179	SNU-1039	SNUB-FW SYS-(PEN 27C TO S/G C)- HAND STROKE	1	26MAR09 09:00	26MAR09 09:59	EN
38012179	SNU-1039	SNUB-FW SYS-(PEN 27C TO S/G C)-REMOVE SCAFFOLD	6	28MAR09 03:00*	28MAR09 10:59	PJ
38012179	SNU-1040	SNUB-FW SYS-(PEN 27C TO S/G C)-AS FOUND VISUAL	1	26MAR09 10:00	26MAR09 10:59	EN
38012179	SNU-1040	SNUB-FW SYS-(PEN 27C TO SG C)-REMO & FUNCTIONAL	5	26MAR09 11:00	26MAR09 16:59	EN
38012179	SNU-1040	SNUB-FW SYS-(PEN 27C TO SG C)-INSTALL & AS LEFT	3	26MAR09 17:00	27MAR09 07:59	EN
38012179	SNU-1041	SNUB-FW SYS(PEN 27C TO S/G C) -ERECT SCAFFOLD	10	18MAR09 12:00	18MAR09 21:59	PJ
38012179	SNU-1041	SNUB-FW SYS(PEN 27C TO S/G C) -AS FOUND VISUAL	1	26MAR09 07:00*	26MAR09 07:59	EN
38012179	SNU-1041	SNUB - FW SYS(PEN 27C TO S/G C) - HANDSTROKE	1	26MAR09 07:00	26MAR09 07:59	EN
38012179	SNU-1041	SNUB-FW SYS(PEN 27C TO S/G C) -REMOVE SCAFFOLD	6	28MAR09 11:00	28MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1042	SNUB-FW SYS(PEN 27C TO S/G C) -AS FOUND VISUAL	1	26MAR09 08:00	26MAR09 08:59	EN
38012179	SNU-1042	SNUB - FW SYS(PEN 27C TO S/G C) - HANDSTROKE	1	26MAR09 08:00	26MAR09 08:59	EN
38012179	SNU-1077	SNUB-FW SYS-FW TO S/G A)-ERECT SCAFFOLD	10	25MAR09 06:00	25MAR09 15:59	PJ
38012179	SNU-1077	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 07:00*	27MAR09 07:59	EN
38012179	SNU-1077	SNUB-FW SYS-(FW TO S/G A) - HANDSTROKE	1	27MAR09 07:00	27MAR09 07:59	EN
38012179	SNU-1077	SNUB-FW SYS-FW TO S/G A)-REMOVE SCAFFOLD	6	27MAR09 08:00	27MAR09 13:59	PJ
38012179	SNU-1078	SNUB-FW SYS-FW TO S/G A)-ERECT SCAFFOLD	10	24MAR09 20:00	25MAR09 05:59	PJ
38012179	SNU-1078	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 08:00	27MAR09 08:59	EN
38012179	SNU-1078	SNUB-FW SYS-(FW TO S/G A) - HANDSTROKE	1	27MAR09 09:00	27MAR09 09:59	EN
38012179	SNU-1078	SNUB-FW SYS-FW TO S/G A)-REMOVE SCAFFOLD	6	27MAR09 12:00	27MAR09 17:59	PJ
38012179	SNU-1079	SNUB-FW SYS-(FW TO S/G A) - ERECT SCAFFOLD	12	24MAR09 08:00	24MAR09 19:59	PJ
38012179	SNU-1079	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 10:00	27MAR09 10:59	EN
38012179	SNU-1079	SNUB-FW SYS-(FW TO S/G A) - HANDSTROKE	1	27MAR09 11:00	27MAR09 11:59	EN
38012179	SNU-1079	SNUB-FW SYS-(FW TO S/G A) - REMOVE SCAFFOLD	6	27MAR09 12:00	27MAR09 17:59	PJ
38012179	SNU-1080	SNUB-FW SYS-FW TO S/G A)-ERECT SCAFFOLD	12	23MAR09 20:00	24MAR09 07:59	PJ
38012179	SNU-1080	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 12:00	27MAR09 12:59	EN
38012179	SNU-1080	SNUB-FW SYS-(FW TO S/G A) - HANDSTROKE	1	27MAR09 13:00	27MAR09 13:59	EN
38012179	SNU-1080	SNUB-FW SYS-FW TO S/G A)-REMOVE SCAFFOLD	6	27MAR09 14:00	27MAR09 19:59	PJ
38012179	SNU-1081	SNUB-FW SYS-(FW TO S/G A) - ERECT SCAFFOLD	12	23MAR09 08:00	23MAR09 19:59	PJ
38012179	SNU-1081	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 14:00	27MAR09 14:59	EN
38012179	SNU-1081	SNUB-FW SYS-(FW TO S/G A) - HANDSTROKE	1	27MAR09 15:00	27MAR09 15:59	EN
38012179	SNU-1081	SNUB-FW SYS-(FW TO S/G A) - REMOVE SCAFFOLD	6	27MAR09 16:00	27MAR09 21:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012179	SNU-1082	SNUB-FW SYS-FW TO S/G A)-ERECT SCAFFOLD	8	23MAR09 00:00*	23MAR09 07:59	PJ
38012179	SNU-1082	SNUB-FW SYS-(FW TO S/G A) - AS FOUND VISUAL	1	27MAR09 16:00	27MAR09 16:59	EN
38012179	SNU-1082	SNUB-FW SYS(FW TO S/G A)-HANDSTROKE	1	27MAR09 17:00	27MAR09 17:59	EN
38012179	SNU-1082	SNUB-FW SYS-FW TO S/G A)-REMOVE SCAFFOLD	6	28MAR09 17:00	28MAR09 22:59	PJ
38012179	SNU-1083	SNUB-FW SYS-FW TO S/G B)-ERECT SCAFFOLD	10	25MAR09 21:00	26MAR09 08:59	PJ
38012179	SNU-1083	SNUB-FW SYS-(FW TO S/G B) - AS FOUND VISUAL	1	26MAR09 09:00	26MAR09 09:59	EN
38012179	SNU-1083	SNUB-FW SYS-(FW TO S/G B)-REMOV & FUNCTIONAL TST	5	26MAR09 10:00	26MAR09 14:59	EN
38012179	SNU-1083	SNUB-FW SYS-(FW TO S/G B) - REINSTALL & AS LEFT	4	26MAR09 15:00	26MAR09 18:59	EN
38012179	SNU-1083	SNUB-FW SYS-FW TO S/G B)-REMOVE SCAFFOLD	6	26MAR09 19:00	27MAR09 00:59	PJ
37004908	SV-3-1412	SV's TO FW PP B RECIRC CV's - REMOVE 1/4" TUBING	2	31MAR09 02:00	31MAR09 03:59	VT
37004908	SV-3-1412	SV's TO FW PP B RECIRC CV's-INSTALL 3/8' TUBING	5	31MAR09 04:00	31MAR09 10:59	VT
37013722	SV-3-1415	SV's TO FW PP A RECIRC CV's - REMOVE 1/4' TUBING	2	30MAR09 19:00	30MAR09 20:59	VT
37013722	SV-3-1415	SV's TO FW PP A RECIRC CV's- INSTALL 3/8' TUBING	5	30MAR09 21:00	31MAR09 01:59	VT
36008940	SV-3-489B	SV-3-489B, REPLACE THE FLEX CONDUIT	4	19MAR09 09:00	19MAR09 12:59	VT
38012039	VENTURIES	MN FW VENTURIES - INSPECT VENTURIES	4	18MAR09 19:00	18MAR09 22:59	EN
37024757	VENTURIES	MN FW VENTURIES - NDE COVERS AFTER WELDING	5	21MAR09 11:00	21MAR09 15:59	EN
37024757	VENTURIES	MN FW VENTURIES - REMOVE SCAFFOLD	12	08APR09 07:00	08APR09 18:59	PJ
38011923		S/G LVL LOOP B HAGAN REPLACEMENTS	10	25MAR09 23:00*	26MAR09 08:59	IC
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3 -REMO INSUL	10	16MAR09 14:00	16MAR09 23:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-SETUP EQUIP	5	17MAR09 00:00	17MAR09 04:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-INSP PIPE	2	17MAR09 07:00	17MAR09 08:59	EN
38025373	3-10-119	AFW TO STM LINE B XCI LOC 07-01 IP#3-SET UP TP&L	8	17MAR09 07:00	17MAR09 14:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-BUILD TENT	18	17MAR09 07:00	18MAR09 00:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-BLAST PIPE	10	18MAR09 07:00	18MAR09 16:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-METALIZE PP	10	19MAR09 07:00	19MAR09 16:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3-REMO TENT	2	19MAR09 17:00	19MAR09 18:59	PJ
38025394	3-10-119	AFW TO STM LINE C XCI LOC 09-01 IP1&2-REMO EQUIP	10	28MAR09 11:00	28MAR09 20:59	PJ
38025373	3-10-119	AFW TO STM LINE A XCI LOC 07-01 IP#3 -INST INSUL	10	08APR09 03:00*	08APR09 14:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1- REMO INSUL	10	19MAR09 19:00	20MAR09 04:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1-INSP PIPE	2	20MAR09 07:00	20MAR09 08:59	EN
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1-BUILD TENT	18	20MAR09 07:00	21MAR09 00:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1-BLAST PIPE	10	21MAR09 07:00	21MAR09 16:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1-METALIZE PP	10	23MAR09 07:00	23MAR09 16:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1-REMO TENT	2	23MAR09 17:00	23MAR09 18:59	PJ
38013670	3-10-219	AFW TO STM LINE B XCI LOC 07-01 IP#1 -INST INSUL	10	23MAR09 19:00	24MAR09 04:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-REMO INSUL	10	24MAR09 07:00	24MAR09 16:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-INSP PIPE	2	24MAR09 17:00	24MAR09 18:59	EN
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-BUILD TENT	18	24MAR09 17:00	25MAR09 12:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-BLAST PIPE	10	25MAR09 13:00	26MAR09 12:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-METALIZE	10	26MAR09 13:00	27MAR09 12:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-REMO TENT	10	27MAR09 13:00	27MAR09 22:59	PJ
38025394	3-10-319	AFW TO STM LINE C XCI LOC 09-01 IP1&2-INST INSUL	10	27MAR09 23:00	28MAR09 10:59	PJ
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP - ERECT RIG SCAF	8	16MAR09 07:00	16MAR09 14:59	PJ
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP-DISASS VLV	9	18MAR09 08:00*	18MAR09 16:59	VT
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP-INSP & REPAIR	9	18MAR09 17:00	19MAR09 01:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP - REASSEM VLV	9	19MAR09 02:00	19MAR09 10:59	VT
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP - REMOV SCAF	8	19MAR09 11:00	19MAR09 18:59	PJ
35019725	AFPD-3-007	ISO VLV WTR TO S/G B FRM AFW PP - PMT	1	26MAR09 18:00	26MAR09 18:59	VT
38012197	CV-3-2816	CV-2816 AFW TRN A TO S/G A-PERF AS FD DIAG TEST	6	19MAR09 14:00*	19MAR09 19:59	VT
34004295	CV-3-2816	CV-3-2816, REMOVE FOLLOWER PIN.	4	19MAR09 20:00	19MAR09 23:59	VT
38012197	CV-3-2816	CV WTR TO S/G A FRM AFW PPS-REMOVE ACT	5	20MAR09 00:00	20MAR09 04:59	VT
38012197	CV-3-2816	CV WTR TO S/G A FRM AFW PPS-O/H ACT	20	20MAR09 05:00	21MAR09 00:59	VT
36024970	CV-3-2816	CV WTR TO S/G A FRM AFW PPS - PERF INSP OF VLV	2	20MAR09 14:00	20MAR09 15:59	MM
38012197	CV-3-2816	CV WTR TO S/G A FRM AFW PPS- INSTALL ACT	5	21MAR09 01:00	21MAR09 05:59	VT
34004295	CV-3-2816	CV-3-2816, REPLACE FOLLOWER PIN.	4	21MAR09 06:00	21MAR09 09:59	VT
38012197	CV-3-2816	VLV AFW TRN A TO S/G A - CAL AOV ACT/ACC	4	21MAR09 10:00	21MAR09 13:59	VT
38012197	CV-3-2816	VLV AFW TRN A TO S/G A - PERF AS LT DIAG TST	4	21MAR09 14:00	21MAR09 17:59	VT
38011924	CV-3-2816	AFW TRN'A' / LOOP A FUNCT & VLV AS LT-PMI-075.1	5	22MAR09 15:00	23MAR09 09:59	IC
38011924	CV-3-2817	AFW TRN'A' / LOOP B FUNCT & VLV AS LT-PMI-075.1	5	23MAR09 10:00	23MAR09 14:59	IC
38011924	CV-3-2818	AFW TRN'A' / LOOP C FUNCT & VLV AS LT-PMI-075.1	5	23MAR09 15:00	24MAR09 09:59	IC
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-INSTALL TEMP HANGER	5	18MAR09 07:00*	18MAR09 11:59	PJ
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-REMOVE PERM HANGER	5	18MAR09 12:00	18MAR09 16:59	PJ
34004296	CV-3-2831	CV-2831-TRN B VLV AFW TO S/G A-REPL FOLLOWER PIN	4	18MAR09 17:00	18MAR09 20:59	VT
34004296	CV-3-2831	CV-2831-TRN B VLV AFW TO S/G A - AS LEFT DIAG	8	18MAR09 21:00	19MAR09 04:59	VT
36016513	CV-3-2831	CV-3-2831 - METALIZE - INSTALL EOL DEVICE	3	19MAR09 07:00	19MAR09 09:59	EM
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-WRAP/COVER ADJ EQP	10	19MAR09 07:00	20MAR09 07:59	PJ
36016513	CV-3-2831	CV-3-2831: EOL DEVICE FIRE IMPAIRMENT TAG	3	20MAR09 03:00	20MAR09 07:59	FP
36016513	CV-3-2831	CV-3-2831:BLAST & METALIZE	20	20MAR09 08:00	23MAR09 07:59	PJ
36016513	CV-3-2831	CV-3-2831:INSPECT PIPING-NDE	3	20MAR09 16:00	21MAR09 08:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
36016513	CV-3-2831	CV-3-2831 - METALIZE - REMOVE EOL DEVICE	3	23MAR09 08:00	23MAR09 10:59	EM
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-REINSTALL PERM HANGER	5	23MAR09 08:00	23MAR09 12:59	PJ
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-REMOVE TEMP HANGER	3	23MAR09 13:00	23MAR09 15:59	PJ
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-TOUCH UP ALL HANGERS	10	24MAR09 07:00	25MAR09 07:59	PJ
38011925	CV-3-2831	AFW TRN'B' / LOOP A FUNCT & VLV AS LT -PMI-075.2	5	24MAR09 10:00	24MAR09 14:59	IC
36016513	CV-3-2831	CV-3-2831:CLEAN AND PAINT-DEMOB TENT	10	25MAR09 08:00	26MAR09 08:59	PJ
38018990	CV-3-2832	CV-2832 TRN B AFW TO S/G B - AS FD DIAG	6	20MAR09 11:00	20MAR09 16:59	VT
38014453	CV-3-2832	CV-2832 TRN B AFW TO S/G B - REMO ACT	5	20MAR09 17:00	20MAR09 21:59	VT
38014453	CV-3-2832	CV-2832 TRN B AFW TO S/G B - O/H ACT	20	20MAR09 22:00	21MAR09 17:59	VT
38014453	CV-3-2832	CV-2832 TRN B AFW TO S/G B - RECONN ACT	5	21MAR09 21:00	22MAR09 01:59	VT
38018990	CV-3-2832	CV-2832 TRN B AFW TO S/G B - AS LT DIAG & CAL	8	22MAR09 02:00	22MAR09 09:59	VT
38011925	CV-3-2832	AFW TRN'B' / LOOP B FUNCT & VLV AS LT -PMI-075.2	5	24MAR09 15:00	25MAR09 09:59	IC
38011925	CV-3-2833	AFW TRN'B' / LOOP C FUNCT & VLV AS LT -PMI-075.2	5	26MAR09 07:00*	26MAR09 11:59	IC
38018293	FT-3-1401A	FT FOR AFW TO S/G A - REMOVE OLD VLV & TUBING	5	20MAR09 15:00	21MAR09 09:59	PJ
38018293	FT-3-1401A	FT FOR AFW TO S/G A - RMV EXST TUBE TRAY	5	21MAR09 10:00	21MAR09 14:59	PJ
38018293	FT-3-1401A	FLOW TRANS FOR AFW TO S/G A-RMV EXST SUPPORTS	10	21MAR09 15:00	23MAR09 14:59	PJ
38018293	FT-3-1401A	FT FOR AFW TO S/G A - INSTALL BLOCK VALVE	5	23MAR09 15:00	24MAR09 09:59	PJ
38018293	FT-3-1401A	FLOW TRANS FOR AFW TO S/G A-INST NEW SUPPORTS	10	24MAR09 10:00	25MAR09 09:59	PJ
38018293	FT-3-1401A	FT FOR AFW TO S/G A - INSTALL NEW VLV & TUBING	10	25MAR09 10:00	26MAR09 09:59	PJ
38018293	FT-3-1401A	FT FOR AFW TO S/G A - PMT	1	07APR09 11:00	07APR09 11:59	PJ
38018294	FT-3-1401B	FLOW TRANS FOR AFW TO S/G B - ERECT SCAFFOLD	8	18MAR09 11:00*	19MAR09 08:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B - REMOV OLD BLK VLV & TUBING	5	19MAR09 09:00	19MAR09 13:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38018294	FT-3-1401B	FT FOR AFW TO S/G B - INSTL NEW TUBING	10	19MAR09 09:00	20MAR09 08:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B-REMOVE EXISTING TUBING TRAY	5	19MAR09 14:00	20MAR09 08:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B-MODIFY EXISTING TX RACK	4	20MAR09 09:00	20MAR09 12:59	PJ
38018294	FT-3-1401B	FLOW TRANS FOR AFW TO S/G B-REMOVE EXISTING SUPP	10	20MAR09 09:00	21MAR09 08:59	PJ
38018294	FT-3-1401B	FLOW TRANS FOR AFW TO S/G B - INSTALL SUPPORTS	10	20MAR09 13:00	21MAR09 12:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B - INSTL BLOCK VALVE	5	21MAR09 09:00	21MAR09 13:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B - INSTL NEW TUBING	10	21MAR09 09:00	23MAR09 08:59	PJ
38018294	FT-3-1401B	FLOW TRANS FOR AFW TO S/G B - REMOVE SCAFFOLD	8	02APR09 12:00*	03APR09 09:59	PJ
38018294	FT-3-1401B	FT FOR AFW TO S/G B - PMT	1	06APR09 07:00	06APR09 07:59	PJ
38018293	FT-3-1457A	FT FOR AFW TO S/G A - REMO OLD VLV & TUBING	5	18MAR09 07:00	18MAR09 11:59	PJ
38018293	FT-3-1457A	FLOW TRANS FOR AFW TO S/G A-RMV EXST TUBE TRAY	5	19MAR09 09:00*	19MAR09 13:59	PJ
38018293	FT-3-1457A	FT FOR AFW TO S/G A - INSTALL BLOCK VLV	5	19MAR09 14:00	20MAR09 08:59	PJ
38018293	FT-3-1457A	FT FOR AFW TO S/G A - INSTALL NEW TUBING	16	20MAR09 09:00	21MAR09 14:59	PJ
38018293	FT-3-1457A	FT FOR AFW TO S/G B - PARTIAL ITOP PCM 07-027	10	26MAR09 10:00	27MAR09 09:59	PJ
38018293	FT-3-1457A	FLOW TRANS FOR AFW TO S/G A - PMT	1	07APR09 11:00	07APR09 11:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B - REMOV OLD VLV & TUBING	6	19MAR09 14:00*	20MAR09 09:59	PJ
38018294	FT-3-1457B	FLOW TRANS FOR AFW TO S/G B-RMV EXST TUB TRAY	5	20MAR09 10:00	20MAR09 14:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B-FAB & INST NEW TUBE TRAY	5	20MAR09 15:00	21MAR09 09:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B-WELD TUBE ADAPTERS	12	21MAR09 10:00	23MAR09 11:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B-INSTALL NEW TUBING	10	23MAR09 12:00	24MAR09 11:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B-INSTALL BLOCK VALVE	5	24MAR09 12:00	24MAR09 16:59	PJ
38018294	FT-3-1457B	FT FOR AFW TO S/G B - PMT	1	06APR09 07:00	06APR09 07:59	PJ
38018293	FT-3-1458A	FLOW TRANS FOR AFW TO S/G A - ERECT SCAFFOLD	16	14MAR09 18:00A	16MAR09 09:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38018293	FT-3-1458A	FT FOR AFW TO S/G A - REMOV OLD VLV & TUBING	5	21MAR09 13:00	23MAR09 07:59	PJ
38018293	FT-3-1458A	FLOW TRANS FOR AFW TO S/G A-RMV EXISTNG TBNG TRA	5	23MAR09 08:00	23MAR09 12:59	PJ
38018293	FT-3-1458A	FT FOR AFW TO S/G A - INSTALL NEW TUBING	5	23MAR09 13:00	24MAR09 07:59	PJ
38018293	FT-3-1458A	FT FOR AFW TO S/G A - INSTALL NEW BLOCK VALVE	16	23MAR09 13:00	25MAR09 08:59	PJ
38018293	FT-3-1458A	FLOW TRANS FOR AFW TO S/G A - REMOVE SCAFFOLD	8	30MAR09 14:00*	31MAR09 11:59	PJ
38018293	FT-3-1458A	FT FOR AFW TO S/G A - PMT	1	08APR09 07:00	08APR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G B - REMOV OLD VLV & TUBING	5	23MAR09 13:00	24MAR09 07:59	PJ
38018294	FT-3-1458B	FLOW TRANS FOR AFW TO S/G B-RMV EXST TUBING TRAY	5	24MAR09 08:00	24MAR09 12:59	PJ
38018294	FT-3-1458B	FLOW TRANS FOR AFW TO S/G B-FAB/INST NEW TRAY	5	24MAR09 13:00	25MAR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G B - INSTAL NEW TUBING	10	25MAR09 08:00	26MAR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G B - INSTALL NEW BLOCK VLV	5	25MAR09 13:00	26MAR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G C - ITOP PCM 07-027 PARTIAL	10	26MAR09 08:00	27MAR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G B - PMT	1	06APR09 07:00	06APR09 07:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G C - FINAL ITOP OF PCM 07-027	1	08APR09 08:00	08APR09 08:59	PJ
38018294	FT-3-1458B	FT FOR AFW TO S/G C - FINAL SATS PCM 07-027	1	08APR09 09:00	08APR09 09:59	EN
38011924	FY-3-1401A	AFW TRAIN A CALIBRATION (*-PMI-075.1)	5	20MAR09 15:00	21MAR09 09:59	IC
38011925	FY-3-1401B	AFW TRAIN B CALIBRATION (*-PMI-075.2)	5	21MAR09 10:00	21MAR09 14:59	IC
38011924		AFW TR' A' CONTROL LOOP/ 'AS FOUNDS'	5	18MAR09 07:00*	18MAR09 11:59	IC
38011925		AFW TR' B' CONTROL LOOP/ 'AS FOUND''	5	18MAR09 12:00	18MAR09 16:59	IC
38011924		AFW TR' A' INDICATION LOOP/ 'AS FOUNDS'	7	19MAR09 07:00	19MAR09 13:59	IC
38011925		AFW TR' B' INDICATION LOOP/ 'AS FOUNDS'	7	19MAR09 14:00	20MAR09 10:59	IC
38011924		AFW TR' A' CONTROL LOOP - AS LEFT	5	21MAR09 15:00	22MAR09 09:59	IC
38011925		AFW TR' B' CONTROL LOOP - AS LEFT	5	22MAR09 10:00	22MAR09 14:59	IC
38011928		BACKFILL/FILL & VENT AFW TRAIN A FLOW TXS	3	05APR09 07:00	05APR09 09:59	IC

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011926		BACKFILL/FILL & VENT AFW TRAIN B FLOW TXS	3	05APR09 10:00	05APR09 12:59	IC
36012683	3-30-328	3-30-328 DN VLV- 3B HTR - REPL VLV & SPOOL PIECE	10	30MAR09 07:00*	30MAR09 16:59	PJ
36012683	3-30-328	3-30-328 DRN VLV, 3B HTR SHELL - PMT	1	08APR09 02:00	08APR09 02:59	PJ
36011080	3-30-511	3-30-511-ISO VLV LS-1548 HTR 5A-REPL VLV & SPOOL	10	28MAR09 08:00*	28MAR09 17:59	PJ
36011080	3-30-511	3-30-511- ISO VLV LS-1546 HTR 5A - PMT	1	08APR09 02:00	08APR09 02:59	PJ
37008154	3-30-525	DRN VLV 5A HTR TO 6A HDT-REPL VLV & SPOOL PIECE	10	28MAR09 18:00	29MAR09 03:59	PJ
37008154	3-30-525	DRN VLV 5A HTR TO 6A HDT - PMT	1	08APR09 02:00	08APR09 02:59	PJ
37023436	3-30-801	INLET ISO VLV CV-1516 - NDE VLV FOR LEAK PATH	4	26MAR09 01:00	26MAR09 04:59	EN
37023436	3-30-801	INLET ISO VLV CV-1516 - PT EXCAVATED AREA	4	26MAR09 21:00	27MAR09 00:59	EN
37023436	3-30-801	INLET ISO VLV CV-1516 - ENG EVALUATE PT RESULTS	4	27MAR09 01:00	27MAR09 04:59	EN
37023436	3-30-801	INLET ISO VLV CV-1516 - PT WELD REPAIR	4	28MAR09 01:00	28MAR09 04:59	EN
37025739	3-30-852	B HDP DISCH CK VLV - REMOVE INSULATION	3	17MAR09 00:00	17MAR09 02:59	PJ
37025739	3-30-852	B HDP DISCH CK VLV - RESTORE INSULATION	4	06APR09 07:00	06APR09 10:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING @ AFW CAGE-INSTA DEADWEIGHT SUPP	8	21MAR09 22:00	23MAR09 07:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING @ AFW CAGE - MOD SUPP 3-HDRH-2	16	23MAR09 08:00*	23MAR09 23:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING @ AFW CAGE - MOD SUPP 3-HDRH-3	16	24MAR09 00:00	24MAR09 17:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING @ AFW CAGE - COAT NEW SUPPORTS	30	24MAR09 18:00	26MAR09 01:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING @ AFW CAGE-REMOVE DEADWEIGHT SUPP	8	26MAR09 02:00	26MAR09 11:59	PJ
37024548	3-HDRH-2	HTR DRN PIPING ABOVE AFW CAGE- REMOVE SCAFFOLD	10	30MAR09 12:00*	30MAR09 21:59	PJ
39001060	3E1A	1A FWH IN/OUT PIPE-COMPLETE BULDING TENT	17	17MAR09 07:00*	17MAR09 23:59	PJ
39001060	3E1A	1A FWH Inlet / Outlet Piping - Remove Asbestos	15	18MAR09 00:00	18MAR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
39001060	3E1A	1A FWH Inlet / Outlet Piping - Fab & Install In	10	18MAR09 17:00	19MAR09 02:59	PJ
39001060	3E1A	1A FWH Drip Inlet Piping - Build Scaffold 1.5 Sh	15	25MAR09 16:00	26MAR09 08:59	PJ
39001060	3E1A	1A FWH Drip Inlet Piping - Build Tent per W.O.#	20	26MAR09 09:00	27MAR09 04:59	PJ
39001060	3E1A	1A FWH Drip Inlet Piping - Remove Asbestos Insul	15	27MAR09 07:00	27MAR09 21:59	PJ
39001060	3E1A	1A FWH Drip Inlet Piping - Fab & Install Insulat	10	27MAR09 22:00	28MAR09 09:59	PJ
39001060	3E1A	1A FWH Emerg Dump Piping - Build Scaffold per W.	15	28MAR09 10:00	29MAR09 00:59	PJ
39001060	3E1A	1A FWH Emerg Dump Piping - Build Tent per W.O.#	20	29MAR09 01:00	30MAR09 22:59	PJ
39001060	3E1A	1A FWH Emerg Dump Piping - Remove Asbestos Insul	15	30MAR09 23:00	31MAR09 15:59	PJ
39001060	3E1A	1A FWH Emerg Dump Piping - Fab & Install Insulat	10	31MAR09 16:00	01APR09 01:59	PJ
39001060	3E1A	1A FWH Emerg Dump Piping - Remove Scaffold per W	10	01APR09 02:00	01APR09 13:59	PJ
39001060	3E2A	2A FWH Inlet/out Piping - Build Tent	10	16MAR09 07:00*	16MAR09 16:59	PJ
39001060	3E2A	2A FWH IN/OUT PIPE-REMOVE/ABATE ASB INSUL	15	17MAR09 11:00*	18MAR09 01:59	PJ
39001060	3E2A	2A FWH Inlet / Outlet Piping - Fab & Install In	10	18MAR09 02:00	18MAR09 13:59	PJ
39001060	3E2A	2A FWH Drip Inlet Piping - Build Scaffold 1.5 Sh	15	25MAR09 16:00	26MAR09 08:59	PJ
39001060	3E2A	2A FWH Drip Inlet Piping - Build Tent per W.O.#	20	26MAR09 09:00	27MAR09 04:59	PJ
39001060	3E2A	2A FWH Drip Inlet Piping - Remove Asbestos Insul	15	27MAR09 07:00	27MAR09 21:59	PJ
39001060	3E2A	2A FWH Drip Inlet Piping - Fab & Install Insulat	10	27MAR09 22:00	28MAR09 09:59	PJ
39001060	3E2A	2A FWH Emerg Dump Piping - Build Scaffold per W.	15	28MAR09 10:00	29MAR09 00:59	PJ
39001060	3E2A	2A FWH Emerg Dump Piping - Build Tent per W.O.#	20	29MAR09 01:00	30MAR09 22:59	PJ
39001060	3E2A	2A FWH Emerg Dump Piping - Remove Asbestos Insul	15	30MAR09 23:00	31MAR09 15:59	PJ
39001060	3E2A	2A FWH Emerg Dump Piping - Fab & Install Insulat	10	31MAR09 16:00	01APR09 01:59	PJ
39001060	3E2A	2A FWH Emerg Dump Piping - Remove Scaffold per W	10	01APR09 02:00	01APR09 13:59	PJ
38013768	3P3A	3P3A INSPECTION A HTR DRN MTR	12	14MAR09 18:00A	16MAR09 10:59	EM
38013768	3P3A	3A HDP MTR INSP - VERIFY MTR HTRS ENERGIZED	1	17MAR09 21:00	17MAR09 21:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37020118	3P3A	3P3A PULLBOX IN RACEWAY 3A1400 CORRODED	24	17MAR09 21:00	18MAR09 22:59	PJ
38013768	3P3A	PMT - 3A HDP MTR INSPECTION	1	09APR09 23:00	09APR09 23:59	EM
38012498	3P3B	3B HDP MTR: DETERM MTR & PREP FOR REMOVAL	4	17MAR09 00:00*	17MAR09 03:59	EM
38012498	3P3B	3B HDP MTR: CONNECT TEMP PWR TO MTR HTRS	2	17MAR09 04:00	17MAR09 05:59	EM
38012498	3P3B	3B HDP MTR:DISCONECT MTR HTRS TO RIG MTR OUT	1	01APR09 13:00	01APR09 13:59	EM
38012498	3P3B	3B HDP MTR: RECONECT MTR HTRS IN LAYDOWN AREA	1	01APR09 22:00	01APR09 22:59	EM
38012498	3P3B	3B HDP MTR: DISCONNECT MTR HTRS TO RIG MTR IN	1	02APR09 19:00	02APR09 19:59	EM
38012498	3P3B	3B HDP MTR - RETERM & RECONNECT TPCW LINES	12	03APR09 14:00	04APR09 01:59	EM
38013770	3P3B	B HTR DRN MTR INSPECTION	12	04APR09 02:00	04APR09 13:59	EM
38013770	3P3B	B HTR DRN MTR - VERIFY MTR HTRS ENERGIZED	1	04APR09 16:00	04APR09 16:59	EM
38012498	3P3B	3B HDP REMOVE SCAFFOLD	4	06APR09 07:00	06APR09 10:59	PJ
38013770	3P3B	3B HTR DRN MTR - PMT MTR REMOVE/INSTALL	1	09APR09 23:00	09APR09 23:59	EM
38013770	3P3B	3B HDP - PMT TIC SWAP	1	09APR09 23:00	09APR09 23:59	EM
38012221	CV-3-1503	MSR B LVL CONT CV - CAL CV	4	27MAR09 07:00*	27MAR09 10:59	VT
38012221	CV-3-1504	MSR D LVL CONT CV - CAL CV	4	28MAR09 04:00	28MAR09 07:59	VT
38013360	CV-3-1505	RHDT 3A CONT VLV - CAL ACTUATOR	4	30MAR09 00:00	30MAR09 03:59	VT
38011932	CV-3-1506	RHDT 3B CONT VLV - CAL ACTUATOR	6	02APR09 11:00	02APR09 16:59	VT
38014455	CV-3-1510A	HDP DISCH FW PPS SUCT - REPLACE POSITIONER & CAL	4	26MAR09 02:00*	26MAR09 07:59	VT
38014455	CV-3-1510A	HDP DISCH FW PPS SUCT - CAL AOV ACT	4	26MAR09 08:00	26MAR09 11:59	VT
38013360	CV-3-1515	RHDT 3B DUMP TO COND CONT VLV - AS-FD CAL	5	31MAR09 00:00	31MAR09 04:59	VT
38011932	CV-3-1516	RHDT 3B DUMP TO COND CONT VLV - AS-FD CAL	4	02APR09 07:00	02APR09 10:59	VT
38010899	CV-3-1517A	6A FW HTR CONT VLV - AS-FD DIAG / CAL	5	03APR09 15:00	03APR09 19:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38010899	CV-3-1517A	6A FW HTR CONT VLV - AS-LEFT DIAG	4	03APR09 20:00	03APR09 23:59	VT
38010899	CV-3-1517B	6A FW HTR CONT VLV - AS-FD DIAG / CAL	5	04APR09 00:00	04APR09 04:59	VT
38010899	CV-3-1517B	6A FW HTR CONT VLV - AS-LEFT DIAG	4	04APR09 05:00	04APR09 08:59	VT
38010886	CV-3-1518A	6B FW HTR CONT VLV - AS-FD DIAG / CAL	5	02APR09 19:00	02APR09 23:59	VT
38010886	CV-3-1518A	6B FW HTR CONT VLV - AS-LEFT DIAG	4	03APR09 00:00	03APR09 03:59	VT
38010886	CV-3-1518B	6B FW HTR CONT VLV - AS-FD DIAG / CAL	5	03APR09 04:00	03APR09 10:59	VT
38010886	CV-3-1518B	6B FW HTR CONT VLV - AS-LEFT DIAG	4	03APR09 11:00	03APR09 14:59	VT
38011929	DPS-3-1401	HTR DRN PPS DIFF PRESS SW ACROSS CV-1510A-CAL SW	4	06APR09 01:00	06APR09 04:59	IC
38011929	DPS-3-1402	HTR DRN PPS DIFF PRESS SW ACROSS CV-1510A-CAL SW	4	06APR09 05:00	06APR09 08:59	IC
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A REMOVE LAGGING	5	17MAR09 17:00	17MAR09 21:59	PJ
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A REMOVE INSULATION	5	24MAR09 10:00	24MAR09 14:59	PJ
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A BUFF AND CLEAN	10	24MAR09 15:00	25MAR09 00:59	PJ
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A PERFORM EXAMS	5	25MAR09 01:00*	25MAR09 09:59	EN
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A ANALYZE DATA	3	26MAR09 14:00	26MAR09 16:59	EN
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A REST INSULATION	10	03APR09 09:00*	03APR09 18:59	PJ
38027015	FAC LOC 33	LOC # 33 FWH 6A - FWH 5A REST LAGGING	12	03APR09 19:00	04APR09 08:59	PJ
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B REMOVE LAGGING	5	21MAR09 09:00	21MAR09 13:59	PJ
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B REMOVE INSULATION	5	21MAR09 14:00	21MAR09 18:59	PJ
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B BUFF AND CLEAN	10	21MAR09 19:00	22MAR09 04:59	PJ
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B PERFORM EXAMS	8	23MAR09 07:00	23MAR09 14:59	EN
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B ANALYZE DATA	6	25MAR09 07:00	25MAR09 12:59	EN
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B REST INSULATION	10	04APR09 07:00*	04APR09 16:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B REST LAGGING	12	04APR09 17:00	05APR09 04:59	PJ
38027015	FAC LOC 34	LOC # 34 FWH 6B - FWH 5B REMOVE SCAFFOLD	10	06APR09 07:00	06APR09 16:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT REMOVE LAGGING	5	23MAR09 19:00	23MAR09 23:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT REMOVE INSULATION	5	24MAR09 00:00	24MAR09 04:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT BUFF AND CLEAN	10	24MAR09 07:00	24MAR09 16:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT PERFORM EXAMS	8	24MAR09 17:00	25MAR09 00:59	EN
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT ANALYZE DATA	6	26MAR09 09:00	26MAR09 14:59	EN
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT REST INSULATION	10	02APR09 10:00*	02APR09 19:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT REST LAGGING	12	02APR09 20:00	03APR09 09:59	PJ
38027015	FAC LOC 35	LOC # 35 FWH 5B - HDT REMOVE SCAFFOLD	10	03APR09 10:00	03APR09 19:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER REMOVE LAGGING	5	21MAR09 17:00	21MAR09 21:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER REMOVE INSULATION	5	21MAR09 22:00	22MAR09 02:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER BUFF AND CLEAN	10	22MAR09 03:00	23MAR09 14:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER PERFORM EXAMS	5	23MAR09 15:00	23MAR09 19:59	EN
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER ANALYZE DATA	3	25MAR09 07:00	25MAR09 09:59	EN
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER REST INSULATION	10	04APR09 10:00*	04APR09 19:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER REST LAGGING	12	04APR09 20:00	06APR09 09:59	PJ
38027015	FAC LOC 36	LOC # 36 HDPP A&B HEADER REMOVE SCAFFOLD	10	06APR09 10:00	06APR09 19:59	PJ
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER REMOVE LAGGING	5	17MAR09 22:00	18MAR09 02:59	PJ
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER REMOVE INSULATION	5	18MAR09 03:00	18MAR09 09:59	PJ
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER BUFF AND CLEAN	10	18MAR09 10:00	18MAR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER PERFORM EXAMS	8	18MAR09 20:00	19MAR09 07:59	EN
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER ANALYZE DATA	6	20MAR09 12:00	21MAR09 07:59	EN
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER REST INSULATION	10	04APR09 19:00*	05APR09 04:59	PJ
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER REST LAGGING	12	06APR09 07:00	06APR09 18:59	PJ
38027015	FAC LOC 37	LOC # 37 HDPP A&B HEADER REMOVE SCAFFOLD	10	06APR09 19:00	07APR09 04:59	PJ
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A REMOVE LAGGING	5	24MAR09 03:00	24MAR09 09:59	PJ
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A REMOVE INSULATION	5	24MAR09 10:00	24MAR09 14:59	PJ
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A BUFF AND CLEAN	10	24MAR09 15:00	25MAR09 00:59	PJ
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A PERFORM EXAMS	5	25MAR09 01:00*	25MAR09 09:59	EN
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A ANALYZE DATA	3	26MAR09 14:00	26MAR09 16:59	EN
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A REST INSULATION	10	08APR09 18:00*	09APR09 03:59	PJ
38027015	FAC LOC 38	LOC # 38 HDPP HDR - CON A REST LAGGING	12	09APR09 04:00	09APR09 17:59	PJ
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A REMOVE LAGGING	6	21MAR09 17:00	21MAR09 21:59	PJ
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A REMOVE INSULATION	5	21MAR09 22:00	22MAR09 02:59	PJ
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A BUFF AND CLEAN	10	22MAR09 03:00	23MAR09 14:59	PJ
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A PERFORM EXAMS	5	23MAR09 15:00*	23MAR09 19:59	EN
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A ANALYZE DATA	4	25MAR09 07:00	25MAR09 10:59	EN
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A REST INSULATION	10	06APR09 08:00*	06APR09 17:59	PJ
38027015	FAC LOC 39	LOC # 39 FWH 4A - FWH 3A REST LAGGING	12	06APR09 18:00	07APR09 07:59	PJ
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B REMOVE LAGGING	5	21MAR09 22:00	22MAR09 02:59	PJ
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B REMOVE INSULATION	5	22MAR09 03:00	23MAR09 09:59	PJ
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B BUFF AND CLEAN	10	23MAR09 10:00	23MAR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B PERFORM EXAMS	8	23MAR09 20:00	24MAR09 07:59	EN
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B ANALYZE DATA	6	25MAR09 12:00	26MAR09 07:59	EN
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B REST INSULATION	10	26MAR09 08:00	26MAR09 17:59	PJ
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B REST LAGGING	12	26MAR09 18:00	27MAR09 07:59	PJ
38027015	FAC LOC 40	LOC # 40 MSR C - RHDT B REMOVE SCAFFOLD	10	27MAR09 08:00	27MAR09 17:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B REMOVE LAGGING	5	23MAR09 10:00	23MAR09 14:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B REMOVE INSULATION	5	23MAR09 15:00	23MAR09 19:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B BUFF AND CLEAN	10	23MAR09 20:00	24MAR09 07:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B PERFORM EXAMS	8	24MAR09 08:00	24MAR09 15:59	EN
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B ANALYZE DATA	6	26MAR09 07:00	26MAR09 12:59	EN
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B REST INSULATION	10	26MAR09 13:00	26MAR09 22:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B REST LAGGING	12	26MAR09 23:00	27MAR09 12:59	PJ
38027015	FAC LOC 41	LOC # 41 RHDT B - FWH 6B REMOVE SCAFFOLD	10	27MAR09 13:00	27MAR09 22:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A REMOVE LAGGING	5	20MAR09 22:00	21MAR09 02:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A REMOVE INSULATION	5	21MAR09 03:00	21MAR09 09:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A BUFF AND CLEAN	10	21MAR09 10:00	21MAR09 19:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A PERFORM EXAMS	5	21MAR09 20:00	22MAR09 00:59	EN
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A ANALYZE DATA	3	24MAR09 09:00	24MAR09 11:59	EN
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A REST INSULATION	10	02APR09 07:00*	02APR09 16:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A REST LAGGING	12	02APR09 17:00	03APR09 04:59	PJ
38027015	FAC LOC 42	LOC # 42 RHDT A - FWH 6A REMOVE SCAFFOLD	10	03APR09 07:00	03APR09 16:59	PJ
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT REMOVE LAGGING	5	23MAR09 18:00	23MAR09 22:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT REMOVE INSULATION	5	23MAR09 23:00	24MAR09 03:59	PJ
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT BUFF AND CLEAN	10	24MAR09 04:00	24MAR09 15:59	PJ
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT PERFORM EXAMS	8	24MAR09 16:00	24MAR09 23:59	EN
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT ANALYZE DATA	6	26MAR09 08:00	26MAR09 13:59	EN
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT REST INSULATION	10	04APR09 10:00*	04APR09 19:59	PJ
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT REST LAGGING	12	04APR09 20:00	06APR09 09:59	PJ
38027015	FAC LOC 43	LOC # 43 FWH 5A/B VENTS - HDT REMOVE SCAFFOLD	10	06APR09 10:00	06APR09 19:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS-HDT ERECT ASBESTOS TENT	40	21MAR09 08:00	24MAR09 01:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT REMOVE LAGGING	5	24MAR09 02:00	24MAR09 08:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT REMOVE INSULATION	5	24MAR09 09:00	24MAR09 13:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT BUFF AND CLEAN	10	24MAR09 14:00	24MAR09 23:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT PERFORM EXAMS	5	25MAR09 00:00	25MAR09 08:59	EN
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT ANALYZE DATA	3	26MAR09 13:00	26MAR09 15:59	EN
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT REST INSULATION	10	07APR09 10:00*	07APR09 19:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT REST LAGGING	12	07APR09 20:00	08APR09 09:59	PJ
38027015	FAC LOC 44	LOC # 44 FWH 5A/B VENTS - HDT REMOVE SCAFFOLD	10	08APR09 10:00	08APR09 19:59	PJ
38012221	LC-3-1503	MSR B LVL CONT-REMO INSU FRM 4-30-693 TO LC-1503	4	16MAR09 07:00	16MAR09 10:59	PJ
38012221	LC-3-1503	MSR B LVL CONTROL - CAL LEVEL LOOP	5	23MAR09 23:00*	24MAR09 03:59	IC
38012221	LC-3-1504	MSR D LVL CONT-REMO INSU FRM 3-30-696 TO LC-1504	4	16MAR09 11:00	16MAR09 14:59	PJ
38012221	LC-3-1504	MSR D LVL CONTROL - CAL LEVEL LOOP	5	27MAR09 23:00	28MAR09 03:59	IC
38013360	LC-3-1505	RHDT 3A LVL CONTROLLER - CAL	6	29MAR09 04:00	29MAR09 23:59	IC
38011932	LC-3-1506	RHDT 3B LEVEL CONTROLLER - CAL PER PMI-081.1	4	02APR09 03:00	02APR09 06:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011929	LC-3-1510A	HTR DRN TK 3B LVL CONT - CAL CONTROLLER	2	04APR09 23:00	05APR09 00:59	IC
38011929	LC-3-1510B	HTR DRN TK 3B LVL CONT - CAL CONTROLLER	2	05APR09 01:00	05APR09 02:59	IC
38013360	LC-3-1515	RHDT 3B DUMP TO COND CONTROLLER - CAL	6	30MAR09 04:00	30MAR09 23:59	IC
38013360	LC-3-1515	RHDT 3A DUMP TO COND - REMOVE SCAFFOLD	6	07APR09 07:00*	07APR09 12:59	PJ
37006736	LC-3-1516	LC-3-1516, REPAIR AIR LEAK @ CONTROLLER	10	28MAR09 04:00	29MAR09 03:59	IC
38011932	LC-3-1516	RHDT 3B DUMP TO COND LVL CONT-CAL PER PMI-081.1	4	01APR09 00:00	01APR09 03:59	IC
37006736	LC-3-1516	RHDT 3B DUMP-REPL LVL CONT, REMOV SCAF	4	01APR09 18:00*	01APR09 21:59	PJ
38010899	LC-3-1517	6A FW HTR LVL CONTROLLER - CAL PER PMI-081.1	4	02APR09 19:00	02APR09 22:59	IC
38010886	LC-3-1518A	6B FW HTR LVL CONTROLLER- CAL PER PMI-081.1	8	01APR09 07:00	01APR09 14:59	IC
38010886	LC-3-1518B	6B FW HTR LVL CONTROLLER - CAL PER PMI-081.1	4	02APR09 15:00	02APR09 18:59	IC
39001010	LS-3-1524	6B FW HTR LVL CONTROLLER- CAL PER PMI-081.1	4	01APR09 00:00	01APR09 17:59	IC
38013360	LS-3-1549	RHDT 3B DUMP TO COND CONT LVL SW. CAL	5	31MAR09 05:00	31MAR09 23:59	IC
38011932	LS-3-1550	RHDT 3B HI LEVEL ALARM - CAL	4	01APR09 23:00	02APR09 02:59	IC
38011929	LS-3-1557	HTR DRN TK 3B PP TRIP LVL SW - CAL SW	2	05APR09 03:00	05APR09 04:59	IC
38011929	LS-3-1558	HTR DRN TK 3B PP TRIP LVL SW - CAL SW	2	05APR09 05:00	05APR09 06:59	IC
38011929	LS-3-1586	HTR DRN TK 3B LOW LVL ALARM SW - CAL SW	2	05APR09 07:00	05APR09 08:59	IC
38011929	LS-3-1587	HTR DRN TK 3B HI LVL ALARM SW - CAL SW	2	05APR09 23:00	06APR09 00:59	IC
38012503	RV-3-3420	RV HTR 4A SHELL - INSTALL RV-3-3420(NEAL INS)	4	31MAR09 01:00	31MAR09 04:59	VT
38012503	RV-3-3420	RV HTR 4A SHELL - PMT RV-3-3420(NEAL INS)	1	08APR09 04:00	08APR09 04:59	VT
38012503	RV-3-3420	RV HTR 4A SHELL-REMOV SCAF / RV-3-3420(NEAL INS)	5	08APR09 07:00	08APR09 11:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012506	RV-3-3423	RV HTR 5B SHELL - RV-3423 REMOV INSUL (NIEL INS)	6	18MAR09 13:00	18MAR09 18:59	PJ
38012506	RV-3-3423	RV HTR 5B SHELL - RV-3-3423 INSTALL (NEIL INS)	4	01APR09 20:00	01APR09 23:59	VT
38012506	RV-3-3423	RV HTR 5B SHELL - RV-3-3423 PMT (NEIL INS)	1	08APR09 04:00	08APR09 04:59	VT
38012506	RV-3-3423	RV HTR 5B SHELL - RV-3423 INSTAL INSUL(NIEL INS)	6	08APR09 07:00	08APR09 12:59	PJ
38012506	RV-3-3423	RV HTR 5B SHELL -RV-3-3423 SCAF REMOV (NIEL INS)	6	08APR09 13:00	08APR09 18:59	PJ
38012508	RV-3-3424	RV HTR 6A SHELL - RV-3-3424 REMOVE INSUL	4	18MAR09 13:00	18MAR09 16:59	PJ
38012508	RV-3-3424	RV HTR 6A SHELL - RV-3-3424 INSTALL	4	02APR09 20:00	02APR09 23:59	VT
38012508	RV-3-3424	RV HTR 6A SHELL - RV-3-3424 INSTALL INSUL	4	08APR09 07:00	08APR09 10:59	PJ
38012508	RV-3-3424	RV HTR 6A SHELL - RV-3-3424 SCAFFOLD REMOVE	8	08APR09 11:00	08APR09 18:59	PJ
38012512	RV-3-6301A	RV HTR 3A SHELL - REMOVE SCAFFOLD	6	19MAR09 09:00	19MAR09 14:59	PJ
38012537	RV-3-6301B	RV HTR 3B SHELL - REMOVE SCAFFOLD	6	20MAR09 03:00	20MAR09 10:59	PJ
38026402	XCI-18	XCI-18 PIPE FRM MSR B DN TO 3-30-689- LADDER	10	26MAR09 19:00	27MAR09 04:59	PJ
38026402	XCI-18	XCI-18 PIPE FRM MSR B DN TO 3-30-689-REMOV INSUL	3	27MAR09 07:00	27MAR09 09:59	PJ
38026402	XCI-18	XCI-18 PIPE FRM MSR B DN TO 3-30-689 -BUFF & CLN	4	27MAR09 10:00	27MAR09 13:59	PJ
38026402	XCI-18	XCI-18 PIPE FRM MSR B DN TO 3-30-689-INSTAL INSU	3	04APR09 18:00*	04APR09 20:59	PJ
38026402	XCI-18	XCI-18 PIPE FRM MSR B DN TO 3-30-689-REMV SCAFF	5	04APR09 21:00	05APR09 01:59	PJ
38026402	XCI-19	XCI-19 VLV 3-2102 MSR A DN TO 6A HTR-ERECT SCAFF	6	27MAR09 02:00	27MAR09 09:59	PJ
38026402	XCI-19	XCI-19 VLV 3-2102 MSR A DN TO 6A HTR-REMOV INSUL	3	27MAR09 10:00	27MAR09 12:59	PJ
38026402	XCI-19	XCI-19 VLV 3-2102 MSR A DN TO 6A HTR -BUFF & CLN	4	27MAR09 13:00	27MAR09 16:59	PJ
38026402	XCI-19	XCI-19 VLV 3-2102 MSR A DN TO 6A HTR-INSTAL INSU	3	04APR09 21:00*	04APR09 23:59	PJ
38026402	XCI-19	XCI-19 VLV 3-2102 MSR A DN TO 6A HTR-REMOV SCAFF	3	05APR09 00:00	05APR09 02:59	PJ
38026402	XCI-20	XCI-20 DN VLV 3-30-698 6B HTR TO COND-ERECT SCAF	3	27MAR09 10:00	27MAR09 12:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026402	XCI-20	XCI-20 DN VLV 3-30-698 6B HTR TO COND-REMOV INSU	3	27MAR09 13:00*	27MAR09 15:59	PJ
38026402	XCI-20	XCI-20 DN VLV 3-30-698 6B HTR TO COND-BUFF & CLN	4	27MAR09 16:00	27MAR09 19:59	PJ
38026402	XCI-20	XCI-20 DN VLV 3-30-698 6B HTR TO CON-INSTAL INSU	3	02APR09 00:00*	02APR09 02:59	PJ
38026402	XCI-20	XCI-20 DN VLV 3-30-698 6B HTR TO COND-REMOV SCAF	3	02APR09 03:00	02APR09 07:59	PJ
38026402	XCI-21	XCI-21 DN VL 3-30-525 5A HTR TO 3A HDT-REMO INSU	3	27MAR09 16:00	27MAR09 18:59	PJ
38026402	XCI-21	XCI-21 DN VL 3-30-525 5A HTR TO 3A HD-BUFF & CLN	4	27MAR09 19:00	27MAR09 22:59	PJ
38026402	XCI-21	XCI-21 DN VL 3-30-525 5A HTR TO 3A HDT-INST INSU	3	02APR09 03:00*	02APR09 07:59	PJ
38026402	XCI-22	XCI-22 DN VL 3-30-526 5B HTR TO 3B HDT-REMO INSU	3	27MAR09 19:00	27MAR09 21:59	PJ
38026402	XCI-22	XCI-22 DN VL 3-30-526 5B HTR TO 3B HDT-BUF & CLN	4	27MAR09 22:00	28MAR09 01:59	PJ
38026402	XCI-22	XCI-22 DN VL 3-30-526 5B HTR TO 3B HDT-INST INSU	3	06APR09 07:00*	06APR09 09:59	PJ
38026402	XCI-23-1	XCI-23-1 - PIPE UP SM OF RO-6298B - REMO INSU	3	27MAR09 22:00	28MAR09 00:59	PJ
38026402	XCI-23-1	XCI-23-1 - PIPE UP SM OF RO-6298B - BUFF & CLN	4	28MAR09 01:00	28MAR09 04:59	PJ
38026402	XCI-23-1	XCI-23-1 - PIPE UP SM OF RO-6298B - INST INSU	8	02APR09 11:00*	02APR09 18:59	PJ
38026402	XCI-23-2	XCI-23-2 - PIPE DN SM OF RO-6298B - REMO INSU	3	28MAR09 01:00	28MAR09 03:59	PJ
38026402	XCI-23-2	XCI-23-2 - PIPE DN SM OF RO-6298B - BUFF & CLN	4	28MAR09 04:00	28MAR09 09:59	PJ
38026402	XCI-23-2	XCI-23-2 - PIPE DN SM OF RO-6298B - INST INSU	3	02APR09 14:00*	02APR09 16:59	PJ
38026402	XCI-24-1	XCI-24-1 - PIPE UP SM OF RO-6299B - REMO INSU	3	28MAR09 04:00	28MAR09 06:59	PJ
38026402	XCI-24-1	XCI-24-1 - PIPE UP SM OF RO-6299B - BUFF & CLN	4	28MAR09 09:00	28MAR09 12:59	PJ
38026402	XCI-24-1	XCI-24-1 - PIPE UP SM OF RO-6299B - INST INSU	10	04APR09 16:00*	05APR09 01:59	PJ
38026402	XCI-24-2	XCI-24-2 - PIPE DN SM OF RO-6299B - REMO INSU	3	28MAR09 09:00	28MAR09 11:59	PJ
38026402	XCI-24-2	XCI-24-2 - PIPE DN SM OF RO-6299B - BUFF & CLN	4	28MAR09 12:00	28MAR09 15:59	PJ
38026402	XCI-24-2	XCI-24-2 - PIPE DN SM OF RO-6299B - INST INSU	10	04APR09 19:00*	05APR09 04:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38026402	XCI-31	XCI-31-1 - PIPE FRM 3-30-037 TO COND - REMO INSU	3	28MAR09 12:00	28MAR09 14:59	PJ
38026402	XCI-31	XCI-31-1 - PIPE FRM 3-30-037 TO CON - BUFF & CLN	4	28MAR09 15:00	28MAR09 18:59	PJ
38026402	XCI-31	XCI-31-1 - PIPE FRM 3-30-037 TO COND - INST INSU	10	28MAR09 22:00	30MAR09 09:59	PJ
38012069	XJ-3-1419	INSP SUCT EXP JOINT & WELDS ON 3P3A HDP	1	30MAR09 08:00	30MAR09 09:59	EN
38012072	XJ-3-1420	INSP SUCT EXP JOINT & WELD ON 3P3B HDR	1	30MAR09 13:00	30MAR09 13:59	EN
38012539	BTV,S	ALL BTV'S--NEAL INSU ISSUE-FULL CLOSE INSP (1)	5	16MAR09 03:00	16MAR09 09:59	MM
38012539	BTV,S	ALL BTV'S--NEAL INSU ISSUE-FULL CLOSE INSP (2)	5	16MAR09 10:00	16MAR09 14:59	MM
38012548	BTV-3-1507	WORK PLATFORM TO SUPPORT VALVE OVERHAUL SCAF SE	4	08APR09 03:00	08APR09 06:59	PJ
38012552	BTV-3-1508	WORK PLATFORM TO SUPPORT VALVE OVREHAUL SCAF SE	4	08APR09 09:00	08APR09 12:59	PJ
38012575	BTV-3-1509	WORK PLATFORM TO SUPPORT VALVE OVREHAUL SCAF SE	4	08APR09 13:00	08APR09 16:59	PJ
38012583	BTV-3-1510	WORK PLATFORM TO SUPPORT VALVE OVREHAUL SCAF SE	4	08APR09 17:00	08APR09 20:59	PJ
38012587	BTV-3-1512	STM TO HTR 4A BTV - REMOVE SCAFFOLD	8	08APR09 21:00	09APR09 04:59	PJ
37024876	BTV-3-1518	STM TO HTR 5A BTV - T/S & REPAIR ACTUATOR	16	02APR09 00:00	02APR09 15:59	VT
37024876	BTV-3-1518	STM TO HTR 5A BTV - PMT - T/S & REPAIR ACT	1	04APR09 08:00	04APR09 08:59	VT
37024876	BTV-3-1518	REBUILD ACTUATOR SCAFF RE	4	04APR09 09:00	04APR09 12:59	PJ
37021196	BTV-3-1524	STM TO HTR 5A BTV - INSTALL ACTUATOR	4	02APR09 00:00	02APR09 03:59	VT
37021196	BTV-3-1524	STM TO HTR 5A BTV - REMOVE SCAFFOLD	4	02APR09 07:00	02APR09 10:59	PJ
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 REMOVE LAGGING	5	25MAR09 09:00	25MAR09 13:59	PJ
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 REMOVE INSULATI	5	25MAR09 14:00	25MAR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 BUFF AND CLEAN	10	25MAR09 19:00	26MAR09 04:59	PJ
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 PERFORM EXAMS	8	26MAR09 07:00	26MAR09 14:59	EN
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 ANALYZE DATA	6	28MAR09 07:00	28MAR09 12:59	EN
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 REST INSULATION	10	28MAR09 13:00	28MAR09 22:59	PJ
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 REST LAGGING	12	28MAR09 23:00	30MAR09 12:59	PJ
38027015	FAC LOC 12	LOC # 12 LP TURB - FWH 3B LINE 1 REMOVE SCAFFOLD	10	30MAR09 13:00	30MAR09 22:59	PJ
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A REMOVE LAGGING	5	24MAR09 17:00	24MAR09 21:59	PJ
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A REMOVE INSULATION	5	24MAR09 22:00	25MAR09 02:59	PJ
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A BUFF AND CLEAN	10	25MAR09 03:00	25MAR09 14:59	PJ
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A PERFORM EXAMS	5	25MAR09 15:00	25MAR09 19:59	EN
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A ANALYZE DATA	3	27MAR09 07:00	27MAR09 09:59	EN
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A REST INSULATION	10	07APR09 08:00*	07APR09 17:59	PJ
38027015	FAC LOC 13	LOC # 13 LP TURBINE - FWH 4A REST LAGGING	12	07APR09 18:00	08APR09 07:59	PJ
38027015	FAC LOC 14	LOC # 14 LP TURBINE - FWH 4A BUFF AND CLEAN	10	19MAR09 12:00	19MAR09 21:59	PJ
38027015	FAC LOC 14	LOC # 14 LP TURBINE - FWH 4A PERFORM EXAMS	5	19MAR09 22:00	20MAR09 02:59	EN
38027015	FAC LOC 14	LOC # 14 LP TURBINE - FWH 4A ANALYZE DATA	3	21MAR09 11:00	21MAR09 13:59	EN
38027015	FAC LOC 14	LOC # 14 LP TURBINE - FWH 4A REST INSULATION	10	21MAR09 14:00	21MAR09 23:59	PJ
38027015	FAC LOC 14	LOC # 14 LP TURBINE - FWH 4A REST LAGGING	12	22MAR09 00:00	23MAR09 13:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B REMOVE LAGGING	5	25MAR09 17:00	25MAR09 21:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B REMOVE INSULATION	5	25MAR09 22:00	26MAR09 02:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B BUFF AND CLEAN	10	26MAR09 03:00	26MAR09 14:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B PERFORM EXAMS	8	26MAR09 15:00	26MAR09 22:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B ANALYZE DATA	6	28MAR09 07:00	28MAR09 12:59	EN
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B REST INSULATION	10	28MAR09 13:00	28MAR09 22:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B REST LAGGING	12	28MAR09 23:00	30MAR09 12:59	PJ
38027015	FAC LOC 15	LOC # 15 LP TURBINE - FWH 4B REMOVE SCAFFOLD	10	30MAR09 13:00	30MAR09 22:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A REMOVE LAGGING	5	24MAR09 22:00	25MAR09 02:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A REMOVE INSULATION	5	25MAR09 03:00	25MAR09 09:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A BUFF AND CLEAN	10	25MAR09 10:00	25MAR09 19:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A PERFORM EXAMS	5	25MAR09 20:00	26MAR09 00:59	EN
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A ANALYZE DATA	3	27MAR09 09:00	27MAR09 11:59	EN
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A REST INSULATION	10	04APR09 19:00*	05APR09 04:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A REST LAGGING	12	06APR09 07:00	06APR09 18:59	PJ
38027015	FAC LOC 16	LOC # 16 XU CONN - FWH 5A REMOVE SCAFFOLD	10	06APR09 19:00	07APR09 04:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A REMOVE LAGGING	5	23MAR09 19:00	23MAR09 23:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A REMOVE INSULATION	5	24MAR09 00:00	24MAR09 04:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A BUFF AND CLEAN	10	24MAR09 07:00	24MAR09 16:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A PERFORM EXAMS	5	24MAR09 17:00*	24MAR09 21:59	EN
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A ANALYZE DATA	3	26MAR09 07:00	26MAR09 09:59	EN
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A REST INSULATION	10	04APR09 00:00*	04APR09 11:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A REST LAGGING	12	04APR09 12:00	04APR09 23:59	PJ
38027015	FAC LOC 17	LOC # 17 XU CONN - FWH 5A REMOVE SCAFFOLD	10	05APR09 00:00	06APR09 11:59	PJ
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B REMOVE LAGGING	5	24MAR09 22:00	25MAR09 02:59	PJ
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B REMOVE INSULATION	5	25MAR09 03:00	25MAR09 09:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B BUFF AND CLEAN	10	25MAR09 10:00	25MAR09 19:59	PJ
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B PERFORM EXAMS	5	25MAR09 20:00	26MAR09 00:59	EN
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B ANALYZE DATA	3	27MAR09 09:00	27MAR09 11:59	EN
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B REST INSULATION	10	04APR09 18:00*	05APR09 03:59	PJ
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B REST LAGGING	12	05APR09 04:00	06APR09 17:59	PJ
38027015	FAC LOC 18	LOC # 18 XU CONN - FWH 5B REMOVE SCAFFOLD	10	06APR09 18:00	07APR09 03:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B REMOVE LAGGING	5	25MAR09 03:00	25MAR09 09:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B REMOVE INSULATION	5	25MAR09 10:00	25MAR09 14:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B BUFF AND CLEAN	10	25MAR09 15:00	26MAR09 00:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B PERFORM EXAMS	11	26MAR09 01:00	26MAR09 15:59	EN
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B ANALYZE DATA	9	28MAR09 07:00	28MAR09 15:59	EN
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B REST INSULATION	10	07APR09 18:00*	08APR09 03:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B REST LAGGING	12	08APR09 04:00	08APR09 17:59	PJ
38027015	FAC LOC 19	LOC # 19 XU CONN - FWH 5B REMOVE SCAFFOLD	10	08APR09 18:00	09APR09 03:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B REMOVE LAGGING	5	25MAR09 17:00	25MAR09 21:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B REMOVE INSULATION	5	25MAR09 22:00	26MAR09 02:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B BUFF AND CLEAN	10	26MAR09 03:00	26MAR09 14:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B PERFORM EXAMS	5	26MAR09 15:00*	26MAR09 19:59	EN
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B ANALYZE DATA	3	28MAR09 07:00	28MAR09 09:59	EN
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B REST INSULATION	10	02APR09 10:00*	02APR09 19:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B REST LAGGING	12	02APR09 20:00	03APR09 09:59	PJ
38027015	FAC LOC 20	LOC # 20 XU CONN - FWH 5B REMOVE SCAFFOLD	10	03APR09 10:00	03APR09 19:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A REMOVE LAGGING	5	20MAR09 17:00	20MAR09 21:59	PJ
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A REMOVE INSULATION	5	20MAR09 22:00	21MAR09 02:59	PJ
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A BUFF AND CLEAN	10	21MAR09 03:00	21MAR09 14:59	PJ
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A PERFORM EXAMS	5	21MAR09 15:00*	21MAR09 19:59	EN
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A ANALYZE DATA	3	24MAR09 07:00	24MAR09 09:59	EN
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A REST INSULATION	10	03APR09 07:00*	03APR09 16:59	PJ
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A REST LAGGING	12	03APR09 17:00	04APR09 04:59	PJ
38027015	FAC LOC 21	LOC # 21 HP TURB - FWH 6A REMOVE SCAFFOLD	10	04APR09 07:00	04APR09 16:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A REMOVE LAGGING	4	19MAR09 10:00	19MAR09 13:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A REMOVE INSULATION	5	19MAR09 14:00	19MAR09 18:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A BUFF AND CLEAN	10	19MAR09 19:00	20MAR09 04:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A PERFORM EXAMS	5	20MAR09 07:00*	20MAR09 11:59	EN
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A ANALYZE DATA	3	21MAR09 16:00	23MAR09 08:59	EN
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A REST INSULATION	10	04APR09 07:00*	04APR09 16:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A REST LAGGING	12	04APR09 17:00	05APR09 04:59	PJ
38027015	FAC LOC 22	LOC # 22 HP TURB - FWH 6A REMOVE SCAFFOLD	10	06APR09 07:00	06APR09 16:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B REMOVE LAGGING	5	20MAR09 19:00	20MAR09 23:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B REMOVE INSULATION	5	21MAR09 00:00	21MAR09 04:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B BUFF AND CLEAN	10	21MAR09 07:00	21MAR09 16:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B PERFORM EXAMS	5	21MAR09 17:00*	21MAR09 21:59	EN
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B ANALYZE DATA	3	24MAR09 07:00	24MAR09 09:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B REST INSULATION	10	24MAR09 10:00	24MAR09 19:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B REST LAGGING	12	24MAR09 20:00	25MAR09 09:59	PJ
38027015	FAC LOC 23	LOC # 23 HP TURB - FWH 6B REMOVE SCAFFOLD	10	25MAR09 10:00	25MAR09 19:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B REMOVE LAGGING	5	17MAR09 07:00*	17MAR09 11:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B REMOVE INSULATION	5	18MAR09 14:00	18MAR09 18:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B BUFF AND CLEAN	10	18MAR09 19:00	19MAR09 04:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B PERFORM EXAMS	8	19MAR09 07:00*	19MAR09 14:59	EN
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B ANALYZE DATA	3	21MAR09 07:00	21MAR09 09:59	EN
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B REST INSULATION	10	04APR09 08:00*	04APR09 17:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B REST LAGGING	12	04APR09 18:00	06APR09 07:59	PJ
38027015	FAC LOC 24	LOC # 24 HP TURB - FWH 6B REMOVE SCAFFOLD	10	06APR09 08:00	06APR09 17:59	PJ
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR- ERECT SCAFF	10	19MAR09 07:00*	19MAR09 16:59	PJ
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR - REMOVE INSULATION	5	19MAR09 19:00	19MAR09 23:59	PJ
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR - BUFF AND CLEAN	5	20MAR09 00:00	20MAR09 04:59	PJ
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR - PERFORM UT EXAMS	2	20MAR09 07:00	20MAR09 08:59	EN
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR- ANALYZE DATA	2	21MAR09 13:00	21MAR09 14:59	EN
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR - REST INSULATION	5	21MAR09 15:00	21MAR09 19:59	PJ
38027015	FAC LOC 56	LOC # 56 EXT STM TURB FLR - REMOVE SCAFFOLD	10	31MAR09 11:00*	31MAR09 20:59	PJ
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - ERECT SCAFF	10	19MAR09 17:00*	20MAR09 02:59	PJ
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - REMOVE INSULATION	5	20MAR09 03:00	20MAR09 09:59	PJ
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - BUFF AND CLEAN	5	20MAR09 10:00	20MAR09 14:59	PJ

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - PERFORM UT EXAMS	2	20MAR09 15:00	20MAR09 16:59	EN
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - ANALYZE DATA	2	23MAR09 07:00	23MAR09 08:59	EN
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - REST INSULATION	5	23MAR09 09:00	23MAR09 13:59	PJ
38027015	FAC LOC 57	LOC # 57 EXT STM TURB FLR - REMOVE SCAFFOLD	10	31MAR09 11:00*	31MAR09 20:59	PJ
37020462		DEGRADED/REPLACE W/ CHROME MOLY	1	24MAR09 07:00*	24MAR09 07:59	PJ
37020423		FAC PIPE REPLACEMENT WITH CHR MOLY 16"	120	24MAR09 07:00*	30MAR09 16:59	PJ
37020462		REPLACE 16" TEE DOWNSTREAM OF BTV-3-1520 SCAF SR	4	28MAR09 07:00*	28MAR09 10:59	PJ
37020423		REPLACE ELBOW & PIPING SCAFF RE	4	06APR09 12:00*	06APR09 15:59	PJ
38012174	3F253A	TURB CONTROL OIL FILTER - REPL ELEMENT ON 3F253A	6	25MAR09 23:00	26MAR09 04:59	MM
38012174	3F253A	3F253A -TURB CONTROL OIL FILTER REMOVE SCAFFOLDS	4	05APR09 05:00*	05APR09 08:59	PJ
38012174	3F253A	TURB CONTROL OIL FILTER "A" - REPL ELEMENT - PMT	1	05APR09 17:00	05APR09 17:59	MM
38012662	3K2	REMOVE SCAFFOLD FROM SEAL OIL SKID AFTER INSP	3	27MAR09 14:00	27MAR09 16:59	PJ
38012662	3K2	REMOVE SCAFFOLD FOR OP'S SEAL OIL SUPPORT	3	28MAR09 14:00	28MAR09 16:59	PJ
38012663	3K2	SET SEAL OIL SYSTEM PARAMETERS	12	31MAR09 19:00*	01APR09 08:59	EN
35016607	3P30	3P30 INSPECT DC EMER PMP MTR	12	25MAR09 19:00*	26MAR09 06:59	EM
35016607	3P30	3P30 PMT DC TURB EMER Pp MTR INSP	2	05APR09 11:00	05APR09 12:59	EM
38013847	3P32	DETERM AND TAPE LEADS TO TURB AUX L O PMP	4	29MAR09 16:00	29MAR09 19:59	EM
38013847	3P32	RETERM AND TAPE LEADS TO TURB AUX L O PMP	8	02APR09 10:00	02APR09 17:59	EM
38006634	3P36	AIR SIDE SEAL OIL PUMP - DETERM MOTOR	4	17MAR09 06:00*	17MAR09 09:59	EM
38006634	3P36	AIR SIDE SEAL OIL PUMP - RETERM MOTOR	4	18MAR09 11:00	18MAR09 14:59	EM
38013776	3P38	*P38-ASSO B/U PP MTR - MTR INSPECTION	6	30MAR09 00:00*	30MAR09 05:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013776	3P38	PMT - *P38-ASSO B/U PP MTR - MTR INSPECTION	2	05APR09 15:00	05APR09 16:59	EM
37025052	3P40	BRG OIL LIFT Pp - DETERM MOTOR	4	30MAR09 07:00*	30MAR09 10:59	EM
37025052	3P40	BRG OIL LIFT Pp - RETERM MOTOR	4	31MAR09 17:00	31MAR09 20:59	EM
36016850	3T26	CORRISON ON L.O. CRANE SUPP-ERECT SCAFF #11443	40	16MAR09 07:00*	17MAR09 22:59	PJ
36016851	3T26	CORROSION ON L.O.RESERVOIR TPCW SUPPORT	161	16MAR09 07:00	24MAR09 13:59	PJ
36016850	3T26	CORROSION L.O. CRANE SUPPT STRUCT. - COAT	161	16MAR09 07:00	04APR09 14:59	PJ
36016850	3T26	CORRISON ON L.O. CRANE SUPP- REMV SCAFF #11443	20	04APR09 15:00	06APR09 12:59	PJ
36016849	3T26	CLEAN/INSPECT LUBE OIL COOLER 'A' SCAF REMOVE	4	06APR09 07:00	06APR09 10:59	PJ
38013771	3V4	3V4 VAPOR EXTRACTOR MTR - DETERM MOTOR	4	30MAR09 07:00*	30MAR09 10:59	EM
38013771	3V4	3V4 VAPOR EXTRACTOR MTR DELIVER NEW MTR TO MM	2	30MAR09 19:00	30MAR09 20:59	EM
38013771	3V4	3V4 VAPOR EXTRACTOR MTR - RETERM MOTOR	4	01APR09 05:00	01APR09 08:59	EM
38013771	3V4	PMT - 3V4 VAPOR EXTRACTOR MTR - MOTOR OVERHAUL	1	05APR09 15:00	05APR09 15:59	EM
37021209	LI-3-1573	LI-3-1573 REPLACE FLOAT	5	27MAR09 04:00	27MAR09 08:59	IC
37021210	LI-3-3506	LS-1-3506: REPLACE FLOAT	5	26MAR09 23:00*	27MAR09 03:59	IC
38012223	PI-3-3413	PI-3413 TURB GOV. IMPELLER CAL.	4	30MAR09 07:00	30MAR09 10:59	IC
36009417	PI-3-3657A	PI-3-3657A: REPAIR/ REPLACE GAUGE STICKING	2	30MAR09 11:00	30MAR09 12:59	IC
36009418	PI-3-3687	RPR/ RPLC FILTERED HP OIL TO TURB CTRL GAUGE	4	31MAR09 07:00*	31MAR09 10:59	IC
38012698	PRV-3-291	PRV-3-291 PRESS REDUCING VLV GOV REMOVE SCAFFOLD	4	06APR09 07:00	06APR09 10:59	PJ
37025254	R-3-340	DISABLE ALARM INPUT FROM TE-3-3423	8	29MAR09 00:00*	29MAR09 07:59	IC
37024642	R-3-340	R-3-340, TRBLSHT POINT 3 FAILED HIGH	10	29MAR09 00:00	29MAR09 23:59	IC
35014052	RV-3-258	AIR SIDE SEAL OIL HDR RV - PMT	1	31MAR09 10:00	31MAR09 10:59	VT

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013634	RV-3-280	MAIN TURB GOV OIL RV - COAT NEW RV INPLACE	4	24MAR09 07:00*	24MAR09 10:59	PJ
36016848		TURBINE LUBE OIL RESERVOIR SURFACE RUST AND PAIN	161	16MAR09 07:00	04APR09 14:59	PJ
36016848		TURBINE LUBE OIL RESERVOIR REMOVE SCAFFOLD	20	04APR09 15:00	06APR09 12:59	PJ
36019552	20/ASB	20/ASB OVERHAUL OR REPL(NEIL INS)	8	24MAR09 13:00	24MAR09 20:59	IC
38013778	26-EHT-1	REPLACE EXHAUST HOOD TEMP DETECTORS	8	26MAR09 20:00*	27MAR09 03:59	EM
38013778	26-EHT-1	EXH HOOD TEMP DETECTORS-TEST TRIP & ALARM W/P&C	4	30MAR09 20:00	30MAR09 23:59	EM
37017026	3-30-082A	GLAND STM COND CK VLV - PT VALVE INTERNALS	1	02APR09 12:00	02APR09 12:59	EN
37016873	3-30-082B	GLAND STM COND CK VLV - PT VALVE INTERNALS	1	02APR09 23:00	02APR09 23:59	EN
34022607	3-90-024	HP TURB GLAND SEAL STM STRAINER -ERECT SCAFFOLD	8	31MAR09 11:00*	31MAR09 18:59	PJ
34022607	3-90-024	HP TURB GLAND SEAL STM - REMOVE INSUL ON PIPE	4	31MAR09 19:00	31MAR09 22:59	PJ
34022607	3-90-024	HP TURB GLAND SEAL STM - BUFF & CLN PIPE	20	31MAR09 23:00	01APR09 20:59	PJ
34022607	3-90-024	HP TURB GLAND SEAL STM - UT PIPE	8	01APR09 21:00	02APR09 04:59	EN
34022607	3-90-024	HP TURB GLAND SEAL STM - COAT PIPING	20	02APR09 07:00	03APR09 02:59	PJ
34022607	3-90-024	HP TURB GLAND SEAL STM - INSTALL INSUL ON PIPE	4	04APR09 01:00	04APR09 04:59	PJ
34022607	3-90-024	3-90-024: REMOVE SCAFFOLD	8	06APR09 19:00*	07APR09 02:59	PJ
38004063	3E10	GLAND STM COND - CUT OFF VLV 3-30-051	5	18MAR09 11:00	18MAR09 15:59	PJ
38004063	3E10	GLAND STM COND - CUT OFF VLV 3-30-244	5	18MAR09 16:00	19MAR09 10:59	PJ
38004063	3E10	GLAND STM COND - PERF BOROSCOPE INSP NORTH END	4	19MAR09 11:00	19MAR09 14:59	EN
38004063	3E10	GLAND STM COND - PERF BOROSCOPE INSP SOUTH END	4	19MAR09 15:00	19MAR09 18:59	EN

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38004063	3E10	GLAND STM COND - DETERMINE IF DIASSEMBLY REQUI	1	19MAR09 19:00	19MAR09 19:59	EN
38004063	3E10	GLAND STM COND - WELD IN VLV 3-30-051	5	20MAR09 07:00*	20MAR09 11:59	PJ
38004063	3E10	GLAND STM COND - WELD IN VLV 3-30-244	5	20MAR09 12:00	20MAR09 16:59	PJ
36018086	3E10	WORK PLATFORMS TO SUPPORT INSTALLING SCAF SE	4	21MAR09 13:00	21MAR09 16:59	PJ
36018086	3E10	3E10: PREFAB THERMAL FLASHING INSIDE COND	100	21MAR09 17:00	27MAR09 04:59	PJ
36018086	3E10	3E10: RE-INSTALL THERMAL FLASHING INSIDE COND	200	25MAR09 11:00	04APR09 12:59	PJ
38004063	3E10	GLAND STM COND - PMT WELDS	1	04APR09 13:00	04APR09 13:59	PJ
38004063	3E10	GLAND STM COND - INTERNAL INSP. SCAFF REMV	4	04APR09 14:00	04APR09 17:59	PJ
36018086	3E10	WORK PLATFORMS TO SUPPORT INSTALLING REMOVE SR	4	06APR09 07:00*	06APR09 10:59	PJ
38014721	3E7	PULL LP TURBINE MANWAYS	10	17MAR09 16:00	18MAR09 01:59	PJ
38014721	3E7	REINSTALL LP TURBINE MANWAYS	10	31MAR09 12:00	31MAR09 21:59	PJ
38011094	3K2	REMOVE SCAFFOLDING AT HP TURBINE HORIZO	4	01APR09 10:00	01APR09 13:59	PJ
38013781	3K2	ASSIST TURB TEST OSP-089/089.2/089.1	4	06APR09 07:00	06APR09 10:59	EM
38013782	3K2	TS 3-PME-089.2 TURB STOP VLV LIM SW CAL	8	06APR09 07:00	06APR09 14:59	EM
38012660	3P40	BRG OIL LIFT Pp-PDM PERFORM VIBE/THERMOGRAPHY	1	05APR09 19:00	05APR09 19:59	EN
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - ERECT SCAF	10	31MAR09 05:00	31MAR09 14:59	PJ
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - REMOVE INSULATION	4	31MAR09 15:00	31MAR09 18:59	PJ
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - DISCONN & REMO ACT	4	31MAR09 19:00*	31MAR09 22:59	VT
38014411	CV-3-3714	TURB LT STOP VLV BYP CV - OVERHAUL AOV ACTUATOR	12	31MAR09 23:00	01APR09 10:59	VT
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - INST & RECONN ACT	4	02APR09 00:00	02APR09 03:59	VT
38012224	CV-3-3714	TURB LT STOP VLV BYP CV - CAL AOV ACTUATOR	4	02APR09 04:00	02APR09 09:59	VT
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - REMOVE SCAF	10	02APR09 10:00	02APR09 19:59	PJ
38013892	CV-3-3714	TURB LT STOP VLV BYP CV - INSTALL INSULATION	4	08APR09 07:00	08APR09 10:59	PJ
38013892	CV-3-3714	OVREHAUL VALVE SCAFF RE	4	08APR09 11:00	08APR09 14:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012225	CV-3-3715	CV-3-3715 CAL AOV - ERECT SCAFFOLD	4	17MAR09 07:00	17MAR09 10:59	PJ
38012225	CV-3-3715	TURB RT STOP VLV BYP CV - CAL AOV ACTUATOR	4	17MAR09 11:00	17MAR09 14:59	VT
38012225	CV-3-3715	CV-3-3715 CALIBRATE AOV - REMOVE SCAFFOLD	4	17MAR09 15:00	17MAR09 18:59	PJ
38014419	CV-3-3718	MN STM PIPING DRN TO COND-DISCONN & REMOVE ACT	4	17MAR09 11:00	17MAR09 14:59	VT
38014419	CV-3-3718	MN STM PIPING DRN TO COND - O/H AOV ACTUATOR	12	17MAR09 15:00	18MAR09 02:59	VT
38014419	CV-3-3718	MN STM PIPING DRN TO COND - INSTALL ACT & RECONN	4	18MAR09 09:00	18MAR09 12:59	VT
38014418	CV-3-3718	MN STM PIPING DRN TO COND - CAL AOV ACTUATOR	4	02APR09 10:00	02APR09 13:59	VT
38016696	CV-3-3719	MN STM PIPING DRN TO COND DOES NOT CNTRL IN AUTO	20	31MAR09 07:00*	01APR09 02:59	IC
38014421	CV-3-3719	MN STM PIPING DRN TO COND - CAL AOV ACT & ACC	4	02APR09 14:00	02APR09 17:59	VT
38014421	CV-3-3719	WORK PLATFORM TO ACCESS VALVE SCAFF RE	4	03APR09 02:00	03APR09 07:59	PJ
38014415	CV-3-3721	TURB DRN TO COND - CAL AOV ACT & ACC	4	02APR09 18:00	02APR09 21:59	VT
38014412	CV-3-3722	TURB DRN TO COND - CAL AOV ACT & ACC	4	02APR09 22:00	03APR09 01:59	VT
38014404	CV-3-3723	TURB DRN TO COND - CAL AOV ACT & ACC	4	03APR09 02:00	03APR09 07:59	VT
38016624	CV-3-3727	CV-3-3726/27, VALVES NOT RESPONDING - T/R	64	17MAR09 07:00*	24MAR09 07:59	IC
38016695	CV-3-3728	CV-3-3728, DOES NOT CONTROL IN AUTO	8	24MAR09 08:00	24MAR09 15:59	IC
38016692	PC-3-3708	PC-3-3708: DOES NOT CONTROL IN AUTO	8	25MAR09 07:00	25MAR09 14:59	IC
38012697	PCV-3-3600	PCV-3600 REMOVE ACTUATOR ASSEMBLY	4	25MAR09 07:00*	25MAR09 10:59	VT
38012697	PCV-3-3600	PCV-3600 REINSTALL ACTUATOR ASSEMBLY	4	25MAR09 15:00	25MAR09 18:59	VT
37012454	PI-3-3416A	PI-3-3416A: GAUGE STICKING	4	31MAR09 15:00	31MAR09 18:59	IC
36018792	PI-3-3615	PI-3-3615: REPLACE TEMPORARY GAUGE	4	31MAR09 15:00	31MAR09 18:59	IC

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011933	PS-3-3607	TURBINE PRESSURE SWITCHES CALIBRATIONS	30	28MAR09 05:00	31MAR09 04:59	IC
38011933	PS-3-3607	PMT TURBINE PRESSURE SWITCHES CALIBRATIONS	1	08APR09 03:00	08APR09 03:59	IC
38011938	PS-3-3628	T.S. TURBINE TRIP AUTO/STOP PRESS SWITCHES CAL	12	25MAR09 13:00*	26MAR09 00:59	IC
38011938	PS-3-3628	PMT - TURB AUTOSTOP OIL PRESSURE	1	08APR09 02:00	08APR09 02:59	IC
38011941	PS-3-3639	TURB OVERSPEED PROTECTION CAL PART 1	6	24MAR09 07:00*	24MAR09 12:59	IC
38011941	PS-3-3639	PMT -TURB. OVSPEED PROT. CAL. PART 2- TEST	3	06APR09 07:00	06APR09 09:59	IC
38011942	PT-3-3414	PT-3414X/PS-3630X DDPS GOVERNOR CONTROL	10	01APR09 03:00	02APR09 02:59	IC
39000808	RV-3-3400	MSR A&B RV-3400 - PREP TO REMOVE RV	12	25MAR09 07:00	25MAR09 18:59	VT
39000808	RV-3-3400	(T)MSR A&B RV-3400 - RIG AND REMOVE RV TO L/DOWN	8	25MAR09 19:00*	26MAR09 02:59	VT
39000808	RV-3-3400	MSR A&B RV-3400 - MOVE RV TO MACH SHOP	4	26MAR09 17:00	26MAR09 20:59	VT
39000808	RV-3-3400	MSR A&B RV-3400 - O/H AND TEST RV	16	26MAR09 21:00	27MAR09 14:59	VT
39000808	RV-3-3400	MSR A&B RV-3400 - MOVE RV FRM SHOP TO L/DOWN	4	30MAR09 11:00	30MAR09 14:59	VT
39000808	RV-3-3400	(T)MSR A&B RV-3400 - MOVE RV FRM L/D TO HDR	8	30MAR09 15:00	30MAR09 22:59	VT
39000808	RV-3-3400	MSR A&B RV-3400 -COMP INSTALLING RV & TAILPIPE	8	31MAR09 15:00	31MAR09 22:59	VT
38014723	RV-3-3400	NEED WORK PLATFORM FROM NORTH END SCAF REMOVE	10	03APR09 00:00*	03APR09 11:59	PJ
39000808	RV-3-3400	MSR A&B RV-3400 - PMT	1	04APR09 08:00	04APR09 08:59	VT
38014723	RV-3-3400	REMOVE WORK PLATFORM FROM SOUTH END SCAF REMOVE	10	07APR09 07:00*	07APR09 16:59	PJ
37020126	RV-3-3401	MSR A&B RV-3401 - PREP TO REMOVE RV	12	24MAR09 17:00	25MAR09 04:59	VT
37020126	RV-3-3401	(T)MSR A&B RV-3401- RIG AND REMOVE RV TO L/DOWN	8	26MAR09 03:00	26MAR09 12:59	VT
37020126	RV-3-3401	MSR A&B RV-3401 - MOVE RV TO MACH SHOP	4	26MAR09 13:00	26MAR09 16:59	VT

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37020126	RV-3-3401	MSR A&B RV-3401 - O/H AND TEST RV	16	27MAR09 15:00	28MAR09 08:59	VT
37020126	RV-3-3401	MSR A&B RV-3401 - MOVE RV FRM SHOP TO L/DOWN	4	30MAR09 07:00*	30MAR09 10:59	VT
37020126	RV-3-3401	(T)MSR A&B RV-3401 - MOVE RV FRM L/D TO HDR	8	30MAR09 23:00	31MAR09 06:59	VT
37020126	RV-3-3401	MSR A&B RV-3401 - COMP INSTALLING RV & TAILPIPE	8	31MAR09 07:00	31MAR09 14:59	VT
37020126	RV-3-3401	MSR A&B RV-3401 - PMT	1	04APR09 08:00	04APR09 08:59	VT
36025046	RV-3-3403	[T]RV-3-3403: MSR A & B RV - REMOVE VLV TO LAYDN	12	17MAR09 11:00	17MAR09 22:59	VT
36025046	RV-3-3403	RV-3-3403: MSR RV - PREP VLV TO SHIP TO VENDOR	12	17MAR09 23:00	18MAR09 12:59	VT
36025046	RV-3-3403	RV-3-3403: MSR A & B RV - VALVE @ VENDOR	40	18MAR09 13:00	23MAR09 07:59	VT
36025046	RV-3-3403	RV-3-3403: RECIEVE VALVE FROM WAREHOUSE	6	23MAR09 08:00	23MAR09 13:59	VT
36025046	RV-3-3403	[T]RV-3-3403:MSR A&B SAFETY INSTALL VALVE	12	23MAR09 14:00	24MAR09 01:59	VT
36025046	RV-3-3403	RV-3-3403: MSR A&B SAFETY VLV REMOVE RIGGING	2	24MAR09 02:00	24MAR09 03:59	VT
36025046	RV-3-3403	RV-3-3403:REHEATER A&B SAFETY VLV PMT	1	08APR09 04:00	08APR09 04:59	VT
37000743	RV-3-3438	RV-3-3438 TURB GLND SEAL STM RV REMOVE SCAFFOLD	5	08APR09 07:00	08APR09 11:59	PJ
38008910	RV-3-418	NEED PLATFORM TO REMOVE / INSTALL RV-ERECT SCAF	10	25MAR09 22:00	26MAR09 09:59	PJ
38008910	RV-3-418	TURB LT CYL HEAT RV - REMOVE INSULATION	5	26MAR09 00:00	26MAR09 04:59	PJ
38008910	RV-3-418	TURB LTT CYL HEAT RV - INSTALL INSULATION	20	03APR09 07:00*	04APR09 02:59	PJ
38008910	RV-3-418	NEED PLATFORM TO REMOVE / INSTALL RV-REMV SCAF	10	04APR09 03:00	04APR09 14:59	PJ
38012229		TI*6700-6710,TURB BEARING IND CAL	30	28MAR09 15:00	31MAR09 00:59	IC
38011940		PI-3612,13,14,15-TURB TRIP GAUGES	8	31MAR09 05:00	01APR09 02:59	IC
38013795	3K2	MN GEN - DETERM & TAPE GFB & VR LEADS	4	16MAR09 11:00	16MAR09 14:59	EM
38024319	3K2	MN GEN VOLT REG - REMOVE RECORDER	2	18MAR09 07:00	18MAR09 08:59	IC
38024319	3K2	CLOSE WO - MN GEN VOLT REG - TROUBLESHOOT PS#1	2	18MAR09 07:00	18MAR09 08:59	EM
38013795	3K2	MN GEN VOLT REG - DISCONNECT & SETUP FOR CAL	12	18MAR09 11:00*	19MAR09 12:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
RWO09001	3K2	GENERATOR METERING CALIBRATION	10	19MAR09 07:00	19MAR09 16:59	SP
38024319	3K2	MN GEN VOLT REG - REPLACE PS#1	2	25MAR09 07:00*	25MAR09 08:59	EM
38024319	3K2	CLOSE WO - MN GEN VOLT REG - TROUBLESHOOT PS#1	2	25MAR09 07:00	25MAR09 08:59	EM
37023021	3K2	MN GEN VOLT REG - REPLACE FIRING CKT PULSE CARD	2	25MAR09 09:00	25MAR09 10:59	EM
37023021	3K2	MN GEN VOLT REG RESTORE FIRING CKT TSA-07-019	2	25MAR09 11:00	25MAR09 12:59	EM
37024330	3K2	MN GEN VOLT REG - RESTORE TSA-07-021	2	25MAR09 13:00	25MAR09 14:59	EM
38013795	3K2	MN GEN VOLT REG - CALIBRATE PER 0-GME-090-1	60	25MAR09 15:00	30MAR09 14:59	EM
38024319	3K2	PMT - MN GEN VOLT REG - REPL PS #1	1	30MAR09 14:00	30MAR09 14:59	EM
38026643	3K2	TRBLSHT. HYDROGEN MONITOR READING OFF-SCALE	6	30MAR09 14:00*	31MAR09 09:59	IC
38013795	3K2	MN GEN VOLT REG - CTL RM INTERFACE & RESTORE	4	30MAR09 15:00	30MAR09 18:59	EM
37023021	3K2	FIRING CIRCUIT MONITORNG PLAN - CLOSE W/O TSK 03	1	30MAR09 18:00	30MAR09 18:59	EM
38013795	3K2	MN GEN VOLT REG - ASSIST E/M LOCKOUT CKT VERIF	4	31MAR09 07:00	31MAR09 10:59	SP
37024330	3K2	PMT; MN GEN VOLT REG - RESTORE TSA-07-021	2	31MAR09 09:00	31MAR09 10:59	EM
37023021	3K2	PMT:MN GEN VOLT REG FIRING CKT PULS CARD TSA7019	1	31MAR09 11:00	31MAR09 11:59	EM
38006086	3K2	TRBLSHT GEN. VIBRATION MONITOR, CHANNELS 2,4,5,6	16	01APR09 07:00*	02APR09 13:59	EN
38013795	3K2	MN GEN - RETERM GFB & VR LEADS	4	02APR09 12:00	02APR09 15:59	EM
38013795	3K2	MN GEN VOLT REG - Phase Check GFB & VR Leads	4	06APR09 05:00	06APR09 08:59	EM
37023021	3K2	PMT:MN GEN VOLT REG - REPL FIRING CKT PULSE CARD	1	08APR09 02:00	08APR09 02:59	EM
38011228	3V16	3V16 GEN VAP EXT - DETERM MOTOR	4	26MAR09 03:00*	26MAR09 06:59	EM
38011228	3V16	3V16 GEN VAP EXT:RETERM	4	26MAR09 23:00	27MAR09 02:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011228	3V16	PMT - 3V16 GEN VAP EXT - MOTOR DETERM/RETERM	2	30MAR09 22:00	30MAR09 23:59	EM
36007965	C99	ITOP PCM 07-008	6	02APR09 14:00	02APR09 19:59	MM
36007965	C99	GEN COND CORE MONITOR - REMOVE SCAFFOLD	12	02APR09 14:00	03APR09 01:59	PJ
36007965	C99	SATS PCM 07-008	6	02APR09 20:00	03APR09 01:59	EN
38013805	FB-3	GEN FIELD BKR - TRANSPORT BKR TO SHOP	2	18MAR09 01:00	18MAR09 02:59	EM
38013805	FB-3	GEN FIELD BKR - PERFORM BREAKER INSPECTION	14	18MAR09 03:00	19MAR09 07:59	EM
38013805	FB-3	GEN FIELD BKR - TRANSPORT BKR TO VR HOUSE	2	19MAR09 12:00*	19MAR09 13:59	EM
38013805	FB-3	GEN FIELD BKR - REINSTAL INSPECTED BREAKER	2	19MAR09 14:00	19MAR09 15:59	EM
38013805	FB-3	GEN FIELD BKR - PERFORM TRIP COIL TEST	4	19MAR09 16:00	20MAR09 07:59	SP
38013805	FB-3	GEN FIELD BKR - PMT BREAKER INSPECTION	1	31MAR09 11:00	31MAR09 11:59	EM
38013799	ISO-PHASE	EM PREP FOR ISO PHASE PT GROUNDING	2	16MAR09 01:00	16MAR09 02:59	EM
38013799	ISO-PHASE	EM GROUND ISOPH BUS PTs	2	16MAR09 03:00	16MAR09 04:59	EM
38013799	ISO-PHASE	EM DISCONECT GRND TX LINKS & GROUND GEN NEUT BUS	2	16MAR09 04:00	16MAR09 05:59	EM
38013799	ISO-PHASE	MAIN GENERATOR PHASE LINKS - ERECT SCAFFOLD	18	16MAR09 04:00	16MAR09 21:59	PJ
38013799	ISO-PHASE	ISOPHASE:REMOVE GEN PHASE LINKS INSTAL GEN GRNDS	24	16MAR09 22:00	17MAR09 21:59	EM
38013799	ISO-PHASE	ISOPHASE BUS-MAIN PHASE LINKS-TRANSPORT TO SHOP	6	17MAR09 16:00	17MAR09 21:59	EM
38013799	ISO-PHASE	MAIN DIV CLR- INSTAL EXCLUSION AREA FLAGING	2	17MAR09 20:00	17MAR09 21:59	EM
38013799	ISO-PHASE	MAIN DIV CLR-EM REMOVE EXCLUSION AREA FLAGGING	1	18MAR09 17:00	18MAR09 17:59	EM
38013799	ISO-PHASE	Mn Gen-REMOVE NEUTRAL ENCLOSURE TOP HALF	10	24MAR09 10:00	24MAR09 19:59	EM
38013799	ISO-PHASE	Mn Gen-REMOVE NEUTRAL LINKS & TRASNSPORT TO SHOP	24	24MAR09 20:00	25MAR09 19:59	EM
38013799	ISO-PHASE	EM INSPECT & CLEAN ISOPHASE BUS	40	25MAR09 20:00	27MAR09 11:59	EM

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013799	ISO-PHASE	EM INSP PT DRWRS WIRING & FUSES.	12	27MAR09 00:00	27MAR09 11:59	EM
38013802	ISO-PHASE	INSTALL DEHUMIDIFIER DUCT @ ISOPH BUS CLG FAN	5	27MAR09 12:00	27MAR09 17:59	EM
38013799	ISO-PHASE	GENERATOR LINKS - CLEAN & INSPECT (SHOP WORK)	48	30MAR09 07:00*	01APR09 06:59	EM
38013799	ISO-PHASE	MN GEN - INSTAL & TORQUE PHASE LINKS	30	02APR09 12:00	03APR09 17:59	EM
38013799	ISO-PHASE	MN GEN - INSTAL & TORQ NEW NEUT LINKS	24	03APR09 18:00	04APR09 17:59	EM
38013799	ISO-PHASE	MN GEN - REINSTAL NEUTRAL ENCLOSURE TOP HALF	12	04APR09 18:00	05APR09 05:59	EM
38013799	ISO-PHASE	MN DIV CLR:EM REQST TST CLR MICRO-OHM GEN LINKS	1	05APR09 06:00	05APR09 06:59	EM
38013799	ISO-PHASE	MAIN GEN - MICRO OHM PHASE & NEUTRAL LINKS	10	05APR09 06:00	05APR09 15:59	EM
38013799	ISO-PHASE	MAIN DIV CLR:EM REQST WORKNG CLR AFTER MICRO-OHM	1	05APR09 16:00	05APR09 16:59	EM
38013799	ISO-PHASE	ISOPHASE - INSTAL BUS DUCT COVERS AT PHASE LINKS	10	05APR09 16:00	06APR09 01:59	EM
38013799	ISO-PHASE	DIV CLR:EM REQST TST CLR GEN MEG&N LINK MICROOHM	1	06APR09 06:00	06APR09 06:59	EM
38013799	ISO-PHASE	MN GEN -EM REM ISOPHASE BUS PT GROUNDS	3	06APR09 06:00	06APR09 08:59	EM
38013799	ISO-PHASE	EM REMOVE GROUNDS AT GROUNDING TRANSFORMER	2	06APR09 09:00	06APR09 10:59	EM
38013799	ISO-PHASE	MN GEN - EM MEGGER MAIN GENERATOR & ISOPHASE BUS	4	06APR09 09:00	06APR09 12:59	EM
38013799	ISO-PHASE	MN GEN - EM TORQUE & MICROHM GROUND Tx LINKS	2	06APR09 13:00	06APR09 14:59	EM
38013799	ISO-PHASE	MN GEN -CONVRT TEST CLR TO WRKNG CLR POST MEGGER	1	06APR09 15:00	06APR09 15:59	EM
38013799	ISO-PHASE	PMT- PT DRAWERS,WIRING & FUSES,CONTINUITY CHECKS	1	06APR09 16:00	06APR09 16:59	EM
38013802	ISO-PHASE	MN GEN-REMVE DEHUMD HOSES FRM ISOPH BUS CLG FAN	3	06APR09 16:00	06APR09 18:59	EM
38013799	ISO-PHASE	MAIN GEN PHASE LINKS - REMOVE SCAFF	12	06APR09 16:00	07APR09 03:59	PJ
38013802	ISO-PHASE	MN GEN - DEMOB & STORE DEHUMIDIFIER HOSES	8	06APR09 19:00	07APR09 02:59	EM
38012192		MAIN DIV CLR - EM REL MN DIV CLR @ GFB	1	17MAR09 22:00	17MAR09 22:59	EM
38012192		MAIN DIV CLR-EM OBTAIN JURISDICTION OF GENERATOR	1	17MAR09 22:00	17MAR09 22:59	EM

WOOR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
37024326	C39A	ALARM POINT 3 TROUBLE LOCKED IN	16	30MAR09 07:00	30MAR09 22:59	EM
38013834	CTMT	PENNETRATION FIRE & SMOKE *SME091.2 (ANNUAL)	12	24MAR09 23:00	25MAR09 10:59	EM
38026077	CTMT	TROUBLESHOOT PEN FIRE ALARM POINT 4 TROUBLE	12	24MAR09 23:00	25MAR09 10:59	EM
38013834	CTMT	PEN SMOKE DETECTOR-NOTIFY PROJ IF SCAFOLD REQ'D	1	25MAR09 11:00	25MAR09 11:59	EM
38013834	CTMT	ERECT SCAFFOLD - S. PEN RM SMOKE DET REPAIR	12	25MAR09 12:00	25MAR09 23:59	PJ
38013834	CTMT	CONTAINMNT FIRE & SMOKE *SME091.2 (ANNUAL)	48	30MAR09 07:00*	01APR09 06:59	EM
38013834	CTMT	REMOVE SCAFOLD - S. PEN RM SMOKE DET SENSITIVITY	6	01APR09 13:00	01APR09 18:59	PJ
38013834		S. PEN RM SMOKE DET - SIGN ONTO RCP CLR	1	24MAR09 22:00	24MAR09 22:59	PJ
RWO09001	3K2	P&C PERFORM GENERATOR CONTROL ROOM METERING INSP	12	20MAR09 07:00	21MAR09 09:59	SP
38012192	3X01	MAIN DIV CLR - E/M PICKUP DIVISION CLEARANCE	1	16MAR09 02:00	16MAR09 02:59	EM
38012192	3X01	MAIN DIV CLR - EM VERIFY MN TX HI SIDE GROUNDED	1	16MAR09 02:00	16MAR09 02:59	EM
38012192	3X01	MAIN DIV CLR - E/M DAY CREW WLKDWN DIV CLR	4	16MAR09 07:00	16MAR09 10:59	EM
38012192	3X01	MN Tx ROCK PIT - MODIFY BARRIER & INSTAL PLANKS	8	16MAR09 08:00	16MAR09 15:59	PJ
38012192	3X01	MN & AUX TX & ISOPH - COMPL SCAF AFTR DELUGE TST	24	16MAR09 08:00	17MAR09 07:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38012192	3X01	MAIN DIV CLR - E/M MID CREW WLKDWN DIV CLR	4	16MAR09 20:00*	16MAR09 23:59	EM
SWO09001	3X01	MN XFMR - TTR, MEGGER, DOBLE TEST XFMR	8	18MAR09 07:00	18MAR09 14:59	SO
38012192	3X01	EM REQST DIV CLR AFTR MAIN TX DOBLE	1	18MAR09 15:00	18MAR09 15:59	EM
38012192	3X01	MN DIV CLR:EM PICKUP DV CLR AFTER MAIN TX DOBLE	1	18MAR09 16:00	18MAR09 16:59	EM
SWO09001	3X01	SAO PERFORM MAIN TX CONTROL PANEL MAINTENANCE	6	18MAR09 16:00	19MAR09 09:59	SO
SWO09001	3X01	SAO - MAIN TX ASCO THROWOVER SWITCH MAINTENANCE	4	19MAR09 10:00	19MAR09 13:59	SO
38012192	3X01	MN DV CLR-EM REQST BNDRY MOVE & RELEASE JURISDCT	1	02APR09 11:00	02APR09 11:59	EM
38012192	3X01	MN & AUX TX & ISOPHASE BUS REMOVE SCAFFOLD	12	02APR09 17:00	03APR09 04:59	PJ
38012192	3X01	MN DV CLR-EM REQ SAO REMOVE MN TX GRNDS & TAGS	1	06APR09 16:00	06APR09 16:59	EM
38012192	3X01	MAIN DIV CLR - EM RELEASE MAIN DIVSION CLEARANCE	1	07APR09 06:00	07APR09 06:59	EM
38012192	3X02	AUX TX - E/M VERIFY LOW SIDE GROUNDS INSTALLED	1	20MAR09 16:00	20MAR09 16:59	EM
38012192	3X02	AUX TX - E/M VERIFY LOW SIDE GROUNDS INSTALLED	1	28MAR09 11:00	28MAR09 11:59	EM
38012192	3X02	AUX TX - E/M REQUEST SAO REMOVE LO SIDE GRNDS	1	02APR09 12:00	02APR09 12:59	EM
38012192	3X02	AUX TX - VERIFY LO SIDE GROUNDS REMOVED	1	02APR09 16:00	02APR09 16:59	EM
38012192	3X02	EM REQ SWOD TO REMOVE GTDs FROM AA02&AB02	1	06APR09 02:00	06APR09 02:59	EM
38008139	X01	MAIN TRANSFORMER BOLTS AT THE BOTTOM OF JB ARE R	24	26MAR09 07:00*	27MAR09 06:59	PJ
38012232	AMSAC	AMSAC 3C391 CABINET CALIBRATION	16	27MAR09 23:00	29MAR09 18:59	IC
38012232	AMSAC	SUPPORT AMSAC END TO END FUNCT TEST *-OSP-093.2	2	02APR09 10:00	02APR09 11:59	IC
38012232	AMSAC	PMT- AMSAC CALIBRATION	2	02APR09 12:00	02APR09 13:59	IC
38011950	N-3-44	ASST RX ENG - HOOK UP REACTIVITY COMPUTER	2	06APR09 14:00	06APR09 15:59	IC
38011950	QR65A	ASST RX ENG - SET UP REACTIVITY COMPUTER	3	06APR09 04:00	06APR09 06:59	IC
38011950	QR65A	RETRIEVE REACTIVITY COMPUTER POST PHYSICS TEST	2	07APR09 07:00	07APR09 08:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38019296	3P3B	3B HDP MTR - CALIBRATE TWO NEW TIC's	12	01APR09 07:00*	01APR09 18:59	EM
38019296	3P3B	3B HDP - DRAIN MOTOR OIL FOR TIC SWAP.	6	01APR09 19:00	02APR09 00:59	EM
38019296	3P3B	3B HDP - INSTAL NEW TIC's	6	02APR09 01:00	02APR09 06:59	EM
38019296	3P3B	3B HDP - FILL MTR W/OIL AFTER TIC's INSTALLED	6	02APR09 07:00	02APR09 12:59	EM
38010549	AN-B-4/1	TBLSHT CNTMT EVACUATION WITH NO C.R. ALARM	10	20MAR09 00:00*	20MAR09 23:59	IC
38011952	3E210	MIMS S/G SENSORS/CABLES RMV	4	18MAR09 12:00*	18MAR09 15:59	IC
38011952	3E210	MIMS S/G SENSORS/CABLES RE-INSTALL	6	30MAR09 13:00	31MAR09 08:59	IC
38015174		BMI - REMOVE MIMS	2	19MAR09 07:00	19MAR09 08:59	IC
38011951		METAL IMPACT MONITORING SYSTEM - PING TEST	6	01APR09 07:00*	01APR09 12:59	IC
38015174		BMI - REINSTALL MIMS	8	01APR09 11:00	01APR09 18:59	IC
38015174		BMI - PMT / PING TESTING OF MIMS	3	01APR09 19:00	01APR09 21:59	IC
38011955	3S10	REMOVE ACCESS CONTROL EQUIP @ EQUIPMENT HATCH	4	05APR09 07:00	05APR09 10:59	IC
38011955	3S8	REMOVE ACCESS CONTROL EQUIP @ PERSONNEL HATCH	5	09APR09 07:00*	09APR09 11:59	IC
38013633	CT TMP AIR	CTMT TEMP AIR - TEST FOR BREATHING AIR	1	18MAR09 07:00	18MAR09 07:59	PJ
38012234	CV-3-6165	BREATHING AIR CNTMT ISO CV - CAL AOV ACT	8	25MAR09 00:00*	25MAR09 09:59	VT
38013632	120	SCAFFOLD BARRIER FOR 001/002 W LADDER	6	16MAR09 03:00	16MAR09 08:59	PJ
38013632	120	SCAFFOLD BARRIER FOR 001/002 W LADDER REMOVE	4	30MAR09 21:00	31MAR09 00:59	PJ
38013837	3P200B	B RCP - INSTALL 3 TEMP LIGHTS	4	17MAR09 15:00	17MAR09 18:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013837	3P200B	B RCP - TEMP PWR - INSTALL HYTORQ CORD	4	18MAR09 17:00	18MAR09 20:59	PJ
38013837	3P200C	C RCP - INSTALL 3 TEMP LIGHTS	3	17MAR09 08:00	17MAR09 10:59	PJ
38013837	3P200C	C RCP - TEMP PWR - INSTALL HYTORQ CORDS	4	17MAR09 19:00	17MAR09 22:59	PJ
38013837	3T229	ACCUM DUMP TEST - TEMP PWR "B" ACC	4	19MAR09 01:00	19MAR09 04:59	PJ
38013837	3T229	ACCUM DUMP TEST - TEMP PWR "A" ACC	3	19MAR09 07:00	19MAR09 09:59	PJ
38013837	3T229	ACCUM DUMP TEST - TEMP PWR "C" ACC	4	19MAR09 10:00	19MAR09 13:59	PJ
38013837	3T237	TEMP PWR - FOR RPI CABLES W/ HEAD ON 58'	7	19MAR09 07:00	19MAR09 13:59	PJ
38013837	3T237	RMV TEMP PWR - RPI CABLES PROJECT	5	25MAR09 16:00	25MAR09 20:59	PJ
38013837	3V3A	PERFORM 'A' ECF FILTER TEST - TEMP PWR	3	19MAR09 07:00	19MAR09 09:59	PJ
38013837	3V3B	PERFORM 'B' ECF FILTER TEST - TEMP PWR	3	19MAR09 10:00	19MAR09 12:59	PJ
38013837	3V3C	PERFORM 'C' ECF FILTER TEST - TEMP PWR	3	19MAR09 10:00	19MAR09 12:59	PJ
38013633	CT TMP AIR	(P)CTMT TEMP AIR - PLACE MANIFOLD(S) ELEV. 58(H)	10	16MAR09 22:00	17MAR09 09:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - PLACE MANIFOLD(S) ON ELEV. 14'	5	17MAR09 08:00	17MAR09 12:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - RUN/INST AIR HOSE TO 58'	8	17MAR09 10:00	17MAR09 17:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - RUN/INST AIR HOSE TO ELEV. 14'	5	17MAR09 13:00	17MAR09 17:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - PLACE MANIFOLD(S) ON ELEV. 30'-6	8	17MAR09 13:00	17MAR09 20:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - RUN/INST AIR HOSE TO ELEV. 30'-6	8	17MAR09 21:00	18MAR09 04:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - REMV MANIFOLD(S) @ ELEV. 14'	10	30MAR09 07:00	30MAR09 16:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - REMV MANIFOLD(S) @ ELEV. 30'-6"	10	30MAR09 07:00	30MAR09 16:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - REMV MANIFOLD(S) @ ELEV. 58	8	30MAR09 17:00	31MAR09 00:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - ROLL BACK AIR FROM EL. 58'	8	30MAR09 17:00	31MAR09 00:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - ROLL BACK AIR FROM EL. 30-6"	8	31MAR09 01:00	31MAR09 10:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - ROLL BACK AIR FROM EL. 14'	8	31MAR09 11:00	31MAR09 18:59	PJ
38013633	CT TMP AIR	CTMT TEMP AIR - CLOSE WO 38013633-01	6	31MAR09 19:00	01APR09 00:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013837	FLUXMAP	FLUX MAP/ THIMBLES - DEMOBE TEMP PWR/ WATER/ AIR	4	31MAR09 01:00	31MAR09 04:59	PJ
38013632	FUEL	(R)VIDEO EQUIP BOX # 1/CAMERA/TRIPOD TO HATCH	1	16MAR09 18:00	16MAR09 18:59	PJ
38013837	PCV-3-455A	PCV-455A (PZR SPRAY CNTL VLV) SET UP TEMP PWR	4	17MAR09 22:00	18MAR09 01:59	PJ
38013837	PCV-3-455B	PCV-455B(PZR SPRAY CNTL VLV) SET UP TEMP PWR	4	18MAR09 03:00	18MAR09 08:59	PJ
38013632	RCDT	RC DRAIN TANK INSTALL BARRIERS	6	16MAR09 03:00	16MAR09 08:59	PJ
38013837	RX CAVITY	INSTACOTE EQUIPMENT - INSTALL TEMP PWR	6	18MAR09 07:00	18MAR09 12:59	PJ
38013837	RX CAVITY	INSTACOTE EQUIPMENT - REMOVE TEMP PWR	4	20MAR09 04:00	20MAR09 09:59	PJ
38013837	RXSTUDTNSR	TEMP PWR - REACTOR DETENSIONING RX HEAD	4	16MAR09 20:00	16MAR09 23:59	PJ
38013837	RXSTUDTNSR	RX HD STUD TENSIONER HOISTS - TEMP PWR	5	17MAR09 00:00	17MAR09 04:59	PJ
38013839	TRI NUKE	FME MONITOR @ TRI-NUKE UNITS - INSTALL	7	18MAR09 02:00	18MAR09 10:59	PJ
38013839	TRI NUKE	TRI-NUKE UNITS - CONNECT & TERM BOTH (600 & 260)	4	20MAR09 07:00	20MAR09 10:59	PJ
38013839	TRI NUKE	TRI-NUKE UNITS-ROTATION CK & AMP CK WHEN RUNNG	2	20MAR09 11:00	20MAR09 12:59	PJ
38013839	TRI NUKE	TRI-NUKE UNITS - DISCONNECT / DE-TERM BOTH UNITS	2	29MAR09 00:00	29MAR09 01:59	PJ
38013839	TRI NUKE	FME MONITOR @ TRI-NUKE UNITS - REMOVE	52	29MAR09 00:00	01APR09 09:59	PJ
38013839	TRI NUKE	TRI-NUKE UNITS-CLOSE WO 36019239 02	1	01APR09 10:00	01APR09 10:59	PJ
36019758	VT & DRN	INSTL/REMOVE VENTS & DRAIN (SEC)(1ST DAY)	24	16MAR09 01:00	17MAR09 00:59	MM
36019758	VT & DRN	INSTL/REMOVE VENTS & DRAIN (SEC)(2 THRU 6 DAYS)	100	17MAR09 01:00	21MAR09 14:59	MM
36019758	VT & DRN	INSTL/REMOVE VENTS & DRAIN (SECONDARY)	420	21MAR09 15:00	09APR09 16:59	MM
38013837		ROUTE VIDEO CABLE FOR RSS TRAILER	44	16MAR09 12:00*	18MAR09 11:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38015174		REACTOR SUMP- INSTALL RIGGING BEAM AT SUMP DOOR	2	16MAR09 15:00	16MAR09 16:59	PJ
38015174		REACTOR SUMP- INSTALL RIGGING BEAM AT SUMP DOOR	2	16MAR09 17:00	16MAR09 18:59	PJ
38013624		ISI CLASS 1 BOLTING INSPECTION	120	16MAR09 17:00	22MAR09 02:59	PJ
38013632		(R) BRING SCAFFOLDING MATERIAL INTO CONTAINMENT	24	16MAR09 18:00	17MAR09 17:59	PJ
38015174		REACTOR SUMP- INSTALL RIGGING BEAM AT SUMP DOOR	2	16MAR09 19:00	16MAR09 20:59	PJ
38003389		STM COMING FRM MANHOLE 27 - EXCAVATE PIPE	60	17MAR09 03:00	19MAR09 14:59	PJ
38003389		STM COMING FRM MANHOLE 27 - REMOVE LEAKING PIPE	20	19MAR09 15:00	20MAR09 10:59	PJ
38003389		STM COMING FRM MANHOLE 27 - WELD IN NEW PIPE	40	20MAR09 11:00	22MAR09 02:59	PJ
38003389		STM COMING FRM MANHOLE 27-REINSUL & MUD	10	22MAR09 03:00	22MAR09 12:59	PJ
38003389		STM COMING FRM MANHOLE 27 - RECOVER NEW PIPE	20	22MAR09 13:00	23MAR09 08:59	PJ
38013574		STM COMING FRM MANHOLE 27-REPAIR CONCRETE PIPE	30	23MAR09 09:00	24MAR09 14:59	PJ
38013574		STM COMING FRM MANHOLE 27-COAT PIPE AS REQ	20	24MAR09 15:00	25MAR09 12:59	PJ
38013574		STM COMING FRM MANHOLE 27-RECOVER CONCRETE PIPE	20	25MAR09 13:00	26MAR09 08:59	PJ
38011968		PERFORM 0-SMI-059.1, SEC 6.4 FOR LINEUP PT F&V	3	02APR09 08:00*	02APR09 10:59	IC
38011968		CTMT VLV LINE UP - FOR SYS LINE UP FOR F&V	6	02APR09 16:00	02APR09 21:59	IC
38011964		PMT TESTING REQUIRED IN MODE 5	5	03APR09 04:00	03APR09 08:59	IC
38011973		OUTSIDE CTMT INST LEAK INSP - @ TEMP & PRESS	30	03APR09 20:00	05APR09 01:59	IC
38011811		M/M POST MAINTENANCE TESTING IN MODE 5	3	04APR09 07:00	04APR09 09:59	MM
38012410		TESTING OF MAIN STEAM RV'S NEED PLANKING SCAF SE	4	04APR09 07:00*	04APR09 10:59	PJ
38013632		REMOVE SCAFFOLDING MATERIAL FROM CONTAINMENT	1	04APR09 09:00	04APR09 09:59	PJ
38013837		TEMP PWR REQ-CLOSE WO 38013837-01	2	04APR09 18:00	04APR09 19:59	PJ
38011810		M/M POST MAINTENANCE TESTING IN MODE 4	3	04APR09 21:00	04APR09 23:59	MM
38011962		PMT TESTING REQUIRED IN MODE 4	5	04APR09 21:00	05APR09 01:59	IC

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38011961		PMT TESTING REQUIRED IN MODE 3	4	05APR09 17:00	05APR09 20:59	IC
38011970		CTMT LEAK INSP - FOR LEAK INSP @ TEMP/PRESS	4	06APR09 05:00	06APR09 08:59	IC
38012410		TESTING OF MAIN STEAM RV'S NEED PLANKING SCAF SE	4	06APR09 15:00*	06APR09 18:59	PJ
38012410		TESTING OF MAIN STEAM RV'S NEED PLANKING SCAF SE	4	06APR09 15:00*	06APR09 18:59	PJ
38011959		PMT TESTING REQUIRED IN MODE 2 (DEFERRED WOs)	5	07APR09 02:00	07APR09 06:59	IC
38011808		M/M POST MAINTENANCE TESTING IN MODE 2	3	07APR09 07:00	07APR09 09:59	MM
38011957		MODE 1 REQ'D PMT'S AFTER OUTAGE	5	08APR09 04:00	08APR09 08:59	IC
38011654		M/M POST MAINTENANCE TESTING IN MODE 1	18	08APR09 04:00	08APR09 23:59	MM
38012178		HOT TORQUE VARIOUS FLNGS, MANWAYS & VLV	24	08APR09 04:00	09APR09 07:59	MM
38013854	CTMT	RELAMP CTMT AT OUTAGE START - ROUTINE RELAMP WO	10	17MAR09 00:00*	17MAR09 23:59	EM
37025219	CTMT	SUPPORT E/M WITH CTMT LIGHTING REPAIRS	48	18MAR09 00:00	21MAR09 23:59	PJ
37025219	CTMT	SEVERAL CTMT LIGHT FIXTURES NOT WORKING/REPAIR	48	18MAR09 00:00	21MAR09 23:59	EM
38013856	CTMT	INSTALL CONTAINMENT SAFE EGRESS LIGHTING	12	20MAR09 22:00	21MAR09 11:59	PJ
38013856	CTMT	REMOVE CONTAINMENT SAFE EGRESS LIGHTING	6	04APR09 10:00	04APR09 15:59	PJ
38013856	CTMT	REMV CONT SAFE EGRESS LIGHT-CLOSE WO 38013856-01	2	04APR09 16:00	04APR09 17:59	PJ
38013854	CTMT	RELAMP CTMT ROUTINE RELAMP WO - CLOSE WORK ORDER	2	04APR09 18:00	04APR09 19:59	EM
38013627	CSI ZN 109	14"-FWA-2301-20 & -21A MT/UT SCAFF ER	8	19MAR09 08:00	19MAR09 15:59	PJ
38013627	CSI ZN 109	14"-FWA-2301-20 & -21A MT/UT SCAFF RE	4	29MAR09 01:00	29MAR09 04:59	PJ
38013627	CSI ZN 110	14"-FWB-2303-16 & -17 MT/UT SCAFF ER	8	23MAR09 01:00	23MAR09 08:59	PJ
38013627	CSI ZN 110	14"-FWB-2303-16 & -17 MT/UT SCAFF RE	4	02APR09 03:00	02APR09 06:59	PJ
38013627	CSI ZN 127	3-CCH-22A VT-3 SCAFF ER	8	23MAR09 01:00	23MAR09 08:59	PJ
38013627	CSI ZN 127	3-CCH-22A VT-3 SCAFF RE	4	03APR09 01:00*	03APR09 04:59	PJ
38013627		3"-SI-2304-3 2"-SI-2304-1 PT/UT & PT SCAF SE	10	22MAR09 21:00	23MAR09 06:59	PJ

WODR	TAG #	Activity Description	Orig Dur	Early Start	Early Finish	Dept
38013627		3"-SI-2304-3 2"-SI-2304-1 PT/UT & PT SCAF RE	4	01APR09 15:00*	01APR09 18:59	PJ
38012729	HP BLDG	INSP DRESSOUT A/C & ICE MACHINES. CHANGE FILTERS	4	04APR09 19:00*	04APR09 22:59	EM
39001246		Turb Test Taps - ITOP PCM 08-034	13	30MAR09 19:00	31MAR09 09:59	PJ
39001246		Turb Test Taps - SATS PCM 08-034	13	31MAR09 10:00	31MAR09 22:59	EN
38013627	CSI ZN 0	ISI ZONE 0 IWE EXAM CONTNMNT LINER PERFORM EXAM	180	16MAR09 10:00*	23MAR09 21:59	EN
39000513	FUEL SIP	(P) FLY MATIERIAL FOR FUEL SIPPING SCAFF TO 58'	2	17MAR09 17:00	17MAR09 18:59	PJ
39000513	FUEL SIP	(P) RIG TOWER ON 58' TO LOWER CAVITY	2	18MAR09 15:00	18MAR09 16:59	PJ
39000513	FUEL SIP	INSPECT SCAFFOLD FOLLOW PLACEMENT	1	18MAR09 17:00	18MAR09 17:59	PJ

Q.

On page 7 of witness Stall's testimony, the witness indicates that a high steam generator water level occurring during plant restart is not an unusual event. For each of the four nuclear units on FPL's system, please provide information regarding FPL's experience with all such events, including frequency, units involved, initial reason for outage, length of time this issue may have extended the affected outages.

a. Of all high steam generator water level events experienced by an FPL nuclear power plant, how many occurred when fast generator loading was being implemented?

A.

In preparing Mr. Stall's testimony, a search of a U.S. nuclear industry database identified more than 100 plant events involving plant shutdowns as a result of high or low steam generator water level. While Turkey Point operators are routinely required to control steam generator water level during startup conditions, FPL identified no records of a shutdown that occurred at an FPL nuclear plant attributable to high steam generator water level during a plant startup other than the Turkey Point Unit 4 manual reactor trip in February 2008.

Steam generator level management at Turkey Point can be challenging to plant operators during start-up or shut down as level control is established with manual operator action and analog instrumentation which does not have the precise, responsive control of an automated system. Feed water level control is not placed into automatic operation until the unit is at greater then 10% power. This manual operation during start-up requires three different dedicated operators to control steam generator water level within the narrow procedurally driven operating band of 45% – 55%. A manual reactor trip is required when steam generator level is less then 10% or greater then 75%.

There are many variables that can affect steam generator water level, reactor coolant system temperature, feed water temperature, reactor power, turbine power, rate of turbine loading, feed water valves positions, steam dump to atmosphere valve positions, blowdown flow, among other things. A detailed explanation of how some of these variables affect steam generator water level is provided in response to Interrogatory 9.

Q. On page 7 of witness Stall's testimony, the witness indicates that a high steam generator water level occurring during plant restart is not an unusual event. For each of the four nuclear units on FPL's system, please provide information regarding FPL's experience with all such events, including frequency, units involved, initial reason for outage, length of time this issue may have extended the affected outages.

a. Of all high steam generator water level events experienced by an FPL nuclear power plant, how many occurred when fast generator loading was being implemented?

A. This interrogatory asks specifically about plant shutdowns resulting from high steam generator water levels. However, nuclear plant technical specifications require the steam generator water level to remain within a narrow range, such that plant shutdowns can result from low as well as high steam generator water levels. Accordingly, FPL is including in its response to this interrogatory information on plant shutdowns caused by either high or low steam generator water levels due to manual plant operations during restart.

In preparing Mr. Stall's testimony, a search of a U.S. nuclear industry database identified more than 100 plant events involving plant shutdowns as a result of high or low steam generator water level. FPL has identified three previous events of shutdowns that occurred at the FPL nuclear units attributable to high or low steam generator water level during plant startups. The three events are summarized below:

On October 30, 1999, St. Lucie Unit 1 was in the process of a reactor startup. While operating at low power a mismatch occurred between the feedwater addition and the steaming rate on the 1A steam generator. This resulted in lowering of the steam generator water level and upon receipt of low level steam generator levels the operators manually tripped the reactor. The outage duration associated with this event was approximately 17 hours.

On October 24, 2002, St. Lucie Unit 1 was at approximately 6% power during power ascension. The operating crew was in the process of "latching" the turbine in order to place the unit on-line. Turbine latching was unsuccessful but the process of latching resulted in generation of a turbine trip signal which automatically opened the main feedwater valves and increased feedwater addition to the steam generators. The operating crew took manual action but was unable to stop the rise in steam generator level. The high steam generator level automatically tripped the feedwater pumps and stopped feedwater addition to the steam generators. Steam generator levels then decreased to the point where the operators manually tripped the reactor. Cause of this event was mechanical binding of the turbine oil interlock box which prevented "latching"

of the turbine. The outage duration associated with this event was approximately 19 hours.

On August 16, 1993, Turkey Point Unit 4 was in Mode 1 at 28% power. The two high pressure feedwater heaters were being placed in service. The restoration of the feedwater heaters was not successful, and feed flow to the steam generators was curtailed. The loss of flow was recognized, an extra condensate pump and feed pump were started, and steam generator levels began to recover. Simultaneously, both feedwater heaters were completely restored to service in an attempt to aid in the recovery of feed flow. As a result, steam generator levels rose faster than the reactor operators could control them. The turbine tripped on "high-high" level in the 4C steam generator, which generated an automatic reactor trip. The outage duration associated with this event was approximately 15 hours.

Q.
Did FPL incur any capital costs as a result of the Flagami Transmission Event?

a. If yes, what were the total costs incurred?

b. If yes, what equipment was replaced or repaired?

c. If yes, in what manner were these costs recovered?

A.
FPL's Nuclear Division did not incur any capital costs as a result of the Flagami Transmission Event.

Q.

In responding to this interrogatory, please refer to witness Avera's testimony in this docket. The witness states on page 5 that "Mr. Yupp's calculation of RPCs (replacement power costs) properly includes only the outage time related to the Flagami Transmission Event" and that including "the additional outage time required to address equipment issues" would be inappropriate.

a) In light of the above, exactly what time is the "additional outage time" referred to by this witness?

b) Witness Yupp included only the first 8 hours in his replacement power costs calculation, but this witness offers no explanation of what the "outage time related to the Flagami Transmission Event" might be. Please do so.

A.

a. The "additional outage time" that witness Avera refers to in his testimony includes the period from the time FPL shut down its peaking units (approximately 8 hours after the event start) to the time each Turkey Point unit returned to 100% power (approximately 158 hours for Unit 3 and 107 hours for Unit 4).

b. FPL believes that the appropriate measure of the "outage time related to the Flagami Transmission Event" is the 8-hour period immediately following the event. As described in witness Yupp's testimony, this time period covers the entire time frame during which the event had a significant impact on FPL's ability to operate its generating system and, as a result, FPL had to run its expensive peaking units in order to meet system load requirements.

Q.

On page 3 of witness Stall's testimony, the witness states that "typically it takes approximately 48 hours to bring a single unit back on line after an unexpected plant shut down." When is a nuclear unit considered back on line? (i.e., is the generator operating at 10% output? 50%? 100%)

A.

For purposes of Mr. Stall's testimony, the nuclear unit is considered back on line when the main generator output breaker is closed and the generating unit connects back on to the grid.

Q. Please describe the plant start up sequence as mentioned by witness Stall on page 4 of his testimony.

A. The following is a high level summary describing the temperature of the reactor coolant system (RCS) and reactor state as the plant is transitioned from mode 6 to mode 1.

A pressurized water reactor plant such as Turkey Point has six distinct phases of operation or "operating modes". These Modes are sequential as the plant transitions from the most shut down state (Mode 6) to operating at full power generating electricity (Mode 1). The Modes are defined and named as follows for combinations of temperature and status of the reactor (running or shut down):

OPERATIONAL MODES

Mode	% Rated Thermal Power	Average Coolant temperature
6 – Refueling	0%	< 140 degrees F
5 – Cold Shutdown	0%	< 200 degrees F
4 – Hot Shutdown	0%	350 degrees F > TAVE > 200 degrees F
3 – Hot Standby	0%	> 350 degrees F
2 – Startup	<5%	> 350 degrees F
1 – Power Operation	> 5%	> 350 degrees F

As a plant begins its transition from Mode 6 to Mode 1, the pressure and temperature of the RCS (the water that flows through and cools the reactor) are increased. This increase is achieved by the heat added from the reactor coolant pumps (pumps that push the water through the reactor for cooling) and from heaters that are designed to help control the pressure of the reactor coolant system. An interconnected system called the residual heat removal (RHR) system is also used to control the temperature of the RCS by adjusting the amount of cooling water supplied to the RHR heat exchangers. As cooling flow is reduced to the heat exchangers, the reactor coolant system heats up. This system is used to control RCS temperature when the reactor is shutdown and is not used in Modes 1-3.

To startup the plant from Mode 6 to Mode 3 consists of raising the temperature of the reactor coolant from <140°F to >349°F. When the RCS is above 200°F, the RHR system is removed from service allowing the RCS to heatup even further and begins transferring its heat to the steam generators. The steam generators are now the primary means for cooling the RCS. Secondary water within the steam generators, which is used to push the turbine blades, begins to boil as it comes into contact with the steam generator tubes carrying the heated RCS water. As the steam generator water turns to steam, it is then released through a "steam dump" as needed to control RCS temperature. As steam is expelled through the steam sumps, the steam generators are also being fed with water from the steam generator feedwater system in order maintain steam generator water level. The RCS heatup continues and RCS temperature is raised eventually to 547°F. The reactor is then started up and brought to Mode 2. Reactor power is further raised to the point where the reactor can produce the

heat needed for power generation. Once reactor power is raised and stabilized at around 5-7% power, the turbine generator is rolled up to 1800 RPM and the turbine generator output breaker is closed to place the unit "Online.". When reactor power exceeds 5% the plant is in Mode 1. Power is increased as more electricity is made until the plant is at full capacity or 100% power.

Control systems critical to the operation of the plant are placed in service as the plant transitions from Mode to Mode. Most of these systems are placed in service in Mode 2. These are sequenced in service in accordance with plant procedures designed to start the plant. Some of the critical systems include those needed to establish a vacuum in the condenser (used to turn steam back into water after spinning the main turbine for electricity). Condensate and feed water (used to pump water from the condenser to the steam generators to make steam for the main turbine) and steam generator level control system (level is controlled by manual adjustments in the control room, by a dedicated operator, until reactor power is approximately 10% to 20%). Then the controls are placed in automatic during Mode 1 and the dedicated operator is no longer needed.

The steam generator water level control during plant heatup and startup is manually controlled by reactor operators as it is not designed to control automatically at lower power levels of less than around 15%. There are many variables that can affect steam generator water level: RCS temperature changes cause a change in steam generator water level, as the RCS heats up, the boiling intensifies creating larger bubbles thereby increasing water level; 2) As steam demand increases, as it would while placing the unit online and increasing turbine load, the pressure in the steam generators is reduced, the boiling intensifies creating larger bubbles thereby increasing water level; 3) increasing feedwater to the steam generators introduces colder feedwater to the steam generators which has an initial effect of cooling the steam generators, thereby reducing the size of the bubbles and lowering steam generator water level. The variables above are all controlled by three different reactor operators when performing a unit startup.

Q.

How long is a typical refueling outage for a nuclear power plant?

A.

Each refueling outage is unique in nature, and as such, it is difficult to define a "typical" outage duration. In addition to refueling a nuclear unit, the duration of a refueling outage will vary based upon the scope and nature of maintenance work and equipment modifications being performed. Subject to these qualifications, without complications refueling outage duration can range from 30 to 45 days.

Q.

At what date and time did FPL begin repairing the Rod Position Indication system at Turkey Point Unit 3?

A.

FPL began repairing the Rod Position Indication system at Turkey Point Unit 3 on February 26, 2008 at 20:00 when the equipment clearance order was issued.

Q.

After the Flagami Transmission event, at what date and time did FPL begin startup of Turkey Point Unit 3?

A.

After the Flagami Transmission Event, FPL commenced startup of Turkey Point Unit 3 on March 3, 2008 at 03:18.

Q.

Following the Flagami Transmission event, at what date and time did FPL begin startup of Turkey Point Unit 4?

A.

Following the Flagami Transmission Event, FPL commenced startup of Turkey Point Unit 4 on February 28, 2008 at 04:58.

Q.

Following the Flagami Transmission event, at what date and time was Turkey Point Unit 4 shut down due to the high steam generator water level?

A.

Turkey Point Unit 4 was shut down due to high steam generator water level on February 29, 2008 at 04:50.

Q.

Based on the Total Peaking Unit Production Cost shown in Exhibit GJY-6 of witness G. Yupp, LG2 has a lower cost ($168/MWh) compared to FGT ($176/MWh). Please explain the reason why FGT was operated closer to capacity than LG2 during the 8-hr period ending 22:00 Feb 26, 2008.

A.

Fort Myers Gas Turbines (FGT) were not operated closer to capacity than the Lauderdale Gas Turbines at Site 2 (LG2). FGT units are rated at approximately 50 MW per unit (temperature dependent) and LG2 units are rated at approximately 30 MW per unit (temperature dependent). 11 of 12 units at FGT were available to run throughout the duration of the event on 2/26/2008. For LG2, 11 of 12 units were available from the start of the event to approximately 16:40. At that time, the 12th and last unit at LG2 was available to run and it was brought on-line and ramped to maximum capacity. As shown on Exhibit GJY-6, all available units at FGT and LG2, excluding hours in which the units ramped up (event beginning) and down (event end), were operated at approximately 100% capacity. Every available unit at each location was brought on-line and ramped to maximum capacity until conditions allowed the units to begin ramping down and off-line.

Q.

Can FPL identify a time or situation when the PSC has utilized a system average dollar per MWh cost with a marginal or incremental energy value to produce a cost that was either refunded to customer or recovered from customers?

A.

FPL is not aware of prior instances where that approach has been used by the Commission. However, FPL is also not aware of any prior instances where the current fact pattern has arisen (i.e., a refund of replacement power costs for a nuclear unit outage that was not caused by imprudent operation of the nuclear unit but rather resulted from transmission-related actions).

Q.

Aside from the purchased power transactions listed in Exhibit GJY-9, did FPL purchase power at any time during the 158 hours immediately following the Flagami Transmission event?

a. If yes, please list in a table similar to the one provided in Exhibit GJY-9 all transactions.

b. If yes, please indicate if these transactions would have been necessary if Turkey Point Units 3 and 4 were on-line.

A.

a. Please see Attachment I.

b. These purchases would have been "necessary" regardless of whether or not Turkey Point Units 3 and 4 were on-line. The purchases were economic transactions based on FPL's system marginal cost projections. FPL's marginal cost during on-peak hours is primarily driven by its large fleet of combined cycle units burning natural gas and conventional units burning natural gas or heavy oil. Therefore, the loss of Turkey Point Units 3 and 4 would generally drive higher production from combined cycle and conventional units, but not impact the range of FPL's marginal cost. During this time period, FPL's marginal cost was high compared to power market prices as natural gas was approximately $9.50/MMBtu and heavy oil was close to $12/MMBtu. Unlike the purchases FPL made during the first eight hours of the Flagami Transmission Event, these purchases were not required to serve system load but rather were made to help reduce the cost of power for FPL's customers.

Purchases on 2/26/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	0700	2300	1,600	128,000.00	80.00
2	1300	1400	200	16,800.00	84.00
		Total	**1,800**	**144,800.00**	**80.44**

Note: These two transactions were executed prior to the Flagami Transmission Event

Purchases on 2/27/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	0500	1400	923	59,644.00	64.62
2	0800	0900	100	6,500.00	65.00
2	1100	1200	40	2,960.00	74.00
3	0900	1200	813	67,722.00	83.30
		Total	**1,876**	**136,826.00**	**72.93**

Purchases on 2/28/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	1500	1600	25	1,125.00	45.00
2	1500	1700	100	4,600.00	46.00
		Total	**125**	**5,725.00**	**45.80**

Purchases on 2/29/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	1500	2200	450	24,350.00	54.11
2	1800	2000	222	16,206.00	73.00
		Total	**672**	**40,556.00**	**60.35**

Purchases on 3/1/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	0700	2300	880	52,800.00	60.00
2	0700	2300	2,400	148,800.00	62.00
3	0000	0100	73	2,774.00	38.00
3	1000	2000	1,054	66,814.00	63.39
3	2100	2300	176	8,802.00	50.11
4	1000	1400	316	19,668.00	62.24
4	1500	1600	100	6,000.00	60.00
4	1700	1900	200	12,550.00	62.75
		Total	**5,199**	**318,208**	**61.21**

Purchases on 3/2/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	0700	2300	880	52,800.00	60.00
2	0700	2300	2,400	148,800.00	62.00
3	0900	2000	319	18,183.00	57.00
4	1300	1700	485	31,100.00	64.12
4	1900	2000	44	3,520.00	80
		Total	**4,128**	**254,403.00**	**61.63**

Purchases on 3/3/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	1100	1300	220	18,700.00	85.00
2	1000	1200	135	9,450.00	70.00
3	0900	1100	69	3,450.00	50.00
		Total	**424**	**31,600.00**	**74.53**

Purchases on 3/4/2008

Counterparty	Begin Time	End Time	Volume (MWh)	Total Cost ($)	$/MWh
1	1100	1200	25	2,025.00	81.00
2	0700	0800	25	1,300.00	52.00
3	0800	1000	200	14,300.00	71.50
4	0700	0800	25	1,850.00	74.00
5	0800	1200	500	43,600.00	87.20
5	1400	1900	140	12,410.00	88.64
5	2000	2400	94	5,855.00	62.29
		Total	**1,009**	**81,340.00**	**80.61**

Note: These transactions are for reference only as they did occur prior to the 158-hour mark.

Q.

Aside from the energy production listed in Exhibit GJY-6, how much energy did the units listed in GJY-1 produce during the 158 hours immediately following the event?

a. If any, please provide a table similar to the table titled "Total Peaking Unit Production Cost" in Exhibit GJY-6 summarizing the total energy production and total cost incurred for that time period indicated.

b. If any, please indicate if the energy production would have been necessary if Turkey Point Units 3 and 4 were on-line.

A.

a. Aside from the energy production shown in Exhibit GJY-6, the units listed in Exhibit GJY-1 did not produce any additional energy during the 158 hours immediately following the event.

b. Not Applicable.

Q.

Please provide FPL's net energy for load for the time period immediately following the Flagami Transmission Event until Turkey Point Unit 4 returned on-line.

A.

From 2/26/08, hour ending 14:00 until Turkey Point Unit 4 returned to full power, FPL's Net Energy for Load was 1,188,644 MWh.

Q.

Please provide FPL's net energy for load for the time period immediately following the Flagami Transmission Event until Turkey Point Unit 3 returned on-line.

A.

From 2/26/08, hour ending 14:00 until Turkey Point Unit 3 returned to full power, FPL's Net Energy for Load was 1,723,849 MWh.

Q.

Please provide an adjusted system average cost for the month of March 2008. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Note: This calculation conservatively assumes that the Turkey Point nuclear units were not generating power until they reached the 100% power level and thus does not reflect output during power ascension.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	31,759,248	313,262	101.38
Light Oil	139,380	628	222.01
Coal	3,773,346	162,259	23.26
Natural Gas	344,950,595	4,401,718	78.37
Nuclear	9,098,382	2,066,766	4.40
Total	**389,720,951**	**6,944,633**	**56.12**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	313,262	6.64%
Light Oil	628	0.01%
Natural Gas	4,401,718	93.34%
Total	**4,715,608**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	101.38	.0664	6.73
Light Oil	222.01	.0001	0.03
Natural Gas	78.37	.9334	73.15
		Total	**79.92**

Cost Impact Calculation

Total March Turkey Point Units 3 and 4 Lost Production in MWh:
Turkey Point 3: 717 MW * 75 hours and 15 minutes = 53,954 MWh
Turkey Point 4: 717 MW * 25 hours and 10 minutes = 18,045 MWh

Total Fuel Cost = 79.92 $/MWh * 71,999 MWh = $5,754,160

Fuel Cost for Turkey Point Units 3 and 4 = 71,999 MWh * 4.40 $/MWh = $316,796

Net Cost Impact = $5,754,160 - $316,796 = **$5,437,364**

Adjusted System Average Cost

Original A3 Fuel Cost – Net Cost Impact = Adjusted Total Fuel Cost
$389,720,951 - $5,437,364 = $384,283,587

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$384,283,587 / 6,944,633 MWh = $55.34/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of February 2008, assuming the absence of Turkey Point Units 3 and 4 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	22,902,013	222,625	102.87
Light Oil	840,820	4,699	178.94
Coal	12,010,604	517,794	23.20
Natural Gas	308,188,667	4,052,626	76.05
Nuclear	8,430,238	1,898,820	4.44
Total	**352,372,341**	**6,696,564**	**52.62**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	222,625	5.20%
Light Oil	4,699	0.11%
Natural Gas	4,052,626	94.69%
Total	**4,279,950**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	102.87	.0520	5.35
Light Oil	178.94	.0011	0.20
Natural Gas	76.05	.9469	72.00
		Total	**77.55**

Cost Impact Calculation

Turkey Point Unit 3 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(696 Hours – 82 Hours and 50 Minutes) * 717 MW = 439,641 MWh

Turkey Point Unit 4 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(696 Hours – 82 Hours and 50 Minutes) * 717 MW = 439,641 MWh

Total Turkey Point Units 3 and 4 MWh included in Schedule A3:
439,641 MWh + 439,641 MWh = 879,281 MWh (value not rounded)

Total Turkey Point Units 3 and 4 fuel costs included in Schedule A3:
4.44 $/MWh * 879,281 MWh = $3,904,008

Fuel Costs to Replace Turkey Point Units 3 and 4:
879,281 MWh * 77.55 $/MWh = $68,188,242

Net Cost Impact = $68,188,242 - $3,904,008 = **$64,284,234**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$352,372,341 + $64,284,234 = $416,656,575

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$416,656,575 / 6,696,564 MWh = $62.22/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of February 2008, assuming the absence of Turkey Point Unit 3 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	22,902,013	222,625	102.87
Light Oil	840,820	4,699	178.94
Coal	12,010,604	517,794	23.20
Natural Gas	308,188,667	4,052,626	76.05
Nuclear	8,430,238	1,898,820	4.44
Total	**352,372,341**	**6,696,564**	**52.62**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	222,625	5.20%
Light Oil	4,699	0.11%
Natural Gas	4,052,626	94.69%
Total	**4,279,950**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	102.87	.0520	5.35
Light Oil	178.94	.0011	0.20
Natural Gas	76.05	.9469	72.00
		Total	**77.55**

Cost Impact Calculation

Turkey Point Unit 3 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(696 Hours – 82 Hours and 50 Minutes) * 717 MW = 439,641 MWh

Total February Turkey Point Unit 3 fuel costs included in Schedule A3:
4.44 $/MWh * 439,641 MWh = $1,952,006

Fuel Costs to Replace Turkey Point Unit 3:
439,641 MWh * 77.55 $/MWh = $34,094,160

Net Cost Impact = $34,094,160 - $1,952,006 = **$32,142,154**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$352,372,341 + $32,142,154 = $384,514,495

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$384,514,495 / 6,696,564 MWh = $57.42/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of February 2008, assuming the absence of Turkey Point Unit 4 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	22,902,013	222,625	102.87
Light Oil	840,820	4,699	178.94
Coal	12,010,604	517,794	23.20
Natural Gas	308,188,667	4,052,626	76.05
Nuclear	8,430,238	1,898,820	4.44
Total	**352,372,341**	**6,696,564**	**52.62**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	222,625	5.20%
Light Oil	4,699	0.11%
Natural Gas	4,052,626	94.69%
Total	**4,279,950**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	102.87	.0520	5.35
Light Oil	178.94	.0011	0.20
Natural Gas	76.05	.9469	72.00
		Total	**77.55**

Cost Impact Calculation

Turkey Point Unit 4 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(696 Hours – 82 Hours and 50 Minutes) * 717 MW = 439,641 MWh

Total February Turkey Point Unit 4 fuel costs included in Schedule A3:
4.44 $/MWh * 439,641 MWh = $1,952,006

Fuel Costs to Replace Turkey Point Unit 4:
439,641 MWh * 77.55 $/MWh = $34,094,160

Net Cost Impact = $34,094,160 - $1,952,006 = **$32,142,154**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$352,372,341 + $32,142,154 = $384,514,495

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$384,514,495 / 6,696,564 MWh = $57.42/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of March 2008, assuming the absence of Turkey Point Units 3 and 4 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Note: This calculation conservatively assumes that the Turkey Point nuclear units were not generating power until they reached the 100% power level and thus does not reflect output during power ascension.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	31,759,248	313,262	101.38
Light Oil	139,380	628	222.01
Coal	3,773,346	162,259	23.26
Natural Gas	344,950,595	4,401,718	78.37
Nuclear	9,098,382	2,066,766	4.40
Total	**389,720,951**	**6,944,633**	**56.12**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	313,262	6.64%
Light Oil	628	0.01%
Natural Gas	4,401,718	93.34%
Total	**4,715,608**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	101.38	.0664	6.73
Light Oil	222.01	.0001	0.03
Natural Gas	78.37	.9334	73.15
		Total	**79.92**

Cost Impact Calculation

Turkey Point Unit 3 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(743 Hours – 75 Hours and 15 Minutes) * 717 MW = 478,777 MWh

Turkey Point Unit 4 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(743 Hours – 25 Hours and 10 Minutes) * 717 MW = 514,687 MWh

Total Turkey Point Units 3 and 4 MWh included in Schedule A3:
478,777 MWh + 514,687 MWh = 993,463 MWh (value not rounded)

Total Turkey Point Units 3 and 4 fuel costs included in Schedule A3:
4.40 $/MWh * 993,463 MWh = $4,371,237

Fuel Costs to Replace Turkey Point Units 3 and 4:
993,463 MWh * 79.92 $/MWh = $79,397,563

Net Cost Impact = $79,397,563 - $4,371,237 = **$75,026,326**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$389,720,951 + $75,026,326 = $464,747,277

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$464,747,277 / 6,944,633 MWh = $66.92/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of March 2008, assuming the absence of Turkey Point Unit 3 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Note: This calculation conservatively assumes that Turkey Point Unit 3 was not generating power until it reached the 100% power level and thus does not reflect output during power ascension.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	31,759,248	313,262	101.38
Light Oil	139,380	628	222.01
Coal	3,773,346	162,259	23.26
Natural Gas	344,950,595	4,401,718	78.37
Nuclear	9,098,382	2,066,766	4.40
Total	**389,720,951**	**6,944,633**	**56.12**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	313,262	6.64%
Light Oil	628	0.01%
Natural Gas	4,401,718	93.34%
Total	**4,715,608**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	101.38	.0664	6.73
Light Oil	222.01	.0001	0.03
Natural Gas	78.37	.9334	73.15
		Total	**79.92**

Cost Impact Calculation

Turkey Point Unit 3 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(743 Hours – 75 Hours and 15 Minutes) * 717 MW = 478,777 MWh

Total Turkey Point Unit 3 fuel costs included in Schedule A3:
4.40 $/MWh * 478,777 MWh = $2,106,619

Fuel Costs to Replace Turkey Point Unit 3:
478,777 MWh * 79.92 $/MWh = $38,263,858

Net Cost Impact = $38,263,858 - $2,106,619 = **$36,157,239**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$389,720,951 + $36,157,239 = $425,878,190

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$425,878,190 / 6,944,633 MWh = $61.32/MWh

Q.

Please provide an adjusted system average cost for FPL's system in the month of March 2008, assuming the absence of Turkey Point Unit 4 for the entire month. Please perform and illustrate calculations in the same manner and format as presented in Exhibit GJY-7.

A.

Note: This calculation conservatively assumes that Turkey Point Unit 4 was not generating power until it reached the 100% power level and thus does not reflect output during power ascension.

Please see Attachment I.

Original A3 Data

Fuel	Cost	MWh	$/MWh
Heavy Oil	31,759,248	313,262	101.38
Light Oil	139,380	628	222.01
Coal	3,773,346	162,259	23.26
Natural Gas	344,950,595	4,401,718	78.37
Nuclear	9,098,382	2,066,766	4.40
Total	**389,720,951**	**6,944,633**	**56.12**

Fuel Mix

Fuel	MWh	% MWh
Heavy Oil	313,262	6.64%
Light Oil	628	0.01%
Natural Gas	4,401,718	93.34%
Total	**4,715,608**	**100.00%**

Blended Marginal Cost

Fuel	$/MWh	% MWh	BMC $/MWh
Heavy Oil	101.38	.0664	6.73
Light Oil	222.01	.0001	0.03
Natural Gas	78.37	.9334	73.15
		Total	**79.92**

Cost Impact Calculation

Turkey Point Unit 4 MWh included in A3 Schedule:
(Total Hours in Month – Outage Hours) * 717 MW
(743 Hours – 25 Hours and 10 Minutes) * 717 MW = 514,687 MWh

Total Turkey Point Unit 4 fuel costs included in Schedule A3:
4.40 $/MWh * 514,687 MWh = $2,264,623

Fuel Costs to Replace Turkey Point Unit 4:
514,687 MWh * 79.92 $/MWh = $41,133,785

Net Cost Impact = $41,133,785 - $2,264,623 = **$38,869,162**

Adjusted System Average Cost

Original A3 Fuel Cost + Net Cost Impact = Adjusted Total Fuel Cost
$389,720,951 + $38,869,162 = $428,590,113

Adjusted Total Fuel Cost / Total System MWh = Adjusted System Average Cost
$428,590,113 / 6,944,633 MWh = $61.72/MWh

Q.

Please complete the table below using the hypothetical assumptions indicated in scenarios a-d. Please provide all calculations used to populate the table.

Purchased Power	Replacement Fuel Cost	Fuel Cost Not Incurred During Outage	Net Replacement Power Costs	Interest	Total Replacement Power Cost

a. Total outage time attributable to Event= 48 Hours
Outage time for Turkey Point Unit 3 attributable to the event= 48 Hours
Outage time for Turkey Point Unit 4 attributable to the event= 48 Hours

b. Total outage time attributable to Event= 107 Hours
Outage time for Turkey Point Unit 3 attributable to the event= 48 Hours
Outage time for Turkey Point Unit 4 attributable to the event= 107 Hours

c. Total outage time attributable to Event= 158 Hours
Outage time for Turkey Point Unit 3 attributable to the event= 158 Hours
Outage time for Turkey Point Unit 4 attributable to the event= 48 Hours

d. Total outage time attributable to Event= 158 Hours
Outage time for Turkey Point Unit 3 attributable to the event= 158 Hours
Outage time for Turkey Point Unit 4 attributable to the event= 107 Hours

A.

Note: Methodology uses Adjusted System Average Cost to calculate "fuel not incurred" by the outages. Interest amount is based on Net Replacement Power Costs from February 2008 through December 2010.

Please see Attachment I.

Part	Purchased Power	Replacement Fuel Cost	Fuel Cost Not Incurred During Outage	Net Replacement Power Costs	Interest	Total Replacement Power Cost
a	618,353	6,421,897	3,532,458	3,507,792	103,979	3,611,771
b	618,353	9,743,596	5,773,114	4,588,835	136,024	4,724,859
c	618,353	12,665,850	7,796,732	5,487,470	162,662	5,650,132
d	618,353	15,987,549	10,037,388	6,568,514	194,706	6,763,220

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.66%
Light Oil	4,668	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,808	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	39.83
March Capacity	717
March Outage hours	0

Turkey Point 4	
February Capacity	717
February Outage hours	39.83
March Capacity	717
March Outage hours	0

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,586	29,896	31,748	93,504	($)
15	282	321	302	558	MWh	15	46,324	53,812	53,267	98,250	($)
16	287	335	307	550	MWh	16	47,206	56,263	54,149	96,668	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	278	347	305	559	MWh	18	48,800	58,278	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,098	59,790	53,796	96,668	($)
20	292	357	308	550	MWh	20	51,629	59,958	54,325	96,668	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,052	2,293	19,685	($)
	2,175	2,801	2,198	4,456	MWh	Total	384,562	436,838	387,683	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.285	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.98	10.21	8.95	13.25	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.81	167.93	176.38	175.78							

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	57,116 MWh
Replacement fuel cost =	4,429,528

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Adjusted System Average Cost	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,558	51.32	300,627	1,465,602
TP3 March	0	0	55.34	0	0
TP4 February	5,858	28,558	51.32	300,627	1,465,602
TP4 March	0	0	55.34	0	0
Total	11,716	57,116		601,254	2,931,204

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 3,597,792

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Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,826	94.89%
Light Oil	4,669	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	626	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,606	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	39.83
March Capacity	717
March Outage hours	0

Turkey Point 4	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	24.17

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh
15	262	321	302	559	MWh
16	267	335	307	550	MWh
17	270	338	309	559	MWh
18	276	347	305	558	MWh
19	269	358	305	556	MWh
20	292	357	308	650	MWh
21	287	297	169	485	MWh
22	59	72	13	112	MWh
	2,175	2,901	2,198	4,456	MWh
Heat Rate*	17.716	18.450	17.727	13.265	MMBtu/MWh
Fuel Price*	9.98	10.21	9.95	13.25	$/MMBtu
Production Cost	176.81	187.95	176.38	175.76	

H.E.	LG1	LG2	PGT	FMGT	
14	30,586	29,885	31,748	93,504	($)
15	46,324	53,912	53,267	98,250	($)
16	47,206	56,263	54,149	96,888	($)
17	47,739	56,767	54,501	98,250	($)
18	48,800	58,279	53,796	98,250	($)
19	51,096	56,790	53,796	96,888	($)
20	51,629	58,958	54,325	96,888	($)
21	50,744	49,881	29,809	85,244	($)
22	10,432	12,092	2,293	19,685	($)
Total	384,562	436,838	387,683	783,167	($)

*Values based on Schedule A4
**Values based on Schedule A4 and Exhibit GJY-5

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.5047
Light Oil fuel cost =	17.8943
Heavy Oil fuel cost =	10.2873
Replacement fuel cost =	77.55 per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.8367
Light Oil fuel cost =	22.2013
Heavy Oil fuel cost =	10.1382
Replacement fuel cost =	79.92 per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	99,419 MWh
Replacement fuel cost =	7,751,327

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Adjusted System Average Cost	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,558	51.32	300,627	1,465,802
TP3 March	0	0	55.34	0	0
TP4 February	5,858	53,531	51.32	300,627	2,747,222
TP4 March	0	17,330	55.34	0	959,036
Total	11,716	99,419		601,254	5,171,861

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 4,588,836

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Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,826	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Total Turkey Point Unit 3 Outage 158
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	75.17

Turkey Point 4	
February Capacity	717
February Outage hours	39.83
March Capacity	717
March Outage hours	0

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh
15	282	321	302	559	MWh
16	287	335	307	550	MWh
17	270	338	309	559	MWh
18	276	347	305	559	MWh
19	259	358	305	550	MWh
20	292	357	308	550	MWh
21	287	287	189	485	MWh
22	59	72	13	112	MWh
	2,175	2,601	2,198	4,458	MWh
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh
Fuel Price*	9.96	10.21	9.95	13.25	$/MMBtu
Production Cost	176.51	167.95	176.38	175.78	

H.E.	LG1	LG2	PGT	FMGT	
14	30,588	29,895	31,748	93,504	($)
15	48,324	53,912	53,257	98,250	($)
16	47,208	56,263	54,149	96,868	($)
17	47,739	56,767	54,501	96,250	($)
18	48,800	58,279	53,798	98,250	($)
19	51,096	59,790	53,798	96,868	($)
20	51,629	59,958	54,325	96,868	($)
21	50,744	49,881	29,808	85,244	($)
22	10,432	12,092	2,293	19,685	($)
Total	384,562	436,838	387,683	783,187	($)

*Values based on Schedule A4
*Values based on Schedule A4 and Exhibit GJY-5

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost = 7.6047
Light Oil fuel cost = 17.8943
Heavy Oil fuel cost = 10.2873
Replacement fuel cost = 77.55 per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost = 7.8387
Light Oil fuel cost = 22.2013
Heavy Oil fuel cost = 10.1382
Replacement fuel cost = 79.92 per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace = 135,986 MWh
Replacement fuel cost = 10,873,580

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Adjusted System Average Cost	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	51.32	300,627	2,747,222
TP3 March	0	53,897	55.34	0	2,982,654
TP4 February	5,858	28,568	51.32	300,627	1,465,802
TP4 March	0	0	55.34	0	0
Total	11,716	135,986		601,254	7,195,478

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 6,487,479

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Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,836	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,825	5.20%
Total	4,278,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Total Turkey Point Unit 3 Outage 156
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	75.17

Turkey Point 4	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	24.17

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,588	29,895	31,748	93,504	($)
15	282	321	302	559	MWh	15	48,324	53,912	53,287	98,250	($)
16	287	335	307	590	MWh	16	47,208	56,263	54,149	98,858	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	558	MWh	18	48,800	58,279	53,798	98,250	($)
19	289	358	305	550	MWh	19	51,094	59,790	53,798	96,858	($)
20	292	357	306	550	MWh	20	51,629	58,958	54,325	96,888	($)
21	287	297	169	485	MWh	21	50,744	49,681	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,885	($)
	2,175	2,601	2,198	4,456	MWh	Total	384,582	436,838	387,663	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh						
Fuel Price*	9.98	10.21	9.95	13.25	$/MMBtu						
Production Cost	176.81	167.95	176.38	175.76							

*Values based on Schedule A4
*Values based on Schedule A4 and Exhibit GJY-5

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.6047
Light Oil fuel cost =	17.8843
Heavy Oil fuel cost =	10.2873
Replacement fuel cost =	77.55 per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.8387
Light Oil fuel cost =	22.2013
Heavy Oil fuel cost =	10.1382
Replacement fuel cost =	79.92 per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	176,289 MWh
Replacement fuel cost =	13,996,279

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Adjusted System Average Cost	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	51.32	300,627	2,747,222
TP3 March	0	53,897	55.34	0	2,982,654
TP4 February	5,858	53,531	51.32	300,627	2,747,222
TP4 March	0	17,330	55.34	0	959,036
Total	11,716	178,289		601,254	9,436,134

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 6,868,514

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Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	3,507,792	3,512,301	3,520,672	3,528,696	3,536,445	3,543,635	3,550,856	3,558,090	3,569,061	3,580,809	3,587,434		
Interest		4,508.97	8,370.98	8,024.20	7,748.43	7,190.77	7,220.16	7,234.87	10,970.78	11,748.16	6,624.50	3,034.37	82,676	82,676
Total	-	3,512,301	3,520,672	3,528,696	3,536,445	3,543,635	3,550,856	3,558,090	3,569,061	3,580,809	3,587,434	3,590,468		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	3,590,468	3,592,458	3,594,763	3,596,710	3,598,134	3,599,183	3,600,158	3,601,133	3,601,958	3,602,664	3,603,324	3,603,955		
Interest	1,989.72	2,305.16	1,947.16	1,423.70	1,049.46	974.78	975.04	825.26	705.38	660.49	630.58	600.66	14,087	96,764
Total	3,592,458	3,594,763	3,596,710	3,598,134	3,599,183	3,600,158	3,601,133	3,601,958	3,602,664	3,603,324	3,603,955	3,604,556		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	3,604,556	3,605,156	3,605,757	3,606,358	3,606,959	3,607,560	3,608,162	3,608,763	3,609,364	3,609,966	3,610,568	3,611,169		
Interest	600.76	600.86	600.96	601.06	601.16	601.26	601.36	601.46	601.56	601.66	601.76	601.86	7,218	103,979
Total	3,605,156	3,605,757	3,606,358	3,606,959	3,607,560	3,608,162	3,608,763	3,609,364	3,609,966	3,610,568	3,611,169	3,611,771		

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Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	4,588,835	4,594,734	4,605,684	4,616,181	4,626,318	4,635,725	4,645,170	4,654,635	4,668,986	4,684,355	4,693,021		
Interest		5,898.56	10,950.78	10,497.12	10,136.37	9,406.85	9,445.29	9,464.53	14,351.79	15,368.75	8,666.06	3,969.51	108,156	108,156
Total	-	4,594,734	4,605,684	4,616,181	4,626,318	4,635,725	4,645,170	4,654,635	4,668,986	4,684,355	4,693,021	4,696,991		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	4,696,991	4,699,594	4,702,609	4,705,156	4,707,019	4,708,392	4,709,667	4,710,942	4,712,022	4,712,945	4,713,809	4,714,634		
Interest	2,602.92	3,015.57	2,547.25	1,862.46	1,372.88	1,275.19	1,275.53	1,079.59	922.77	864.04	824.82	785.77	18,429	126,584
Total	4,699,594	4,702,609	4,705,156	4,707,019	4,708,392	4,709,667	4,710,942	4,712,022	4,712,945	4,713,809	4,714,634	4,715,419		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	4,715,419	4,716,205	4,716,991	4,717,778	4,718,564	4,719,350	4,720,137	4,720,924	4,721,710	4,722,497	4,723,284	4,724,072		
Interest	785.90	786.03	786.17	786.30	786.43	786.56	786.69	786.82	786.95	787.08	787.21	787.35	9,439	136,024
Total	4,716,205	4,716,991	4,717,778	4,718,564	4,719,350	4,720,137	4,720,924	4,721,710	4,722,497	4,723,284	4,724,072	4,724,859		

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Interest Calculation

	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	Annual	Cumulative
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Interest	Interest
Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	5,487,470	5,494,524	5,507,619	5,520,172	5,532,293	5,543,542	5,554,837	5,566,155	5,583,317	5,601,696	5,612,059		
Interest		7,053.69	13,095.28	12,552.78	12,121.38	11,249.00	11,294.97	11,317.98	17,162.31	18,378.42	10,363.14	4,746.87	129,336	129,336
Total	-	5,494,524	5,507,619	5,520,172	5,532,293	5,543,542	5,554,837	5,566,155	5,583,317	5,601,696	5,612,059	5,616,806		

	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%
Amount	5,616,806	5,618,918	5,623,525	5,626,571	5,628,798	5,630,440	5,631,964	5,633,490	5,634,781	5,635,884	5,636,918	5,637,904		
Interest	3,112.65	3,606.11	3,046.08	2,227.18	1,641.73	1,524.91	1,525.32	1,291.01	1,103.48	1,033.25	986.46	939.65	22,038	151,374
Total	5,619,918	5,623,525	5,626,571	5,628,798	5,630,440	5,631,964	5,633,490	5,634,781	5,635,884	5,636,918	5,637,904	5,638,844		

	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%
Amount	5,638,844	5,639,783	5,640,723	5,641,664	5,642,604	5,643,544	5,644,485	5,645,426	5,646,366	5,647,308	5,648,249	5,649,190		
Interest	939.81	939.96	940.12	940.28	940.43	940.59	940.75	940.90	941.06	941.22	941.37	941.53	11,288	162,662
Total	5,639,783	5,640,723	5,641,664	5,642,604	5,643,544	5,644,485	5,645,426	5,646,366	5,647,308	5,648,249	5,649,190	5,650,132		

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Interest Calculation

ACCOUNT	2008 JAN	2008 FEB	2008 MAR	2008 APR	2008 MAY	2008 JUN	2008 JUL	2008 AUG	2008 SEP	2008 OCT	2008 NOV	2008 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	4.86000%	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	6,568,514	6,576,957	6,592,632	6,607,658	6,622,167	6,635,632	6,649,153	6,662,700	6,683,244	6,705,243	6,717,647		
Interest		8,443.28	15,675.08	15,025.71	14,509.32	13,465.07	13,520.10	13,547.65	20,543.33	21,999.01	12,404.70	5,682.01	154,815	154,815
Total	-	6,576,957	6,592,632	6,607,658	6,622,167	6,635,632	6,649,153	6,662,700	6,683,244	6,705,243	6,717,647	6,723,329		

ACCOUNT	2009 JAN	2009 FEB	2009 MAR	2009 APR	2009 MAY	2009 JUN	2009 JUL	2009 AUG	2009 SEP	2009 OCT	2009 NOV	2009 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.36000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	6,723,329	6,727,055	6,731,372	6,735,018	6,737,684	6,739,649	6,741,474	6,743,300	6,744,845	6,746,166	6,747,403	6,748,584		
Interest	3,725.84	4,316.53	3,646.16	2,665.94	1,965.16	1,825.32	1,825.82	1,545.34	1,320.87	1,236.80	1,180.80	1,124.76	26,379	181,195
Total	6,727,055	6,731,372	6,735,018	6,737,684	6,739,649	6,741,474	6,743,300	6,744,845	6,746,166	6,747,403	6,748,584	6,749,709		

ACCOUNT	2010 JAN	2010 FEB	2010 MAR	2010 APR	2010 MAY	2010 JUN	2010 JUL	2010 AUG	2010 SEP	2010 OCT	2010 NOV	2010 DEC	Annual Interest	Cumulative Interest
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	6,749,709	6,750,834	6,751,959	6,753,084	6,754,210	6,755,335	6,756,461	6,757,587	6,758,713	6,759,840	6,760,967	6,762,093		
Interest	1,124.95	1,125.14	1,125.33	1,125.51	1,125.70	1,125.89	1,126.08	1,126.26	1,126.45	1,126.64	1,126.83	1,127.02	13,512	194,708
Total	6,750,834	6,751,959	6,753,084	6,754,210	6,755,335	6,756,461	6,757,587	6,758,713	6,759,840	6,760,967	6,762,093	6,763,220		

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Q.

In Docket No. 060001-EI, FPL calculated a replacement power cost of $6,163,000 for the March/April 2006 outage extension at Turkey Point Unit 3.

a. Please explain the methodology used to calculate the $6,163,000 figure.

b. Please complete the table below using the methodology described in question 34 (a) assuming the scenarios listed in question 33.

Purchased Power	Replacement Fuel Cost	Fuel Cost Not Incurred During	Net Replacement Power Costs	Interest	Total Replacement Power Cost

A.

a. The methodology used to develop the $6,163,000 figure for the March/April 2006 outage extension at Turkey Point 3 was based on using actual fuel cost data as reflected in the A-Schedules filed with the Commission. The assumption was that the replacement power for that outage was based on 60% heavy oil generation and 40% natural gas generation. The nuclear avoided fuel cost was used to calculate the fuel not incurred by the outage.

b. Note: Methodology uses nuclear avoided fuel cost to calculate "fuel not incurred" by the outages. Marginal costs were calculated using a mix of 60% heavy oil and 40% natural gas to replicate the calculations used in Docket No. 060001-EI. Additionally, the calculations have been completed using the actual mix of natural gas, heavy oil and light oil for February 2008 and March 2008 in lieu of the 60%/40% oil/gas ratio used in Docket No. 060001-EI. In previous calculations for this docket, FPL has used the actual mix of natural gas, heavy oil and light oil to calculate marginal cost as the actual mix is more representative of FPL's system during this time period. Interest amount is based on Net Replacement Power Costs from February 2008 through December 2010.

Please see Attachment I and II.

Part	Purchased Power	Replacement Fuel Cost	Fuel Cost Not Incurred During *Outage*	Net Replacement Power Costs	Interest	Total Replacement Power Cost
a	390,605	6,421,897	321,213	6,491,290	192,417	6,683,707
b	390,605	9,743,596	504,914	9,629,288	285,435	9,914,723
c	390,605	12,665,850	712,161	12,344,293	365,914	12,710,208
d	390,605	15,987,549	895,863	15,482,291	458,932	15,941,223

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.80%
Light Oil	4,869	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[illegible] 17

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[illegible] 39.83
March Capacity	717
March Outage hours	[illegible] 0

Turkey Point 4	
February Capacity	717
February Outage hours	[illegible] 39.83
March Capacity	717
March Outage hours	[illegible] 0

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,568	29,695	31,748	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,267	98,250	($)
16	267	335	307	550	MWh	16	47,206	56,263	54,149	96,668	($)
17	270	336	309	558	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	559	MWh	18	48,800	58,279	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,096	59,790	53,796	96,668	($)
20	292	357	308	550	MWh	20	51,629	59,958	54,325	96,668	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,806	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,601	2,198	4,456	MWh	Total	384,562	436,838	387,683	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.98	10.21	9.95	13.26	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.61	167.95	176.38	175.76							

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.6367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	57,116 MWh
Replacement fuel cost =	**4,429,628**

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,558	4.98	29,191	142,311
TP3 March	0	0	4.94	0	0
TP4 February	5,858	28,558	4.35	25,482	124,229
TP4 March	0	0	4.33	0	0
Total	11,716	57,116		54,673	266,540

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 6,491,296

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[illegible]

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[illegible]
March Capacity	717
March Outage hours	[illegible]

Turkey Point 4	
February Capacity	717
February Outage hours	[illegible]
March Capacity	717
March Outage hours	[illegible]

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,588	29,895	31,748	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,267	98,250	($)
16	267	335	307	550	MWh	16	47,206	56,253	54,149	96,568	($)
17	270	338	309	559	MWh	17	47,739	56,757	54,501	98,250	($)
18	276	347	305	559	MWh	18	48,800	58,279	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,098	59,790	53,796	96,568	($)
20	292	357	308	550	MWh	20	51,629	59,956	54,325	96,568	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,601	2,198	4,456	MWh	Total	384,562	436,838	387,683	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh	*Values based on Schedule A4					
Fuel Price*	9.98	10.21	9.95	13.25	$/MMBtu	*Values based on Schedule A4 and Exhibit GJY-5					
Production Cost	176.81	167.95	176.38	175.76							

Replacement Fuel Cost (Part A) Total 1,992,279

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	99,419 MWh
Replacement fuel cost =	7,751,327

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,556	4.96	29,191	142,311
TP3 March	0	0	4.94	0	0
TP4 February	5,858	53,531	4.35	25,482	232,862
TP4 March	0	17,330	4.33	0	75,068
Total	11,716	99,419		54,673	450,241

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= **9,629,288**

090505 Hearing Exhibits - 000293

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 34b
Attachment 1, Page 1 of 1

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.69%
Light Oil	4,669	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,282	6.64%
Total	4,715,808	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Total Turkey Point Unit 3 Outage 158
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	76.17

Turkey Point 4	
February Capacity	717
February Outage hours	39.83
March Capacity	717
March Outage hours	0

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,566	29,895	31,748	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,267	98,250	($)
16	267	333	307	550	MWh	16	47,208	56,263	54,148	96,666	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	559	MWh	18	48,800	58,279	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,098	59,790	53,796	96,666	($)
20	292	357	308	550	MWh	20	51,629	59,958	54,325	96,666	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,806	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,601	2,198	4,458	MWh	Total	384,562	438,838	387,683	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.98	10.21	9.96	13.25	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.81	167.95	176.36	175.76							

Replacement Fuel Cost (Part A) Total 1,952,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost = 7.6047
Light Oil fuel cost = 17.8943
Heavy Oil fuel cost = 10.2873
Replacement fuel cost = 77.55 per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost = 7.8367
Light Oil fuel cost = 22.2013
Heavy Oil fuel cost = 10.1382
Replacement fuel cost = 79.92 per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace = 135,986 MWh
Replacement fuel cost = 10,873,590

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	4.96	29,191	266,757
TP3 March	0	53,897	4.94	0	266,503
TP4 February	5,858	28,558	4.35	25,482	124,229
TP4 March	0	0	4.33	0	0
Total	11,716	135,986		54,673	657,488

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= **12,344,293**

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,062,626	94.89%
Light Oil	4,869	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	9.17

Total Turkey Point Unit 3 Outage 158
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	75.17

Turkey Point 4	
February Capacity	717
February Outage hours	74.66
March Capacity	717
March Outage hours	24.17

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,588	29,695	31,748	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,287	98,250	($)
16	267	335	307	550	MWh	16	47,208	56,263	54,149	96,668	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,601	98,250	($)
18	276	347	305	559	MWh	18	48,800	58,279	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,098	59,790	53,796	96,668	($)
20	292	357	306	550	MWh	20	51,629	59,958	54,325	96,668	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,801	2,198	4,456	MWh	Total	384,562	436,836	387,883	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.98	10.21	9.85	13.25	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.81	167.95	176.38	175.76							

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2006:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2006:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	175,288	MWh
Replacement fuel cost =	13,998,279	

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	4.98	29,191	266,757
TP3 March	0	53,897	4.94	0	266,503
TP4 February	5,858	53,531	4.35	25,482	232,862
TP4 March	0	17,330	4.33	0	75,068
Total	11,716	178,288		54,673	841,190

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power
= 15,483,291

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.99000%	3.09000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.09000%	3.09000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D6 + Line D6)	8.08000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (60% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	6,491,290	6,499,834	6,515,125	6,529,974	6,544,312	6,557,618	6,570,960	6,584,369	6,604,670	6,626,411	6,638,670		
Interest		8,344.01	15,480.79	14,849.05	14,338.73	13,306.77	13,381.15	13,388.37	20,301.80	21,740.37	12,256.86	5,615.21	152,995	152,995
Total	-	6,499,634	6,515,125	6,529,974	6,544,312	6,557,619	6,570,960	6,584,369	6,604,670	6,626,411	6,638,670	6,644,285		
Interest Rate - First Day Rep Bus Mo	0.84000%	0.78000%	0.75000%	0.66000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.78000%	0.75000%	0.66000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D6 + Line D6)	1.62000%	1.54000%	1.38000%	0.96000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (60% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	6,644,286	6,647,967	6,652,233	6,655,836	6,658,471	6,660,413	6,662,217	6,664,021	6,665,548	6,666,853	6,668,076	6,669,243		
Interest	3,682.04	4,265.78	3,603.29	2,634.80	1,942.05	1,803.86	1,804.35	1,527.17	1,305.34	1,222.26	1,166.91	1,111.54	26,069	178,064
Total	6,647,967	6,652,233	6,655,836	6,658,471	6,660,413	6,662,217	6,664,021	6,665,548	6,666,853	6,668,076	6,669,243	6,670,354		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D6 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (60% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	6,670,354	6,671,466	6,672,578	6,673,690	6,674,802	6,675,915	6,677,027	6,678,140	6,679,253	6,680,366	6,681,480	6,682,593		
Interest	1,111.73	1,111.91	1,112.10	1,112.28	1,112.47	1,112.65	1,112.84	1,113.02	1,113.21	1,113.39	1,113.58	1,113.77	13,353	192,417
Total	6,671,466	6,672,578	6,673,690	6,674,802	6,675,915	6,677,027	6,678,140	6,679,253	6,680,366	6,681,480	6,682,593	6,683,707		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D6 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	9,628,298	9,641,665	9,664,845	9,686,672	9,707,942	9,727,682	9,747,502	9,767,362	9,787,479	9,829,729	9,847,914		
Interest		12,377.88	22,879.30	22,027.34	21,270.32	19,738.48	19,820.15	19,860.94	30,116.03	32,250.03	18,185.00	8,329.69	226,956	226,956
Total	-	9,641,665	9,664,845	9,686,672	9,707,942	9,727,682	9,747,502	9,767,362	9,787,479	9,829,729	9,847,914	9,856,243		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D8 + Line D8)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	9,856,243	9,861,705	9,868,033	9,873,378	9,877,287	9,880,167	9,882,843	9,885,520	9,887,785	9,889,722	9,891,535	9,893,266		
Interest	5,462.00	6,327.93	5,345.18	3,908.21	2,880.88	2,675.88	2,676.60	2,265.43	1,936.36	1,813.12	1,731.02	1,648.86	38,671	265,627
Total	9,861,705	9,868,033	9,873,378	9,877,287	9,880,167	9,882,843	9,885,520	9,887,785	9,889,722	9,891,535	9,893,266	9,894,915		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D8 + Line D8)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	9,894,915	9,896,564	9,898,213	9,899,863	9,901,513	9,903,163	9,904,814	9,906,465	9,908,116	9,909,767	9,911,419	9,913,071		
Interest	1,649.15	1,649.43	1,649.70	1,649.98	1,650.25	1,650.53	1,650.80	1,651.08	1,651.35	1,651.63	1,651.90	1,652.18	19,808	285,435
Total	9,896,564	9,898,213	9,899,863	9,901,513	9,903,163	9,904,814	9,906,465	9,908,116	9,909,767	9,911,419	9,913,071	9,914,723		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D6 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (60% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63600%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20379%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	12,344,293	12,360,161	12,388,619	12,417,857	12,445,125	12,470,430	12,496,838	12,521,299	12,558,906	12,601,249	12,624,561		
Interest		15,867.56	29,458.38	28,238.01	27,267.54	25,305.09	25,408.50	25,460.27	38,807.34	41,343.02	23,312.31	10,678.27	290,946	290,946
Total	-	12,360,161	12,389,619	12,417,857	12,445,125	12,470,430	12,496,838	12,521,299	12,559,906	12,601,249	12,624,561	12,635,240		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D8 + Line D8)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (60% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	12,635,240	12,642,242	12,650,354	12,657,206	12,662,216	12,665,909	12,668,340	12,672,771	12,675,675	12,678,157	12,680,462	12,682,701		
Interest	7,002.03	8,112.11	6,852.27	5,010.14	3,693.15	3,430.35	3,431.28	2,904.18	2,482.32	2,324.33	2,219.08	2,113.78	49,575	340,521
Total	12,642,242	12,650,354	12,657,206	12,662,216	12,665,909	12,668,340	12,672,771	12,675,675	12,678,157	12,680,482	12,682,701	12,684,815		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D6 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (60% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	12,684,815	12,686,929	12,689,043	12,691,158	12,693,273	12,695,389	12,697,505	12,699,621	12,701,738	12,703,856	12,705,972	12,708,090		
Interest	2,114.14	2,114.49	2,114.84	2,115.19	2,115.55	2,115.90	2,116.25	2,116.60	2,116.96	2,117.31	2,117.66	2,118.01	25,393	365,914
Total	12,686,929	12,689,043	12,691,158	12,693,273	12,695,389	12,697,505	12,699,621	12,701,738	12,703,856	12,705,972	12,708,090	12,710,208		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.46000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12)	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	15,482,291	15,502,192	15,539,139	15,574,556	15,608,755	15,640,493	15,672,380	15,704,293	15,752,714	15,804,567	15,833,805		
Interest		19,901.20	36,946.89	35,416.29	34,199.13	31,737.80	31,887.50	31,932.43	48,421.57	51,852.68	29,238.45	13,392.78	364,907	364,907
Total	-	15,502,192	15,539,139	15,574,556	15,608,755	15,640,493	15,672,380	15,704,293	15,752,714	15,804,567	15,833,805	15,847,198		

Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	15,847,198	15,855,980	15,868,154	15,874,748	15,881,032	15,885,864	15,889,988	15,894,270	15,897,912	15,901,026	15,903,941	15,906,724		
Interest	8,781.99	10,174.25	8,594.17	6,283.75	4,631.97	4,302.37	4,303.53	3,642.44	3,113.34	2,915.19	2,783.19	2,651.12	62,177	427,084
Total	15,855,980	15,866,154	15,874,748	15,881,032	15,885,664	15,889,988	15,894,270	15,897,912	15,901,026	15,903,941	15,906,724	15,909,376		

Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D5 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	15,909,375	15,912,027	15,914,679	15,917,331	15,919,984	15,922,636	15,925,291	15,927,946	15,930,600	15,933,255	15,935,911	15,938,567	15,941,223	
Interest	2,651.58	2,652.00	2,652.45	2,652.89	2,653.33	2,653.77	2,654.22	2,654.66	2,655.10	2,655.54	2,655.99	2,656.43	31,845	458,932
Total	15,912,027	15,914,679	15,917,331	15,919,984	15,922,636	15,925,291	15,927,946	15,930,600	15,933,255	15,935,911	15,938,567	15,941,223		

Part	Purchased Power	Replacement Fuel Cost	Fuel Cost Not Incurred During Outage	Net Replacement Power Costs	Interest	Total Replacement Power Cost
a	390,605	7,255,107	321,213	7,324,499	217,116	7,541,615
b	390,605	11,153,594	504,914	11,039,285	327,231	11,366,516
c	390,605	14,524,194	712,161	14,202,637	421,000	14,623,637
d	390,605	18,422,681	895,863	17,917,423	531,115	18,448,538

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,629	94.69%
Light Oil	4,660	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	629	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,609	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[redacted]

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

Turkey Point 4	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	176	180	532	MWh	14	30,586	29,895	31,748	93,504	($)
15	282	321	302	559	MWh	15	46,324	63,912	53,267	96,250	($)
16	287	335	307	550	MWh	16	47,206	56,283	54,149	96,888	($)
17	270	338	308	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	556	MWh	18	48,800	58,279	53,796	96,250	($)
19	269	356	308	550	MWh	19	51,096	59,790	53,796	96,888	($)
20	292	357	308	550	MWh	20	51,829	59,958	54,325	96,888	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	56	72	13	112	MWh	22	10,432	12,092	2,263	19,685	($)
-	2,175	2,801	2,196	4,456	MWh	Total	384,562	438,836	387,883	763,187	($)
Heat Rate*	17.716	16.458	17.727	13.265	MMBtu/MWh	*Values based on Schedule A4					
Fuel Price*	9.86	10.21	9.95	13.25	$/MMBtu	*Values based on Schedule A4 and Exhibit GJY-5					
Production Cost	176.81	167.95	176.38	175.76							

Replacement Fuel Cost (Part A) Total 1,982,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost ($/KWh) * Gas percentage) + (Light Oil fuel cost ($/KWh) * Light Oil percentage) + (Heavy Oil fuel cost ($/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:
Gas fuel cost = 7.6047
Light Oil fuel cost = 17.6943
Heavy Oil fuel cost = 10.2873
Replacement fuel cost = [redacted] per MWh 40% gas/60% heavy oil

Based on A3 Schedule for March 2008:
Gas fuel cost = 7.8367
Light Oil fuel cost = 22.2013
Heavy Oil fuel cost = 10.1382
Replacement fuel cost = [redacted] per MWh 40% gas/60% heavy oil

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))
Energy to replace = 57,116 MWh
Replacement fuel cost = 5,282,837

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,558	4.98	29,191	142,311
TP3 March	0	0	4.94	0	0
TP4 February	5,858	28,558	4.35	25,482	124,229
TP4 March	0	0	4.33	0	0
Total	11,716	57,116		54,673	266,540

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power
= 7,324,499

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,826	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[redacted]

Total Turkey Point Unit 3 Outage 48
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

Turkey Point 4	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,588	29,895	31,748	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,267	98,250	($)
16	267	335	307	550	MWh	16	47,208	56,263	54,149	96,668	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	559	MWh	18	48,800	58,279	53,796	98,250	($)
19	259	356	305	560	MWh	19	51,098	59,790	53,796	98,668	($)
20	292	357	306	550	MWh	20	51,629	59,958	54,325	96,668	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	58	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,801	2,196	4,456	MWh	Total	384,562	436,836	387,663	783,187	($)
Heat Rate*	17.718	16.450	17.727	13.286	MMBtu/MWh						
Fuel Price*	9.88	10.21	9.95	13.25	$/MMBtu						
Production Cost	176.81	167.95	176.36	175.78							

*Values based on Schedule A4
*Values based on Schedule A4 and Exhibit GJY-5

Replacement Fuel Cost (Part A) Total **1,992,270**

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2006:

Gas fuel cost =	7.8047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	[redacted] per MWh	40% gas/60% heavy oil

Based on A3 Schedule for March 2006:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	[redacted] per MWh	40% gas/60% heavy oil

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	99,419 MWh
Replacement fuel cost =	9,161,324

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	28,556	4.98	29,191	142,311
TP3 March	0	0	4.94	0	0
TP4 February	5,858	53,531	4.35	25,482	232,862
TP4 March	0	17,330	4.33	0	75,068
Total	11,716	99,419		54,673	450,241

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= **11,039,295**

090505 Hearing Exhibits - 000302

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 34b
Attachment II, Page 1 of 1

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,826	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	826	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,806	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[redacted]

Total Turkey Point Unit 3 Outage 158
Total Turkey Point Unit 4 Outage 48

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

Turkey Point 4	
February Capacity	717
February Outage hours	[redacted]
March Capacity	717
March Outage hours	[redacted]

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,568	29,695	31,746	93,504	($)
15	262	321	302	559	MWh	15	46,324	53,912	53,267	98,250	($)
16	267	335	307	550	MWh	16	47,208	56,263	54,149	98,888	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	569	MWh	18	48,800	58,279	53,796	98,250	($)
19	289	356	305	550	MWh	19	51,099	59,790	53,796	98,888	($)
20	292	357	305	550	MWh	20	51,629	59,956	54,325	98,888	($)
21	287	287	169	485	MWh	21	50,744	48,661	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,601	2,196	4,466	MWh	Total	384,562	435,838	367,663	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.285	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.98	10.21	9.95	13.25	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.81	167.95	176.38	175.76							

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2006:

Gas fuel cost =	7.6047	
Light Oil fuel cost =	17.8943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	[redacted] per MWh	40% gas/60% heavy oil

Based on A3 Schedule for March 2006:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	[redacted] per MWh	40% gas/60% heavy oil

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	135,986 MWh
Replacement fuel cost =	12,531,924

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	4.98	29,191	266,757
TP3 March	0	53,897	4.94	0	266,503
TP4 February	5,858	28,558	4.36	25,482	124,228
TP4 March	0	0	4.33	0	0
Total	11,716	135,986		54,673	657,488

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 14,202,637

090505 Hearing Exhibits - 000303

Florida Power & Light Company
Docket No. 090505-EI
Staff's 1st Set of Interrogatories
Interrogatory No. 34c
Attachment II, Page 1 of 1

Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.69%
Light Oil	4,869	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	[redacted]8.17

Total Turkey Point Unit 3 Outage 156
Total Turkey Point Unit 4 Outage 107

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	[redacted]74.86
March Capacity	717
March Outage hours	[redacted]95.17

Turkey Point 4	
February Capacity	717
February Outage hours	[redacted]74.86
March Capacity	717
March Outage hours	[redacted]24.17

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident
Replacement Fuel Cost ($) = Site MWh * Site Production Cost ($/MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,588	29,895	31,748	93,504	($)
15	282	321	302	558	MWh	15	46,324	53,912	53,267	98,250	($)
16	297	335	307	550	MWh	16	47,208	56,283	54,149	96,666	($)
17	270	338	309	559	MWh	17	47,739	56,767	54,501	98,250	($)
18	276	347	305	550	MWh	18	48,800	58,279	53,798	96,250	($)
19	289	356	305	550	MWh	19	51,096	59,790	53,798	96,666	($)
20	292	357	308	550	MWh	20	51,629	59,958	54,325	96,666	($)
21	287	297	169	485	MWh	21	50,744	49,881	29,808	85,244	($)
22	59	72	13	112	MWh	22	10,432	12,092	2,293	19,685	($)
	2,175	2,601	2,196	4,496	MWh	Total	384,562	436,838	387,689	783,187	($)
Heat Rate*	17.716	16.450	17.727	13.265	MMBtu/MWh		*Values based on Schedule A4				
Fuel Price*	9.96	10.21	9.96	13.25	$/MMBtu		*Values based on Schedule A4 and Exhibit GJY-5				
Production Cost	176.81	167.95	176.38	175.78							

Replacement Fuel Cost (Part A) Total 1,992,270

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A
Replacement fuel cost ($/MWh) = {(Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage)}*10

Based on A3 Schedule for February 2008:

Gas fuel cost = 7.6047
Light Oil fuel cost = 17.8943
Heavy Oil fuel cost = 10.2873
Replacement fuel cost = [redacted] per MWh 40% gas/60% heavy oil

Based on A3 Schedule for March 2008:

Gas fuel cost = 7.6367
Light Oil fuel cost = 22.2013
Heavy Oil fuel cost = 10.1382
Replacement fuel cost = [redacted] per MWh 40% gas/60% heavy oil

Replacement Fuel Cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace = 176,289 MWh
Replacement fuel cost = 16,439,411

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)
Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Nuclear Avoided Cost ($/MWh)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,531	4.98	29,181	266,757
TP3 March	0	53,097	4.94	0	262,503
TP4 February	5,858	53,531	4.35	25,482	232,862
TP4 March	0	17,330	4.33	0	75,068
Total	11,716	176,289		54,673	841,190

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE
Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($) + Net Purchased Power

= 17,917,423

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.96000%	3.08000%	3.08000%	2.63000%	2.64000%	2.43000%	2.46000%	2.44000%	2.46000%	4.95000%	2.95000%	1.48000%	
Interest Rate - First Day Sub Bus Mo	3.08000%	3.08000%	2.63000%	2.64000%	2.43000%	2.45000%	2.44000%	2.46000%	4.95000%	2.95000%	1.48000%	0.54000%	
Total (Line D6 + Line D6)	8.08000%	6.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%	
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%	
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%	
Amount	-	7,324,466	7,333,914	7,351,383	7,368,148	7,384,328	7,399,342	7,414,419	7,429,525	7,452,433	7,476,864	7,490,796	
Interest		9,416.03	17,479.16	16,765.05	16,179.23	15,014.80	15,076.16	15,106.86	22,907.70	24,530.93	13,832.38	6,335.97	172,633	172,633
Total	-	7,333,914	7,351,393	7,368,148	7,384,328	7,399,342	7,414,419	7,429,525	7,452,433	7,476,864	7,490,796	7,497,132		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%	
Total (Line D6 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%	
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%	
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%	
Amount	7,497,132	7,501,287	7,506,100	7,510,166	7,513,139	7,516,330	7,517,366	7,519,402	7,521,125	7,522,598	7,523,977	7,525,294	
Interest	4,154.66	4,813.33	4,066.80	2,972.77	2,191.33	2,035.40	2,035.96	1,723.20	1,472.89	1,379.14	1,316.70	1,254.22	29,415	202,049
Total	7,501,287	7,506,100	7,510,166	7,513,139	7,515,330	7,517,366	7,519,402	7,521,125	7,522,598	7,523,977	7,525,294	7,526,548		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Total (Line D6 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	
Amount	7,526,548	7,527,802	7,529,057	7,530,312	7,531,567	7,532,822	7,534,077	7,535,333	7,536,589	7,537,845	7,539,101	7,540,358	
Interest	1,254.42	1,254.83	1,254.84	1,255.05	1,255.28	1,255.47	1,255.68	1,255.89	1,256.10	1,256.31	1,256.52	1,256.73	15,067	217,116
Total	7,527,802	7,529,057	7,530,312	7,531,567	7,532,822	7,534,077	7,535,333	7,536,589	7,537,845	7,539,101	7,540,358	7,541,615		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.86000%	3.06000%	3.06000%	2.63000%	2.84000%	2.43000%	2.46000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.06000%	3.06000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.45000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D6 + Line D6)	8.08000%	8.17000%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03800%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44500%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	11,039,286	11,053,475	11,079,819	11,105,072	11,129,457	11,152,087	11,174,809	11,197,578	11,232,104	11,269,076	11,289,924		
Interest		14,190.08	26,344.12	25,252.75	24,364.89	22,629.90	22,722.38	22,768.87	34,525.87	36,972.34	20,847.79	9,549.38	260,168	260,168
Total	-	11,053,475	11,079,819	11,105,072	11,129,457	11,152,087	11,174,809	11,197,578	11,232,104	11,269,076	11,289,924	11,299,473		
Interest Rate - First Day Rep Bus Mo	0.84000%	0.79000%	0.79000%	0.65000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.79000%	0.65000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D6 + Line D6)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	11,299,473	11,305,735	11,312,990	11,319,117	11,323,598	11,326,901	11,329,968	11,333,037	11,335,634	11,337,854	11,339,933	11,341,917		
Interest	6,261.79	7,254.51	6,127.97	4,480.48	3,302.72	3,067.70	3,068.53	2,597.18	2,219.89	2,078.61	1,984.49	1,880.32	44,334	304,522
Total	11,305,735	11,312,990	11,319,117	11,323,598	11,326,901	11,329,968	11,333,037	11,335,634	11,337,854	11,339,933	11,341,917	11,343,797		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D6 + Line D6)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	11,343,607	11,345,596	11,347,589	11,349,480	11,351,372	11,353,264	11,355,156	11,357,048	11,358,941	11,360,834	11,362,726	11,364,622		
Interest	1,890.63	1,990.95	1,991.26	1,991.58	1,991.90	1,992.21	1,992.53	1,992.84	1,993.16	1,993.47	1,993.79	1,994.10	22,708	327,231
Total	11,345,596	11,347,589	11,349,480	11,351,372	11,353,264	11,355,156	11,357,048	11,358,941	11,360,834	11,362,726	11,364,622	11,366,516		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.98000%	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44800%	2.45000%	4.95000%	2.95000%	1.49000%		
Interest Rate - First Day Sub Bus Mo	3.08000%	3.08000%	2.63000%	2.84000%	2.43000%	2.45000%	2.44000%	2.46000%	4.95000%	2.95000%	1.49000%	0.54000%		
Total (Line D5 + Line D6)	8.06000%	6.17080%	5.72000%	5.47000%	5.27000%	4.88000%	4.89000%	4.89000%	7.40000%	7.90000%	4.44000%	2.03000%		
Average Interest Rate (50% of Line D7)	4.03000%	3.08500%	2.86000%	2.73500%	2.63500%	2.44000%	2.44500%	2.44800%	3.70000%	3.95000%	2.22000%	1.01500%		
Monthly Average Interest Rate (Line D8 / 12	0.33583%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.32917%	0.18500%	0.08458%		
Amount	-	14,202,837	14,228,894	14,254,787	14,287,276	14,318,648	14,347,763	14,378,986	14,408,280	14,450,709	14,498,278	14,526,098		
Interest		18,256.31	33,883.13	32,488.03	31,372.48	29,114.58	29,233.57	29,293.13	44,419.39	47,568.82	26,821.81	12,285.81	334,746	334,746
Total	-	14,220,894	14,254,787	14,287,276	14,318,648	14,347,763	14,378,996	14,408,280	14,450,709	14,498,278	14,526,098	14,537,384		
Interest Rate - First Day Rep Bus Mo	0.54000%	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.79000%	0.75000%	0.55000%	0.40000%	0.30000%	0.35000%	0.30000%	0.25000%	0.22000%	0.22000%	0.20000%	0.20000%		
Total (Line D8 + Line D9)	1.33000%	1.54000%	1.30000%	0.95000%	0.70000%	0.65000%	0.65000%	0.55000%	0.47000%	0.44000%	0.42000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.66500%	0.77000%	0.65000%	0.47500%	0.35000%	0.32500%	0.32500%	0.27500%	0.23500%	0.22000%	0.21000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.05542%	0.06417%	0.05417%	0.03958%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%		
Amount	14,537,384	14,545,440	14,564,773	14,582,657	14,598,421	14,572,670	14,576,817	14,580,586	14,583,906	14,586,762	14,589,437	14,591,980		
Interest	8,056.13	8,333.32	7,883.54	5,764.38	4,249.12	3,946.78	3,947.63	3,341.36	2,856.01	2,674.24	2,553.15	2,432.00	57,038	391,784
Total	14,545,440	14,554,773	14,582,657	14,588,421	14,572,670	14,576,617	14,580,586	14,583,906	14,586,762	14,589,437	14,591,990	14,594,422		
Interest Rate - First Day Rep Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Interest Rate - First Day Sub Bus Mo	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Total (Line D8 + Line D9)	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%	0.40000%		
Average Interest Rate (50% of Line D7)	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%	0.20000%		
Monthly Average Interest Rate (Line D8 / 12	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%		
Amount	14,594,422	14,596,854	14,599,287	14,601,720	14,604,154	14,606,588	14,609,022	14,611,457	14,613,892	14,616,326	14,618,764	14,621,200		
Interest	2,432.40	2,432.81	2,433.21	2,433.62	2,434.03	2,434.43	2,434.84	2,435.24	2,435.65	2,436.05	2,436.46	2,436.87	29,216	421,000
Total	14,596,854	14,599,287	14,601,720	14,604,154	14,606,588	14,609,022	14,611,457	14,613,892	14,616,326	14,618,764	14,621,200	14,623,637		

Interest Calculation

Interest Rate - First Day Rep Bus Mo	4.980000%	3.080000%	3.080000%	2.630000%	2.640000%	2.430000%	2.460000%	2.440000%	2.460000%	4.980000%	2.880000%	1.480000%	
Interest Rate - First Day Sub Bus Mo	3.080000%	3.080000%	2.630000%	2.640000%	2.430000%	2.450000%	2.440000%	2.460000%	4.980000%	2.980000%	1.480000%	0.540000%	
Total (Line D5 + Line D6)	8.060000%	6.170000%	5.720000%	5.470000%	5.270000%	4.880000%	4.900000%	4.900000%	7.460000%	7.960000%	4.440000%	2.030000%	
Average Interest Rate (60% of Line D7)	4.836000%	3.702000%	3.432000%	3.282000%	3.162000%	2.928000%	2.940000%	2.940000%	4.476000%	4.776000%	2.664000%	1.218000%	
Monthly Average Interest Rate (Line D8 / 12)	0.33563%	0.25708%	0.23833%	0.22792%	0.21958%	0.20333%	0.20375%	0.20375%	0.30833%	0.33167%	0.18500%	0.08458%	
Amount	-	17,917,423	17,940,455	17,983,213	18,024,199	18,063,778	18,100,507	18,137,387	18,174,342	18,230,380	18,280,388	18,324,225	
Interest		23,031.35	42,758.09	40,998.74	39,578.14	36,729.68	36,879.78	36,954.89	56,037.56	50,008.33	33,837.22	15,488.24	422,301
Total	-	17,940,455	17,983,213	18,024,199	18,063,778	18,100,507	18,137,387	18,174,342	18,230,380	18,280,388	18,324,225	18,339,724	422,301

Interest Rate - First Day Rep Bus Mo	0.540000%	0.780000%	0.750000%	0.580000%	0.400000%	0.300000%	0.360000%	0.300000%	0.250000%	0.220000%	0.220000%	0.200000%	
Interest Rate - First Day Sub Bus Mo	0.780000%	0.750000%	0.580000%	0.400000%	0.300000%	0.360000%	0.300000%	0.250000%	0.220000%	0.220000%	0.200000%	0.200000%	
Total (Line D5 + Line D6)	1.320000%	1.540000%	1.330000%	0.980000%	0.700000%	0.660000%	0.660000%	0.550000%	0.470000%	0.440000%	0.420000%	0.400000%	
Average Interest Rate (60% of Line D7)	0.792000%	0.924000%	0.798000%	0.588000%	0.420000%	0.396000%	0.396000%	0.330000%	0.282000%	0.264000%	0.252000%	0.240000%	
Monthly Average Interest Rate (Line D8 / 12)	0.06542%	0.06417%	0.06417%	0.03658%	0.02917%	0.02708%	0.02708%	0.02292%	0.01958%	0.01833%	0.01750%	0.01667%	
Amount	18,338,724	18,349,866	18,361,662	18,371,608	18,378,880	18,384,241	18,389,220	18,394,200	18,398,415	18,402,018	18,405,392	18,408,613	
Interest	10,163.26	11,774.51	9,945.80	7,272.08	5,360.51	4,979.07	4,980.41	4,215.34	3,603.02	3,373.70	3,220.84	3,068.10	71,957
Total	18,349,866	18,361,662	18,371,608	18,378,880	18,384,241	18,389,220	18,394,200	18,398,415	18,402,018	18,405,392	18,408,613	18,411,681	484,258

Interest Rate - First Day Rep Bus Mo	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	
Interest Rate - First Day Sub Bus Mo	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	
Total (Line D5 + Line D6)	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	0.400000%	
Average Interest Rate (60% of Line D7)	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	0.200000%	
Monthly Average Interest Rate (Line D8 / 12)	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	0.01667%	
Amount	18,411,681	18,414,750	18,417,819	18,420,889	18,423,958	18,427,028	18,430,101	18,433,172	18,436,244	18,439,317	18,442,390	18,445,464	
Interest	3,068.61	3,069.12	3,069.64	3,070.15	3,070.66	3,071.17	3,071.68	3,072.20	3,072.71	3,073.22	3,073.73	3,074.24	36,857
Total	18,414,750	18,417,819	18,420,889	18,423,958	18,427,028	18,430,101	18,433,172	18,436,244	18,439,317	18,442,390	18,445,464	18,448,538	531,115

Q.

Please provide FPL's hourly net energy for load for each hour immediately following the Flagami Transmission Event until Turkey Point Unit 3 returned on-line.

A.

Please see Attachment I for FPL's hourly Net Energy for Load for the hour immediately following the event until Turkey Point Unit 3 returned to full power.

	Hour Ending														
Date	HR-1	HR-2	HR-3	HR-4	HR-5	HR-6	HR-7	HR-8	HR-9	HR-10	HR-11	HR-12	HR-13	HR-14	HR-15
2/26/2008														13,502	14,222
2/27/2008	9,720	8,942	8,517	8,255	8,265	8,839	10,275	11,032	11,369	11,641	11,760	11,686	11,531	11,214	10,953
2/28/2008	8,931	8,595	8,554	8,703	9,191	10,377	12,450	13,575	13,263	12,928	12,530	12,083	11,649	11,292	11,012
2/29/2008	9,366	9,043	8,981	9,021	9,234	10,229	12,002	12,702	12,260	11,805	11,704	11,518	11,386	11,240	11,081
3/1/2008	8,146	7,641	7,377	7,280	7,339	7,662	8,327	9,182	10,149	10,776	11,259	11,453	11,534	11,577	11,667
3/2/2008	8,213	7,609	7,271	7,165	7,183	7,347	7,749	8,435	9,637	10,585	11,167	11,521	11,725	11,878	11,949
3/3/2008	8,202	7,611	7,365	7,285	7,491	8,234	9,691	10,517	11,125	11,844	12,497	12,983	13,267	13,483	13,705
3/4/2008	9,127	8,464	8,103												

	Hour Ending								
Date	HR-16	HR-17	HR-18	HR-19	HR-20	HR-21	HR-22	HR-23	HR-24
2/26/2008	14,200	14,334	14,346	14,900	15,398	14,806	13,600	12,356	10,885
2/27/2008	10,895	10,955	11,265	12,305	12,740	12,273	11,623	10,672	9,624
2/28/2008	10,857	10,919	11,181	12,291	13,039	12,808	12,199	11,273	10,175
2/29/2008	11,046	11,037	11,080	11,698	12,002	11,518	10,853	9,991	9,014
3/1/2008	11,699	11,681	11,611	11,903	12,079	11,577	10,842	9,988	9,096
3/2/2008	12,017	12,016	11,938	12,295	12,710	12,204	11,319	10,301	9,089
3/3/2008	13,904	13,988	13,903	14,196	14,549	13,903	12,876	11,579	10,203
3/4/2008									

Q.

Following the initial identification of the Rod Position Indication system issue, when was FPL's next planned outage?

a. How long was the planned outage scheduled for?

b. What was the nature of the planned outage? Include in your response the purpose of the outage, the list of any repairs or maintenance items to be performed and the schedule for the performance of the repair or maintenance items.

c. How long did the planned outage actually last?

A.

The next planned outage at Turkey Point Unit 3 was the refueling outage scheduled to begin on March 16, 2009.

a. The March 2009 Turkey Point Unit 3 planned refueling outage was scheduled for 35 days. This duration was based on the Approved Operating Schedule dated February 27, 2009.

b. The main purpose of the March 2009 Turkey Point Unit 3 planned outage was to refuel the reactor. The work schedule for the March 2009 planned outage is provided in response to Interrogatory 4d.

c. The duration of the March 2009 Turkey Point Unit 3 planned outage was approximately 55 days.

Q.

How long did FPL's repair of the Rod Position Indication system take?

A.

The Rod Position Indication (RPI) System repair began on February 26, 2008 at 20:00 after the Equipment Clearance Order was issued. The RPI System repair was completed on March 3, 2008 at 01:59 when post maintenance testing was completed.

Q.

In October 2007, during a planned outage, the Rod Position Identification system problem was identified. How long did that 2007 planned outage last?

A.

The Turkey Point Unit 3 Fall 2007 refueling outage duration was approximately 44 days.

Q.

In response to Commission staff's discovery to Tampa Electric Company (TECO) in Docket No. 080001-EI, TECO identified additional replacement power costs it incurred as a result of the Flagami Transmission event. Has TECO requested that FPL reimburse TECO for those replacement power costs? If yes, what was the result of the request?

A.

TECO has not requested that FPL reimburse it for the additional replacement costs they incurred as a result of the Flagami Transmission Event.

Q.
What other utilities were impacted by the Flagami Transmission event?

A.
The following FRCC member utilities were impacted by the Flagami Transmission event. The term "impacted" refers to a loss of generation, a loss of load or both a loss of generation and a loss of load. In addition, Keys Energy Services experienced a loss of load due to a transmission outage of their only tie to Florida Keys Electric Cooperative, which occurred as a result of the Flagami Transmission event.

Progress Energy Florida
Tampa Electric Company
Seminole Electric Cooperative
Florida Keys Electric Cooperative
Lakeland Electric
Orlando Utilities Commission
Gainesville Regional Utilities
Reedy Creek Improvement District
Kissimmee Utility Authority
New Smyrna Beach
Homestead Energy Services
JEA
Keys Energy Services
Ocala Utility Services
Lee County Electric Cooperative
City of Vero Beach
Fort Pierce Utilities Authority

Q.

Have any of the utilities listed in response to interrogatory 40, sought recovery from FPL for costs associated with the Flagami Transmission event? If yes, please list the utilities and the outcome of any discussion, settlement or litigation.

A.

None of the utilities impacted by the Flagami Transmission Event have sought recovery from FPL for costs associated with the Flagami Transmission Event.

Q.

Please provide a production costing simulation comparing FPL's system, assuming no unit outages from the Flagami Transmission Event, with the following scenarios:

a. Total outage time attributable to Event = 48 Hours
Outage time for Turkey Point Unit 3 attributable to the event = 48 Hours
Outage time for Turkey Point Unit 4 attributable to the event = 48 Hours

b. Total outage time attributable to Event = 107 Hours
Outage time for Turkey Point Unit 3 attributable to the event = 48 Hours
Outage time for Turkey Point Unit 4 attributable to the event = 107 Hours

c. Total outage time attributable to Event = 158 Hours
Outage time for Turkey Point Unit 3 attributable to the event = 158 Hours
Outage time for Turkey Point Unit 4 attributable to the event = 48 Hours

d. Total outage time attributable to Event = 158 Hours
Outage time for Turkey Point Unit 3 attributable to the event = 158 Hours
Outage time for Turkey Point Unit 4 attributable to the event = 107 Hours

A.

Please see Attachment I.

Case	Total Production Cost (Model Output)	Production Cost Change	Purchased Power Cost	Replacement Power Cost (RPC)
Base	$86,293,334	$0	$0	0$
42a	$92,004,193	$5,710,859	$885,935	$6,596,794
42b	$94,507,007	$8,213,673	$885,935	$9,099,608
42c	$96,798,310	$10,504,976	$885,935	$11,390,911
42d	$99,964,935	$13,671,601	$885,935	$14,557,536

Assumptions:

1. Modeling includes actual load, actual unit initial conditions and actual fuel prices.
2. Modeling includes actual net interchange for the study horizon. Note: For the Base Case, actual interchange was adjusted to remove power purchased in response to the event. Additionally, existing purchases on 2/26 were modified to reflect estimates of volumes that would have been purchased absent the event from 14:00 through the end of the day.
3. Cases involving 48 hours outage duration assume nuclear unit(s) off for full 48 hours. Power ascension occurs after 48 hours modeled as per actual ascension following the event for each respective unit.
4. Cases involving either 158 hours outage duration for Turkey Point Unit 3 or 107 hours outage duration for Turkey Point Unit 4 include power ascension within outage duration time frame for that particular unit (per actual ascension following event).

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF MIAMI- DADE)

I hereby certify that on this 1st day of March, 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared Gloria L. Lopez, who is personally known to me, and acknowledged before me that she provided the answers to interrogatory numbers 1 and 2 and co-sponsored interrogatory numbers 33 and 34 from STAFF'S FIRST SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 42) in Docket No(s). 090505-EI, and that the responses are true and correct based on her personal knowledge.

Gloria L. Lopez

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 1st day of March, 2010.

Notary Public
State of Florida, at Large

My Commission Expires:

MARILU ROJAS
Notary Public - State of Florida
My Commission Expires Jan 7, 2011
Commission # DD 627141

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF PALM BEACH)

I hereby certify that on this 1st day of March 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared Gerard J. Yupp, who is personally known to me, and acknowledged before me that he provided the answers to interrogatory numbers 3, 7, 15, 16, 18 through 20, 26 through 34 and 42 from STAFF'S FIRST SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 42) in Docket No(s). 090505-EI, and that the responses are true and correct based on his personal knowledge.

Gerard J. Yupp

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 1st day of March 2010.

Notary Public
State of Florida, at Large

MARITZA MIRANDA-WISE
MY COMMISSION # DD 870958
EXPIRES: May 30, 2013
Bonded Thru Notary Public Underwriters

My Commission Expires:
5/30/2013

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF PALM BEACH)

I hereby certify that on this 24th day of FEB., 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared J.A. Stall, who is personally known to me, and acknowledged before me that he provided the answers to interrogatory numbers 4 through 6, 8 through 14, 25, and 36 through 38 from STAFF'S FIRST SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 42) in Docket No(s). 090505-EI, and that the responses are true and correct based on his personal knowledge.

J. A. Stall

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 24th day of Feb, 2010.

Notary Public
State of Florida, at Large

My Commission Expires:

ELSA M. AKIN
MY COMMISSION # DD 711823
EXPIRES: October 12, 2011
Bonded Thru Notary Public Underwriters

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF MIAMI- DADE)

I hereby certify that on this 1st day of March 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally Terry J. Keith, who is personally known to me, and acknowledged before me that he provided the answer to interrogatory number 17 from STAFF'S FIRST SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 42) in Docket No(s). 090505-EI, and that the response is true and correct based on his personal knowledge.

Terry J. Keith

Terry J. Keith

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 1st day of March 2010.

Notary Public
State of Florida, at Large

My Commission Expires:

MARILU ROJAS
Notary Public - State of Florida
My Commission Expires Jan 7, 20[illegible]
Commission # DD 6[illegible]

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF WEST PALM BEACH)

I hereby certify that on this 23 day of FEBRUARY, 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared Rosemary Morley, who is personally known to me, and acknowledged before me that she provided the answers to interrogatory numbers 21 through 24, and 35 from STAFF'S FIRST SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 42) in Docket No(s). 090505-EI, and that the responses are true and correct based on her personal knowledge.

Rosemary Morley

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 23 day of February, 2010.

NOTARY PUBLIC - STATE OF FLORIDA
Janet L. Ervin
Commission # DD651458
Expires: APR. 25, 2011
BONDED THRU ATLANTIC BONDING CO., INC.

Notary Public
State of Florida, at Large

My Commission Expires:
April 25, ~~2010~~ 2011

28

FPL's Responses to Staff's Second Set of Interrogatories (Nos. 43-55)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 28
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 28
DATE 03/17/10

Q.

On page 3 (Bates Stamp No. FPL-FI-10-85), of FPL's response to OPC's production of documents request No. 33, it is indicated that the manual trip at Turkey Point Unit 4 delayed start up of both Turkey Point Nuclear Units by approximately 30 hours. Given this statement, would the total outage time for Turkey Point Unit 3 have been 128 hours (158-30=128) if Turkey Point Unit 4 was not manually tripped?

A.

FPL cannot state with certainty that the total outage time for Turkey Point Unit 3 would have been 30 hours less than the actual outage time in a hypothetical case where the restart of Turkey Point Unit 4 was not delayed by 30 hours. This is a hypothetical question and the actual restart time for Turkey Point Unit 3 in such a hypothetical scenario would be dependent on a number of factors. It is impossible to create a hypothetical scenario that models all of the factors that would be required to definitively answer this question.

Q.

In responding to Interrogatory 44, please refer to page 12 (Bates Stamp No. FPL-FI-10-94), of FPL's response to OPC's production of documents request No. 33.

In Table 1, in the column labeled "Comments" it is noted that Less than 3 minutes into the ramp load was decreased from 37 MWe to 17 MWe due to maintain Tavg/Tref mismatch within specifications.

Did a similar event occur during the 02/29/08 event?

A.

FPL's response assumes that the word "event" Interrogatory 44 is referring to the Turkey Point Unit 4 manual reactor trip on high steam generator water level that occurred on February 29, 2008. A similar issue did not occur during the February 29, 2008 Turkey Point Unit 4 manual reactor trip.

Q.

On page 14 (Bates Stamp No. FPL-FI-10-96), of FPL's response to OPC's production of documents request No. 33, it is indicated that the operating crew did not load the main generator at the same rate as practiced in the Just-in-Time Training. If the operating crew loaded the main generator at the same rate as practiced in the Just-in-Time Training, does FPL believe a manual trip due to the steam generator level would have occurred?

A.

FPL cannot not state with certainty that a reactor trip would have been avoided assuming that the crew that was operating Turkey Point Unit 4 during the attempted plant startup on February 29, 2008 had loaded the main generator at exactly the same rate as practiced in the Just-in-Time Training. The simulator does not precisely replicate the plant as designed. While the simulator model of reactor core conditions is relatively robust, the simulator software package is not fully able to precisely replicate all secondary side plant conditions (e.g., ambient conditions, cooling canal temperatures). In any event, it should be noted that using a slower main generator loading rate also poses other risks attendant to the plant being in a manual feedwater control state.

Q.
Please complete the table below, in a manner like the table on page 12 (Bates Stamp No. FPL-FI-10-94), of FPL's response to OPC's production of documents request No. 33, describing the last 10 "Hot Standby to Power Operation" startups at FPL's Turkey Point Units 3 and 4. Please include the 2/29/08 startup.

Startup Date	Time to 40 MWe	Comments

A.
Please see Attachment I.

Last 10 "Hot Standby to Power Operation" Startups at FPL's Turkey Point Units 3 and 4

	Unit	Startup Date	Time to 40 MWe	Comments
1	3	10/16/2007	0:06:11	3-23 RFO
2	3	3/3/2008	0:16:09	Loss of Switchyard
3	4	3/1/2008	0:08:11	Loss of Switchyard
4	4	5/11/2008	0:23:11	4-24 RFO
5	3	6/28/2008	0:57:46	#9 bearing
6	4	8/23/2008	0:22:33	SNC seal inj leak
7	4	10/14/2008	0:17:22	SNC #2 TCV
8	3	5/9/2009	0:47:10	#3 control valve
9	4	12/4/2009	0:08:08	4-25 RFO
10	4	1/14/2010	0:08:17	heater drain pump/4A SGFP

hummss

Successful Startups

Startup

1		2		3		4		5		6 **		7		8		9		10	
Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW	Relative Time	MW
0:00:00	-0.08158836	0:00:00	-0.26065	0:00:00	-0.05471	0:00:00	-0.42995	0:00:00	-0.66991	0:00:00	8.076671	0:00:00	-0.39801	0:00:00	-0.07173	0:00:00	-0.09615	0:00:00	-0.39327
0:00:36	3.568029415	0:00:36	2.982281	0:00:36	4.085448	0:00:36	11.68146	0:00:36	3.372211	0:00:36	9.428124	0:00:36	4.310384	0:00:36	5.86174	0:00:36	10.57426	0:00:36	9.371368
0:01:12	13.9844582	0:01:12	4.714379	0:01:12	7.727676	0:01:12	4.175031	0:01:12	10.70452	0:01:12	10.80196	0:01:12	9.23572	0:01:12	6.09168	0:01:12	16.39151	0:01:12	10.60894
0:01:48	32.22490638	0:01:48	9.064182	0:01:48	12.60498	0:01:48	5.886343	0:01:48	11.70449	0:01:48	12.17579	0:01:48	10.40065	0:01:48	10.94749	0:01:48	15.02306	0:01:48	11.22442
0:02:24	35.33471298	0:02:24	16.2149	0:02:24	17.02987	0:02:24	13.95985	0:02:24	11.39944	0:02:24	13.54662	0:02:24	12.17592	0:02:24	11.36901	0:02:24	17.53465	0:02:24	11.53195
0:03:00	35.18680573	0:03:00	19.0837	0:03:00	20.76052	0:03:00	11.27934	0:03:00	12.96381	0:03:00	14.92345	0:03:00	15.84266	0:03:00	11.58745	0:03:00	17.31017	0:03:00	11.52594
0:03:36	17.98949242	0:03:36	20.54685	0:03:36	23.90488	0:03:36	14.62508	0:03:36	12.98248	0:03:36	16.28728	0:03:36	17.91754	0:03:36	11.25682	0:03:36	17.4478	0:03:36	11.7969
0:04:12	19.7814864	0:04:12	21.33684	0:04:12	27.70794	0:04:12	14.9656	0:04:12	12.2198	0:04:12	17.67111	0:04:12	19.04284	0:04:12	10.51271	0:04:12	17.57053	0:04:12	10.93773
0:04:48	28.65899005	0:04:48	21.5961	0:04:48	35.19601	0:04:48	21.94096	0:04:48	11.42634	0:04:48	19.04495	0:04:48	20.2444	0:04:48	9.794537	0:04:48	26.30279	0:04:48	19.18745
0:05:24	26.97144127	0:05:24	27.04658	0:05:24	36.37513	0:05:24	23.23828	0:05:24	11.03029	0:05:24	20.41878	0:05:24	20.65743	0:05:24	9.15551	0:05:24	27.75983	0:05:24	20.09616
0:06:00	36.46564102	0:06:00	27.77511	0:06:00	35.96504	0:06:00	19.54547	0:06:00	10.90439	0:06:00	21.78281	0:06:00	22.24589	0:06:00	9.480128	0:06:00	38.46853	0:06:00	21.52412
0:06:36	42.35737991	0:06:36	27.80643	0:06:36	37.38692	0:06:36	20.72944	0:06:36	11.66892	0:06:36	23.16644	0:06:36	26.62347	0:06:36	9.489895	0:06:36	41.64035	0:06:36	22.57033
0:07:12	42.75336745	0:07:12	29.22804	0:07:12	39.41108	0:07:12	19.25861	0:07:12	12.66218	0:07:12	24.54027	0:07:12	30.06814	0:07:12	10.02282	0:07:12	42.7247	0:07:12	26.59371
0:07:48	42.76793671	0:07:48	29.17676	0:07:48	39.30996	0:07:48	14.74157	0:07:48	13.95261	0:07:48	25.9141	0:07:48	33.64561	0:07:48	9.452058	0:07:48	43.80096	0:07:48	33.44839
0:08:24	42.36350891	0:08:24	28.631	0:08:24	41.12791	0:08:24	15.74666	0:08:24	15.66528	0:08:24	27.28794	0:08:24	33.61393	0:08:24	14.45459	0:08:24	45.3978	0:08:24	44.58564
0:09:00	43.49070358	0:09:00	28.34912	0:09:00	40.77705	0:09:00	19.99033	0:09:00	16.1958	0:09:00	28.66177	0:09:00	35.17454	0:09:00	18.07304	0:09:00	45.20139	0:09:00	49.53586
0:09:36	44.8378473	0:09:36	28.87597	0:09:36	42.47163	0:09:36	31.16803	0:09:36	16.87036	0:09:36	30.0356	0:09:36	36.22723	0:09:36	18.92389	0:09:36	46.83039	0:09:36	49.06103
0:10:12	43.4693718	0:10:12	28.55443	0:10:12	44.69686	0:10:12	29.98852	0:10:12	17.03945	0:10:12	31.40943	0:10:12	35.59104	0:10:12	19.47623	0:10:12	45.39671	0:10:12	42.11075
0:10:48	46.7163876	0:10:48	28.66047	0:10:48	43.21128	0:10:48	36.34033	0:10:48	17.0566	0:10:48	32.78326	0:10:48	35.4115	0:10:48	19.89508	0:10:48	44.98214	0:10:48	38.95283
0:11:24	51.12312317	0:11:24	28.65532	0:11:24	42.40874	0:11:24	28.25216	0:11:24	17.41753	0:11:24	34.15709	0:11:24	33.60779	0:11:24	19.38822	0:11:24	58.15415	0:11:24	38.50945
0:12:00	54.22851563	0:12:00	28.48668	0:12:00	41.63684	0:12:00	27.97931	0:12:00	16.59483	0:12:00	35.53093	0:12:00	33.10541	0:12:00	19.61019	0:12:00	60.22452	0:12:00	40.70365
0:12:36	63.91413116	0:12:36	28.61052	0:12:36	43.40902	0:12:36	25.84036	0:12:36	16.38585	0:12:36	36.90476	0:12:36	33.8887	0:12:36	21.62603	0:12:36	61.22403	0:12:36	42.33635
0:13:12	70.61418915	0:13:12	29.48424	0:13:12	45.61083	0:13:12	26.49039	0:13:12	16.98224	0:13:12	36.27859	0:13:12	35.67513	0:13:12	21.81609	0:13:12	59.28006	0:13:12	42.69334
0:13:48	75.2705476	0:13:48	31.22072	0:13:48	46.43645	0:13:48	25.22143	0:13:48	17.6469	0:13:48	39.85242	0:13:48	36.00503	0:13:48	21.88339	0:13:48	57.63102	0:13:48	41.49995
0:14:24	79.0579834	0:14:24	32.97351	0:14:24	46.91093	0:14:24	30.62925	0:14:24	15.98522	0:14:24	39.79069	0:14:24	38.12671	0:14:24	22.23056	0:14:24	57.34883	0:14:24	50.23562
0:15:00	79.16913605	0:15:00	34.60394	0:15:00	45.3294	0:15:00	29.29437	0:15:00	15.88093	0:15:00	37.85841	0:15:00	38.80417	0:15:00	21.78377	0:15:00	57.76411	0:15:00	51.93809
0:15:36	85.56483459	0:15:36	38.4493	0:15:36	43.20446	0:15:36	29.79803	0:15:36	15.94568	0:15:36	35.92613	0:15:36	38.76748	0:15:36	22.18698	0:15:36	58.8229	0:15:36	53.1562
0:16:12	90.28829193	0:16:12	41.35125	0:16:12	45.26114	0:16:12	31.08714	0:16:12	14.62916	0:16:12	35.09366	0:16:12	38.93613	0:16:12	23.9298	0:16:12	58.15919	0:16:12	55.58364
0:16:48	88.79928046	0:16:48	43.39216	0:16:48	49.20414	0:16:48	31.6102	0:16:48	15.59036	0:16:48	35.49671	0:16:48	39.39105	0:16:48	25.37065	0:16:48	62.7372	0:16:48	54.87422
0:17:24	87.87450714	0:17:24	46.18819	0:17:24	51.49844	0:17:24	29.89822	0:17:24	15	0:17:24	35.89976	0:17:24	40.90395	0:17:24	24.08972	0:17:24	73.81411	0:17:24	54.1075
0:18:00	93.26831055	0:18:00	50.30703	0:18:00	53.85953	0:18:00	29.46703	0:18:00	14.97401	0:18:00	36.30281	0:18:00	36.89087	0:18:00	24.07919	0:18:00	78.04659	0:18:00	54.1134

**Unit placed online at 10:23 PM according to control room logs

090505 Hearing Exhibits - 000330

Florida Power & Light Company
Docket No. 090505-EI
Staff's 2nd Set of Interrogatories
Interrogatory No. 46
Attachment I, Page 1 of 1

Q.

Please complete the table below, in a manner like the table on page 12 (Bates Stamp No. FPL-FI-10-94), of FPL's response to OPC's production of documents request No. 33, describing the last 3 unsuccessful "Hot Standby to Power Operation" startups at FPL's Turkey Point Units 3 and 4. Please include the 2/29/08 startup.

Startup Date	Time to 40 MWe	Comments

A.

Please see Attachment I.

Last 3 Uncuccessful "Hot Standby to Power Operation" Startups at FPL's Turkey Point Units 3 and 4

	Unit		Startup Dat	Time to 40 MWe	Comments
1		4	2/29/2008	N/A	Manual Trip due to high SGWL
2		4	2/28/2008	N/A	Turbine Trip on Reverse power
3		4	3/24/2005	No data Available	Rx Shutdown due to Oil leak on 4B SGFP after SNO for 4B SGFP Motor Fault

h:mm:ss

Unsuccesfull Startups

Startup	1		2		3	
	Relative Time	MW	Relative Time	MW	Relative Time	MW
	0:00:00	N/A	0:00:00	N/A	0:00:00	N/A
	0:00:36	N/A	0:00:36	N/A	0:00:36	N/A
	0:01:12	N/A	0:01:12	N/A	0:01:12	N/A
	0:01:48	N/A	0:01:48	N/A	0:01:48	N/A
	0:02:24	N/A	0:02:24	N/A	0:02:24	N/A
	0:03:00	N/A	0:03:00	N/A	0:03:00	N/A
	0:03:36	N/A	0:03:36	N/A	0:03:36	N/A
	0:04:12	N/A	0:04:12	N/A	0:04:12	N/A
	0:04:48	N/A	0:04:48	N/A	0:04:48	N/A
	0:05:24	N/A	0:05:24	N/A	0:05:24	N/A
	0:06:00	N/A	0:06:00	N/A	0:06:00	N/A
	0:06:36	N/A	0:06:36	N/A	0:06:36	N/A
	0:07:12	N/A	0:07:12	N/A	0:07:12	N/A
	0:07:48	N/A	0:07:48	N/A	0:07:48	N/A
	0:08:24	N/A	0:08:24	N/A	0:08:24	N/A
	0:09:00	N/A	0:09:00	N/A	0:09:00	N/A
	0:09:36	N/A	0:09:36	N/A	0:09:36	N/A
	0:10:12	N/A	0:10:12	N/A	0:10:12	N/A
	0:10:48	N/A	0:10:48	N/A	0:10:48	N/A
	0:11:24	N/A	0:11:24	N/A	0:11:24	N/A
	0:12:00	N/A	0:12:00	N/A	0:12:00	N/A
	0:12:36	N/A	0:12:36	N/A	0:12:36	N/A
	0:13:12	N/A	0:13:12	N/A	0:13:12	N/A
	0:13:48	N/A	0:13:48	N/A	0:13:48	N/A
	0:14:24	N/A	0:14:24	N/A	0:14:24	N/A
	0:15:00	N/A	0:15:00	N/A	0:15:00	N/A
	0:15:36	N/A	0:15:36	N/A	0:15:36	N/A
	0:16:12	N/A	0:16:12	N/A	0:16:12	N/A
	0:16:48	N/A	0:16:48	N/A	0:16:48	N/A
	0:17:24	N/A	0:17:24	N/A	0:17:24	N/A
	0:18:00	N/A	0:18:00	N/A	0:18:00	N/A

Q.

On page 4 (Bates Stamp No. FPL-FI-10-86), of FPL's response to OPC's production of documents request No. 33, it is indicated that the abnormally fast generator loading that was implemented by the operating crew exacerbated steam generator level fluctuations. Why was "abnormally" fast generator loading being implemented?

A.

As indicated in the Root Cause Report (Bates No. FPL-FI-10-96), the root cause of the generator loading rate used during the February 29, 2008 restart of Turkey Point Unit 4 was the lack of detailed guidance for initial loading of the main generator, prescribed ramp rates, and stabilizing power while transferring to automatic feed regulating valve control. However, as noted by FPL witness J.A. Stall in his deposition, there is a trade-off between increasing the loading more rapidly, which increases the risk of water-level fluctuations, and increasing the loading more slowly, which leaves control of the valves that determine the water level in a vulnerable, manual mode for a longer period of time. As a result of this trade-off, there is no clear-cut "correct" answer to the question of how rapidly the main generator should be loaded. Nonetheless, in the aftermath of the February 29, 2008 restart of Turkey Point Unit 4, FPL has determined that the greater risk arises from a loading rate that is too high and has provided additional guidance on the initial loading.

Q.

On page 6 (Bates Stamp No. FPL-FI-10-88), of FPL's response to OPC's production of documents request No. 33, it is indicated that all members of the operating crew scheduled to perform the actual plant evolution from hot standby to power operation did not attend the Just-in-Time Training. Please explain why not. How many times in the past 10 years have all members of the operating crew scheduled to perform the actual plant evolution from hot standby to power operation not attend the Just-in-Time Training?

A.

All members of the operating crew scheduled to perform the actual plant evolution from hot standby to power operation for the restart of Turkey Point Unit 4 after the Flagami Transmission Event did not attend the Just-in-Time Training due to shift manning requirements. The U.S. Nuclear Regulatory Commission imposes work hour restrictions on operations employees, and with both Turkey Point units shut down staffing resources were limited such that it would not have been possible to both (1) have all of the relevant members of the operating crew attend the Just-in-Time Training and (2) maintain the necessary complement of personnel to meet other staffing requirements. FPL is not required to, and does not, maintain records sufficient to determine the answer to the second question included in Interrogatory 49.

Q.
Was procedure 4-GOP-301 developed by FPL?

A.
Procedure 4-GOP-301 was developed by FPL.

Q.
What would be the bill impact on a residential bill of 1,000 kWh for the following scenarios:

a. A one time refund of $2,024,035 refunded in the manner proposed by witness Keith (in responding to this interrogatory, refer to page 2 of witness Keith's testimony).

b. A one time refund of $15,974,055 refunded in the manner proposed by witness Keith (in responding to this interrogatory, refer to page 2 of witness Keith's testimony).

c. A one time refund of $2,024,035 refunded through in the manner proposed by witness Keith (in responding to this interrogatory, please refer to page 1, lines 20-22 of witness Keith's testimony).

d. A refund of $15,974,055 refunded through in the manner proposed by witness Keith (in responding to this interrogatory, please refer to page 1 Lines 20-22 of witness Keith's testimony).

A.
a. The estimated impact on the June 2010 residential 1,000 kWh bill based on a one-time refund of $2,024,035 is $0.23, excluding GRT. Estimated interest was calculated from February 2008 through May 2010.

b. The estimated impact on the June 2010 residential 1,000 kWh bill based on a one-time refund of $15,974,055 is $1.81, excluding GRT. Estimated interest was calculated from February 2008 through May 2010.

c. FPL believes that the most appropriate method to refund customers the replacement power costs resulting from the Flagami Transmission Event, as discussed on page 1, lines 20-22 of witness Keith's direct testimony filed on January 13, 2010, is to reflect the refund in the 2010 net true-up, which would reduce 2011 fuel factors for all customers. This method would not provide customers with a one-time refund. The estimated impact of $2,024,035 on a 1,000 kWh residential bill for January through December 2011 would be $0.02. Estimated interest was calculated from February 2008 through December 2010.

d. FPL believes that the most appropriate method to refund customers the replacement power costs resulting from the Flagami Transmission Event, as discussed on page 1, lines 20-22 of witness Keith's direct testimony filed on January 13, 2010, is to reflect the refund in the 2010 net true-up, which would reduce 2011 fuel factors for all customers. This method would not provide customers with a one-time refund. The estimated impact of $15,974,055 on a 1,000 kWh residential bill for January through December 2011 would be $0.16. Estimated interest was calculated from February 2008 through December 2010.

Q.
What would be the bill impact on a residential bill of 1,000 kWh for each $1,000,000 refunded to the customer assuming a one-time refund in the manner proposed by witness Keith on page 2 of his testimony.

A.
The estimated bill impact on the June 2010 residential 1000 kWh bill for each $1,000,000 refunded is $0.11. Estimated interest was calculated from February 2008 through May 2010.

Q.

What would be the bill impact on a residential bill of 1,000 kWh for each $1,000,000 refunded to the customer assuming the refund method proposed by witness Keith on page 1 of his testimony.

A.

The estimated bill impact on a residential 1000 kWh bill for each $1,000,000 refunded is $0.01. Estimated interest was calculated from February 2008 through December 2010.

Q.

Please provide a breakdown of FPL's costs used to derive the $70,000 cost of implementing a one-time refund as discussed on page 2 at line 15 of witness Keith's testimony.

A.

Please see Attachment I for cost breakdown.

Breakdown by Component	Description of Component	IM - Man Day Effort (development [1] and system testing) [2]	$$ per Man day	Billing Projects and Support - Man Day Effort (system testing)[2]	$$ per Man Day	Total Effort
Selection Program	This program identifies customers that qualify for a refund. It ensures that the billing period is within the specifications of the refund order	16	$ 300	22	$ 280	$ 10,960
Refund Calculation Program	This program retrieves the current kWh consumption to be billed for each account and calculates the refund including applicable taxes and fees. This program also books financial transactions in the General Ledger as well as populates all refund control reports	26	$ 300	20	$ 280	$ 13,400
Implementation and support of refund programs	Schedule programs to be executed daily during the Billing program schedule. In addition, these programs take significant computer resources and time and must be monitored for successful completion daily. Any exceptions identified need to be corrected and reposted to assure that all qualified customers receive a refund	60	$ 300	100	$ 280	$ 46,000

[1] DEVELOPMENT

- Dates for selection and qualification of customers are entered in the system -Refund factor is developed and entered in the system -Minimum total kWh consumption to qualify for a refund is entered in the system -A new customer bill statement message is developed and entered in the system.
- Update to Interactive Voice Respond (IVR) and toll free number customer messages to answer inquiries pertaining to the refund are performed.
- New General ledger accounts need to be implemented to uniquely account for refund dollars. This includes modification to financial reports.

[2] SYSTEM TESTING

Verification that all customers who qualify based on the order receive a refund and that no customer who does not qualify receives a refund -Verification of refund calculation accuracy to include:

- all rates(tariffs)
- 232 taxing authorities including different taxing methodologies and tax exemptions
-sampling of calculation for a range of consumption differences
-correction of refund amount for rebilling or cancelations during the refund period
- Verification on CIS II online screens displaying customer refund/bill information -Verification that corrections for billing period that refund is based on triggers a correction to the refund -Verification of financial reporting and General ledger balancing

Q.

Does FPL believe, regardless of the type of unit(s) affected, replacement power costs should always be calculated based on a system average cost? Please explain answer.

A.

Yes, when the outage is transmission-created and there is no imprudence in the operation of the units affected. In this way the transmission-related costs are separated from the generation-related costs and the impact on fuel costs is normalized for the type of units that happened to be affected by the transmission outage.

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF PALM BEACH)

I hereby certify that on this 8th day of March, 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared J.A. Stall, who is personally known to me, and acknowledged before me that he provided the answers to interrogatory numbers 43 through 50, 56 and 57 from STAFF'S SECOND SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 43 - 57) in Docket No(s). 090505-EI, and that the responses are true and correct based on his personal knowledge.

J.A. Stall

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 8th day of March, 2010.

Notary Public
State of Florida, at Large

ELSA M. AKIN
MY COMMISSION # DD 711923
EXPIRES: October 12, 2011
Bonded Thru Notary Public Underwriters

My Commission Expires:

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF MIAMI- DADE)

I hereby certify that on this 7th day of March 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally Terry J. Keith, who is personally known to me, and acknowledged before me that he provided the answers to interrogatory numbers 51 through 53 from STAFF'S SECOND SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 43 -57) in Docket No(s). 090505-EI, and that the responses are true and correct based on his personal knowledge.

Terry J. Keith

Terry J. Keith

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 8th day of March, 2010.

Notary Public
State of Florida, at Large

My Commission Expires:

MARILU ROJAS
Notary Public - State of Florida
My Commission Expires Jan 7, 2011
Commission # DD 627141

AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF MIAMI- DADE)

I hereby certify that on this 8th day of March, 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared Martha Gonzalez, who is personally known to me, and she acknowledged before me that she provided the answer to interrogatory number 54 from STAFF'S SECOND SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 43 - 57) in Docket No(s). 090505-EI, and that the response is true and correct based on her personal knowledge.

Martha Gonzalez

Martha Gonzalez

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 8th day of March, 2010.

Notary Public
State of Florida, at Large

My Commission Expires:

MARILU ROJAS
Notary Public - State of Florida
My Commission Expires Jan 7, 2011
Commission # DD 627141

AFFIDAVIT

STATE OF TEXAS)

COUNTY OF TRAVIS)

I hereby certify that on this 4th day of March, 2010, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared William Avera, who is personally known to me, and acknowledged before me that he provided the answer to interrogatory number 55 from STAFF'S SECOND SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 43 - 57) in Docket No(s). 090505-EI, and that the response is true and correct based on his personal knowledge.

William Avera

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 4th day of March, 2010.

Notary Public

My Commission Expires:
1/10/2011

ADRIEN MCKENZIE
Notary Public
STATE OF TEXAS
My Comm Exp. Jan. 10, 2011

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OPC's Responses to Staff's First Set of Interrogatories (Nos. 1-2)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 29
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 29
DATE 03/17/10

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Review of Replacement Fuel Costs Associated with the February 26, 2008 outage On Florida Power & Light's electrical system	Docket No. 090505-EI Filed March 8, 2010

CITIZENS' RESPONSES TO STAFF'S FIRST SET OF INTERROGATORIES TO THE OFFICE OF PUBLIC COUNSEL

The Citizens of Florida (Citizens), through the Office of Public Counsel, file these responses to Staff's First Set of Interrogatories to the Office of Public Counsel.

Interrogatory 1. Please explain how the "Average Nuclear Production Cost Avoided ($/MWh)" value of $4.68, in Exhibit DED-8 (page 3 of 3) was developed.

Response:

The Average Nuclear Production Cost Avoided value of $4.68 is calculated as the total February Fuel Cost Not Incurred ($502,400) divided by the total February Not Incurred Generation (107,311 MWh).

Interrogatory 2. Please refer to Exhibit DED-8 for the following question. On page 1 of 3 OPC calculates a "Net Peak Replacement Generation Cost" based on 11,472 MWh of generation from Turkey Point Units 3 and 4, and 11,430 MWh of generation from replacement generation. On page 3 of 3 OPC appears to calculate a "Net Purchased Power Replacement Cost" based on 5,214 MWh of generation from Turkey Point Units 3 and 4, and 5,214 MWh of generation from

purchased power. If all of FPL's purchased power was purchased in the first 8 hours of the outage would it be appropriate to assume that all peak replacement generation and all purchased power (11,430 MWh + 5,214 MWh=16,644 MWh) replaced nuclear generation (11,472 MWh)? Explain.

Response:

Yes, since it is Dr. Dismukes' understanding that the Company dispatched the most economic units available to meet its load requirements to offset the loss of nuclear generation.

Charlie Beck
Deputy Public Counsel

Office of Public Counsel
c/o The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
(850) 488-9330

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FPL's Responses to Staff's First Request for Production of Documents (No. 2)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 30
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 30
DATE 03/17/10

Q.

Please provide the critical path or estimated time required for the Rod Position Indication system repairs at Turkey Point Unit 3 that was given to Nuclear Regulatory Commission when the delay of repairs was requested by FPL.

A.

FPL does not have any responsive documents to this request. FPL did not provide a repair schedule to the Nuclear Regulatory Commission as part of its technical specification request.

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FPL's Responses to OPC's Sixth Request for Production of Documents (Nos. 29-31 and 33-35)

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 31
COMPANY Florida Publric Service Commission Staff
WITNESS Staff Exhibit 31
DATE 03/17/10

Q.

Please provide all documents in your possession, custody or control relating to deferring RPI repairs for Unit 3 (See testimony of J.A. Stall, page 4, lines 14-16.) This request includes, but is not limited to, all communications between FPL and the NRC related to this issue.

A.

Documents responsive to this request are provided as Bates Nos. FPL-FI-10-29 through FPL-FI-10-59. Also see responsive documents to OPC's Sixth Request for Production of documents No. 30.

FPL

November 12, 2007
L-2007-175
10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

RE: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
License Amendment Request – LAR 194
Rod Position Indication Systems

Reference1: FPL letter L-2002-152, "Turkey Point Unit 4 Docket No. 50-251, Proposed License Amendment Inoperable Rod Position Indication, " dated July 29, 2002.
Reference 2: FPL letter L-2004-174, , "Turkey Point Unit 4 Docket No. 50-251, Proposed License Amendment Inoperable Rod Position Indication, " dated July 28, 2004.
Reference 3: FPL letter L-2006-209, "Turkey Point Unit 3 Docket No. 50-250, Proposed License Amendment Inoperable Rod Position Indication, " dated September 8, 2006.

Pursuant to 10 CFR 50.90, Florida Power and Light Company (FPL) requests expedited approval of changes to the Turkey Point Units 3 and 4 Facility Renewed Operating Licenses DPR-31 and DPR-41, respectively, by incorporating the attached Technical Specification (TS) revision. The proposed amendment would revise Technical Specification 3.1.3.2 to allow use of an alternate method of monitoring rod position for a control rod or shutdown rod with an inoperable rod position indicator (RPI). The proposed alternate method of monitoring the stationary gripper coil voltage has been previously submitted by FPL per references 1, 2 and 3, and approved by the NRC for use at Turkey Point Units 3 and 4. The most recent NRC approval of the alternate method for monitoring rod position was approved on October 5, 2006, by issuance of License Amendment 230 for Turkey Point Unit 3 for control rod M-6 in Control Rod Bank C during Cycle 22 operation. FPL's previous submittals were temporary in nature and specifically applicable to the unit with the inoperable RPI. Additionally use of the alternate method of monitoring rod position was limited to the specific rod with the inoperable RPI for operation for the remainder of the specific operating cycle.

Turkey Point has experienced several failures of the Turkey Point Units 3 and 4 Analog RPI system as documented in References 1, 2 and 3. The proposed amendment will revise Technical Specification 3.1.3.2 on a permanent basis to allow use of an alternate method of monitoring rod position for a control rod or shutdown rod with an inoperable RPI. This submittal is similar to the Sequoyah Nuclear Plant Units 1 and 2 Technical Specification Change 06-04, "Monitoring of Control or Shutdown Rod Position by an Alternate Means," submitted to the NRC July 6, 2006 and approved by the NRC on December 11, 2006 (TAC Nos. MD2514 and MD2515). The method to be used will monitor the stationary gripper coil of the Control Rod Drive Mechanism (CRDM) for the control or shutdown rod with an inoperable analog RPI. The amendment will provide a less burdensome monitoring method than currently required by TS 3.1.3.2 when problems with the analog RPI system are experienced. When a problem in the RPI system requires the monitoring of a rod's position by the alternate means, FPL intends to continue operation until the end of the current cycle, or until an entry into Mode 3 when the inoperable RPI will be repaired.

A001
NRR

FPL is requesting expedited review of this amendment due to the unanticipated failure of the Turkey Point Unit 3 Analog RPI for control rod F-2 in Control Rod Bank B. The failure of the Unit 3 RPI for control rod F-2 in Control Rod Bank B has resulted in a loss of position indication for that rod. Control Rod Bank B, including control rod F-2, is currently in the all rods out position. This was confirmed by movable incore detectors. Troubleshooting activities outside containment have indicated a low resistance between the primary conductor to ground and to the secondary conductor. Specialty equipment was used to further identify the fault inside containment near the reactor head. Accessibility and significant radiation dose prevent repairs during power operation. The connection to the coil stack needs inspection and repair during an outage. FPL plans to continue unit operation until Unit 3 enters Mode 3 when the inoperable RPI will be repaired. The RPI will be repaired no later than the Unit 3 Cycle 24 refueling outage in Spring 2009.

With one analog RPI per bank inoperable, TS 3.1.3.2.a action statement currently requires to either: 1.) Determine the position of the non-indicating rod(s) indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or 2.) Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

FPL is currently implementing TS 3.1.3.2.a action statement. As a result, there is a concern regarding excessive wear of the movable incore detector system, due to exercising the movable incore detectors every 8 hours (approximately 90 times per month), to comply with the compensatory actions required by the current action statement. Although, wear of the incore detector system does not pose a reduction in the margin of safety, excessive wear of the incore detector system could result in a loss of functionality of the system. This could lead to the inability to complete required surveillances, which if not completed could lead to a required plant power reduction and/or shutdown.

The proposed changes have been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c). FPL has determined that the proposed changes involve no significant hazards considerations. A description of the proposed changes is included in Attachment 1 to this letter. Attachment 2 is the "Determination of No Significant Hazards Consideration." Attachments 3 and 4 contain copies of the affected Technical Specifications pages marked-up and a clean copy of the proposed revision, respectively.

The Turkey Point Plant Nuclear Safety Review Committee and the FPL Company Nuclear Review Board have reviewed the proposed amendment. Upon approval of the proposed changes, FPL requests that the amendments be made effective on the date of issuance.

In accordance with 10 CFR 50.91(b)(1), a copy of the proposed amendment is being forwarded to the State Designee for the State of Florida.

Please contact Paul Infanger, Licensing Manager, at (305) 246-6632, if there are any questions regarding this submittal.

I declare under penalty of perjury that the foregoing is true and correct.

Very truly yours,

11/12/2007
Executed on

William Jefferson, Jr.
Vice President
Turkey Point Nuclear Plant

Attachments

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Mr. W. A. Passetti, Florida Department of Health

EVALUATION OF PROPOSED TS CHANGE

EVALUATION OF PROPOSED TS CHANGES

BACKGROUND

Turkey Point has experienced several failures of the Turkey Point Units 3 and 4 Analog Rod Position Indication (RPI) system as documented in References 1, 2 and 3. Turkey Point Unit 3 is currently operating with a failed Analog RPI for control rod F-2 in Control Rod Bank B. The failure of the Unit 3 RPI for control rod F-2 in Control Rod Bank B has resulted in a loss of position indication for that rod. Control Rod Bank B, including rod F-2, is currently in the all rods out position. This was confirmed by movable incore detectors. Attempts to repair the RPI for control rod F-2 have been unsuccessful. Troubleshooting activities outside containment have indicated a low resistance between the primary conductor to ground and the secondary conductor. Specialty equipment was used to further identify the fault inside containment near the reactor head.

All of the RPIs were tested on October 7, 2007, during the recent Unit 3 refueling outage. All of the RPIs, including the now failed F-2 RPI, tested satisfactorily. Shortly after that time, on October 16, 2007, RPI F-2 failed due to a short from the primary coil to ground. The suspected cause of this ground is mechanical damage due to inadvertent contact during outage activities on the reactor vessel head after the October 7, 2007 testing. The F-2 RPI is located on the periphery of the core near an access port and was susceptible to external physical contact during certain activities that were performed during the subject time period. Thirty-seven RPIs (Control Rod Banks A, C and D, and Shutdown Rod Banks A, and B) were tested on October 28, 2007, and November 1, 2007, to confirm that other RPIs were not experiencing degradation. Two of the 37 RPIs tested are in close proximity to the F-2 RPI. All 37 RPIs tested satisfactorily.

Accessibility and significant radiation dose prevent repairs during power. The connection to the coil stack needs inspection and repair during an outage. Repairs will be performed at the earliest opportunity, when Turkey Point Unit 3 enters Mode 3, but no later than Unit 3 Cycle 24 refueling outage in Spring 2009.

Current Technical Specification

TS 3.1.3.2, Position Indication Systems – Operating, defines the Limiting Condition for Operation for the Analog RPI system. With one analog RPI per bank inoperable, TS 3.1.3.2.a action statement currently requires that 1.) Determine the position of the non-indicating rod(s) indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or 2.) Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

FPL is currently implementing TS 3.1.3.2.a.1 action statement due to a failed RPI in Unit 3 for control rod F-2 in Control Rod Bank B.

There is a concern regarding excessive wear of the movable incore detector system, due to exercising the movable incore detectors every 8 hours (approximately 90 times per month), to comply with the compensatory actions required by the current action statement TS 3.1.3.2.a.1 Although, wear of the incore detector system does not pose a reduction in the margin of safety, excessive wear of the incore detector system could result in a loss system functionality. This could lead to the inability to complete

required surveillances, which if not completed could lead to a required plant power reduction and/or shutdown.

DESCRIPTION OF PROPOSED LICENSE AMENDMENTS

Pursuant to 10 CFR 50.90, FPL requests that Turkey Point Units 3 and 4 Technical Specification (TS) 3.1.3.2, be modified on a permanent basis to allow the use of an alternate method of determining rod position for a control rod or shutdown rod with an inoperable RPI. The proposed alternate method of monitoring the stationary gripper coil voltage has been previously submitted by FPL per references 1, 2 and 3, and approved by the NRC for use at Turkey Point Units 3 and 4. The NRC approved the alternate method for monitoring rod position on October 5, 2006, by issuance of License Amendment 230 for Turkey Point Unit 3 for control rod M-6 in Control Rod Bank C during Cycle 22 operation. FPL's previous submittals were temporary in nature and specifically applicable to the unit with the inoperable RPI. Additionally use of the alternate method of monitoring rod position was limited to the specific rod with the inoperable RPI for operation for the remainder of the specific operating cycle.

FPL is requesting expedited review of this amendment due to the unanticipated failure of the Turkey Point Unit 3 Analog RPI for control rod F-2 in Control Rod Bank B. The proposed amendment will revise Technical Specification 3.1.3.2 on a permanent basis to allow use of an alternate method of monitoring rod position for a control rod or shutdown rod with an inoperable RPI. This request is similar to the Sequoyah Nuclear Plant Units 1 and 2 Technical Specification Change 06-04, "Monitoring of Control or Shutdown Rod Position by an Alternate Means," submitted to the NRC July 6, 2006 and approved by the NRC on December 11, 2006 (TAC Nos. MD2514 and MD2515).

The proposed changes to TS 3.1.3.2 will add a new action that allows use of an alternate method for determining rod position. Action a.2.a), a.2.b), and a.2.c) will be incorporated to provide for the alternative monitoring. The new requirements are as follows:

2** a). Determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours and once every 31 Effective Full Power Days thereafter, and within 1 hour if rod control system parameters indicate unintended movement, or if the rod with an inoperable position indicator is moved greater than 12 steps, and

b). Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable indicator within 8 hours and once per 8 hours thereafter, and

c). Determine the position of the non-indicating rod indirectly by the movable incore detectors prior to increasing THERMAL POWER above 50% RATED THERMAL POWER and within 8 hours of reaching 100% RATED THERMAL POWER, or

In order to maintain proper numbering considering the addition of a new TS 3.1.3.2 Action a.2, the numbering of current TS 3.1.3.2 Action a.2. will be revised to be Action a.3.

A footnote is added that will apply to the new Action a.2. This footnote describes the limitations for the use of these new provisions. The new footnote reads as follows:

** Rod position monitoring by Actions a.2.a), a.2.b), and a.2.c) may only be applied to one inoperable rod position indicator per unit and shall only be allowed until an entry into MODE 3.

In summary, the proposed change will add new requirements to allow alternate monitoring of the rod position when the analog RPI is not operable. This allowance can only be used for one rod indication per unit and can only be used until the next opportunity to safely correct the problem. The alternate method of monitoring rod position provides reasonable indication of rod position without subjecting the movable incore detectors to excessive wear.

JUSTIFICATION FOR PROPOSED TS CHANGE

As described in the bases for Specification 3.1.3, the purpose of the rod control system, of which the RPIs are an integral part, is to ensure that: "(1) acceptable power distribution limits are maintained, (2) the minimum SHUTDOWN MARGIN is maintained, and (3) the potential effects of rod misalignment on associated accident analyses are limited. OPERABILITY of the control rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits."

FPL has determined that these objectives can be met with an inoperable RPI in a control rod bank or shutdown bank without subjecting the movable incore system to unnecessary additional wear. FPL will provide a display to track parameters of the stationary gripper coil of the Control Rod Drive Mechanism (CRDM) on the non-indicating rod. In accordance with proposed Action a.2.a), FPL will determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours. Additionally, proposed Action a.2.a) will require confirmation of the position for the non-indicating control rod or shutdown rod at least once every 31 Effective Full Power Days using the movable incore system. Proposed Action a.2.b) will require verification that the coil has not changed state at least once every 8 hours. This 8-hour surveillance period is consistent with the current operational requirements of control rod position determination using the movable incore detectors and is more frequent than the normal 12-hour requirement for position determination specified in TS 4.1.3.1.1. If the coil has changed state, a determination of the position for the non-indicating control rod or shutdown rod will be made within 1 hour by using the movable incore detector system as required by proposed Action a.2.a). If the rod with the inoperable position indicator is moved greater than 12 steps, proposed Action a.2.a) will determine the position of the non-indicating rod indirectly by the movable incore detectors within 1 hour. This provision provides assurance that any unintended rod movement is identified in a timely manner. Proposed Action a.2.c) requires the use of the movable incore detector system to verify rod position prior to increasing thermal power above 50 percent rated thermal power (RTP) and within 8 hours of reaching 100 percent RTP. These provisions are intended to establish and confirm the position of the rod with the inoperable RPI to ensure that power distribution requirements are not violated.

In summary, FPL concludes that the proposed change will continue to ensure that the intent of Technical Specifications are met.

In evaluating the requested change, the following conditions were considered:

- Rod Drop or Rod Misalignment During Power Operation
- Rod Drop or Rod Misalignment During Reactor Startup
- Reactor Trip
- SHUTDOWN MARGIN

Rod Drop or Rod Misalignment During Power Operation

A full rod drop of a control rod or shutdown rod would be immediately detectable by other means than the position indication system. Independent indication of a dropped control rod is obtained by using the excore power range signals. This rod drop detection circuit is actuated upon sensing a rapid decrease in flux and is designed such that normal load variations do not cause it to be actuated. Furthermore, a negative reactivity insertion corresponding to the reactivity worth of a full rod drop would cause a noticeable change in core parameters including core power and core average temperature.

A rod misalignment of a control rod may also be detectable by other means, e.g. axial flux deviation and the required operator actions would therefore not be dependent on the status of the individual rod position indication system. During normal operation, all control rods operate at the all rods out position of 228 to 230 steps as defined in the Core Operating Limits Report (COLR). For the infrequent instances when control rod bank movement is required during power operation a determination of the rod position will be made by using the movable incore detector system in accordance with plant procedures.

With alternate CRDM parameter monitoring and rod drop/misalignment parameter indications, the increase in the likelihood of an undetected rod drop or misalignment is considered to be negligible.

Rod Drop or Rod Misalignment During Reactor Startup

Repairs will be performed at the earliest opportunity when the unit enters Mode 3, but no later than the next refueling outage.

Reactor Trip

Following a reactor trip, the position indication system is used to verify that all rods have fully inserted. Current plant procedures require emergency boration if more than one rod fails to fully insert. The inoperability of the position indication system prevents verification of insertion for the subject rod during reactor trip. As an additional conservative measure administrative controls will be used to heighten reactor operator awareness when the rod position indication for a control rod or shutdown bank is inoperable. This will ensure that emergency boration is initiated, as required by existing procedures, if another rod other than the rod with an inoperable RPI does not fully insert. Turkey Point typically performs a manual reactor trip from approximately 25% power in the event of a controlled shutdown so that these post-trip procedures would also be used.

Shutdown Margin

Consistent with TS 3/4.1.1.1, SHUTDOWN MARGIN in Modes 1 and 2 is ensured by verifying compliance with the control rod bank insertion limits of TS 3.1.3.6. The surveillance specified in TS 4.1.3.6 is performed with the Rod Insertion Limit Monitor, which relies on the group step counter demand position indication and is unaffected by an inoperable Analog RPI for a control rod. Nevertheless, in the case when the Rod Insertion Limit Monitor is inoperable, the analog RPI for individual rods can be used to demonstrate compliance with TS 3.1.3.6 consistent with TS surveillance requirement 4.1.3.6. The proposed alternate method to monitor the stationary gripper coil for a control rod with an inoperable RPI will provide assurance that the position has not

changed and remains within the allowed misalignment with the group step counter demand position for the affected control rod and the control rod bank insertion limits of TS 3.1.3.6.

In addition, verification of compliance with required SHUTDOWN MARGIN in Modes 1 and 2 also relies upon the rods being movable and trippable. This is verified by periodic rod exercise consistent with TS surveillance requirement 4.1.3.1.2. During the performance of this rod exercise procedure, the affected rod will be exercised and flux traces will be performed after insertion and removal to confirm the position of the rod with the inoperable RPI. Thus, the moveable and trippable status of the affected rod will be confirmed and the affected rod can continue to be credited in verification of SHUTDOWN MARGIN in Modes 1 and 2.

Consistent with TS 3/4.1.1.1 and TS 3/4.1.1.2, SHUTDOWN MARGIN in Modes 3, 4 and 5 is ensured by considering Reactor Coolant System (RCS) boron concentration, rod position, RCS average temperature, fuel burnup, xenon concentration and samarium concentration. Plant procedures ensure SHUTDOWN MARGIN in Modes 3, 4 and 5 by specifying RCS boron concentration requirements that consider all these factors. While in Modes 3, 4 and 5 the analog rod position indication is relied upon to determine rod position. While the analog RPI for a rod remains out-of-service in Modes 3, 4 and 5, rod position cannot be easily determined. Accordingly, these RCS boron concentration requirements will be increased to consider an allowance for the withdrawn worth of a control rod with an inoperable RPI assuming this control rod has the highest reactivity allowance. Shutdown Margin Calculation with two or more rods stuck will conservatively bound a boron concentration to satisfy Shutdown Margin requirements. Shutdown Margin Calculation procedure 0-OP-028.2 will be revised to ensure that shutdown margin limits continue to be met for the remainder of this operating cycle. The use of the alternate methodology requires that the pertinent procedures are modified to account for the rod with the inoperable RPI.

Thus, the proposed alternate position verification for a control or shutdown rod with an inoperable RPI while at power, the normal rod exercise surveillance of control rods and the increased shutdown boron concentration requirements will ensure compliance with the SHUTDOWN MARGIN requirements of TS 3.1.1.1 and TS 3.1.1.2 will be maintained.

Proposed Alternate Rod Position Monitoring Method Implementation

Parameter Monitored

For the present time, the parameter monitored for a control rod or shutdown rod with an inoperable RPI will be the stationary gripper coil current. The control rods are held in place by energized stationary gripper coils. The control rod can not be moved without de-energizing the stationary gripper coil. The rod control power cabinet design uses a resistor to monitor the coil current. The gripper coil current (measured as an equivalent voltage) will be monitored on an existing control room recorder mounted on a vertical panel within the control room surveillance area. This recorder is a multi-channel recorder with currently one channel in continuous use for Generator Gross Mega-Watts. A spare channel will be used to display the gripper current for a control rod or shutdown rod with an inoperable RPI. Typically, the normal gripper current is 4.4 amps, which when measured across the resistor will be equivalent to 275 milli-volts. The recorder has alarm indication in a form of a display window, which is programmed for a low and high voltage alarm indicative of a gripper coil change of state. Additionally, the gripper coil low and high voltage alarm will provide an output to a control room annunciator window to indicate a potential rod unintended movement based on a low or high voltage, indicative of a gripper coil change of state.

Operator Training

The licensed Reactor and Senior Reactor Operators will be responsible for monitoring the output data from the alternate monitoring equipment. The display instrument will be programmed to display CRDM parameter trends and numerical values for rod with the inoperable RPI. Operating procedure 3/4-OSP-201.1 " RCO Daily Log", will provide instructions for monitoring CRDM parameter trends. Accordingly, the indicated value for the rod with the inoperable RPI will be logged by the Operators at least every 8 hours. The Operators will be able to identify any changes in gripper coil state based on a deviation from the normal state, which is defined by a predetermined operating band as well as by a programmed alarm, and by observing the historical trend line displayed. Additionally, a rod trouble annunciator will be added to provide an audible alarm indicating a potential rod undesired movement. The annunciator relies on the recorder or plant computer alarm contact activated by a state change in stationary gripper coil status based on a low or high voltage, indicative of a gripper coil change of state. The actions prescribed in the Annunciator Response and Off Normal Operating procedures for a change in the gripper value are the same as those for a rod that is indicated to be deviating based on an individual RPI.

Impact on Indications and Alarms:

The following table provides a summary of the indications and alarms and how they are affected by the an inoperable RPI for a control rod or shutdown rod:

Function	Indication / Alarm Identification	Normal Operation	Affect of Modified Operation
Analog Meter Indication	RPI Panel	Provides analog rod position reading for inoperable control rod or shutdown rod.	This indication will be disabled and considered out-of-service for the control rod or shutdown rod with an inoperable RPI.
Rod Bottom Indication Lights	Control Panel	Lights illuminate when any rod is within 20 steps or closer to the bottom of the core.	This indication will be disabled and considered out-of-service for the control rod or shutdown rod with an inoperable RPI. The lights will not be capable of illumination.
Rod Bottom / Rod Drop Annunciation	Annunciator window B7/1 - NIS / RPI Rod Drop Rod Stop	This annunciation is actuated when any rod is within 20 steps or closer to the bottom of the core.	The ability of the control rod or shutdown rod with an inoperable RPI to actuate this annunciation will be disabled. All other control rods or shutdown rods with operable RPIs will actuate this annunciatior.

Rod Deviation Annunciation	Annunciator window B9/3 - Rod Deviation	This annunciation is actuated for any deviation of 12 (24 moving) steps between any two rods in the same bank or any shutdown rod below 218 steps and control rod bank B greater than 35 steps.	The ability of the control rod or shutdown rod with an inoperable RPI to actuate this annunciation will be disabled. All other control rods or shutdown rods with operable RPIs will actuate this annunciatior.
Rod Insertion Limit Monitor	Annunciator windows B 8/1 & B8/2 - Rod Bank A/B/C/D Low Limit & Extra Low Limit	This annunciation is actuated for any control rod bank at or below its B8/2:lo-lo limit (Banks A & B – 203 steps, Banks C & D variable per COLR rod insertion limit) and B8/1: lo-limit (Banks A & B – 223 steps, Bank C 10 steps above lo-lo limit and Band D 20 steps above lo-lo limit)	This annunciation relies on the group step counter demand position indication and is unaffected by an out-of-service Analog RPI for a control rod.
Gross Megawatts Recorder	Recorder on Panel 3/4C04	Provide a single continuous recording of the gross megawatts from the main generator.	An additional recorder channel indication will be added to the function of the equipment. This indication will provide continuous recording and indication of the Stationary Gripper status for a control rod or shutdown rod with an inoperable RPI.
Gross Megawatts Recorder	Recorder on Panel 3/4C04	No alarms are utilized on this recorder.	High and low alarm indication light settings will be provided on this recorder for the Stationary Gripper status for a control rod or shutdown rod with an inoperable RPI.
Rod Trouble Monitor	Annunciator window	This annunciation is actuated for any high or low gripper coil voltage from the recorder or plant computer	This annunciator relies on the control room recorder or plant computer alarm contact activated by a state change in stationary gripper coil voltage status for a control rod or shutdown rod with an inoperable RPI.

Compensatory Measures

The following compensatory measures will be used to offset the loss of indication and alarms affected by an inoperable RPI for a control rod or shutdown rod:

For the Analog Meter Indication:
The specific position indication of height for the control rod or shutdown rod with an inoperable RPI will not be available on the alternate monitoring equipment but will be compensated for by performing flux traces. Flux traces will be required following rod motion that affects the control bank or shutdown bank with the inoperable RPI. This measure will be procedurally driven by the general operating procedures that govern reactor operation and the surveillance procedure that exercises all of the rods on a routine basis. The flux traces during the rod exercising procedure will be performed following the insertion of a control rod bank or shutdown rod bank and following the subsequent withdrawal to All Rods Outs as defined in the Core Operating Limits Report.

For the Rod Bottom Light Indication and Rod Bottom Annunciation Alarm:
The Rod Bottom Light and Rod Bottom Annunciation Alarm that will not be available on the alternate monitoring equipment will be compensated for by the procedurally driven requirement to perform a flux trace any time a change in state is indicated on the recorder. In the case of an indicated dropped rod on the individual rod position indicator for a control rod or shutdown bank with an inoperable RPI, the Operators will monitor the plant response as trained for a Dropped Rod event. They will specifically monitor for changes in RCS temperature and pressure, changes of indicated reactor power and indicated neutron flux, changes in generator output and pressurizer level. If no changes in plant parameters are noted along with no change in state based on the alternate monitoring indication, a flux trace is still procedurally required. If changes are noted in plant parameters, it will be assumed that the rod has dropped and required actions will be taken. If another rod drops in conjunction with the indications discussed for a control rod or shutdown rod with an inoperable RPI, it will be assumed that two rods have dropped and Operators will take appropriate actions.

For the Rod Deviation Annunciation Alarm:
The Rod Deviation Annunciation Alarm that will be lost for the control rod or shutdown rod with an inoperable RPI, will be compensated by flux traces driven from the Annunciator Response procedure as well as the routine surveillance procedure when a gripper coil change in state is observed on the alternate monitoring equipment.

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Description Of Proposed License Amendment

The proposed amendment would revise TS 3.1.3.2 to allow use of an alternate method of determining rod position for a shutdown or control rod with an inoperable RPI. The method to be used will monitor the stationary gripper coil of the Control Rod Drive Mechanism (CRDM) for the control or shutdown rod with an inoperable analog RPI. The proposed amendment will provide a less burdensome monitoring method than currently required by TS 3.1.3.2 when problems with the analog RPI system are experienced. When a problem in the RPI system requires the monitoring of a rod's position by the alternate means, FPL plans to continue unit operation until the unit enters Mode 3 when the inoperable RPI will be repaired.

Introduction

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

Florida Power and Light Company (FPL) has concluded that the proposed amendment to the Turkey Point Units 3 and 4 operating licenses does not involve a significant hazards consideration. In support of this determination, an evaluation of each of the three standards set forth in 10 CFR 50.92 is provided below.

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   No. The proposed change provides an alternative method for verifying rod position of one control rod or shutdown rod with an inoperable rod position indicator (RPI). The proposed change meets the intent of the current specification in that it ensures verification of position of the control rod or shutdown rod within one hour of unintended rod motion and at least once every eight (8) hours. The proposed change provides only an alternative method of monitoring control rod position and does not change the assumption or results of any previously evaluated accident.

   Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

No. As described above, the proposed change provides only an alternative method of determining the position of one control rod or shutdown rod with an inoperable RPI. No new accident initiators are introduced by the proposed alternative manner of performing rod position verification. The proposed change does not affect the reactor protection system or the reactor control system. Hence, no new failure modes are created that would cause a new or different kind of accident from any accident previously evaluated.

Therefore, operation of the facility in accordance with the proposed amendments would not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

No. The bases of Specification 3.1.3.2 state that the operability of the rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits. The proposed change does not alter the requirement to determine rod position but provides an alternative method for determining the position of control rod or shutdown rod with an inoperable RPI. As a result, the initial conditions of the accident analysis are preserved and the consequences of previously analyzed accidents are unaffected.

Therefore, operation of the facility in accordance with the proposed amendments would not involve a significant reduction in the margin of safety.

Based on the reasoning presented above, FPL has determined that the requested changes involve no significant hazards consideration.

Environmental Consideration

The proposed license amendment changes requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The proposed amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and no significant increase in individual or cumulative occupational radiation exposure. FPL concluded that the proposed amendment involves no significant hazards consideration and meets the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and that, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendment.

Conclusion

FPL concludes, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be detrimental to the common defense and security or to the health and safety of the public.

TURKEY POINT UNITS 3 AND 4 MARKED-UP TECHNICAL SPECIFICATION PAGES

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LIMITING CONDITION FOR OPERATION (Continued)

3.1.3.2 The Analog Rod Position Indication System * and the Demand Position Indication System shall be OPERABLE and capable of determining the respective actual and demanded shutdown and control rod positions as follows:

a. Analog rod position indicators *, within one hour after rod motion (allowance for thermal soak);

All Shutdown Banks: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Bank A and B: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Banks C and D: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal range of 0-All Rods Out as defined in the Core Operating Limits Report.

b. Group demand counters; ± 2 steps.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With a maximum of one analog rod position indicator per bank inoperable either: 3

1. Determine the position of the non-indicating rod(s) * indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or

Insert A → 2. 3 Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours. 1

b. With a maximum of one demand position indicator per bank inoperable either:

1. Verify that all analog rod position indicators for the affected bank are OPERABLE and that the most withdrawn rod and the least withdrawn rod of the bank are within the Allowed Rod Misalignment of Specification 3.1.3.1 at least once per 8 hours, or

2. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

* During Unit 4 Cycle 21, the position of Rod F-8 Shutdown Bank B will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed.

* During Unit 3 Cycle 22, the position of Rod M-6, Control Bank C will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed. 1

Insert B

Insert A

2** a). Determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours and once every 31 Effective Full Power Days thereafter, and within 1 hour if rod control system parameters indicate unintended movement, or if the rod with an inoperable position indicator is moved greater than 12 steps, and

b). Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable indicator within 8 hours and once per 8 hours thereafter, and

c). Determine the position of the non-indicating rod indirectly by the movable incore detectors prior to increasing THERMAL POWER above 50% RATED THERMAL POWER and within 8 hours of reaching 100% RATED THERMAL POWER, or

Insert B

** Rod position monitoring by Actions a.2.a), a.2.b), and a.2.c) may only be *applied to one inoperable* rod position indicator per unit and shall only be allowed until an entry into MODE 3.

TURKEY POINT UNITS 3 AND 4 CLEAN TECHNICAL SPECIFICATION PAGES

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LIMITING CONDITION FOR OPERATION (Continued)

3.1.3.2 The Analog Rod Position Indication System * and the Demand Position Indication System shall be OPERABLE and capable of determining the respective actual and demanded shutdown and control rod positions as follows:

a. Analog rod position indicators *, within one hour after rod motion (allowance for thermal soak);

All Shutdown Banks: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Bank A and B: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Banks C and D: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal range of 0-All Rods Out as defined in the Core Operating Limits Report.

b. Group demand counters; ± 2 steps.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With a maximum of one analog rod position indicator per bank inoperable either:

1. Determine the position of the non-indicating rod(s) * indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or

2** a). Determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours and once every 31 Effective Full Power Days thereafter, and within 1 hour if rod control system parameters indicate unintended movement, or if the rod with an inoperable position indicator is moved greater than 12 steps, and

b). Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable indicator within 8 hours and once per 8 hours thereafter, and

c). Determine the position of the non-indicating rod indirectly by the movable incore detectors prior to increasing THERMAL POWER above 50% RATED THERMAL POWER and within 8 hours of reaching 100% RATED THERMAL POWER, or

3. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued):

b. With a maximum of one demand position indicator per bank inoperable either:

1. Verify that all analog rod position indicators for the affected bank are OPERABLE and that the most withdrawn rod and the least withdrawn rod of the bank are within the Allowed Rod Misalignment of Specification 3.1.3.1 at least once per 8 hours, or

2. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

* During Unit 4 Cycle 21, the position of Rod F-8 Shutdown Bank B will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed.

* During Unit 3 Cycle 22, the position of Rod M-6, Control Bank C will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed.

** Rod position monitoring by Actions a.2.a), a.2.b), and a.2.c) may only be applied to one inoperable rod position indicator per unit and shall only be allowed until an entry into MODE 3.

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ATTACHMENT 4

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FUNCTIONAL FAILURE DETERMINATION CHECKLIST

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CR # *CR 200733783* Unit No: *3* SSC: *028-AA*

Equipment Group: *ROD POSITION INDICA* MR Function Being Evaluated *028-AA-03*

System Engineer: *Brian Bakke* Completed review due to MRC by: *11/17/2007*

RPI-3-F2 declared out of service

On 10/16/07 at 1845, Ann F 4/6, RPIs Power Trouble was received. The ARP was reviewed and the NPO reported an AC Output Line 2 Ground indication on the RPI inverter.

At 1846, B 9/3, SD Rod Off Top/ Deviation was received and Control Group B, RPI-3-F2 indicated pegged high (>235 steps). The crew entered 3-ONOP-028.1 (RCC Misalignment), met all requirements to NOT declare Rod F2 inoperable and transitioned to 3-ONOP-028.2 (RCC Position Indication Malfunction).

At 1900, RPI-3-F2 was declared out of service and I&C department began troubleshooting and possible preparations to adjust the RPI. At 1950 I&C department found that RPI-3-F2 Primary was shorted to ground. The cable from RPI rack was left disconnected. This removed the ground from the RPI Inverter. Cable characterization by I&C department showed the same result. WR 37012584 was generated.

RPI-3-F2 remains inoperable putting U3 in TSAS 3.1.3.2.a, requiring a determination of rod position every 8 hrs or reduce thermal power < 75%. U3 currently is at 30% power with plans to move up in power per 3-GOP-301. Additionally, because Ann B 9/3 is inoperable, rod heights are being logged every 4 hrs to comply with TSAS 4.1.3.1.1 and 4.1.3.2.1.

After discussion with RCOs, US, SM, and AOM, it was determined that because of RPI-3-F2 failure, a conservative approach to rod drop casualties would be used. If a rod drops, then per 3-ONOP-028.3 (Dropped RCCA), rod F2 will assumed to already be dropped. Additionally, if a reactor trip occurs, rod F2 will be assumed to be fully withdrawn. This will be considered through all ONOPs and EOPs. A Night Order was written that describes this guidance and is listed below.

Night Order 10/16/07

RPI-3-F2 has a short from the RPI primary coils to ground. This causes the indication to malfunction and peg high. The cable for RPI-3-F2 has been disconnected to prevent the ground from impacting the RPI Inverter.

If a rod were to drop, with the position of F2 rod indeterminate, then F2 would conservatively be considered dropped, during the performance of 3-ONOP-028.3.

If a Reactor Trip were to occur, with the position of F2 rod indeterminate, then F2 would conservatively be considered not fully inserted, during the performance of EOP's.

Tom W

1. Functional Failure Determination (Is this event considered a functional failure?)

   THIS EVENT WAS A FUNCTIONAL FAILURE WHICH CAUSED A LOSS OF FUNCTION 028-AA-03.

   a. Yes This functional failure has caused performance criteria or goals to be exceeded (Notify MRC)

   b. No This functional failure has or will cause extensive unavailability that has or will cause performance criteria or goals to be exceeded. (Notify MRC)

   c. No This functional failure should not be considered Maintenance Preventable. (If YES, Proceed to Step #3).

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FUNCTIONAL FAILURE DETERMINATION CHECKLIST

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d. No This functional failure should also be considered under another function:
Function ID:

e. This functional failure was a contributing cause to exceeding a Maintenance Rule plant level criteria (check all that may apply):

- No Reactor Trip
- No Unplanned ESF Actuation
- No Unplanned Power Change > 20%
- No Unplanned increase in Shutdown Risk Level

f. No This functional failure is maintenance preventable and repetitive in nature (same or similar cause on the same or similar component.)

g. No This functional failure involves the failure of a high safety significant SSC.

> **NOTE**
>
> If this event is determined to be a Repetitive Maintenance Preventable Functional Failure (RMPFF) a Condition Report is REQUIRED to determine reasons why the actions to prevent reoccurrence were not effective.

CR Number generated to evaluate repetitive MPFF: **None**

h. Apparent cause: (attach information as necessary, or include reference to existing cause determination documents)

CR2007-33783 Evaluation reviewed the cause and effects of this RPI failure. In part it states:

"The RPI connectors at the seismic plate were removed as described in CR2007-17324 due to insert material degradation. From that time forward the intermediate head cables and the coil stack wiring have been spliced. An inspection of these splices had been performed early in the outage. Due to the fact that RPI F2 is located very near the entrance to the upper head region and personnel were working in that immediate vicinity at the end of the outage it is most likely that the splice was mechanically damaged by these activities. An examination of the splices and cables cannot be performed until the reactor is not in operation."

The splice mentioned above was performed under PC/M 07-039. The support of the cable is described as:

"The lower part of the spliced cable will be restrained, in part laterally, by the seismic plate, as the splice jacket will be inserted into the hole of the seismic plate. Below the seismic plate, the cable length essentially remains the same and no additional load will be imposed on that portion of the cable run. Field mock up of the spliced cable demonstrated that the repaired cable fits relatively snugly in the seismic plate conector hole. This configuration will limit vibration and any potential for chafing of the cable jacket." It should be noted that this does not provide adequate mechanical protection for damage due to personnel stepping on or bumping into. Actions have been created to investigate this failure more extensively when conditions permit.

This MPFF is directly related to the performance issue for which the Unit 3 and Unit 4 Rod Position Indication System is classified under paragraph (a)(1) of the rule. The actions discussed in this evaluation (implementation of the TSA and license ammendment request to provide an alternate method of monitoring this rod) to address the immediate concerns with this condition are interim, and will no longer be required when the (a)(1) actions are completed. Because the permanent corrective actions for this event are directly related to those corrective actions already prescribed for the Unit 3 and Unit 4 Rod Position Indication

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FUNCTIONAL FAILURE DETERMINATION CHECKLIST

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System (a)(1) issue, no changes to the (a)(1) goals or corrective actions are required due to this event.

2. Justification for Non-Functional Failure Determination
   This event was not a Functional Failure because:

   a. N/A The system/function is not in the scope of the Maintenance Rule.

   b. N/A The event was a failure of a redundant component within a redundant train - no Maintenance Rule function was lost.

   c. N/A The event was a failure of an installed spare or swing component which was not configured as an operating component - no Maintenance Rule function was lost.

   d. N/A The failure was identified through post maintenance testing and is directly related to maintenance performed.

   e. N/A An engineering evaluation has demonstrated the function was available even though not meeting Tech. Spec Limit

   f. N/A Degraded condition being used as a data point - no Maintenance Rule function was lost.

   g. N/A The instrument was found to have drifted, but not out of Tech Spec limits - no Maintenance Rule function was lost.

   h. N/A The instrument subcomponent failure (electronic card, etc.) did not result in a loss of channel or instrument function - no Maintenance Rule function was lost.

   i. N/A Other (attach additional justification as necessary)

   Justification: (attach information as necessary, or include reference to existing cause determination documents)

3. Justification for Considering a Functional Failure not an MPFF
   This event was not a Maintenance Preventable Functional Failure because:

   a. N/A The FF occurred as a result of normal plant operating procedures, and not related to any maintenance, surveillance, or testing activities.

   b. N/A The FF occurred due to a design deficiency not previously identified at Turkey Point or through a review of related industry operating information.

   c. N/A The equipment that failed is included in an approved run-to-failure analysis.

   d. N/A Other (include justification)

Responsible Engineer Comments:
The RPI connectors at the seismic plate were removed as described in CR2007-17324 due to insert material degradation. From that time forward the intermediate head cables and the coil stack wiring have been spliced. An inspection of these splices had been performed early in the outage. Due to the fact that RPI F2 is located very near the entrance to the upper head region and personnel were working in that immediate vicinity at the end of the outage it is most likely that the splice was mechanically damaged by these activities. An examination of the splices and cables cannot be performed until the reactor is not in operation.

Extent of Condition Review was conducted. All other RPI's are continuing to operate as designed with no other

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FUNCTIONAL FAILURE DETERMINATION CHECKLIST

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failures. This would indicate that the extent of condition is limited to the RPI F2.

1) TSA is to be implemented to provide alternate method of monitoring F2,
2) Licensing is to request license amendment to allow for alternate monitoring of Control rod F2.

MPFF Evaluation Performed By:

Name: *Brian E. Bakke* Signature: **Signature On File** Date: *11/14/2007*

EPIX Database Update Not Complete

Maintenance Rule Review Closeout

a. If step #1 is checked YES, MRC review for component (cross system) repetitive failure.

1) Enter applicable evaluation codes for Assembly, Cause and Reason.

Assembly: *Indicators, recorders, gauges*

Cause: *Erratic output/indication*

Reason: *Installation*

Factor:

b. ___ Unavailability caused by this functional failure captured in Maintenance Rule database.

c. Yes MRC concurs with System Engineer evaluation?

d. List follow up actions below, with any tracking numbers:

MRC Review:

Name: *Chuck Sibley* Signature: **Signature On File** Date: *11/14/2007*

Printed: 11/14/2007

FF #: CR 200733783

EXTENT OF CONDITION:

On 10/16/07, RPI-3-F2 was declared out of service due to a short circuit condition that developed between the RPI stack primary coil and ground. Refer to CR 2007-33783. TSA 07-018 was implemented on November 3, 2007 to temporarily address this condition.

On 02/26/2008, Units 3 and 4 tripped off-line due to fault at an electrical substation. Troubleshooting conducted by I&C Maintenance on RPI-3-F2 determined that one or more of the coil stack wires that connects to the primary and secondary of the coil stack had nicked or chaffed insulation. Resistance testing of the wires indicates low resistance between the conductor and the ground of these wires. The damaged insulation wires for RPI-3-F2 were repaired under WO 37023013. Readings taken after repairs were made indicate the short condition was resolved.

Between 10/16/07 and the dual unit SNO, no other Unit 3 RPIs have experienced short to ground conditions similar in nature to RPI-3-F2. Based on this, the extent of condition is limited to RPI-3-F2.

Preparer

3/2/08
Verifier

PROBLEM STATEMENT - Condition Noted (what is wrong):

On 10/16/07 at 1845, Ann F 4/6, RPIs Power Trouble was received. The ARP was reviewed and the NPO reported an AC Output Line 2 Ground indication on the RPI inverter.

At 1846, B 9/3, SD Rod Off Top/ Deviation was received and Control Group B, RPI-3-F2 indicated pegged high (>235 steps). The crew entered 3-ONOP-028.1 (RCC Misalignment), met all requirements to NOT declare Rod F2 inoperable and transitioned to 3-ONOP-028.2 (RCC Position Indication Malfunction).

At 1900, RPI-3-F2 was declared out of service and I&C department began troubleshooting and possible preparations to adjust the RPI. At 1950 I&C department found that RPI-3-F2 Primary was shorted to ground. The cable from RPI rack was left disconnected. This removed the ground from the RPI Inverter. Cable characterization by I&C department showed the same result. WR 37012584 was generated.

PROBLEM STATEMENT - Expectation (gap between what is and what should be):
All RPI indicators are expected to indicate physical position of control rods through magnetic detection coils mounted on the reactor vessel head closure assembly.

PROBLEM STATEMENT - Significance of effects of Condition
The Total Equipment Database module of PASSPORT classifies (equipment/component) as (Safety/Quality) Related. Therefore, this Condition Report is (Safety/Quality) Related.

Technical Specifications 3.1.3.2.a requires:

> *"The Analog Rod Position Indication System and the Demand Position Indication System shall be OPERABLE and capable of determining the respective actual and demanded shutdown and control rod positions. . ."*

With applicable modes 1 and 2 compensatory actions of:

> *"With a maximum of one analog rod position indicator per bank inoperable either:*
> *1. Determine the position of the non-indicating rod(s) * indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or*
> *2. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within8 hours."*

Failure of analog rod position indicator F2 therefore invoked the requirement for compensatory flux mapping at least once per 8 hours (unless this RPI function was restored)

SAFETY CLASSIFICATION:

The Total Equipment Database module of PASSPORT classifies Rod Control as Quality Related (QR). Therefore, this Condition Report is QR.

ENG-QI 2.6 Quality Related criteria #6 specifies: "Instrumentation, equipment, components or structures required to be operable by Technical Specifications."

Technical Specifications 3.1.3.2.a requires: "The Analog Rod Position Indication System and the Demand Position Indication System shall be OPERABLE and capable of determining the respective actual and demanded shutdown and control rod positions. . ."

Therefore, the Analog Rod Position Indicating System is Quality Related.

Investigation (data collection for analysis):
Megger and resistance checks of the cable indicate the Primary coil is shorted to ground. This is supported by the ground indication on the RPI inverter. Char testing of the RPI cable indicated the problem exists at the coil stack but is not conclusive. Half splitting of the RPI cable at the curb box further indicates the problem is out toward the head. With the reactor operating at power it is not possible to investigate further. With the knowledge that the F2 coil stack is close to the upper head access point the following support/refute matrix was generated.

Formal Method of Analysis Selected:
Since troubleshooting was performed under 0-CMP-102.1, which implements the support/refute method, support/refute will also be used for analysis.

Analysis: People

Possible Cause	Refute Evidence to Refute	Support Evidence to support	Results	Cause
Personnel not qualified	Journeymen on qualification list	Journeymen not on qualification list	Journeymen were on qualification list	No
Time pressure	Adequate time available	Limited time available	Adequate time was available	No
Work loading	Queued tasks	Multiple tasks	Single task performed	No
Personnel stepping on sliced cables	Splices healthy	Splices damaged	Splices damaged	Yes

Analysis: Processes

Possible Cause	Evidence to Refute	Evidence to support	Results	Cause
Spliced connections not as durable as original design	Splices not damaged by workers in the area	Splices damaged by workers in the area	Splices damaged by workers in the area	Yes

Procedure or PC/M incorrect	Procedure and PC/M adequate & correct	Procedure or PC/M inadequate or incorrect	Procedure and PC/M adequate & correct	No
Configuration not as specified	Configured as specified	Not configured as specified	Configured as specified	No

Analysis: Equipment

RPI-3-F2 Investigation Matrix

Possible Cause	Supporting Evidence	Refuting Evidence	Investigative Action	Results
FM somewhere below seismic plate	visual inspection finds foreign material on head	visual inspection finds nothing unusual	visually inspect head area while coil withdrawn	Nothing unusual found
CET head cable contacting magnet wires	visual inspection with stack in place shows CET cable near or on stack	visual inspection finds good clearance	visually inspect coil length while coil inserted	Good clearance found
glass braid & silicone pigtail insulation compromised	hand over hand inspection finds damage, break or wire penetration	hand over hand finds no problems	close inspection of wires	No problems found
faulty RPI coil stack assembly	inspection finds catastrophic damage	physical design makes grounding nearly impossible	inspect for catastrophic damage	No damage found
shield ground within temp splice	ground found and eliminated during splice replacement	ground remains after splice removal	carefully disassemble & document	Ground lost during splice removal--lost opportunity
bad head cable	ground in cable after splice removal	no ground after splice removal	megger after splice removal	No ground after splice removal
bad curb box splice	ground in head area with curb box connector disconnected & CHAR supports location	ground still in despite head out of circuit	megger & char with curb box connector removed	No ground located
bad field cable or penetration	ground remains after curb box disconnected & CHAR supports location	ground gone with curb box disconnected	megger & char with curb box connector removed	No ground located
dust or contamination near butt splices	visual inspection finds debris	visual inspection finds nothing unusual	visual inspection	clean & dry- No problem found
Signal Conditioning Module (SCM) bad	ground remains despite disconnected field	ground gone with field disconnected	disconnect field	No ground at SCM
inverter ground	ground remains despite disconnected field	ground gone with field disconnected	disconnect field	No ground after cable disconnect

faulted primary current limiting resistor	ground remains despite disconnected field	ground gone with field disconnected	disconnect field	No ground with cable disconnected
boric acid spray or bridge	visual inspection of head area reveals BA leak	visual inspection does not find BA	visually inspect head area	No Boric acid found

APPARENT CAUSE AND CONTRIBUTING FACTORS:

The RPI connectors at the seismic plate were removed as described in CR2007-17324 due to insert material degradation. From that time forward the intermediate head cables and the coil stack wiring have been spliced. An inspection of these splices had been performed early in the outage. Due to the fact that RPI F2 is located very near the entrance to the upper head region and personnel were working in that immediate vicinity at the end of the outage it is most likely that the splice was mechanically damaged by these activities. As a result of troubleshooting of RPI-3-F2 during the 2008 dual unit SNO, I&C has determined that one or more of the coil stack wires that connect to the primary or secondary of the coil stack have nicked or chaffed insulation as described in Spec E-011-08-001. The resistance testing of the wires indicated low resistance between the conductor and the ground of these wires. Although during the investigation the ground was not specifically located it was no longer present after the splice components were removed. As a result Spec clarification E-011-08-001 provided the appropriate method of guarding the affected insulation on the coil stack and splice wires.

EXTENT OF CONDITION:

Extent of Condition Review was conducted. All other RPI's are continuing to operate as designed with no other failures. This would indicate that the extent of condition is limited to RPI-3-F2.

NONCONFORMANCE EVALUATION:

The FPL Topical Quality Assurance Report (TQAR) TQR 15.0 defines a nonconformance as a deficiency in characteristic, process, service, documentation or procedure which renders the quality of an item unacceptable or indeterminate. The failure of F2 to indicate rod position following a trip means that a non conformance exists.

TECHNICAL EVALUATION FOR REWORK:

The disposition is rework because CR2007-17324 action 23 will return F2 to within the design requirements.

CORRECTIVE ACTION (S):

1) TSA was implemented to provide alternate method of monitoring F2, This TSA is no longer necessary since the repairs have been completed during the SNO and has since then been removed.

2) Licensing is to request license amendment to allow for alternate monitoring of Control rod F2. This License amendment has not been approved and is no longer necessary with the repairs complete.

Q.
Please provide the January, 2008 amendment to the Unit 3 operating license (See testimony of J.A. Stall, page 5, lines 1-4).

A.
Documents responsive to this request are provided as Bates Nos.FPL-FI-10-60 through FPL-FI-10-76.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

RECEIVED
FEB 05 2008
Nuclear Licensing

January 28, 2008

Mr. J. A. Stall
Senior Vice President, Nuclear and
Chief Nuclear Officer
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS REGARDING TECHNICAL SPECIFICATIONS 3.1.3.2, "POSITION INDICATING SYSTEMS - OPERATING," TO ALLOW FOR THE USE OF AN ALTERNATE METHOD TO MONITOR ROD POSITION FOR A ROD WITH AN INOPERABLE ANALOG ROD POSITION INDICATION (TAC NO. MD7349 AND MD7350)

Dear Mr. Stall:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 237 to Renewed Facility Operating License No. DPR-31 and Amendment No. 232 to Renewed Facility Operating License No. DPR-41 for the Turkey Point Plant, Units Nos. 3 and 4, respectively.

The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated November 12, 2007. The amendments revise TS 3.1.3.2, "The Analog Rod Position Indication System - Operating," to allow for the use of an alternate method, other than the movable incore detectors, to monitor the position of a control rod or shutdown rod in the event of a problem with the analog rod position indication (analog RPI) system. The use of this alternate method will reduce the required frequency of flux mapping using the movable incore detectors to determine the position of the non-indicating rod, thus reducing the wear on the movable incore detector system that is also used to complete other required TS surveillances.

A copy of the related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

Brenda L. Mozafari, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures: 1. Amendment No. 237 to DPR-31
2. Amendment No. 232 to DPR-41
3. Safety Evaluation

cc w/enclosures: See next page

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 237
Renewed License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power & Light Company (the licensee) dated November 12, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-31 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 237, are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas H. Boyce, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Operating License and
Technical Specifications

Date of Issuance: January 28, 2008

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 232
Renewed License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power & Light Company (the licensee) dated November 12, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-41 is hereby amended to read as follows:

   (B) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 232, are hereby incorporated in the license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into the license.

   The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This licensee amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas H. Boyce, Chief
Plant Licensing Branch II-2
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications

Date of Issuance: January 28, 2008

E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess, and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;

F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Units Nos. 3 and 4.

3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:

A. Maximum Power Level

The applicant is authorized to operate the facility at reactor core power levels not in excess of 2300 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 237 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

c. Final Safety Analysis Report

The licensee's Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on November 1, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than July 19, 2012.

The Final Safety Analysis Report supplement as revised on November 1, 2001, described above, shall be included in the next scheduled update to the Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess, and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;

F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Units Nos. 3 and 4.

3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:

A. Maximum Power Level

The applicant is authorized to operate the facility at reactor core power levels not in excess of 2300 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 232 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

C. Final Safety Analysis Report

The licensee's Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on November 1, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than April 10, 2013.

The Final Safety Analysis Report supplement as revised on November 1, 2001, described above, shall be included in the next scheduled update to the Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 237 RENEWED FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 232 RENEWED FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Replace Page 3 of Renewed Operating License DPR-31 with the attached Page 3

Replace Page 3 of Renewed Operating License DPR-41 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove pages	Insert pages
3/4 1-20	3/4 1-20
3/4 1-20a	3/4 1-20a

LIMITING CONDITION FOR OPERATION (Continued)

3.1.3.2 The Analog Rod Position Indication System * and the Demand Position Indication System shall be OPERABLE and capable of determining the respective actual and demanded shutdown and control rod positions as follows:

a. Analog rod position indicators *, within one hour after rod motion (allowance for thermal soak);

All Shutdown Banks: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Bank A and B: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal ranges of 0-30 steps and 200-All Rods Out as defined in the Core Operating Limits Report.

Control Banks C and D: within the Allowed Rod Misalignment of Specification 3.1.3.1 of the group demand counters for withdrawal range of 0-All Rods Out as defined in the Core Operating Limits Report.

b. Group demand counters; ± 2 steps.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With a maximum of one analog rod position indicator per bank inoperable either:

1. Determine the position of the non-indicating rod(s) * indirectly by the movable incore detectors at least once per 8 hours and within one hour after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod's position, or

2** a). Determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours and once every 31 Effective Full Power Days thereafter, and within 1 hour if rod control system parameters indicate unintended movement, or if the rod with an inoperable position indicator is moved greater than 12 steps, and

b). Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable indicator within 8 hours and once per 8 hours thereafter, and

c). Determine the position of the non-indicating rod indirectly by the movable incore detectors prior to increasing THERMAL POWER above 50% RATED THERMAL POWER and within 8 hours of reaching 100% RATED THERMAL POWER, or

3. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

REACTIVITY CONTROL SYSTEMS

POSITION INDICATION SYSTEMS - OPERATING

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued):

b. With a maximum of one demand position indicator per bank inoperable either:

1. Verify that all analog rod position indicators for the affected bank are OPERABLE and that the most withdrawn rod and the least withdrawn rod of the bank are within the Allowed Rod Misalignment of Specification 3.1.3.1 at least once per 8 hours, or

2. Reduce THERMAL POWER to less than 75% of RATED THERMAL POWER within 8 hours.

* During Unit 4 Cycle 21, the position of Rod F-8 Shutdown Bank B will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed.

* During Unit 3 Cycle 22, the position of Rod M-6, Control Bank C will be determined every 8 hours by verifying gripper coil parameters of the Control Rod Drive Mechanism to determine it has not changed state, until the repair of the indication system for this rod is completed.

** Rod position monitoring by Actions a.2.a), a.2.b), and a.2.c) may only be applied to one inoperable rod position indicator per unit and shall only be allowed until an entry into MODE 3.

FPL-FI-10-70 090505 Hearing Exhibits - 000395



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 237 TO 232

RENEWED FACILITY OPERATING LICENSE NO. DPR-31 AND

AMENDMENT NO. 232 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

1.0 INTRODUCTION

By application dated November 12, 2007, the Florida Power and Light Company (FPL, the licensee) requested changes to the Technical Specifications (TSs) for the Turkey Point Plant, Units 3 and 4 (TP). The requested amendments would revise TS 3.1.3.2, "The Analog Rod Position Indication System - Operating," to allow for the use of an alternate method, other than the movable incore detectors, to monitor the position of a control rod or shutdown rod in the event of a problem with the analog rod position indication (analog RPI) system. The use of this alternate method will reduce the required frequency of flux mapping using the movable incore detectors to determine the position of the non-indicating rod, thus reducing the wear on the movable incore detector system that is also used to complete other required TS surveillances.

2.0 REGULATORY EVALUATION

The objectives of the rod control system and rod position indication system are to ensure that control rod alignment and insertion limits are maintained. Operators utilize the analog RPI system to monitor the positions of the rods to establish that the plant is operating within the bounds of the accident analysis assumptions. Operability, including position indication, of the control rods and shutdown rods is an initial condition assumption in all safety analyses that assume rod insertion upon a reactor trip. Maximum rod misalignment is an initial condition assumption in the safety analysis that directly affects core power distributions and assumptions of available shutdown margin (SDM). Control rod inoperability or misalignment may cause increased power peaking due to the asymmetric reactivity distribution and a reduction in the total available rod worth for reactor shutdown.

General Design Criterion (GDC) 13 in Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Appendix A, specifies that instrumentation shall be provided to monitor variables and systems over their operating ranges during normal operation, anticipated operational occurrences, and accident conditions. TP TS 3.1.3.2 requires operability of the shutdown and control rod analog RPI system and the bank demand position indication system, and thereby

ensures compliance with the control rod alignment and insertion limits. The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the licensee's license amendment request (LAR) to verify that the licensing basis criteria stated in the Updated Final Safety Analysis Report (UFSAR) continues to be met with the proposed changes.

3.0 TECHNICAL EVALUATION

The licensee proposed the following changes to TS 3.1.3.2, Action a:

- Existing Action a.2 will be renumbered to become Action a.3. This is an editorial change which is acceptable to the NRC staff.

- Introduce a new Action a.2 as the alternate means for rod position monitoring. The proposed alternate means described in Action a.2 is composed of three elements; a.2.a), a.2.b), and a.2.c), as follows:

  2. a) Determine the position of the non-indicating rod indirectly by the movable incore detectors within 8 hours and once every 31 Effective Full Power Days thereafter, and within 1 hour if rod control system parameters indicate unintended movement, or if the rod with an inoperable position indicator is moved greater-than 12 steps, and

  b) Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable position indicator within 8 hours and once per 8 hours thereafter, and

  c) Determine the position of the non-indicating rod indirectly by the movable incore detectors prior to increasing THERMAL POWER above 50% RATED THERMAL POWER and within 8 hours of reaching 100% RATED THERMAL POWER, or

- Add the following footnote regarding the proposed alternate method a.2:

  Rod position monitoring by Actions 2.a), 2.b), and 2.c) may only be applied to one inoperable rod position indicator per unit and shall only be allowed until an entry into MODE 3.

Action a.2.a) includes four distinct requirements for verification of the non-indicating rod position using the movable incore detectors: (1) initial verification within 8 hours of the inoperability of the analog RPI, (2) re-verification once every 31 Effective Full Power Days thereafter, (3) verification within 1 hour if rod control system parameters indicate unintended rod movement, and (4) verification within 1 hour if the rod with an inoperable position indicator is intentionally moved greater than 12 steps. An unintended rod movement would be defined as the release of the stationary gripper when no action was demanded either manually or automatically from the rod control system, or a rod motion in a direction other than the direction demanded by the rod control system. An intended rod movement occurs when either an operator manually demands motion from the rod control system, or a temperature or power mismatch demands motion while the rod control system is being controlled automatically. Therefore, any indication of intentional rod movement of greater than 12 steps or unintentional rod movement will require verification of the rod position using the movable incore detectors within 1 hour, which ensures that any rod movement of a non-indicating rod is identified in a timely manner, and that the position of the

non-indicating rod is identified during power changes that result from unit trips or power reductions. The 8-hour completion time for initial verification of rod position remains the same as required by the existing method using the movable incore detector specified in Action a.1. With respect to the 31 Effective Full Power Days verification time interval, the licensee cites the concern over the potential wear and failure of the movable incore detector system caused by repeated use over a long period of time, and therefore the 31- day interval is chosen to coincide with the frequency of other surveillance requirements using the movable incore detectors. The 31-day verification interval is also supplemented by Action a.2.b), using an alternate means to monitor the parameters of the rod control system for indications of rod movement.

Action a.2.b) uses an alternate means to monitor whether the non-indicating rod has moved from the position last determined using the movable incore detectors within 8 hours and once per 8 hours thereafter. The November 12, 2007, LAR provided a detailed description of the alternate method, including components relied upon in the alternate monitoring method. The alternate method, at present, will monitor the rod control system stationary gripper coil current for indications of rod movement for the non-indicating rod.

The current rod control power cabinet design uses a resistor to monitor the coil current. The gripper coil current, measured as an equivalent voltage, will be monitored on an existing control room multi-channel recorder mounted on a vertical panel within the control room surveillance area. A spare channel will be used to display the gripper coil current for a non-indicating rod. The recorder has alarm indication in the form of a display window, which will be programmed for a high and low voltage alarm. Additionally, the recorder high and low voltage alarm will provide an output to a control room annunciator window to indicate a potential rod unintended movement. The recorder and annunciator are indicative of gripper coil change of state. The alternate method is an improvement over the periodic movable in-core detector method because it provides continuous monitoring and alarming capabilities in addition to the once per 8-hour review of the rod control system parameters for unintended rod movement; thus, this provides the opportunity for improved operator response time.

Action a.2.c) consists of two distinct requirements for verification of non-indicating rod position using the movable incore detectors: (1) prior to increasing thermal power above 50-percent rated thermal power (RTP), and (2) within 8 hours after reaching 100 percent RTP. These two requirements will verify the non-indicating rod position prior to power exceeding 50 percent RTP and after reaching 100-percent RTP. Therefore, Action a.2.c) confirms the position of the non-indicating rod to ensure that power distribution requirements are not violated and to establish a starting point for the proposed alternate monitoring actions.

The rod misalignment event is not analytically presented in the Turkey Point's UFSAR; however, the NRC staff reviewed the rod misalignment event, from the UFSAR, of another pressurized-water reactor plant similar in configuration to Turkey Point. With the assumption that the reactor is at rated full power steady state condition with no occurrence of excursion for core temperature, pressure, or flow, the two most bounding rod misalignment events were analyzed: Case 1 where a single rod cluster control assembly (RCCA) is stuck fully withdrawn out of the core and Case 2 where a single RCCA is stuck fully inserted in the core.

In addition, it was assumed for Case 1 that the most reactive bank RCCA is fully withdrawn from the core and that the most reactive bank RCCA is fully inserted in the core for Case 2. Analytical results indicate that Case 2 represents the most limiting case. The peak pellet linear heat

generation was below the threshold limit so that fuel centerline melt does not occur. Since no fuel failures were calculated to occur, there is no radiological release consequent to this event.

Thus, the result of the analysis is in conformance with the acceptance criteria for Condition II events, which are faults of moderate frequency expected to occur on a frequency of once per year during plant operation. Therefore, the NRC staff finds the results applicable and acceptable to TP.

The staff evaluated the effect of using the alternate monitoring method on the design basis events of a rod drop or rod misalignment event during power operation. The ability to immediately detect a rod drop or misalignment is not directly provided by the movable incore detectors used in current Action a.1, or by the alternate monitoring method by monitoring the rod control system parameters. However, should there be a full-rod drop of a control or shutdown rod, it will be immediately detectable by means other than the position indication system.

Independent indication of a dropped rod is obtained using the excore power range signals. Additionally, a negative reactivity insertion corresponding to the reactivity worth of a full-rod drop will cause a change in core parameters including core average temperature and axial flux. Rod misalignment will also be detectable by other means, such as axial flux deviations or a channel deviation alarm. Therefore, the likelihood of an undetected rod drop or misalignment is considered negligible while using the alternate monitoring method.

In addition, the limits of Limiting Condition for Operation (LCO) 3.1.3.1 on shutdown or control rod alignment of 12 steps ensure that the assumptions in the safety analyses will remain valid and that the assumed negative reactivity will be available to be inserted during a plant shutdown. Therefore, the NRC staff finds that the design basis analyses of a rod drop or misalignment remain acceptable.

While operating in Modes 1 and 2, the shutdown margin (SDM) is ensured by verifying compliance with the control rod bank limits of TS 3.1.3.6. The surveillance requirement is performed with the Rod Insertion Limit Monitor, which relies on the group step counter demand position indication and is unaffected by an inoperable analog RPI for a control rod. However, whenever the Rod Insertion Limit Monitor is inoperable, the analog RPI for individual rods can be used to demonstrate compliance with TS 3.1.3.6 consistent with the surveillance requirement.

The alternate monitoring method, which will monitor the stationary gripper coil for the control rod with an inoperable analog RPI, will provide assurance that the position has not changed and remains within the allowed misalignment for the affected control rod and the control rod bank insertion limits of TS 3.1.3.6. In addition, while in Modes 1 and 2, verification of compliance with the required shutdown margin relies upon the rods being capable of insertion. This is verified by periodic rod exercise consistent with TS surveillance requirements. During the performance of the rod exercise with the affected rod, flux traces will be performed after rod insertion and withdrawal to confirm the position of the rod with an inoperable analog RPI. Therefore, insertion status will be confirmed and the affected rod can continue to be credited in the verification of the SDM. Thus, the NRC staff concludes that there are adequate controls, while operating in Modes 1 and 2, to provide reasonable assurance that the plant will continue to achieve subcriticality during a reactor trip.

In operational Modes 3, 4, and 5, the rod with the inoperable analog RPI cannot be easily determined while using Required Actions a.1 (movable incore detector method) or a.2 (alternate

monitoring method). In addition, the rod bottom indication will not be available for the rod with an inoperable analog RPI to verify full rod insertion; thus, the non-indicating rod would be assumed to be incapable of providing negative reactivity following a reactor trip and would not be credited in the SDM calculation. Therefore, the SDM is ensured by considering Reactor Coolant System (RCS) boron concentration, rod position, RCS average temperature, fuel burnup, xenon concentration and samarium concentration. To compensate for the non-indicating rod, the boron concentration requirements will be increased to allow the withdrawn worth of the rod assuming this control rod has the highest reactivity allowance.

SDM calculations are performed in accordance with plant procedure 0-OP-028.2, which will be revised to ensure that the SDM limits continue to be met. Also, TP has procedures in place that address the condition in which more than one rod may not fully insert on a reactor trip to ensure that the reactor is safely shut down. In summary, the non-indicating rod would be treated as if it has not fully inserted on a reactor trip and operators will take actions as currently driven by procedures to safely shut down the reactor, including initiation of emergency boration if two or more rods are not indicating fully inserted. Therefore, while operating in Modes 3, 4, and 5, the NRC staff concludes that there are adequate controls to provide reasonable assurance that the plant will continue to achieve subcriticality upon a reactor shutdown.

As a result, the NRC staff concludes that the use of an alternate method for monitoring the non-indicating rod position provides an acceptable process for knowing the non-indicating rod position and therefore continues to meet GDC 13.

The footnote to TS LCO 3.1.3.2 Action a.2 clearly limits the conditions for the use of the alternate rod position monitoring provisions. It specifically limits the use of these provisions to only one inoperable rod position indicator, thus ensuring sufficient rod position monitoring on a real time basis to verify core conditions during normal operations and accident conditions. The duration for Action a.2 shall only be allowed until entry into Mode 3. Therefore, the repair of the analog RPI must be performed as soon as reasonable conditions exist to safely perform the activities and repeated use of this provision is not acceptable in lieu of the necessary repair.

The licensee will treat the proposed alternate monitoring method as a temporary alteration (TA) in accordance with plant approved procedures. A 10 CFR 50.59 screening review will be performed whenever the TA is implemented.

The NRC staff concludes that the alternate monitoring method, which provides continuous monitoring, and the incore detector method, which provides monitoring on an intermittent basis, in conjunction with each other, provides an overall improvement to the monitoring process associated with and inoperable analog RPI, which in turn should improve the operator response time to a rod movement event involving a rod with an inoperable analog RPI, thus, improving the margin of safety. Therefore, from the evaluation described above, the NRC staff has determined that the proposed LAR is acceptable based on the following reasons: (1) the TS changes provide adequate controls to ensure that the rod position is known, (2) any rod misalignment is detectable for the one rod with an inoperable analog RPI, (3) operators will take appropriate action to ensure that the rod stays within its alignment limit and that SDM is maintained, and (4) there is an improvement in the margin of safety associated with an inoperable analog RPI. Furthermore, the NRC staff agrees with the licensee that an inoperable analog RPI should be repaired during an entry into Mode 3 when the repair can be safely performed.

4.0 STATE CONSULTATION

Based upon a letter dated May 2, 2003, from Michael N. Stephens of the Florida Department of Health, Bureau of Radiation Control, to Brenda L. Mozafari, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida does not desire notification of issuance of license amendments.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (72 FR 67323). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. FPL, letter L-2007-175, "Turkey Point Units 3 and 4 Docket Nos. 50-250 and 50-251, Proposed License Amendment Request - LAR 194 Rod Position Indication Systems," dated November 12, 2007.

2. FPL, letter L-2006-209, "Turkey Point Unit 3 Docket No. 50-250, Proposed License Amendment Inoperable Rod Position Indication," dated September 8, 2006.

3. Updated Final Safety Analysis Report (UFSAR), Turkey Point Units 3 and 4, Docket Nos. 50-250 and 50-251.

4. NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Vol. 1 and 2, Revision 3.1, dated December 1, 2005.

5. Updated Final Safety Analysis Report (UFSAR), H. B. Robinson Steam Electric Plant, Unit 2, Docket No. 50-261.

Principal Contributor: John Budzynski

Date: January 28, 2008

Q.

Please provide all documents in your possession, custody or control related to the timing of the RPI system repair. The request includes, but is not limited to, documents created prior to the outage concerning the time frame planned for performing the RPI system repair.

A.

Documents responsive to this request are provided as Bates Nos.FPL-FI-10-77 through FPL-FI-10-79.

Forced Outage Meeting
Agenda

U3

SNO Items Added since last meeting

Major Scope Review

- F2 RPI coil stack replacement
- Repair of Seal Table Thimble D-3
- Generator Hydrogen Leakage Repairs
- Exciter #1 Firing Circuit Module Replacement

Readiness report

U4

SNO Items Added since last meeting

Major Scope Review

- No major scope planned due to upcoming outage

Readiness report

Unit 3 D-3 / RPI F-2

Repair F-2 RPI

Critical Path

For Mode 5 Schedule:
Polar Crane Inspection
F-2 Repair

Major Scope

For Mode 5 Schedule
Repair D-3
Repair F2
Replace Exciter #1 Firing Circuit Module
Generator Hydrogen Leakage Repairs

Minor Scope

For Mode 5 Schedule

Support Activities

Equip Hatch Opening
Just In Time Training (JIT)

FPL-FI-10-78 090505 Hearing Exhibits - 000404

UNIT	Activity ID	Activity Description	Early Start	Early Finish	Orig Dur	Rem Dur	Cal ID	TASK	SYST	Equip Tag
3	U3NO28-03H	RPI-3-F2: HANG ECO	26FEB08 20:00A	26FEB08 20:59A	1	0	1		028	RPI-3-F2
3	3702301301	RPI-3-F2: REPAIR CUT SPLICE RAYCHEM INSP	26FEB08 23:00A	26FEB08 23:59A	1	0	1	01	028	RPI-3-F2
3	37023013I2	RPI-3-F2 REPAIR: REMOVE SPLICES	26FEB08 23:00A	26FEB08 23:59A	1	0	1		028	RPI-3-F2
4	3800482401	RPI-4-J5: TROUBLESHOOT/REPAIR INDICATOR	27FEB08 00:00A	27FEB08 01:59A	8	0	1	01	072	RPI-4-J5
3	U3HPRPI	HP BRIEF FOR RPI SPLICE REPAIR	27FEB08 07:00A	27FEB08 07:59A	1	0	1		041	
3	37023013RA	+RPI-3-F2 REPAIR: INSPECT PIGTAIL SPLICE	27FEB08 10:00A	27FEB08 11:59A	2	0	1		028	RPI-3-F2
3	U3ICRPI	HP BRIEF FOR RPI SPLICE REPAIR	27FEB08 15:00A	27FEB08 15:59A	1	0	1		041	
3	37023013R1	RPI-3-F2 REPAIR: RAISE F-2 AND SECURE	28FEB08 08:00A	28FEB08 09:59A	1	0	1		028	RPI-3-F2
3	3702301352	RPI-3-F2 REPAIR: RE-SPLICE CONNECTION	28FEB08 23:00A	29FEB08 00:59A	2	0	1		028	RPI-3-F2
3	3702301354	RPI-3-F2 REPAIR: CHAR TEST CABLE	29FEB08 01:00A	29FEB08 02:59A	2	0	1		028	RPI-3-F2
3	U3NO28-03R	RPI-3-F2: REL ECO	29FEB08 08:00A	29FEB08 09:59A	2	0	1		028	RPI-3-F2
3	3702301R2	RPI-3-F2 REPAIR: REST PERIOD FROM RCA	29FEB08 15:00A	29FEB08 15:59A	1	0	1		028	RPI-3-F2
3	3702301R3	RPI-3-F2 REPAIR: REPAIR PIGTAIL SPLICE	29FEB08 16:00A	29FEB08 18:59A	3	0	1		028	RPI-3-F2
3	37023013R9	RPI-3-F2 REPAIR-TEST CABLE REPAIR AND COIL STACK	29FEB08 19:00A	29FEB08 21:59A	2	0	1		028	RPI-3-F2
3	37023013R5	RPI-3-F2 REPAIR: LOWER F-2 TO ORIGINAL POSITION	29FEB08 21:00A	29FEB08 21:59A	1	0	1		028	RPI-3-F2
3	37023013R7	RPI-3-F2 REPAIR: TORQUE SEISMIC PLATE	29FEB08 22:00A	29FEB08 22:59A	1	0	1		028	RPI-3-F2
3	3702301355	RPI-3-F2 REPAIR: RESTORE FROM T3A GRIPPER VOLT.	01MAR08 10:00A	01MAR08 11:59A	2	0	1		028	RPI-3-F2
3	370230131	RPI-3-F2 REPAIR: PMT RPI-3-F2 REPAIR - PMI 028.2	03MAR08 01:00A	03MAR08 01:59A	1	0	1		028	RPI-3-F2

Start Date 24FEB08 23:00 Finish Date 10DEC09 08:59 Data Date 10MAR08 15:00 Run Date 21JAN10 16:20	Turkey Point Nuclear Power Station Unit 3 F-2 RPI Repair 2008 Dual Unit Forced Outage	

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Q.

Please provide all documents in your possession, custody or control discussing the amount of additional time required to restart Unit 4 because the water level in one of the steam generators exceeded 75% (See testimony of J.A. Stall, page 6, lines 17-18).

A.

Documents responsive to this request are provided as Bates Nos. FPL-FI-10-80 through FPL-FI-10-154.

UNIT	Activity ID	Activity Description	Early Start	Early Finish	Orig Dur	Rem Dur	Cal ID	TASK	SYST	Equip Tag
4	U4OPFJIT2	JUST IN TIME TRAINING - UNIT ENTERING MODE 2	27FEB08 19:00A	27FEB08 20:59A	2	0	1		000	
3	U3OPFJIT2	JUST IN TIME TRAINING - UNIT ENTERING MODE 2	28FEB08 03:00A	28FEB08 06:59A	4	0	1		000	
3	U3OPFSUJIT	(JIT) RX STARTUP, ROLL TURBINE, PLACE ONLINE JIT	28FEB08 08:00A	28FEB08 11:59A	5	0	1		040	
4	T4OPFJIT2	JUST IN TIME TRAINING - UNIT ENTERING MODE 2	29FEB08 12:00A	29FEB08 14:59A	3	0	1		000	
4	U4OPFJITDS	GOP- JUST IN TIME TRNG TURB ROLL (DAYSHIFT)	29FEB08 12:00A	29FEB08 14:59A	3	0	1		072	
3	U3OPFROJIT	JUST IN TIME TRAINING FOR TURB ROLL	29FEB08 15:00A	29FEB08 15:59A	1	0	1		069	
4	U4OPFJITNS	GOP- JUST IN TIME TRNG TURB ROLL (NIGHTSHIFT)	29FEB08 19:00A	29FEB08 22:59A	4	0	1		072	
3	U3OPMJITSU	GOP- JUST IN TIME - RX S/U, ROLL TURBINE (MIDS)	02MAR08 11:00A	02MAR08 13:59A	3	0	1		000	
3	U3OPDJITSU	GOP- JUST IN TIME - RX S/U, ROLL TURBINE (DAYS)	02MAR08 15:00A	02MAR08 17:59A	3	0	1		000	
3	U3OPFSJIT	JUST IN TIME TRAINING- SYNCH TO GRID	02MAR08 16:00A	02MAR08 16:59A	1	0	1		069	

Start Date	24FEB08 23:00	Turkey Point Nuclear Power Station	
Finish Date	10DEC09 08:59	Just In Time Training 2008	
Data Date	10MAR08 15:00	Dual Unit Forced Outage	
Run Date	21JAN10 16:22		
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UNIT	Activity ID	Activity Description	Early Start	Early Finish	Orig Dur	Rem Dur	Cal ID	2008 FEB 28 Fri 29	2008 MAR Sat 1	Sun 2	Mon 3
4	U4OPFCLOS1	CLOSE BREAKER - MANUAL RX TRIP HIGH S/G LVL	29FEB08 05:00A	29FEB08 04:59A	0	0	1				
4	T4OPFJIT2	JUST IN TIME TRAINING - UNIT ENTERING MODE 2	29FEB08 12:00A	29FEB08 14:59A	3	0	1				
4	U4OPFJITDS	GOP- JUST IN TIME TRNG TURB ROLL (DAYSHIFT)	29FEB08 12:00A	29FEB08 14:59A	3	0	1				
4	U4MSF0284	NPS APPROVAL OF CONTAINMENT CLOSURE IAW ADM-009	29FEB08 15:00A		0	0	1				
4	T4OPF0136	ADJ BORON FOR CRTCL CNDTNS PER OP-046&OSP-040.4	29FEB08 15:00A	29FEB08 15:59A	1	0	1				
4	U4PSF0500	SETUP CTMT CONTROL POINT / SECURITY POSTED	29FEB08 15:00A	29FEB08 16:59A	2	0	1		UNLOCK PERSONNEL ACCESS HATCH TO PERMIT ENTRY		
4	T4OPF0300	PERFORM POST TRIP REVIEW	29FEB08 15:00A	29FEB08 17:59A	3	0	1				
4	U4WCF002	MANAGEMT APPROVAL/KNOWN OPERATIONAL DEFICIENCIES	29FEB08 16:00A	29FEB08 16:59A	4	0	1		OBTAIN MANAGMENT APPROVAL OF 0-ADM-629 LIST OF KNOWN DIFICIENCIES PRIOR TO OUTAGE.		
4	U4NCFADD	CHEM ADDITION IF REQUIRED	29FEB08 15:00A	29FEB08 19:59A	5	0	1				
4	T4OPFMOD2I	RX START UP UNIT ENTERING MODE 2 PER GOP-301	29FEB08 16:00A	29FEB08 17:59A	2	0	1				
4	U4OPFJITNS	GOP- JUST IN TIME TRNG TURB ROLL (NIGHTSHIFT)	29FEB08 19:00A	29FEB08 22:59A	4	0	1				
4	T4OPF89GST	4-OP-089.1 (1) - ESTABLISH GL STM & CYLINDER HT	29FEB08 21:00A	29FEB08 21:59A	1	0	1				
4	T4OPF89VAC	4-OP-073.1 (1) - ESTABLISH CONDENSER VACCUUM	29FEB08 22:00A	29FEB08 22:59A	1	0	1				
4	T4OPFMSIV	WARM MAIN STEAM LINES PER OP-072 & OPEN MSIVs	01MAR08 01:00A	01MAR08 03:59A	3	0	1				
4	U4NCFMOD2I	CHECK CHEMISTRY PRIOR TO 5%	01MAR08 03:00A	01MAR08 03:59A	1	0	1			After RHR removed from service & every 4 hours until 547F	
4	U4OPCLOSCP	ROLL TURB - DELAY CP	01MAR08 04:00A	01MAR08 06:59A	1	0	1			U4 S/U WAS DELAYED TO FOLLOWING DAYSHIF TO ISSUES WITH TURBINE TRIP ON PREVIOUS N TO ALLOW FOR TRAINING ETC.	
4	U4OPFROLL	4-OP-089 (1) - PREP TURB FOR ROLL/LATCH LL	01MAR08 07:00A	01MAR08 07:59A	1	0	1				
4	U4OPFROLL2	4-OP-089 (2) - ROLL TURBINE TO 1800 RPM	01MAR08 08:00A	01MAR08 09:59A	2	0	1				

Start Date 24FEB08 23:00
Finish Date 10DEC09 08:59
Data Date 10MAR08 15:00
Run Date 26JAN10 11:42

Early Bar
Progress Bar

0310 Sheet 1 of 2

KEY POINT NUCLEAR POWER STAT

PROJECTS

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UNIT	Activity ID	Activity Description	Early Start	Early Finish	Orig Dur	Rem Dur	Cal ID	2008 FEB Fri 29	2008 MAR Sat 1	2008 MAR Sun 2	2008 MAR Mon 3
4	U4OPFCLOSE	RTRN TO SRVCE/CLOSE BKR/ENTER MODE 1 PER GOP-301	01MAR08 10:00A	01MAR08 10:59A	1	0	1				
4	U4NCF0180	CHECK CHEMISTRY AT 30%	01MAR08 11:00A	01MAR08 12:59A	2	0	1			until 547F	
4	U4OPF0180	INCREASE RX POWER TO 30% PER GOP-301	01MAR08 11:00A	01MAR08 12:59A	2	0	1				
4	U4OPF0040	INCREASE POWER TO 40% PER GOP-301	01MAR08 13:00A	01MAR08 13:59A	1	0	1				
4	U4OPF0185	INCREASE POWER TO 50% PER GOP-301	01MAR08 14:00A	01MAR08 14:59A	1	0	1				
4	U4OP0060	INCREASE POWER TO 60% PER GOP-301	01MAR08 15:00A	01MAR08 15:59A	1	0	1				
4	U4OP0070	INCREASE POWER TO 70% PER GOP-301	01MAR08 15:00A	01MAR08 15:59A	1	0	1				
4	U4OPFGDT	ASSIST CHEM -PROCESS GDTS TO ENSURE 3 AVAILABLE	01MAR08 15:00A	01MAR08 17:59A	3	0	1				
4	U4OP0080	INCREASE POWER TO 80% PER GOP-301	01MAR08 16:00A	01MAR08 16:59A	1	0	1				
4	U4OP0090	INCREASE POWER TO 90% PER GOP-301	01MAR08 17:00A	01MAR08 17:59A	1	0	1				
4	U4OPF0190	INCREASE LOAD TO 100% PER GOP-301	01MAR08 18:00A	01MAR08 18:59A	1	0	1				
4	U4OPF20007	PERFORM OSP-059.1 - N-31 SR TEST	01MAR08 18:00A	01MAR08 18:59A	1	0	1				TECH SPEC * FREQUENCY: MANUAL PERFORM PRIOR TO RX START-UP
4	U4MMFRPOST	SUPPORT DEMOB FROM SNO	01MAR08 19:00A	02MAR08 22:59A	16	0	1		ALL POST-OUTAGE (RWP# 700)		
4	U4MMF76087	SWAP & CLEAN L.O. STRAINER	02MAR08 15:00A	02MAR08 16:59A	2	0	1				PMCR 04-076087

Turkey Point Nuclear Plant

Steam Generator Level – Manual Trip

On 2/29/08, while increasing load immediately after synchronization of the Unit 4 turbine generator, the 4A steam generator level exceeded the 75% manual trip guideline stated in Emergency and Off Normal Operating Procedure Usage (0-ADM-211), Enclosure 1. As a result the operating crew initiated a manual reactor trip.

Root Cause for **CR# 2008-7157**

Title: Steam Generator Level – Manual Trip

Date of Event: 02/29/08

Team Members:
Team Leader: Jose Alvarez, Performance Improvement - qualified RCA
Team Member: Kevin Remington, Engineering Supervisor
Team Member: Virginia Barry, Operations Department Unit Supervisor
Team Member: Guy Levy, Training Supervisor
Team Member: Juan Cuan, PTN Road to Excellence
Team Member: Julio Balaguero, Principal Engineer

Condition Report Owner: Richard Wright, PTN – Operations Manager

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1. Introduction

Problem Statement:

On 2/29/08, while increasing load immediately after synchronization of the Unit 4 turbine generator, the 4A steam generator level exceeded the 75% manual trip guideline stated in Emergency and Off Normal Operating Procedure Usage (0-ADM-211), Enclosure 1. As a result the operating crew initiated a manual reactor trip.

This manual reactor trip challenged plant systems and caused financial consequences by adding an unplanned unit cycle and delaying startup on both Turkey Point nuclear units by approximately 30 hours.

Investigation Scope:

This root cause team will focus on the organizational effectiveness prior to and during the event. If the team discovers equipment deficiencies, the facts and information regarding the equipment deficiencies will be documented in a separate condition report.

The team will prioritize their analyses and conduct this evaluation in a stepwise manner. Analysis will initially be focused on the active errors and development of actions to correct those deficiencies identified. Analysis of latent organizational issues will follow.

Investigation Methodology: Investigation techniques will include interviews of involved parties, Event and Causal Factor Charting, Why Staircase, Barrier, and Change analysis.

The Root Cause Charter can be found in Attachment 1

2. Executive Summary

On 2/28/2008 Turkey Point Unit 4 was being made ready to return to service and it was scheduled to go from hot standby to power operation on the morning of 2/29/2008. Unit 4 was the first unit to be returned to service after a dual unit auto-trip that occurred on 2/26/2008 due to an under voltage condition on the electric grid.

On 2/29/2008 while executing this evolution and specifically while increasing load immediately after synchronization of the turbine generator, the 4A steam generator level exceeded the 75% manual trip guideline. As a result the operating crew initiated a manual reactor trip.

A team was formed to determine the root cause of this event and to recommend corrective actions.

Major Conclusions of the root cause effort are:

The abnormally fast generator loading that was implemented by the operating crew exacerbated steam generator (SG) level fluctuations and the eventual loss of steam generator level control. This resulted in the manual trip of the reactor. The operators determined the loading rate based on their training and plant conditions. The procedure used for this evolution (4-GOP-301, Hot Standby to Power Operation), did not provide sufficient guidance for the rate of initial loading of the main generator. **Insufficient guidance for the initial loading of the main generator and for stabilizing power while preparing to transfer to automatic feed regulating valve control is the root cause.**

Additionally the following contributing causes were identified:

- The reactor control operator (RCO) did not attend just-in-time training (JITT) and, therefore, did not benefit from the crew's training and practice session. This changed the crew dynamics for the evolution (placing Unit 4 on line) from the way they practiced in the simulator. Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**

- The abnormally fast generator loading implemented by the operating crew focused the unit supervisor on peer checking the RCO as recommended in NAP-402, Conduct of Operations. The requirement for frequent peer checks of the RCO weakened the unit supervisor's overall oversight role during the evolution. **The abnormally fast generator loading is a contributing cause, it shifted the unit supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**

- The turbine operator and senior reactor operator (SRO) continued to increase turbine load while the steam generator (SG) level continued to increase after the feed regulating by-pass valves were all closed thinking that the higher steaming rate would lower SG level. **A weakness in the understanding of the "shrink and swell" concept is a contributing cause.**

- The FW operator did not stabilize SG levels and did not communicate his concerns about SG level control until it was too late. **Failure of the FW operator to communicate SG levels and trends to the other operators is a contributing cause.**

The following corrective actions to prevent recurrence and routine corrective actions have been recommended by the root cause team to address the root cause and contributing causes identified.

Corrective Actions to Prevent Recurrence:

1. Revise 3/4-GOP-301, Hot Standby to Power Operation to provide guidelines for ramp rates during turbine loading and appropriate hold points that ensure proper control of plant parameters.

   Due Date: April 15, 2008, ***CAPR***

Routine Corrective Actions Include:

2. Develop an interim process solution that ensures all crew members of the affected crews attend JITT as called for per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup after a refueling outage" for the Unit 4-24 Refueling Outage startup.

   Due Date: 5/4/2008 - ***Routine Corrective Action***

3. Develop a permanent process that ensures all crew members of affected crews attend JITT when called for as per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup following a refueling outage". Include such process in the appropriate procedures.

   Due Date: 07/31/2008 - ***Routine Corrective Action***

4. Provide a summary of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08 in the form of a case study to go over human performance and error reduction techniques to operations personnel. The case study presentation is to include questioning attitude, stop when unsure, peer checking, proper overall oversight and team work as it relates to the lessons learned associated with this event. This training will be given as part of Continuing Training LOCT Segment 2.

   Due Date: 6/26/2008 Continuing Training LOCT Segment 2, -***Routine Corrective Action***

5. Provide just-in-time training (JITT) on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell of steam generator indicated levels. This JITT will be provided to all of the crew members of the affected crews appropriately timed prior to Unit 4-24 refueling start up.

   Due Date: 5/4/2008 - ***Routine Corrective Action***

6. Provide training as part of continuing training on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell on steam generator indicated levels.

   Due Date: 7/31/2008 - ***Routine Corrective Action***

3. Background

On 2/26/2008, PTN Units 3 & 4 experienced an auto-trip due to an under voltage condition on the grid. Unit 4 was being made ready to return to service and it was scheduled to go from hot standby to power operation on the morning of 2/29/2008. Unit 4 was the first unit to be returned to service after the dual unit auto-trip.

Just-in-time training

In preparation for bringing the unit from hot standby to power operation, just-in-time training (JITT) was conducted for the crew that was to perform the evolution. This JITT was conducted at the beginning of the operating crew's shift at 18:00 on 2/28/2008. Not all members of the operating crew scheduled to perform the actual plant evolution from hot standby to power operation attended the JITT.

Attending the JITT from the operating crew were the:

- Feed-water control operator (FW RO),
- Balance of plant operator (BOP RO),
- Balance of plant SRO (BOP SRO)
- Unit supervisor (US).

The reactor control operator (RCO) and shift manager of the operating crew did not attend JITT due to shift manning requirements. In the place of the RCO a staff SRO (certified) participated with the crew in JITT as a surrogate. Training was performed and the hot standby to power operation evolution was performed successfully on the simulator in accordance with 4-GOP-301 (Hot Standby to Power Operation). This included closing the generator breaker and adding load to the turbine until they successfully synchronized to the grid and stabilized the plant.

Actual Hot standby to power operation evolution

At 02:00 on 2/29/2008 a briefing was held in the control room regarding the hot standby to power operation evolution. At approximately 04:47 the generator output breaker was closed and ready to pick up load. The RCO of the operating crew had not participated in the JITT as previously stated. All other personnel (other than the shift manager) performed their assignments as in the JITT. The following figure 1 is a graphical representation of the crew composition during the actual plant evolution.

Crew Composition during Actual Evolution In Plant

Reactor Control	Steam Generator	Turbine Controls
1 RCO @	1 FW RO	1 BOP RO
1 US (peer checking RCO) #		1 BOP SRO (peer checking BOP RO)

Also present were the Shift Manager @ and the Assistant Operations Manager.

@ Did not attend the JIT training on 2/28/08

Focused on peer checking RCO due to rapid MW ramp rate

Figure1

The operating crew began to load the turbine in increments of 5 to 10 megawatts electric (MWe), as prescribed in procedure 4-GOP-301, with the intent of getting above 40 MWe as quickly as possible so they could put the feed-water controls in automatic. The RCO called for frequent increases in MWe to accomplish this (see Unit 4 Manual Trip summary of key parameters

Figure 2). The frequent reactivity changes made to support the rapid increase in MWe focused the US on peer checking the RCO.

At 04:49:38 the FW RO closed the feed-water control valve to try to reduce the swelling in the level (64.8%) that was occurring in 4A SG. During that time load was continually being increased until at 04:50:12 the 4A SG feed-water level exceeded 75%. The unit 4 reactor was manually shut down at 04:50 due to exceeding the limit as identified in 0-ADM 211.

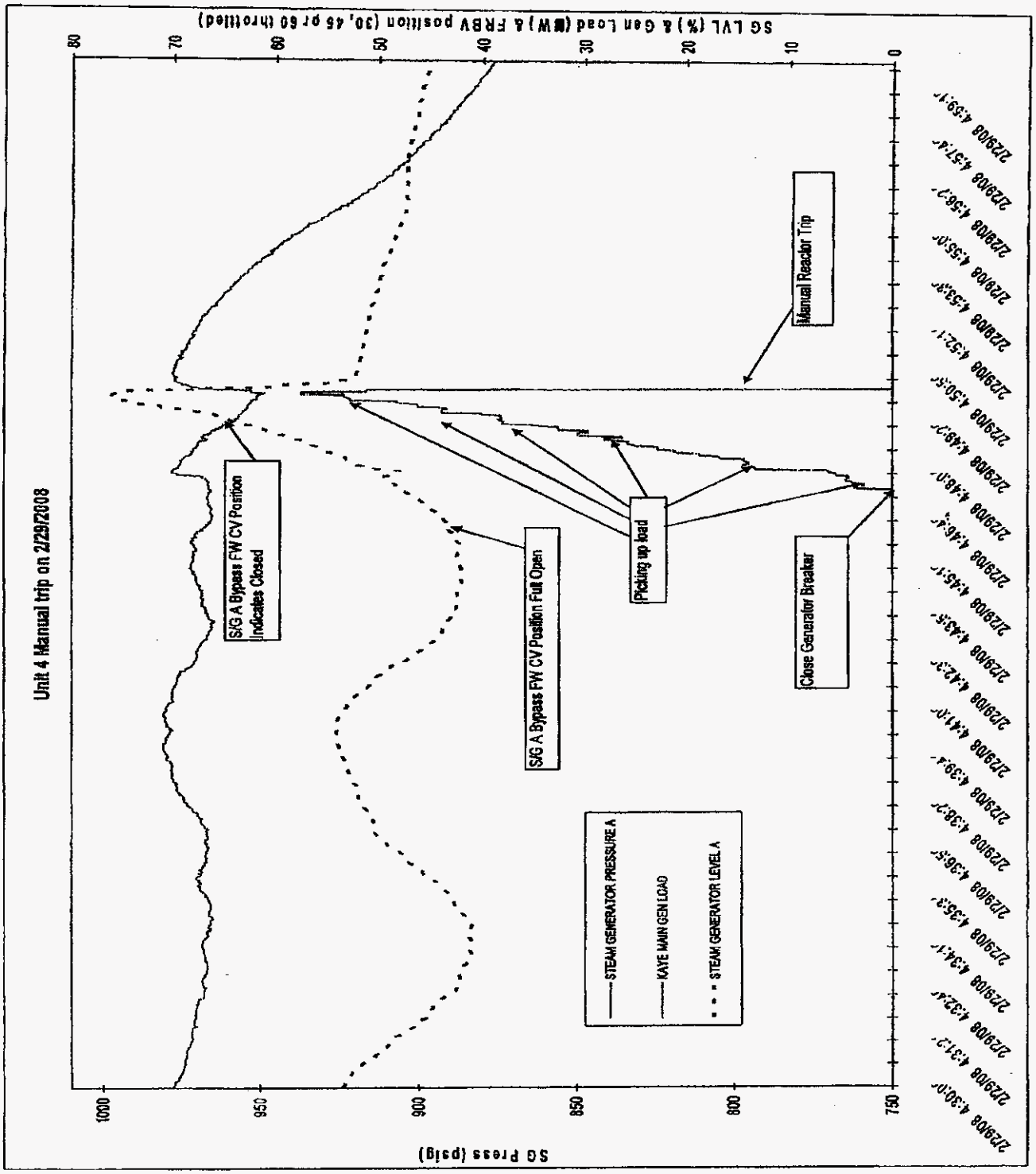

Unit 4 Manual trip on 2/29/2008
SG Press (psig)
SG LVL (%) & Gen Load (MW) & FRBV position (30, 45 or 60 throttled)
STEAM GENERATOR PRESSURE A
KAYE MAIN GEN LOAD
STEAM GENERATOR LEVEL A
S/G A Bypass FW CV Position Indicates Closed
S/G A Bypass FW CV Position Full Open
Picking up load
Manual Reactor Trip
Close Generator Breaker

Figure 2

4. Sequence of Events

The following is the timeline of events. A detailed Event and Causal Factor Chart can be found in Attachment 2. This event and causal factor chart details key organizational events prior to the day of terminal event (active error) February 29, 2008. Following is a timeline of events immediately preceding the terminal event.

Sequence of Events February 28, 2008

2/28/08	Unit 4 made ready to return to service • Unit 4 scheduled for startup on 2/29/08 • JIT training scheduled for 18:00 2/28/02
~18:00	Operating crew notified of JIT training to put unit 4 online
~18:00 - 22:00	Not all operating crew members attend JIT training
2/29/08	
02:00	Briefing begins in control room
04:47:36	Closed generator breaker (Feed-water flow between 250,000 to 272,000Lb/Hr)
04:48:00	Feed-water flow increased on 4A SG to ~450,000 Lb/Hr, 13.3 MW and 4A SG FW level 49%
04:48:20	Feed-water flow decreased on 4A SG to ~340,000 Lb/Hr, 14.4 MW and 4A SG FW level 52.6%
04:49:04	Feed-water regulation isolation valve opened causing increase in feed-water flow to ~390,000 Lb/Hr, 28MW, 4A SG FW level 58%
04:49:12	Feed-water flow reduced to ~ 100,00 Lb/Hr, 30.6MW and 4A SG FW level 58.5%
04:49:38	Feed-water flow valve shut off, 38.5 MW and 4A SG FW level 64.8%
04:50:12	4A SG Feed-water level exceeds 75%, 52.8 MW
4:50:24	Load reduced from 57.5 to 51.2 MW
4:50:28	4A SG Feed-water level below 75%
4:51	Manual Reactor trip

4.1 Immediate Action

Upon the 4A SG Feed-water level exceeding the administrative limit of 75%, Operators manually performed a Reactor Trip on Unit 4. 4-EOP-E-O, Reactor Trip or Safety Injection was entered with Immediate Actions performed. The crew transitioned to 4-EOP-ES-0.1, Reactor Trip Response and stabilized the plant. The crew transitioned to 4-GOP-103, Power Operation to Hot-Standby. Event Notification (EN #44016) was made to the Nuclear Regulatory Commission (NRCOC) @ 0547. The operating crew reviewed the event, performed remedial training with emphasis on the fundamentals of shrink and swell during turbine loading.

4.2 Risk Consequences and Safety Significance

This event resulted in a manual reactor trip with no safety equipment operation. The associated plant transient does produce a minimal increased risk to plant fatigue. The Final Safety Analysis Report (FSAR) Table 4.1-8, Design Thermal and Loading Cycles - 60 Years for design cycles of Reactor Trip (Transient Design Condition) is 400 times. The Fatigue Monitoring Program is designed to track design cycles to ensure that Reactor Coolant System components remain within their design fatigue limits.

This event is not safety significant. The operating crew immediately recognized the 4A SG level control issue and the operating crew conservatively tripped the unit in accordance with the manual trip guidelines, below the reactor trip set point. The plant safety limits were not challenged at anytime.

5. Evidence and Cause Analysis

The root cause problem statement and investigation scope (Attachment 1) focuses this analysis on the organizational factors associated with exceeding the 75% (narrow range) manual trip guideline of the 4A steam generator while returning the unit back to service.

Investigation Methodology:

A cross-functional team was formed to perform a root cause analysis that identifies root causes, contributing causes and appropriate corrective actions. The team used the Root Cause Handbook as a guide utilizing Event and Causal Factor charting, Why Analysis techniques and Barrier analysis. A root and contributing cause test matrix was utilized to validate root and contributing causes.

The following was performed by the team to determine root and contributing causes:

- To gain an understanding the team developed an event and causal factor chart (Attachment 2). This chart depicts the events in chronological order and the corresponding causal factors to those events. The PI ProcessBook data base (ERDADS) was used to validate log entries and timelines (Figure 2).
- In parallel the team gathered, reviewed and summarized available evidence by interviewing key personnel and reviewing documentation. The team adjusted and finalized the timeline in an iterative manner.
- Once all pertinent information was added to the event and causal factor chart the team identified key causal factors. Three causal factors were identified by the team.
- The team then further analyzed each of the key causal factors using the "Why Analysis" tool (Attachments 4). Final potentially actionable "why's" were identified for each causal factor.
- The team used a Root Cause and Contributing Cause Test Matrix (Attachment 5) to test each step in the why analysis for being a root cause or contributing cause. Brackets were added to the test matrix to show related why's.
- The team performed a Barrier Analysis to further understand the broken barriers identified during the analysis of this event (Attachment 6).
- Section 5 of the report (Event and Causal Analysis) is arranged in three major sections with discussion on the following causal factors within each one:

    A. **Prevention - Causal Factor 1**
    The turbine operator and SRO continued to increase main generator load while steam generator levels not stable.
    Lack of detailed guidance for adequate initial loading of the main generator
    B. **Prevention – Casual Factor 2**
    The operating crew did not load the main generator at the same rate as practiced in JITT.
    Just in Time Training / Practice fails to produce proper MW unit ramp up.
    C. **Detection - Causal Factor 3**
    Operator on SG level does not indicate there is an issue or, ask for slowdown.
    Situation Awareness – Operating Crew Failed to Stop (Slow Down) when unsure

- Final conclusions and determinations arrived at in each section are based on the information contained within the specific section and on information contained in other sections of the report.

5.A. Prevention – Causal Factor 1

The turbine operator and SRO continued to increase main generator load while steam generator levels not stable.

A review of the PI data trends before and during the synchronization of the main generator to the grid indicated that the FW RO did not have stable control of steam generator (SG) levels (see Figure 2). In the 18 minutes before the synchronization all SG levels were oscillating between approximately 40 and 60% narrow range indicated level. Observers indicate that there were no communications by the FW RO or other operators that the FW RO was having difficulty controlling levels. SG level and trend data was not communicated before or during the synchronization event.

A review of the procedure in use, 4-GOP-301, Hot Standby to Power Operation, indicates that there is insufficient direction to ensure that crews synchronize and stabilize the plant consistently. Following turbine generator synchronization the procedure directs the following in step 5.55:

"Increase turbine load to 40 MWe in increments of approximately 5-10 MW."

All operators interviewed indicated that they have historically been trained to expedite the ramp to 40 MWe. However, the basis for expediting the ramp to 40 MWe was not known consistently amongst the operators and what was deemed to be an acceptable time band to get to 40 MWe was inconsistent amongst operators.

Following several steps to ensure proper steam dump operation the following direction is given in step 5.58:

"Perform the following as turbine load is increased to place the main feedwater control valves in automatic control:"

At this point some operators stabilize and place the feedwater regulating valves in automatic per the subsequent steps prior to increasing load. Other operators continue the load increase while performing the same evolution.

The procedure does not specify ramp rates or hold points and operating crews are not consistent in how the procedure is interpreted. In this case the crew performed the steps very rapidly and loaded the main generator to 40 MWe in 2 minutes. In previous and subsequent successful startups the crews performed the same load increase as shown in the following Table1 and Figure 3

Startup Date	Time to 40 MWe	Comments
U3 10/16/2007	5 min 50 sec	Less than 3 minutes into the ramp load was decreased from 37 MWe to 17 MWe due to maintain Tavg/Tref mismatch within specifications.
U4 3/1/2008	6 min 52 sec	None
U3 3/3/2008	16 min 4 sec	None

Table 1

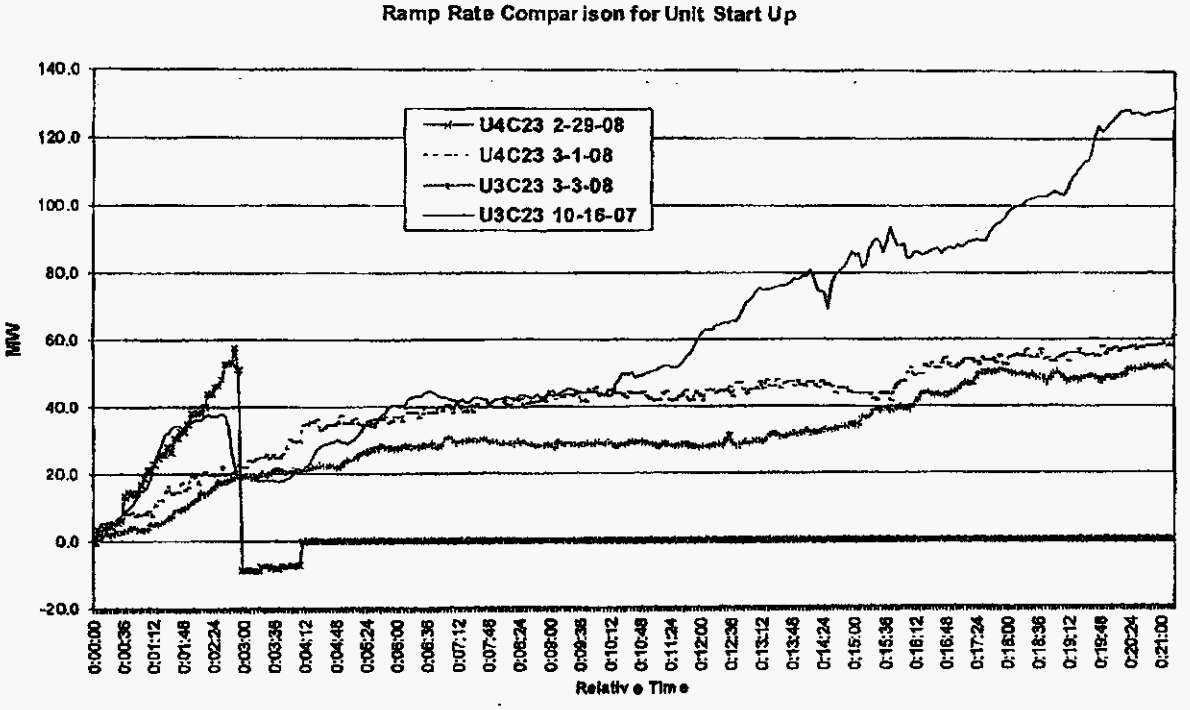


Figure 3

Conclusion:

The abnormally fast generator loading that was implemented by the operating crew exacerbated steam generator (SG) level fluctuations and the eventual loss of steam generator level control. This resulted in the manual trip of the reactor. The operators determined the loading rate based on their training and plant conditions. The procedure used for this evolution (4-GOP-301, Hot Standby to Power Operation), did not provide sufficient guidance for the rate of initial loading of the main generator. **Insufficient guidance for the initial loading of the main generator and for stabilizing power while preparing to transfer to automatic feed regulating valve control is the root cause.**

Action:

1. Revise 3/4-GOP-301, Hot Standby to Power Operation to provide guidelines for ramp rates during turbine loading and appropriate hold points that ensure proper control of plant parameters.
   Due Date: April 15, 2008, ***Corrective Action to Prevent Recurrence***

5.B. Prevention – Casual Factor 2

The Operating crew did not load the main generator at the same rate as practiced in the Just-in-Time Training (JITT)

Just-in-Time Training

On 2/29/2008 the mid-shift operating crew was scheduled to perform the hot standby to power operation evolution. On 2/28/2008 the operating crew that was to perform the evolution (with two exceptions) attended Just-In-Time Training facilitated by Operations Training in the station's simulator. The exceptions to the JITT attendance was the Reactor Controls Operator (RCO) and the Shift Manager who were required to stay in the control room to satisfy minimum shift manning requirements. An experienced previously licensed SRO acted as the RCO during the JITT. During the JITT the main control board was manned with one Unit Supervisor (US), a surrogate RCO, one Reactor Operator at the feedwater controls (FWRO), a Balance of Plant Operator (BOPRO) at the turbine and generator controls, and an extra SRO with the BOP to act as peer checker.

The station's simulator is a Unit 3 simulator, simulator differences are routinely discussed in training, and these differences do not manifest themselves as difficulties to the crews. A Unit 3 startup is fundamentally the same as a Unit 4 startup with respect to plant controls and procedures. This was discussed in the briefing and the crew understood and accepted the concept.

The JITT simulated raising reactor power to approximately 6%, starting the turbine, and synchronizing the main generator to the grid. The evolution was briefed and performed in accordance with procedures and management expectations for procedure use, place keeping, and communications. The instructor facilitating the JITT noted good communications, precise control of the plant, and good steam generator (SG) level control.

During the JITT the main generator was synchronized to the grid and loaded to approximately 55 MWe over a 15-20 minute period, including transferring SG level control to automatic. The evolution was debriefed and the crew returned to the control room at approximately 2300 hrs.

Actual hot standby to power operation evolution

The actual hot standby to power operation evolution in the plant differed from what was practiced in the simulator by having a faster and more aggressive MWe ramp rate. This difference in the ramp rate can be attributed to the following:

- The lack of detailed guidance for adequate initial loading of the main generator, prescribed ramp rates, and stabilizing power while transferring to automatic feed regulating valve control. This was previously discussed in this report and is the Root Cause of this event.
- Different RCO in JITT This RCO did not attend JITT. This changed the crew dynamics as they were practiced in the simulator.
- The US focused on peer checking reactivity changes as opposed to a more holistic overall oversight.
- Weaknesses in the understanding of shrink and swell (assumption by the BOP SRO that increasing turbine loading will decrease steam generator levels). This is covered in the next section of this report 5C.
- Failure of the FWRO to communicate Steam Generator levels and trends to the other operators. This is covered in the next section of this report 5C.

A graphical representation of the operating crew's composition can be seen in figure 1.

Crew Composition During Actual Evolution in Plant

Reactor Control	Steam Generator	Turbine Controls
1 RCO @	1 FW RO	1 BOP RO
1 US (peer checking RCO) #		1 BOP SRO (peer checking BOP RO)

Also present were the Shift Manager @ and the Assistant Operations Manager.

@ Did not attend the JIT training on 2/28/08
# Focused on peer checking RCO due to rapid MW ramp rate

Figure1

Different RCO in JITT
The RCO during the actual plant evolution is very experienced and respected by his peers. He is very dynamic and takes charge more so than the surrogate RCO did in the simulator. The RCO missing in the JITT did not have the opportunity to practice and be coached on an appropriate ramp rate.

When the evolution began the RCO took charge and the Unit Supervisor was focused on peer checking the RCO's reactivity manipulations, which happened frequently and quickly due to the rapid ramp rate in MWe that was being implemented during the evolution. Figure 3 compares the ramp rate of this evolution to other successful evolutions.

US focused on peer checking reactivity changes
It should be noted that 0-ADM-200, Conduct of Operations, requires the US to be cognizant of the manipulation and be in the vicinity of the controls. This is routine for daily plant operations. During normal daily plant operations reactivity manipulations occur only several times daily and peer checking takes only a few minutes. In this case the RCO performed reactivity manipulations almost continuously to increase plant load and the US was peer checking all the manipulations. This caused the US to focus on the peer checking and not the overall evolution. The Unit Supervisor's (US) focus on peer checking was due to the unusually fast ramp rate throughout the evolution.

Contributing Causes

The reactor control operator (RCO) did not attend just-in-time training (JITT) and, therefore, did not benefit from the crew's training and practice session. This changed the crew dynamics for the evolution (placing Unit 4 on line) from the way they practiced in the simulator. Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**

The abnormally fast generator loading implemented by the operating crew focused the unit supervisor on peer checking the RCO as recommended in NAP-402, Conduct of Operations. The requirement for frequent peer checks of the RCO weakened the US overall oversight role during the evolution. **The abnormally fast generator loading is a contributing cause, it shifted the Unit Supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**

Actions

2. Develop an interim process solution that ensures all crew members of the affected crews attend JITT as called for per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup after a refueling outage" for the Unit 4-24 Refueling Outage startup.

   Due Date: 5/4/2008 - ***Routine Corrective Action***

3. Develop a permanent process that ensures all crew members of affected crews attend JITT when called for as per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup following a refueling outage". Include such process in the appropriate procedures.

   Due Date: 07/31/2008 - ***Routine Corrective Action***

The following action (4) applies to causal factors 2 and 3 and it is listed twice in the report. In addition to issues associated with causal factor 3, the case study will address the lessons learned from this event on proper team work and the importance of overall oversight of plant evolutions associated with this causal factor (2).

4. Provide a summary of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08 in the form of a case study to go over human performance and error reduction techniques to operations personnel. The case study presentation is to include communication, questioning attitude, stop when unsure, peer checking, proper overall oversight and team work as it relates to the lessons learned associated with this event. This training will be given as part of Continuing Training LOCT Segment 2.

   Due Date: Continuing Training LOCT Segment 2, June 26, 2008 -***Routine Corrective Action***

5.C. **Prevention – Casual Factor 3**

Operator on SG level does not indicate there is an issue or ask for slowdown.

Most of the RCO's communications were directed to the BOPRO to raise load. There were no obvious communications with the FWRO to determine if SG levels were adequate and stable. The FWRO is a very experienced reactor operator and has performed at least five plant startups at Turkey Point. The RCO and BOPRO were aware of this and communicated 'around' the FWRO.

The time period of the event was very short, less than 3 minutes. The 4 crew members conducting the evolution, including the SROs, did not make an effort to slow the RCO down as he directed 10 MWe load changes quickly and frequently.

As the main generator was loaded, other communications occurred about steam dumps and feedwater regulating valve (FRV) isolation valves and FRV leakby. This conversation lasted about 55 seconds. The FWRO failed to communicate SG levels and trends to the other operators until it was too late to prevent SG level from exceeding 75%.

During the latter stages of the event the FWRO had the feedwater regulating valve bypass closed due to overfeeding the SGs. As the RCO directed the SRO at the turbine controls to pick up more load the SG narrow range level was increasing due to increased steam demand. SG wide range level was not being monitored because it is not visible from the position of the operators at the controls. The significance of the wide range level indicators is that shrink and swell phenomena can be easily diagnosed by comparing the narrow range level indicators to the wide range level indicators. The SRO at the turbine continued to increase load, presumably to lower SG level (as written in the post trip Plant Personnel Statements and stated in interviews). As turbine load was increased the SG level increased as a result of swell phenomena. The RO at the turbine controls recognized this and immediately shed approximately 6 MWe to lower SG level as it was passing through 75%. The effect of lowering load was to also lower SG level, however level had already exceeded the 75% manual trip setpoint and the order was given to trip the unit.

The events described above indicate a fundamental knowledge gap by some operators regarding shrink and swell phenomena. During the JITT, turbine loading ramp rates were much slower and feedwater operation was more stable. The JITT did not include a discussion of shrink and swell because the issue did not present itself.

The FW operator did not have a peer checker as recommended in NAP-402, Conduct of Operations, Attachment E, step 4.1.2, which states in part;

> *"Operations has the greatest potential to influence reactivity management or initiate reactivity related events and peer checks should typically be used for the following type of activities:*
> - *Feedwater control changes"*

There were two peer checkers stationed at the controls with the 3 startup operators. Neither peer checker was directly checking the FW operator. Plant Personnel Statements indicate that the US attempted to peer check the FW operator, but was interrupted in most cases to peer check the RCO ("I kept pulling (name) back away from SG level control"). In any case, a peer checker was not assigned to the FW operator.

Conclusion:

Contributing Causes

The turbine operator and Senior Reactor Operator (SRO) continued to increase turbine load while the Steam Generator level continued to increase after the feed regulating by-pass valves were all closed thinking that the higher steaming rate would lower SG level. **A weakness in the understanding of the "shrink and swell" concept is a contributing cause.**

The FW operator did not stabilize SG levels and did not communicate his concerns about SG level control until it was too late. **Failure of the FW operator to communicate SG levels and trends to the other operators is a contributing cause.**

Actions

5. Provide Just-in-Time Training (JITT) on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell of steam generator indicated levels. This JITT will be provided to all of the crew members of the affected crews appropriately timed prior to Unit 4-24 Refueling Start up.

   Due Date: 5/4/2008 - ***Routine Corrective Action***

6. Provide training as part of continuing training on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell on steam generator indicated levels.

   Due Date: 7/31/2008 - ***Routine Corrective Action***

The following action (4) applies to causal factors 2 and 3 and it is listed twice in the report. In addition issues associated with causal factor 2, previously discussed in the report the case study will address the lessons learned from this event on proper team work, questioning attitude, stop when unsure and peer checking associated with this causal factor(3).

4. Provide a summary of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08 in the form of a case study to go over human performance and error reduction techniques to operations personnel. The case study presentation is to include communication, questioning attitude, stop when unsure, peer checking, proper overall oversight and team work as it relates to the lessons learned associated with this event. This training will be given as part of Continuing Training LOCT Segment 2.

   Due Date: Continuing Training LOCT Segment 2, June 26, 2008 -***Routine Corrective Action***

5.1 **Extent of Condition**

Condition – MWe present , Steam generators in manual level control
The extent of condition evaluation included a review of procedures for situations where the following conditions exist:

a. Load (MWe) is present and
b. The steam generator levels are under manual control.

The Root Cause Team determined that only the following procedure fits the above criteria:

3/4-ONOP-049.1 Deviation or Failure of Safety Related or Reactor Protection Channels

The team recommends that the procedure be revised to provide guidance that load (MWe) should not be adjusted until the Steam Generator levels systems can be placed on automatic or words to that intent.

Action

7. Revise Deviation or Failure of Safety Related or Reactor Protection Channels (3/4-ONOP-049.1) to provide guidance that load (MWe) should not be adjusted until the Steam Generator levels systems can be placed on automatic or words to that intent.

   Due Date: 7/31/2008 - ***Routine Corrective Action***

5.2 Generic Implications (Extent of Cause)

Extent of Cause for the Corrective Actions to Prevent Recurrence (CAPR) –

For extent of cause analysis the team used the following cause:

> **Cause** – Insufficient guidance for parameter control when MWe are present and the Steam Generator levels are in Manual Control

The operation of the plant is done under procedural guidance. Any maneuvering of the plant would be done under a specific procedure.

The team performed a review to determine where else while operating the plant "MWe are present and the Steam Generators levels are in Manual Control" for insufficient guidance.

The only other instance where guidance could be deficient for this condition is Deviation or Failure of Safety Related or Reactor Protection Channels (3/4-ONOP-049.1).

No additional action is required as action 7 addresses the revision of this procedure.

The team recommends that the Operations Department Procedure group verify this extent of cause and determine if there are any other cases of where: MWe are present and Steam Generator levels are in manual control for procedural deficiencies.

Enhancement Action

8. Operations Department Procedure to group verify this extent of cause and determine if there are any other cases of where procedural deficiencies exist when MWe are present and Steam Generator levels are in manual control other than Deviation or Failure of Safety Related or Reactor Protection Channels (3/4-ONOP-049.1). .
   Due Date: 12/31/08 ***Enhancement Action***

5.3 Industry Operating Experience

The INPO Plant Events data base was researched for applicable industry operating experience. The entire data base was searched which includes all events, no time frame was excluded. For each search specific key words were used to find events that might be similar to the event of this root cause. Results of the search were first screened by reading the titles. If the titles indicated that the specific operating experience might be applicable the complete event summary was read to determine if it was applicable.

Three searches were performed using the following key words:

Search 1
"turbine trip" and "steam generator level"
This search yielded 137 industry events.
Search 2
"start up" and "turbine trip"
This search yielded 23 industry events.
Search 3
"start up, reactor trip"
This search yielded 53 industry events.
Search 4
"Feedwater Control System" and reactor Scram"

This search yielded 128 events. Three events had similarities to the event of this root cause.

- 280-030125 - Surry 1, event date 1/25/2003
  This event was caused by the challenges of performing a reactor startup and having to control feedwater in manual with FF and SF indications being less accurate at low power levels.
  As corrective action, the Operators were coached on observing SF/FF, actual level, and anticipating the effects of shrink and swell. Additional simulator training will be provided for the operators, including the effects of shrink and swell.

- 336-930223-1 Millstone 2, event date 2/23/1993
  The cause of the reactor trip was insufficient feedwater flow to the steam generators for the existing reactor power level. Following the main turbine trip, the steam generator pressures increased, causing the differential pressure between the main feedwater pump and the steam generators to decrease, and consequently decreasing the feedwater flow rate to the steam generators. Additionally, the operators were initially concerned about overfeeding the steam generators and stopped the automatic actions of the feedwater control system and consequently, only, partially opened the feedwater bypass control valves. When steam generator levels were observed to be decreasing, the feedwater flow rates were then increased.

- 395-970426-1 Summer 1, event date 4/26/1997
  The initial high steam generator water level was caused by inadequate manual control of main feedwater speed. Insufficient main feedwater pump speed had caused the main feedwater regulating valves, operating in automatic, to be near the fully open position. An upward adjustment of pump speed and feedwater-to-steam header differential pressure rapidly increased feedwater flow. The reaction of the main feedwater regulating valves from near the fully open position was too slow to prevent high steam generator water level. The secondary operator placed the main feedwater regulating valves in manual control

and was successful in preventing high water level in two steam generators, but water level in the third steam generator momentarily reached the high level setpoint that trips the main turbine and the main feedwater pumps.

These events occurred in 1997 -2003, The lessons learned from these events applicable to the event of this root cause were also somewhat related to the topics covered in SOER 96-1, Control Room Supervision, Operational Decision – Making, and Teamwork.

SOER 96-1

The SOER discusses deficiencies in supervisory oversight, reactivity control, teamwork, and crew decision-making. It is recommended that material prepared as part of the case study of this event prepared for action 4 be included in Continuing Training LOCT as part of the continuing training given on SOER 96-1.

Action

9. Revise the Continuing Training LOCT training plan to incorporate discussions of this event (summary of case study created of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08) during the continuing training for SOER 96-1 yearly.
   Due Date: 7/31/2008 -***Routine Corrective***

5.4 Evaluation of Preventative Maintenance (PM) and PM Technical Basis

This event is not associated with equipment reliability. No aspects of the root or contributing causes are associated with preventative maintenance. Therefore, the preventative maintenance program is not applicable to this evaluation.

5.5 Past Occurrences

Internal Operating Experience Review

The SITRIS data base was searched from February 28, 2003 through February 29, 2008 using the key words "manual trip" in the issue title or issue description to determine if there were any previous condition reports that detailed the same general condition and causes of this event or previous occurrence.

Details of SITRIS search results:

Manual Trip

A Search in SITRIS was performed using the above criteria, and for the criteria of 'Manual Trip" in the **Issue Title** and Issue **Description** resulted in the identification of the following CRs:

2005-15105
2005-30680
2005-31103
2005-35560
2008-7157
2004-10543 2004-18025 2004-18113
2005-15105 2005-17984 2005-272
2005-28128 2006-1417 2006-29055
2007-27024
The "Brief Description" and "detailed Description" of each of the above CRs were evaluated and found no repeat occurrences or events.

Steam Generator and Trip or scram

A Search in SITRIS was performed using the above criteria, and for the criteria of 'Steam Generator – Trip or scram" in the **Issue Title** and Issue **Description** resulted in the identification of the following CRs:
2005-28229
2007-11440
204-16990
The "Brief Description" and "detailed Description" of each of the above CRs were evaluated and found no repeat occurrences or events.

Conclusion:
This event is not considered a repeat event or occurrence.

6. Condition - Causes - Corrective Actions - Effectiveness Measure

The CAPRS and routine actions which are detailed within this report and in the following table will not be complete at time of the CROG CR evaluation. Deferment of these actions is justified by the following:

- Procedure 3/4-GOP-301, Hot Standby to Power Operation, and performing such an evolution will not be completed at the station without all members of the crew to perform such an evolution participate in a JITT to:
    - Practice and coach members on performing the evolution the appropriate method of conducting the MWe ramp up and control of parameters
    - The concept of shrink and swell and how to properly control steam generator levels.

The JITT was conducted for both subsequent return to service of Units 3 (3/4/2008) and 4 (3/1/2008) and steam generator levels properly controlled and MWe ramp ups were conducted successfully.

The next planned challenge (performance of the evolution) is the up coming unit 4 return to service from refueling outage PT4-24. JITT has been planned for the operating crews that will conduct such evolution and procedure 3/4-GOP-301, Hot Standby to Power Operation will have been revised by such a time.

6. **Condition - Causes - Corrective Actions - Effectiveness Measure**

Condition: On 2/29/08, while increasing load immediately after synchronization of the Unit 4 turbine generator, the 4A steam generator level exceeded the 75% manual trip guideline stated in Emergency and Off Normal Operating Procedure Usage (0-ADM-211), Enclosure 1. As a result the operating crew initiated a manual reactor trip

CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Root Cause Insufficient guidance for the initial loading of the main generator and for stabilizing power while preparing to transfer to automatic feed regulating valve control is the **root cause.**	**Corrective Actions to Prevent Recurrence** 1. Revise 3/4-GOP-301, Hot Standby to Power Operation to provide guidelines for ramp rates during turbine loading and appropriate hold points that ensure proper control of plant parameters.	Wurster, Frank **Due Date:** 4/15/2008	CAPR #1 SITRIS Action 2	1. Procedure 3/4-GOP-301, Hot Standby to Power Operation will be reviewed to determine if intent of this revision has been met and addresses root cause of this report. 2. Units evolutions from Hot Standby to Power Operations are: • Completed successfully • Affected operating parameters are kept with within correct bands. • MWe ramp rates are adhered to. **Due Date:** 12/31/09 (or when at least 3 evolutions are successfully completed to perform this effectiveness review)

FPL-FI-10-107 090505 Hearing Exhibits - 000434

CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Contributing Cause Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**	**Routine Corrective Actions.** 2. Develop an interim process solution that ensures all crew members of the affected crews attend JITT as called for per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup after a refueling outage" for the Unit 4-24 Refueling Outage startup. 3. Develop a permanent process that ensures all crew members of affected crews attend JITT when called for as per Licensed Operator Continuing Training Program (0-ADM-315) for "plant startup following a refueling outage". Include such process in the appropriate procedures.	Shafer, Sam **Due Date:** 5/4/2008 Shafer, Sam **Due Date:** 7/31/2008	CA # 2 SITRIS Action 3 CA # 3 SITRIS Action 4	N/A N/A

FPL-FI-10-108 090505 Hearing Exhibits - 000435

CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Contributing Cause **The abnormally fast generator loading is a *contributing cause*, it shifted the Unit Supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**	**Routine Corrective Actions.** 4. Provide a summary of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08 in the form of a case study to go over human performance and error reduction techniques to operations personnel. The case study presentation is to include communication, questioning attitude, stop when unsure, peer checking, proper overall oversight and team work as it relates to the lessons learned associated with this event. *This training will be given as* part of Continuing Training LOCT Segment 2. Action 4 addresses 2 conditions and 2 causal factors. It is listed twice due to this.	*Levy, Guy* **Due Date:** Continuing Training LOCT Segment 2, 6/26/ 2008	CA # 4 SITRIS Action 5	N/A

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CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Contributing Cause The turbine operator and Senior Reactor Operator (SRO) continued to increase turbine load while the Steam Generator level continued to increase after the feed regulating by-pass valves were all closed thinking that the higher steaming rate would lower SG level. A **weakness in the understanding of the "shrink and swell" concept is a contributing cause.**	**Routine Corrective Actions** 5. Provide Just-in-Time Training (JITT) on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell of steam generator indicated levels. This JITT will be provided to all of the crew members of the affected crews appropriately timed prior to Unit 4-24 Refueling Start up.	Levy, Guy **Due Date:** 5/4/2008	CA # 5 SITRIS Action 6	N/A
	6. Provide training as part of continuing training on the revisions to Hot Standby to Power Operation (3/4-GOP-301). In addition to providing instruction on the ramp rates, appropriate turbine loading, and hold points to ensure proper control of these plant parameters the training should include the dynamics of shrink and swell on steam generator indicated levels.	Levy, Guy **Due Date:** 7/31/2008	CA # 6 SITRIS Action 7	N/A

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CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Contributing Cause The FW operator did not stabilize SG levels *and did not* communicate his concerns about SG level control until it was too late. **Failure of the FW operator to communicate SG levels and trends to the other operators is a contributing cause.**	**Routine Corrective Action** 4. Provide a summary of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08 in the form of a case *study to go over human performance* and error reduction techniques to operations personnel. The case study presentation is to include communication, questioning attitude, stop when unsure, peer checking, proper overall oversight and team work as it relates to the lessons learned associated with this event. This training will be given as part of Continuing Training LOCT Segment 2. Action 4 addresses 2 conditions and 2 causal factors. It is listed twice due to this.	Levy, Guy **Due Date:** Continuing Training LOCT Segment 2, 6/26/ 2008	**CA # 4** **SITRIS Action 5**	**N/A**

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CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Extent of Condition The extent of condition evaluation included a review of procedures for situations where the following conditions exist: a. Load (MWe) is present and b. The steam generator levels are under manual control. The following procedure fits the above criteria (4-ONOP-049.1) Deviation or Failure of Safety Related or Reactor Protection Channels	**Routine Corrective Action** 7. Revise Deviation or Failure of Safety Related or Reactor Protection Channels (4-ONOP-049.1) to provide guidance that load (MWe) should not be adjusted until the Steam Generator levels systems can be placed on automatic or words to that intent.	Wurster, Frank **Due Date:** 7/31/2008	**CA # 7** **SITRIS Action**	**N/A**
Extent of Cause Procedural guidance deficiency when there is MWe and the Steam Generator is in Manual Control	**Enhancement Action** 8. Operations Department Procedure Group to verify this extent of cause and determine if there are any other cases of where: procedural deficiencies exist. when MWe are present and Steam Generator levels are in manual control other than Deviation or Failure of Safety Related or Reactor Protection Channels (3/4-ONOP-049.1) .	Wurster, Frank **Due Date:** 12/31/2008	**CA # 8** **SITRIS Action**	**N/A**

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CAUSE	CORRECTIVE ACTION	Owner / Due Date	CAPR or CA #	MEASURE OF EFFECTIVENESS
Use of Industry Operating Experience The SOER 96-1 discusses deficiencies in supervisory oversight, reactivity control, teamwork, and crew decision-making which have some similarities to this event.	**Routine Corrective Action** 9. Revise the Continuing Training LOCT training plan to incorporate discussions of this event (summary of case study created of the Steam Generator Level Manual Trip event at Turkey Point on 2/29/08) during the continuing training for SOER 96-1 yearly.	Levy, Guy **Due Date:** 7/31/2008	**CA # 8** **SITRIS Action**	

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7. Non Contributory Factors

The following was considered by the team and deemed non contributory based on the team's analysis of the facts and evidence associated with the event.

FW operator listed in the Watchstander Out-of-Service log

The FW operator was listed in the Watchstander Out-of-Service log as being out-of-service for medical reasons. It should be noted here that the team conferred and verified with the medical officer that medical reasons did not impair the operator's ability to operate the plant and main control board. The actual medical reasons were maintained confidential by the medical officer. The Operations Manager was aware of this and deemed the practice acceptable based on previous experience and benchmarking the Seabrook Station. The investigation team initiated condition report CR-2008-7967 for Operations and Licensing to determine if this practice is acceptable per 10CFR50 and 10CFR55. The referenced CR is coded as SL 2 and Apparent Cause Evaluation required.

Control Room Noise "Other Personnel in the Control Room

A review of keybadge entry logs for the control room did not yield an abnormal number of personnel in the control room preceding he event or at the time of the event. Only crew complement and personnel with control room business accessed the control room.

8. References

- Condition Reporting, NAP-204
- Deviation or Failure of Safety Related or Reactor Protection Channels, 3-ONOP-049.1
- Florida Power and Light Turkey Point Root Cause Evaluation Handbook
- Conduct of Operations, NAP-402
- Hot Standby to Power Operation, 4-GOP-301,
- Power Operation to Hot Standby, 4-GOP-103,
- Main Turbine, 3-OP-089
- SOER 96-1, *Control Room Supervision*, Operational Decision – Making, and Teamwork.

Attachment 1

Steam Generator Level – Manual Trip – 2/29/08
Root Cause Evaluation Charter
CR#2008-7157

Management Sponsor: Richard V Wright

Problem Statement: On 2/29/08, while increasing load immediately after synchronization of the Unit 4 turbine generator, the 4A steam generator level exceeded the 75% manual trip guideline stated in Emergency and Off Normal Operating Procedure Usage (0-ADM-211), Enclosure 1. As a result the operating crew initiated a manual reactor trip.

This manual reactor trip challenged plant systems and caused financial consequences by adding an unplanned unit cycle and delaying startup on both Turkey Point nuclear units by approximately 30 hours.

Investigation Scope: This root cause team will focus on the organizational effectiveness prior to and during the event. If the team discovers equipment deficiencies, the facts and information regarding the equipment deficiencies will be documented in a separate condition report.

The team will prioritize their analyses and conduct this evaluation in a stepwise manner. Analysis will initially be focused on the active errors and development of actions to correct those deficiencies identified. Analysis of latent organizational issues will follow.

Investigation Methodology: Investigation techniques will include interviews of involved parties, event and causal factor charting, why staircase, barrier, and change analysis.

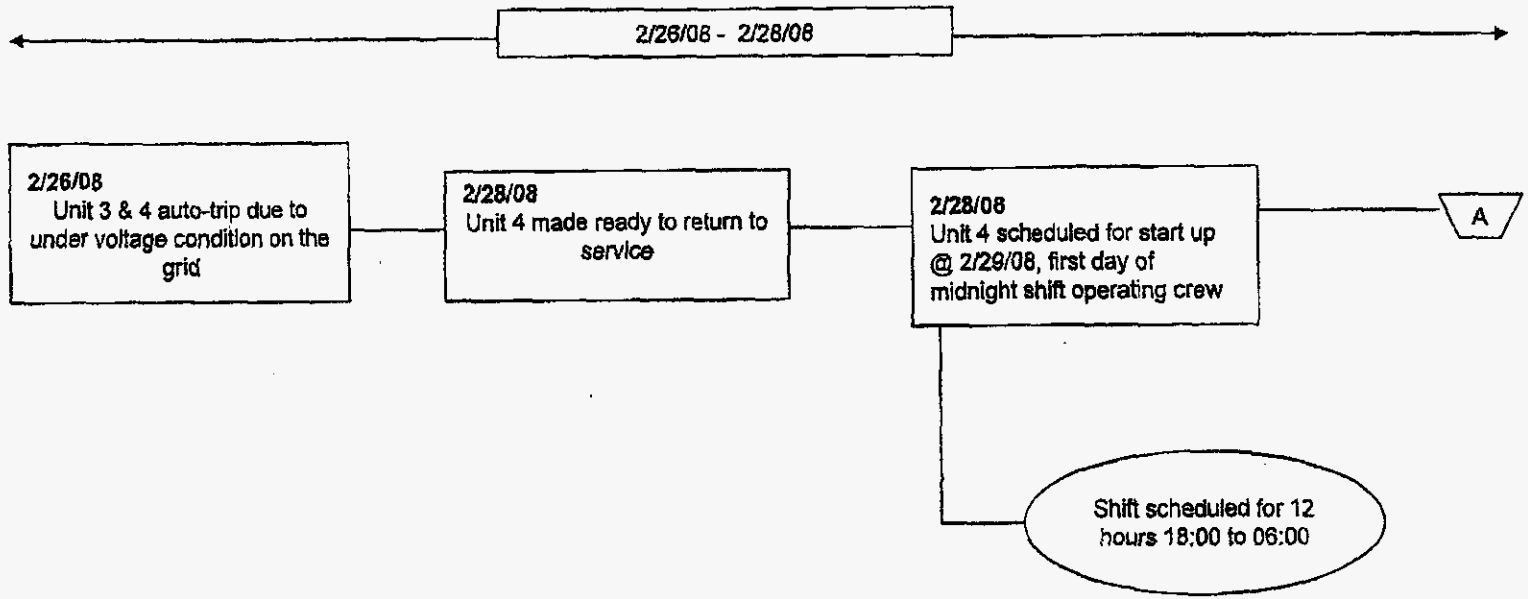
Team Members:
Team Leader: Jose Alvarez, Performance Improvement - qualified RCA
Team Member: Kevin Remington, Engineering Supervisor
Team Member: Virginia Barry, Operations Department Unit Supervisor
Team Member: Guy Levy, Training Supervisor
Team Member: Juan Cuan, PTN Road to Excellence
Team Member: Julio Balaguero, Principal Engineer

Milestones:
Date Assigned: *03/01/08*
Status Update: *03/04/08* Team presents preliminary causal factors
Status Update: 03/06/08 Team presents proposed compensatory actions (if required).
Status Draft Causes / Actions: *03/14/08*
Draft Report: *03/21/08*
Final Report: *03/27/08*
Communications Plan:
Communication will be handled by the Site Communications Coordinator.

Approved:_____ **Date:**_____
Management Sponsor
Reviewed by: CROG on _____ Date

Attachment 2

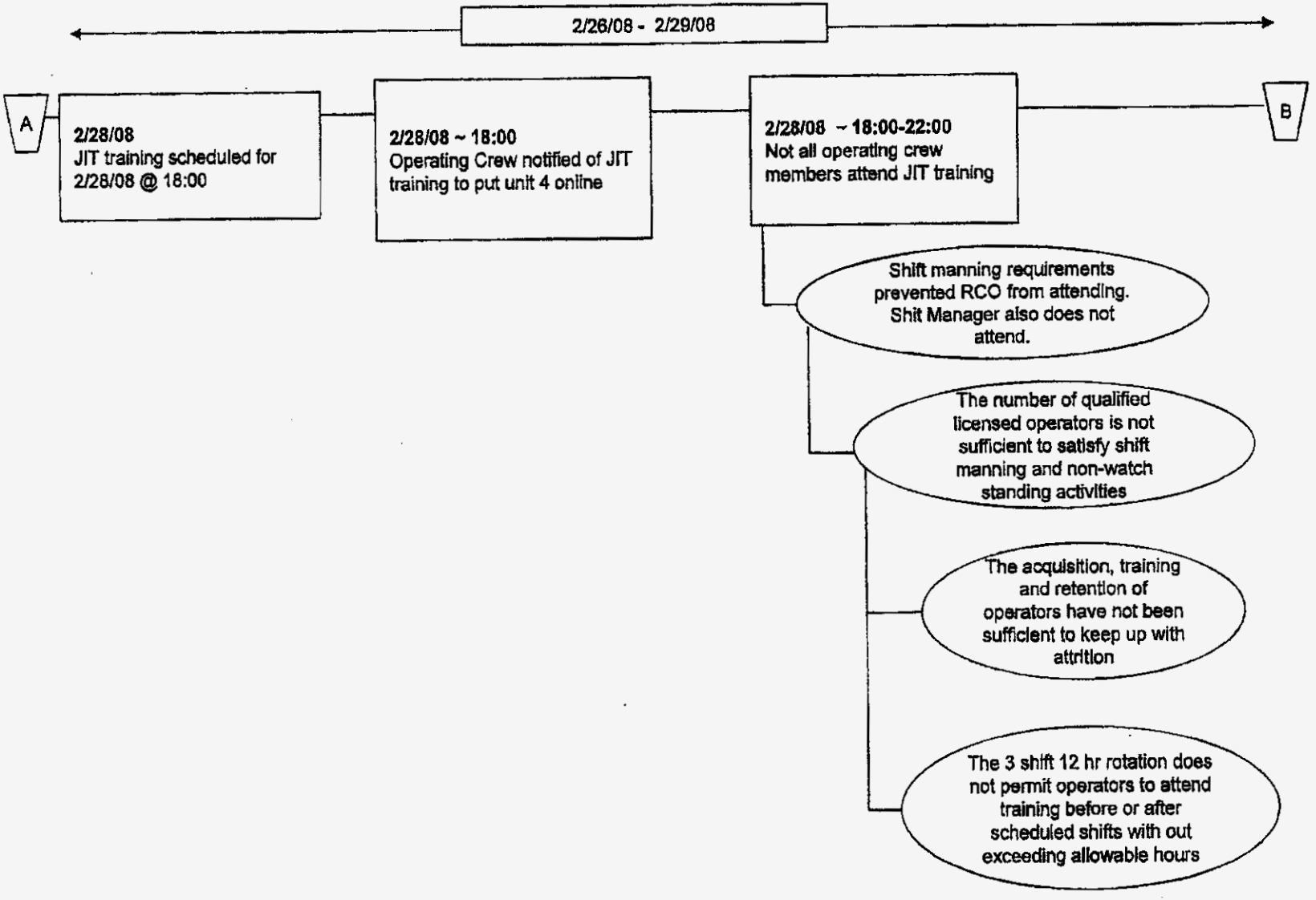
Unit 4 Manual Trip Due to High Steam Generator Level 2/29/08



FPL-FI-10-117 090505 Hearing Exhibits - 000444

Attachment 2

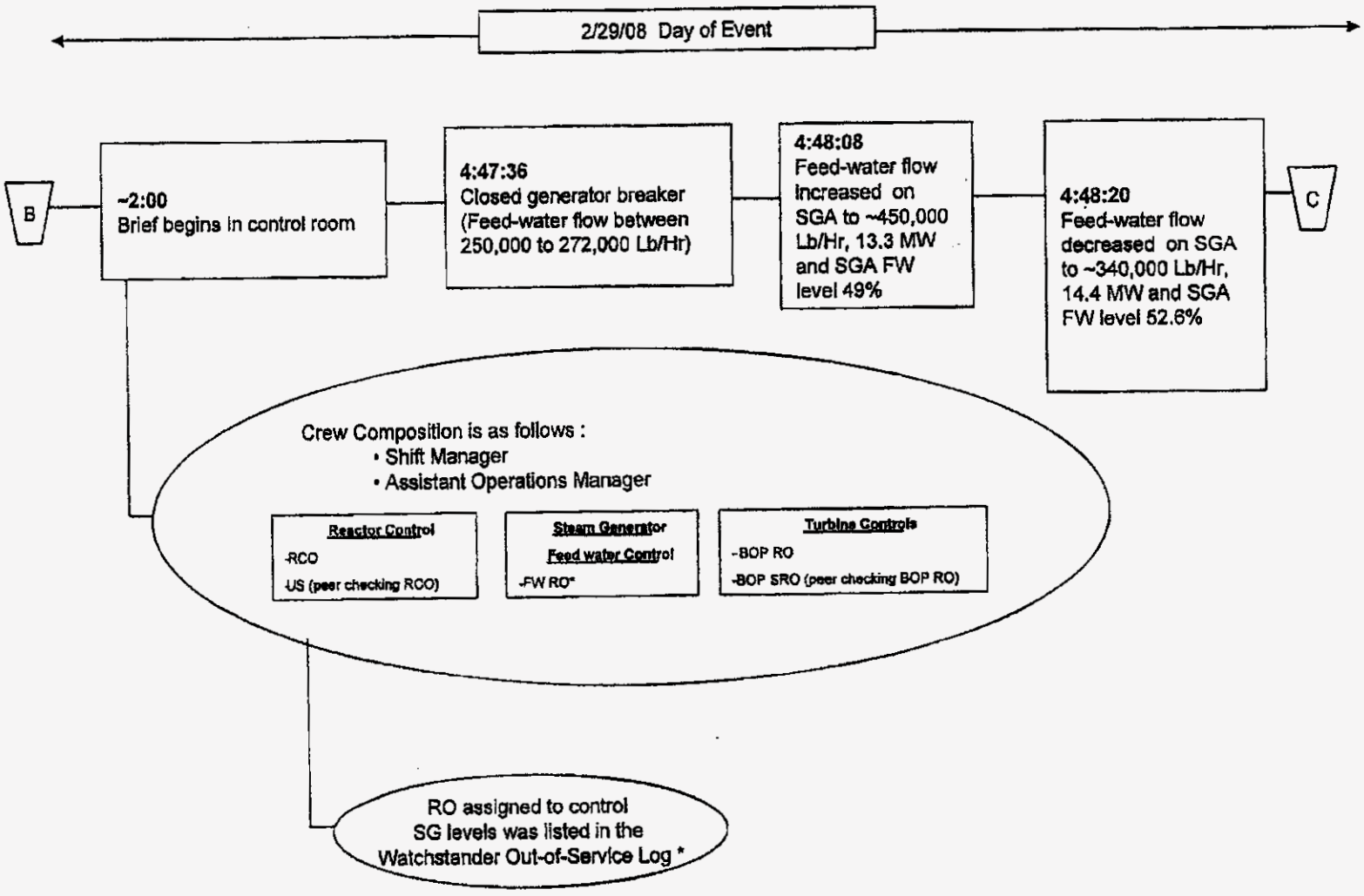
Unit 4 Manual Trip Due to High Steam Generator Level 2/29/08



FPL-FI-10-118 090505 Hearing Exhibits - 000445

Attachment 2

Unit 4 Manual Trip Due to High Steam Generator Level 2/29/08

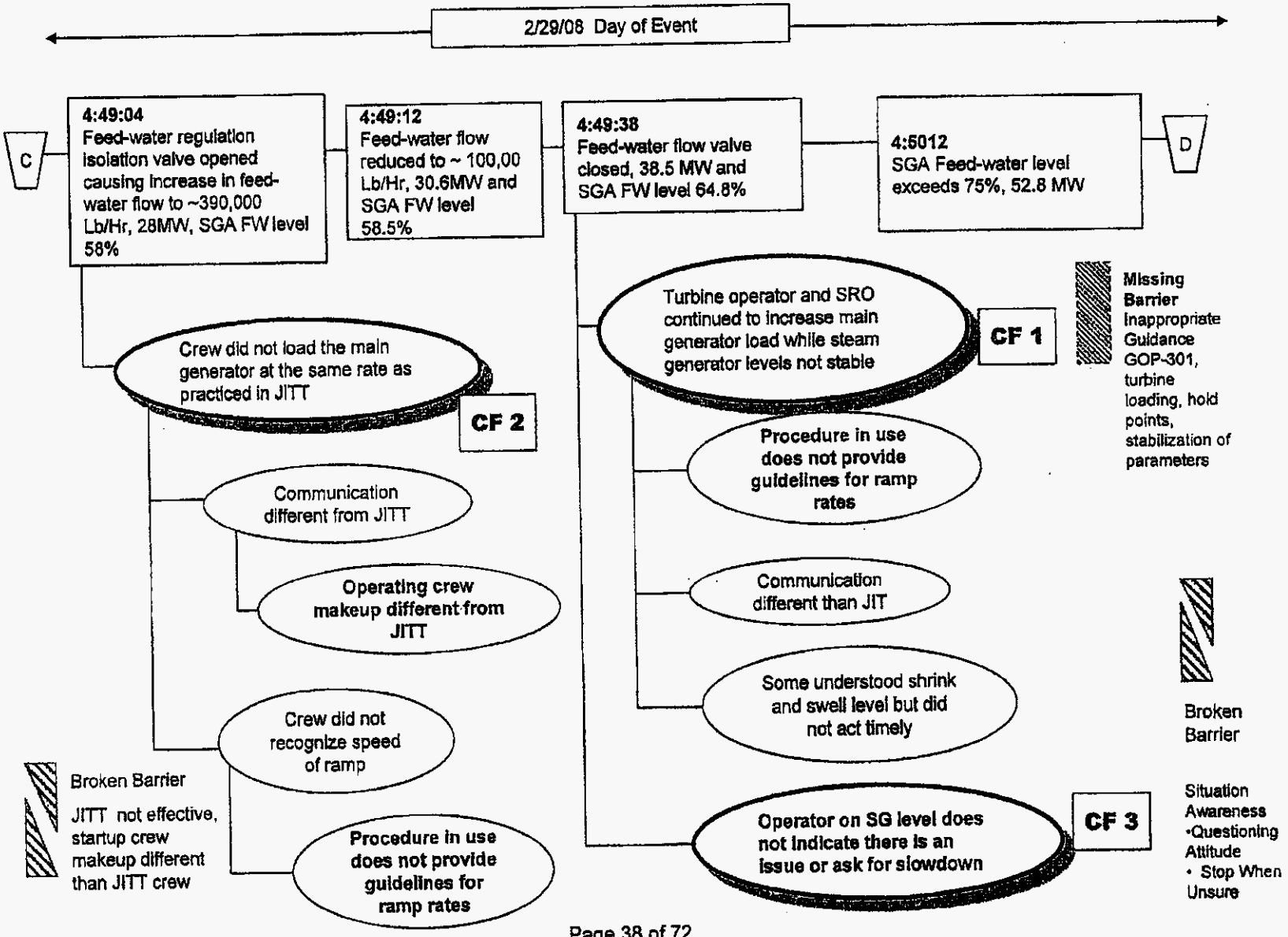


*This issue has been documented in CR 2008-7967 according to medical department there was not a medical impairment

FPL-FI-10-119 090505 Hearing Exhibits - 000446

Attachment 2

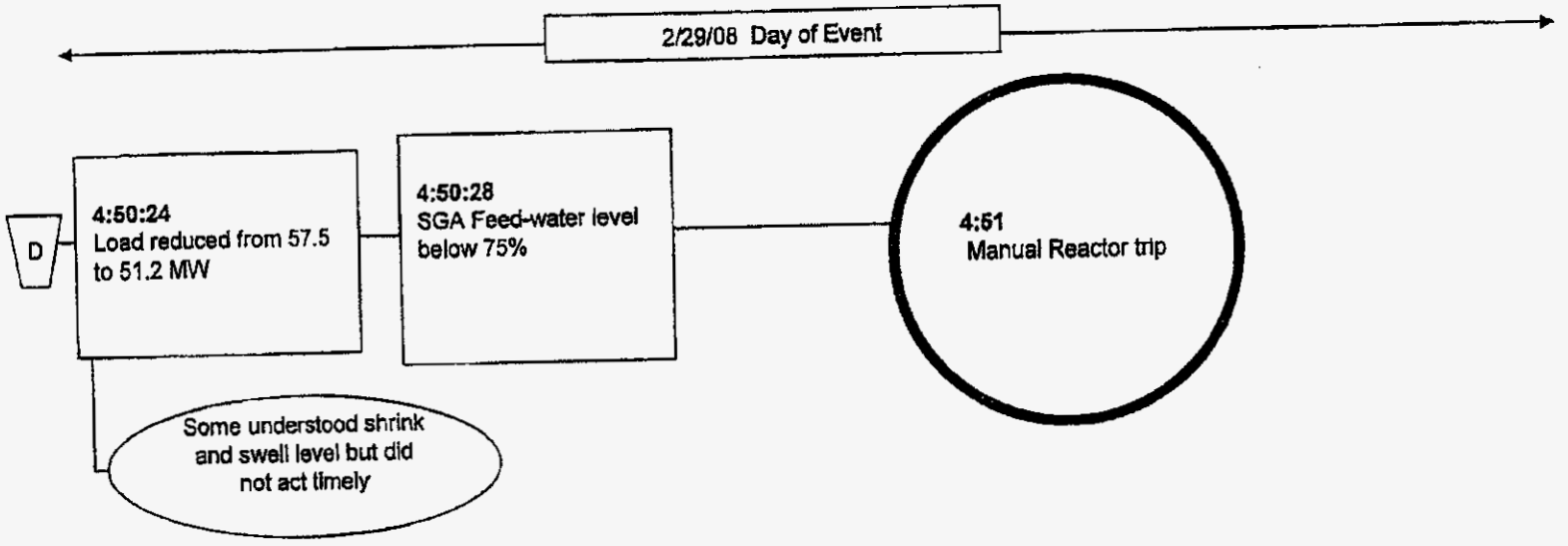
Unit 4 Manual Trip Due to High Steam Generator Level 2/29/08



FPL-FI-10-120 090505 Hearing Exhibits - 000447

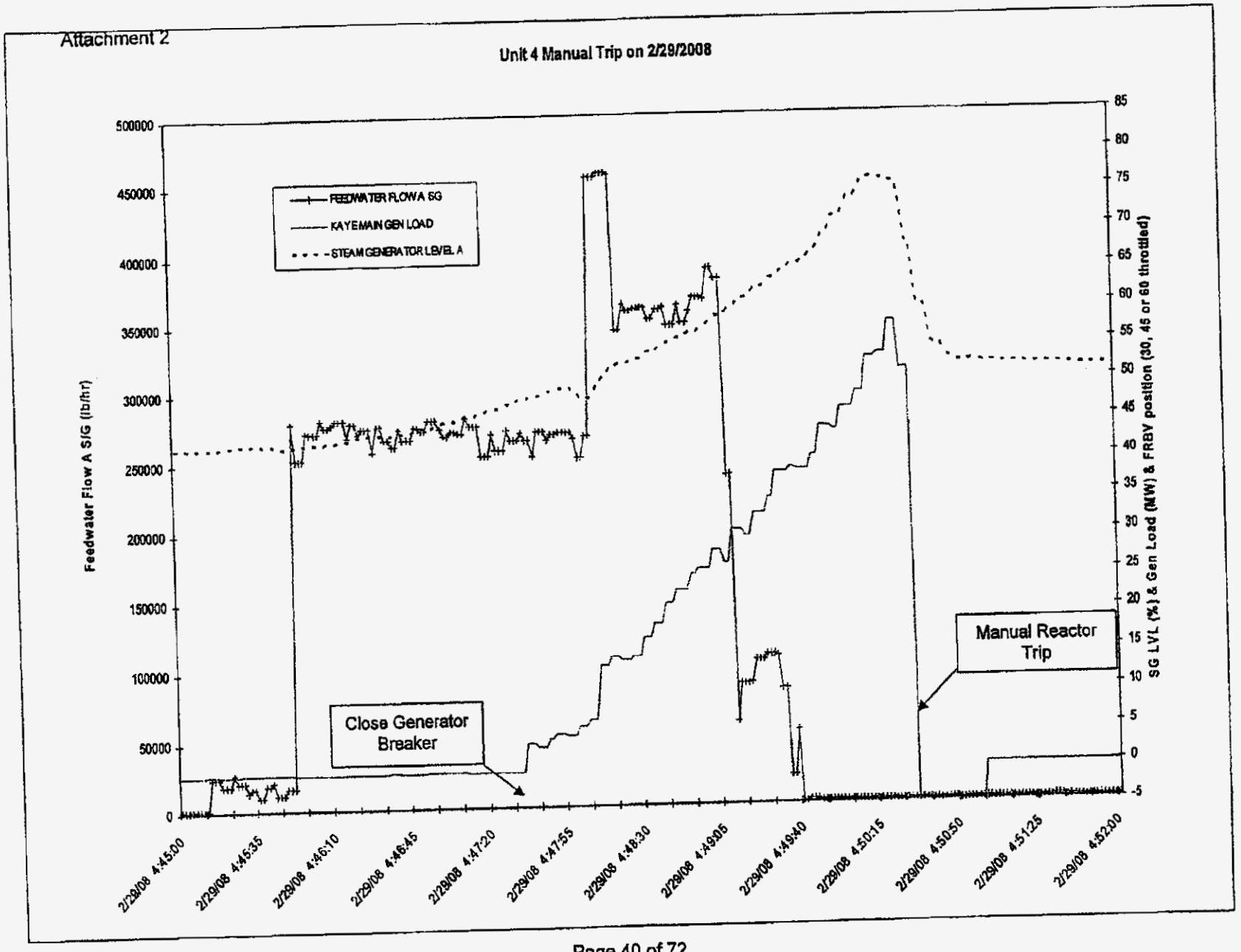
Attachment 2

Unit 4 Manual Trip Due to High Steam Generator Level 2/29/08



FPL-FI-10-121 090505 Hearing Exhibits - 000448

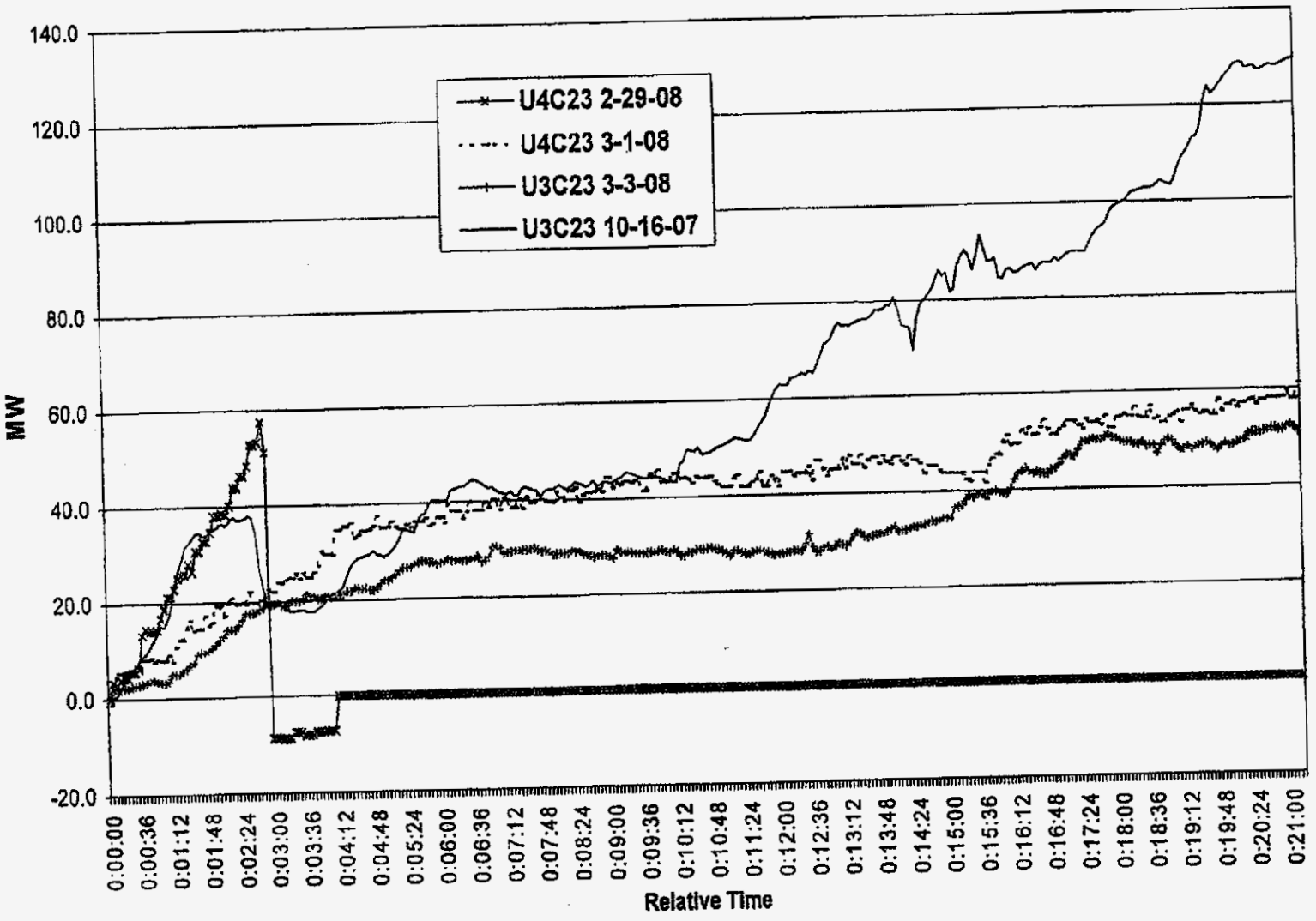
Attachment 2



FPL-FI-10-122 090505 Hearing Exhibits - 000449

Attachment 3

Ramp Rate Comparison for Unit Start Up



FPL-FI-10-123 090505 Hearing Exhibits - 000450

CF 1 The turbine operator and turbine SRO continued to increase main generator load while steam generator levels were not stable and

CF 3 Operator on SG level does not indicate there is an issue or ask for slowdown.

These 2 causal factors are interfwined due to common causes for both

- **Why did the turbine operator and turbine SRO continue to increase main generator load while steam generator levels were not stable?**
  The procedure in use does not provide clear guidelines for ramp rates during turbine loading or hold points and is not clear on the sequence (ramp MWe and stabilize or hold MWe stabilize then ramp MWe) that operator actions should follow.

  Operators determine the loading rates, hold points and order of some actions based on plant conditions and previous experience.

  - **Why is the procedure not adequate in these areas?**
    These shortcomings in the procedure have not been identified in the past.

  The turbine SRO directed additional load increases to "assist with level control", assuming that increased steam flow would cause SG level to decrease with no feed flow (the FW operator had already closed the FRBV). This was not corrected in time by the other crew members who understood the dynamics of shrink and swell on SG level.

  - **Why did the SRO assume that increased steam flow would cause SG level to decrease with no feed flow?**
    The turbine SRO did not realize initially that the increasing SG level was the result of overfeeding previously, followed by rapidly continuing the load increase, which lowered SG pressure causing the narrow range level to 'swell'.

    - **Why did the SRO not realize the swell phenomena?**
      Based on previous experiences, the training emphasis in JITT was on preventing low SG water levels and the phenomena of shrink and swell were not discussed.

      - **Why were *shrink and swell phenomena* not discussed in training?**
        JITT is conducted to reinforce standards and expectations, procedure compliance, and to practice the evolution until it is performed correctly. Although shrink and swell effects are realized anytime power is changing, the crew's pace in the JITT was considerably slower than in the plant and the effects of shrink and swell did not challenge the operators; as a result the subject did not present itself for discussion.

  - **Why did the other crew members *(Including Operator on SG level)* not attempt to correct or slow down the turbine SRO when he directed further load increases to "assist with level control"?**
    During this part of the evolution several simultaneous events occurred within the 54 seconds prior to the trip:
    - The FW operator identified he was having difficulty with SG level and closed the FRBV.

- The FW operator was opening the FRV isolation valves and the crew commenced a discussion of possible FRV leakby exacerbating the 4A SG level problem.
- The RCO and turbine SRO directed additional load increase.

All these issues prompted questions and communications to stabilize the plant. During the questions and communications the turbine RO (BOP) noted the proper action would be to lower load and he promptly shed approximately 6 MWe and the 4A SG level was turning downward. At the same time the crew noted that level had exceeded 75% and a manual reactor trip was required. The operating crew (including the FWRO) did not have a clear understanding of the correct course of action until it was too late to take corrective action.

The FW operator was listed in the Watchstander Out-of-Service log as being out-of-service for medical reasons.

- **Why was the operator listed on the Out of Service log operating the unit?** Medical reasons did not impair the operator's ability to operate the plant and main control board. (confirmed with medical officer)

Conclusions:

The abnormally fast generator loading that was implemented by the operating crew exacerbated steam generator (SG) level fluctuations and the eventual loss of steam generator level control. This resulted in the manual trip of the reactor. The operators determined the loading rate based on their training and plant conditions. The procedure used for this evolution (4-GOP-301, Hot Standby to Power Operation), did not provide sufficient guidance for the rate of initial loading of the main generator. **Insufficient guidance for the initial loading of the main generator and for stabilizing power while preparing to transfer to automatic feed regulating valve control is the root cause.**

The turbine operator and Senior Reactor Operator (SRO) continued to increase turbine load while the Steam Generator level continued to increase after the feed regulating by-pass valves were all closed thinking that the higher steaming rate would lower SG level. **A weakness in the understanding of the "shrink and swell" concept is a contributing cause.**

The FW operator did not stabilize SG levels and did not communicate his concerns about SG level control until it was too late. **Failure of the FW operator to communicate SG levels and trends to the other operators is a contributing cause.**

The FW operator was listed in the Watchstander Out-of-Service log as being out-of-service for medical reasons. The team conferred and verified with the medical officer that medical reasons did not impair the operator's ability to operate the plant and main control board. The actual medical reasons were maintained confidential by the medical officer. The FW operator being listed in the Watchstander Out-of-Service log **did not contribute** to this event.

CF 2 The crew did not load the main generator at the same rate as practiced in JITT.

- **Why did the crew load the main generator at a different rate than was practiced in Just-In-Time training (JITT)?**
  All operators performing the evolution did not attend Just-In-Time training

  - **Why did all operators performing the evolution not attend Just-In-Time training?**
    The current process for scheduling personnel JITT does not take into consideration the current operations staffing levels and requirements to operate the plant. The combination of the two (current staffing levels and control room staffing requirements) prevented all affected crew members from attending the JITT

    The current process for scheduling personnel for JITT does not take into consideration the current operating crew staffing levels and requirements to operate the plant.

    - **Why does the process for scheduling personnel for JITT not take into consideration the current staffing levels and requirements to operate the plant?**
      Previously staffing and requirements to operate the plant did not require focused scheduling practices. Operating crew staffing standard levels were recently updated to require more personnel.

      - **Why didn't previous staffing and requirements to operate plant require focused scheduling practices?**
        Staffing requirement standards to operate the plant were not as are they are currently which made more operators available to stand in for personnel attending JITTs.

    Shift staffing and manning requirements prevented the SM and RCO from attending JITT.

    - **Why did shift staffing and manning requirements prevent the SM and RCO from attending JITT?**
      The number of qualified licensed operators is not sufficient to satisfy shift manning and non-watchstanding activities at the same time.

      - **Why is the number of qualified licensed operators only sufficient to satisfy shift manning and not non-watchstanding activities?**
        The acquisition, training, and retention of operators have not been sufficient to keep up with attrition.

      - **Why is the number of qualified licensed operators only sufficient to satisfy shift manning and not non-watchstanding activities?**
        The 3 shift 12 hour rotation did not permit operators to attend training before or after scheduled shifts without exceeding allowable hours.

    During the evolution communications were not conducted as they were practiced in the JITT.

- **Why did all operators performing the evolution not communicate as they did in JITT?**
  The RCO did not attend JITT (see above). This changed the crew dynamics as they were practiced in the simulator. Most of the RCOs communications were directed to the BOP to raise load. There were no obvious communications with the FW operator to determine if SG levels were adequate and stable.

  - **Why were there no obvious communications with the FW operator?**
    The FW operator is a very experienced RO and has performed at least 5 plant startups at PTN. The RCO and BOP were aware of this and communicated 'around' the FW operator. The time period of the event was very short. As the main generator was loaded other communications occurred about steam dumps and main feed regulating valve (FRV) isolation valves and FRV leakby. The FW operator failed to communicate SG levels and trends to the other operators until it was too late.

  - **Why did the crew dynamics change?**
    The RCO's goal was to get the unit stable with the FRVs in auto by 0530 (shift turnover). The 4 crew members conducting the evolution, including the SROs, did not make an effort to slow the RCO down as he directed 10 MWe load changes quickly and frequently.

    - **Why did the crew not make an effort to slow down the RCO?**
      The RCO was more assertive than the other operators, including the SROs. He is very experienced and respected by his peers. The crew failed to recognize the abnormally fast pace of the evolution.

      - **Why did the crew fail to recognize the abnormally fast pace of the evolution?**
        Some operators have the understanding that they should expedite the ramp to 40 MWe. However, the basis for expediting the ramp to 40 MWe was not known consistently amongst the operators and what was deemed to be an acceptable time band to get to 40 MWe was inconsistent amongst operators.

        The guidance being used did not provide sufficient guidelines for ramp rates during turbine loading and operators determined the loading rates based on plant conditions and their understanding. ***(See Causal Factor 1)***

        The Unit Supervisor (US) oversight role was weakened due to the US focus on peer checking reactivity manipulations with the RCO

        - **Why was the US oversight role weakened by the reactivity changes peer checking activities?**
          Reactivity manipulations were occurring in a frequent manner due to the rapid ramp rate being implemented by the RCO and BOPRO. This weakened the US overall oversight.

          - **Why was the US tasked with peer checking?**

0-ADM-200, *Conduct of Operations*, requires the US to be cognizant of the manipulation and be in the vicinity of the controls. This is routine for daily plant operations.

The FW operator activities did not receive adequate peer checking as recommended in NAP-402, Conduct of Operations, Attachment E, step 4.1.2, which states in part;

"Operations has the greatest potential to influence reactivity management or initiate reactivity related events and peer checks should typically be used for the following type of activities:
- *Feedwater control changes"*

- **Why did the FW operator activities not receive peer checking as recommended in NAP-402, Conduct of Operations?**
  There were two peer checkers stationed at the controls with the 3 startup operator stations. The US and other peer-checker's time got consumed by activity in the RCO and Turbine Generator stations due to the rapid MWe ramp rate being implemented.

Conclusions:

The Reactor Control Operator (RCO) did not attend Just-in-time training (JITT) and, therefore, did not benefit from the crew's training and practice session. This changed the crew dynamics for the evolution (placing Unit 4 on the line) from the way they were practiced in the simulator. Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**

The abnormally fast generator loading implemented by the operating crew focused the unit supervisor on peer checking the RCO as recommended in NAP-402, Conduct of Operations. The requirement for frequent peer checks of the RCO weakened the US overall oversight role during the evolution. **The abnormally fast generator loading is a contributing cause, it shifted the Unit Supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**

Attachment 5

CAUSES	The problem would not have occurred if the cause had not been present.	The problem will not recur due to the same causal factor if the cause is corrected or eliminated.	Correction or elimination of the cause will prevent recurrence of similar conditions.	Root Cause or Contributing Cause?
Causal Factor 1 **The turbine operator and SRO continued to increase main generator load while steam generator levels not stable.** **Causal Factor 3** **Operator on SG level does not indicate there is an issue or ask for slowdown.** (These 2 causal factors are intertwined due to common causes for both)				
The procedure in use does not provide clear guidelines for ramp rates during turbine loading or hold points and is not clear on the sequence that operator actions should follow. Operators determine the loading rates, hold points and order of some actions based on plant conditions and previous experience.	**True**	**True**	**True**	**Root Cause**
Shortcomings in the procedure have not been identified in the past.	**True**	**True**	**True**	**Root Cause**
The turbine SRO directed additional load increases to "assist with level control", assuming that increased steam flow would cause SG level to decrease with no feed flow (the FW operator had already closed the FRBV).	**True**	**False**	**False**	**Contributing Cause**
SRO did not realize initially that the increasing SG level was the result of overfeeding previously, followed by rapidly continuing the load increase, which lowered SG pressure causing the narrow range level to 'swell'	**True**	**False**	**False**	**Contributing Cause**
Emphasis in JITT was on preventing low SG water levels and the phenomena of shrink and swell were not discussed.	**True**	**False**	**False**	**Contributing Cause**
JITT was considerably slower than in the plant and the effects of shrink and swell did not challenge the operators; as a result the subject did not present itself for discussion.	**True**	**False**	**False**	**Contributing Cause**

The operating crew (including the FWRO) did not have a clear understanding of the correct course of action until it was too late to take corrective action.	True	False	False	Contributing Cause
The FW operator failed to communicate SG levels and trends to the other operators until it was too late.	True	True	False	Contributing Cause
The FW operator was listed in the Watchstander Out-of-Service log as being out-of-service for medical reasons.	False	False	False	Non Contributory
Medical reasons did not impair the operator's ability to operate the plant and main control board. (confirmed with medical officer)	False	False	False	Non Contributory

ALL True = Root Cause SOME True = Contributing Factor ALL False = No Impact

CONCLUSION:

The abnormally fast generator loading that was implemented by the operating crew exacerbated steam generator (SG) level fluctuations and the eventual loss of steam generator level control. This resulted in the manual trip of the reactor. The operators determined the loading rate based on their training and plant conditions. The procedure used for this evolution (4-GOP-301, Hot Standby to Power Operation), did not provide sufficient guidance for the rate of initial loading of the main generator. **Insufficient guidance for the initial loading of the main generator and for stabilizing power while preparing to transfer to automatic feed regulating valve control is the root cause.**

Failure of the FW operator to communicate loss of control of SG levels and trends to the other operators until it was too late is a contributing cause.

The reactor control operator (RCO) did not attend just-in-time training (JITT) and, therefore, did not benefit from the crew's training and practice session. This changed the crew dynamics for the evolution (placing Unit 4 on line) from the way they practiced in the simulator. Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**

The abnormally fast generator loading implemented by the operating crew focused the unit supervisor on peer checking the RCO as recommended in NAP-402, Conduct of Operations. The requirement for frequent peer checks of the RCO weakened the US overall oversight role during the evolution. **The abnormally fast generator loading is a contributing cause, it shifted the Unit Supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**

Attachment 5

FW operator listed in the Watchstander Out-of-Service log **did not contribute** to this event. The FW operator was listed in the Watchstander Out-of-Service log as being out-of-service for medical reasons. The team conferred and verified with the medical officer that medical reasons did not impair the operator's ability to operate the plant and main control board. The actual medical reasons were maintained confidential by the medical officer.

Attachment 5

CAUSES	The problem would not have occurred if the cause had not been present.	The problem will not recur due to the same causal factor if the cause is corrected or eliminated.	Correction or elimination of the cause will prevent recurrence of similar conditions.	Root Cause or Contributing Cause?
Causal Factor 2 The crew did not load the main generator at the same rate as practiced in JITT.				
All operators performing the evolution did not attend Just-In-Time training	True	True	False	Contributing Cause
The combination of the two (staffing levels and operate plant requirements) prevented all affected crew members from attending the JITT	True	True	False	Contributing Cause
The current process for scheduling personnel JITT does not take into consideration the current operations staffing levels and requirements to operate the plant. The combination of the two (current staffing levels and control room staffing requirements) prevented all affected crew members from attending the JITT.	True	True	False	Contributing Cause
Previously staffing and requirements to operate the plant did not require focused scheduling practices. Operating crew staffing standard levels were recently updated to require more personnel.	True	True	False	Contributing Cause
Staffing requirement standards to operate the plant were not as are they are currently which made more operators available to stand in for personnel attending JITTs	True	True	False	Contributing Cause
Shift staffing and manning requirements prevented the SM and RCO from attending JITT .	False	False	False	Non Contributory
The number of qualified licensed operators is not sufficient to satisfy shift manning and non-watchstanding activities at the same time.	False	False	False	Non Contributory

The acquisition, training, and retention of operators have not been sufficient to keep up with attrition.	False	False	False	Non Contributory
The 3 shift 12 hour rotation did not permit operators to attend training before or after scheduled shifts without exceeding allowable hours.	True	False	False	Contributing Cause
During the evolution communications were not conducted as they were practiced in the JITT.	True	False	False	Contributing Cause
There were no obvious communications with the FW operator to determine if SG levels were adequate and stable.	False	False	False	Non Contributory
The time period of the event was very short. As the main generator was loaded other communications occurred about steam dumps and main feed regulating valve (FRV) isolation valves and FRV leakby. The FW operator failed to communicate SG levels and trends to the other operators until it was too late.	True	False	False	Contributing Cause
The RCO's goal was to get the unit stable with the FRVs in auto by 0530 (shift turnover). The 4 crew members conducting the evolution, including the SROs, did not make an effort to slow the RCO down as he directed 10 MWe load changes quickly and frequently.	False	False	False	Non Contributory
The RCO was more assertive than the other operators, including the SROs. He is very experienced and respected by his peers. The crew failed to recognize the abnormally fast pace of the evolution.	True	False	False	Contributing Cause

Attachment 5

	The procedure in use does not provide guidelines for ramp rates during turbine loading and operators determine the loading rates based on plant conditions. **(See Causal Factor 1)**	**True**	**True**	**True**	**Root Cause**
	The Unit Supervisor (US) oversight role was weakened due to the US focus on peer checking reactivity manipulations with the RCO	**True**	**True**	**False**	**Contributing Cause**
	Reactivity manipulations were occurring in a frequent manner due to the rapid ramp rate being implemented by the RCO and BOPRO. This weakened the US overall oversight.	**True**	**True**	**False**	**Contributing Cause**
	0-ADM-200, Conduct of Operations, requires the US to be cognizant of the manipulation and be in the vicinity of the controls. This is routine for daily plant operations.	**True**	**True**	**False**	**Contributing Cause**
	There were two peer checkers stationed at the controls with the 3 startup operator stations. The US and other peer-checker's time got consumed by activity in the RCO and Turbine Generator stations due to the rapid MWe ramp rate being implemented.	**True**	True	**False**	**Contributing Cause**

ALL True = Root Cause SOME True = Contributing Factor ALL False = No Impact

Contributing Causes

The Reactor Control Operator (RCO) did not attend Just-in-time training (JITT) and, therefore, did not benefit from the crew's training and practice session. This changed the crew dynamics for the evolution (placing Unit 4 on the line) from the way they were practiced in the simulator. Having a different crew makeup than during the JITT contributed to the crew's fast generator loading and failure to include the feed water (FW) operator in all load change communications. **Not all members of the operating crew attending the JITT and practicing the evolution is a contributing cause.**

The abnormally fast generator loading implemented by the operating crew focused the unit supervisor on peer checking the RCO as recommended in NAP-402, Conduct of Operations. The requirement for frequent peer checks of the RCO weakened the US overall oversight role during the evolution. **The abnormally fast generator loading is a contributing cause, it shifted the Unit Supervisor's focus from overall oversight to peer checking a large number of reactivity changes.**

Attachment 6

Steam Generator Level – Manual Trip

2/29/2008
CR 2008-7157

Barrier Analysis

#	Consequence	Barrier	Failed Yes / No Or Missing	Discussion /Assessment
1	Turbine operator and SRO continued to increase main generator load while the steam generator levels are not stable.	4-GOP-301, Hot Standby to Power Operation	Missing	• The procedure used for this evolution (4-GOP-301, Hot Standby to Power Operation), did not provide guidelines for the rate of initial loading of the main generator. The operators determine the loading rate based on their training and plant conditions. An abnormally fast generator loading was implemented by the operating crew. This exacerbated steam generator (SG) level fluctuations and resulted in a loss of steam generator level control and the manual trip of the reactor.
2	Crew did not load the main generator at the same rate as practiced in JITT	JITT (practice and coaching of crew in evolution)	Yes	• Yes not all members attended the JITT. This caused the JITT to not be an effective barrier to control plant parameters and the MWe ramp up rate.
3	Operator on SG level does not indicate there is an issue or ask for slowdown	Human Performance tools – Situational awareness -Questioning attitude -Stop when unsure	Yes	• Operators do not slow down evolution or stop progress continue with ramp rate
4	Unit Supervisor became focused on reactivity changes which weakened his overall oversight	Supervisory Oversight	Yes	• The abnormally fast generator loading focused the unit supervisor on peer checking the RCO this weakened the US overall oversight role during the evolution. • The unit supervisor allowed himself to loose overall oversight.
5	Operators continued to increase MWe to reduce steam generator levels	Operator Knowledge of "shrink and swell"	Yes	• A weakness in the understanding of the "shrink and swell" concept caused turbine operator and Senior Reactor Operator (SRO) to continue to increase turbine load thinking that the higher steaming rate would lower SG level.

Search criteria "Turbine trip, steam generator level"
NO = reviewed OE and found not to match conditions of CR 2008-7157
N/A = reviewed OE title and found not to be applicable.
A = Applicable

1. 498- Two Steam Generator Feedwater Pump Turbine Trips (OE26308)
NO 071229-1
2. 886- Hydraulic Fluid Leakage due to Damage of O-ring (MER TYO 07-111)
N/A 070615-1
3. 785- Automatic reactor shutdown due to very low level of steam generator 2 following
NO 070609-1 loss of turbine-driven feedwater pump in operation (MER PAR 07-201)
4. 266- Reactor Trip due to Feed Reg Valve Failure - (OE24977) (followup information
N/A 070605-1 provided by OE25334 and OE25378) (final update by OE24977)
5. 261- Loose Lug Connection In Main Transformer Causes Plant Trip (OE25029)
N/A 070515-1
6. 455- Unit 2 Feedwater Pump Shutdown due to Hydraulic Leak on High Pressure
N/A 070331-1 Governor Valve Actuator - [OE24638 - OE24858]
7. 889- SG level Transient due to Failure of Main Speed Controller Input Card for Main
N/A 070328-1 Feed Water Pump (MER TYO 07-070)
8. 269- Simultaneous Trip of Units 1 & 2 from 100% Power due to Grid Disturbance (SER
N/A 070215-1 1-07)
9. 892- Plant Trip due to Steam Generator High Level (MER TYO 07-007; 15 December,
NO 061215-1 2006, Yonggwang Unit 2, KHNP)
10. 395- Main Turbine Trip Due To High Steam Generator Level - OE24606 - Update to
NO 061122-3 OE24077 [LER 395-06004]
11. 334- LER 334-06004 - Reactor Trip Due to a Failed Universal Logic Board in the Solid
N/A 060907-1 State Protection System
12. 247- OE23358 - Manual Reactor Trip Actuated in response to an unanticipated plant
NO 060823-3 response to the load reduction from 100% to 50% reactor power
13. 681- Safety signal actuation and unit shutdown due to a control circuit power failure
N/A 060803-1 after a transmission grid short circuit (EAR MOW 07-007)
14. 755- EAR PAR 06-036; (Almaraz 2, 27 June 2006) Reactor trip due to turbine trip plus
N/A 060627-1 P-7, due to low vacuum in the condenser.
15. 599- Plant Trip on Steam Generator High Level (EAR TYO 07-001)
NO 060429-1
16. 412- OE22478 - Main Generator Exciter Winding Causes Open Field Coil Results in
N/A 060402-1 Reactor Trip (updated by LER 412-06001)
17. 109- MER ATL 06-0085; Reactor Scram Following Successful House Loading
NO 060228-1 (Koeberg Unit 2, 28 February 2006)
18. 667- Reactor and Turbine trip due to protection actuation after second Main Feed
NO 060130-1 Water Pump (LAC) start up on power raising (MER PAR 07-060)
19. 895- EAR TYO 06-014; Plant Trip due to High Condenser Pressure (January 9, 2006,
N/A 060109-1 Ulchin Unit 1, KHNP)
20. 369- LER 05-369-006 Automatic Reactor Trip and Auxiliary Feedwater System
NO 051217-1 Actuation Due To Steam Generator Hi-Hi Water Level
21. 423- OE21825 - Millstone 3 Failure to Withstand A Turbine Trip at 40% Reactor Power
N/A 051201-3 (Updated by LER 423-05005)
22. 423- OE21823 - RCS Leakage to Containment Drains Transfer Tank (Updated by
N/A 051201-1 OE23802)

23. 382- NO 051111-1 OE21845 - Manual Reactor Trip Initiated Due to Loss of All Circulating Water Pumps (Updated by LER 382-051111)
24. 599- N/A 050723-1 EAR TYO 06-020; Reactor Trip due to Malfunction of Pneumatic Controller for a Main Feed Water Control Valve
25. 443- N/A 050501-1 OE20891 - Turbine Trip Due to High Vibration during Unit Start-up
26. 665- N/A 050430-1 EAR TYO 05-010; Reactor trip on Primary Heat Transport System Pressure high in RAPS Unit#4 (30 April, 2005, RAPS Unit 4, NPCIL)
27. 599- N/A 050308-1 MER TYO 06-027; House Load Operation without Steam Bypass System
28. 164- NO 050125-1 MER PAR 06-018; (Ling'ao, 25 January 2005) Manual Tripping of Main Turbine Following Grid Fault
29. 389- NO 041227-1 LER 389-04005 - Manual Reactor Trip Due to Steam Generator Low Level
30. 414- N/A 041028-1 LER 414-04002 Manual Reactor Trip Initiated Due to Control Rods from Shutdown Bank D Dropping into the Core
31. 247- N/A 040924-1 OE19216 - Manual Reactor Scram Due to SOV Failure Associated with the Positioner of the Main Feedwater Regulating Valve (Updated by OE19457)
32. 247- N/A 040901-1 OE19116 - Unit Manually Tripped Due to a Steam Generator Level Perturbation as a Result of a Main Feedwater Regulating Valve Failure (Updated by OE19262 and OE21043)
33. 498- NO 040527-1 OE18606 - Steam Generator Feed Pump Turbine Trip
34. 316- NO 040408-1 OE18602 - Reactor Trip as a Result of High Steam Generator Water Level
35. 483- N/A 040127-1 Failed Distance Relay Results in Trip of Switchyard Breakers and Subsequent Turbine and Reactor Scram (OE17679 updated by OE19064)
36. 389- N/A 031220-2 LER 389-03-006 - Long-Standing 2C TDAFW Pump Design Issue Resulted in Condition Prohibited by Tech Specs
37. 313- N/A 030829-1 Automatic Reactor Scram After Turbine Control Valves Close Due to Lightning Strike
38. 158- NO 030826-1 Plant Shutdown due to Steam Generator Water Level Fluctuation
39. 244- N/A 030814-1 Major Power Grid Disturbance Causes Loss of Electrical Load and Reactor Scram
40. 446- N/A 030725-1 Main Feedwater Pump Trip, AFW ESF Actuation, and Manual Turbine Trip Following Attempt to Restore Isolated Low Pressure Feedwater Heater String During Plant Startup
41. 455- N/A 030626-1 OE16720 - Westinghouse 7300 System Comparator Circuit Card Failure
42. 338- N/A 030419-1 OE16062 - Manual Unit Trip Required due to Failure of Main Turbine Interface Valve Diaphragm
43. 455- N/A 030330-1 OE16276 - Westinghouse 7300 System Comparator Circuit Card Failure
44. 336- N/A 030307-1 OE15841 Unit Trip While Performing RPS Matrix Testing and Subsequent Loss of Charging Flow (Updated by WOE01324)
45. 413- NO 030204-1 Automatic Reactor Scram Following Main Turbine Trip on Steam Generator High-high Level
46. 362- N/A 021016-1 Main Feedwater Pump Tripped During Online Lube Oil Pump Test

47. 754- N/A 020909-1 ENR PAR 03-024; Feedwater Control Valve Plug Detachment

48. 499- NO 020707-1 Automatic Reactor Scram and Main Turbine Trip Because of High Water Level in 2B Steam Generator

49. 327- NO 020215-1 Nonconservative Low-Low Steam Generator Level Setpoints

50. 339- N/A 011222-1 Automatic Scram After Turbine Control System Power Supply Failure

51. 933- N/A 011025-1 Turbine Trip and Reactor Poison Outage Due to Maintenance Activities on the Wrong Unit

52. 269- N/A 010912-1 LER 269-01-002, Reactor Scram After Auto Main Turbine Trip Due to Isolated Phase Bus Problem at Oconee Unit 1

53. 425- N/A 010407-1 Manual Reactor Scram While Testing Main Feedwater Pump Trip Signals

54. 389- N/A 010314-1 Control Rod Drive Motor Generator Voltage Regulator Failure Results in Automatic Reactor Scram

55. 443- N/A 010305-1 Automatic Reactor Scram Caused by Loss of Off-site Power to Station Buses During Severe by Snow Storm

56. 247- NO 010102-1 Main Turbine Trip On High Steam Generator Level

57. 280- N/A 001024-1 OE11784 - Reactor Scram as a Result of Human Error on Turbine Electro-Hydraulic Control System Maintenance

58. 370- N/A 001015-1 Steam Generator Level Control System Failure Results in Undetected Level Increase

59. 758- N/A 000905-1 Dropped Shutoff Rod and Plant Shutdown at Embalse 1

60. 414- N/A 000608-1 Feedwater System Lineup Prohibited by Technical Specifications

61. 414- N/A 000605-1 Rainwater Intrusion Causes Feedwater System Malfunction, Turbine Trip, and Automatic Reactor Scram

62. 780- N/A 000515-1 Turbine Trip Followed by Reactor Shutdown and Safety Injection Due to Steam Generator Overfill

63. 499- N/A 000209-1 Turbine Trip Because of AMSAC System Actuation

64. 414- N/A 000101-1 Turbine Protection System Disabled Because of Inadequate Communications

65. 370- N/A 990715-1 Reactor Trip During Testing Caused by Reactor Trip Breaker Malfunction

66. 498- N/A 990627-1 Turbine Trip Caused by Loose Power Supply Connection and Resulted in an Automatic Reactor Scram on Overtemperature

67. 362- N/A 990515-2 Turbine Manually Tripped Due to High Vibration

68. 348- N/A 990415-1 Non-Conservatism in Steam Generator Level Surveillance Related to Improved Technical Specifications

69. 400- N/A 990312-1 Reactor Scram Due to Degraded Condition of a Steam Generator Water Level Flow Control Valve

70. 280- NO 981122-1 Spurious High Steam Flow Signal Results in High Steam Generator Level Followed by an Automatic Turbine Trip, Reactor Scram, and Subsequent Safety Injection Actuation

71. 261- N/A 981017-1 Reactor Scram Following Turbine Runback and Blown Fuses on Nuclear Instrumentation
72. 109- N/A 980913-1 PR-7106, Turbine Trip and Reactor Scram During Turbine Valve Surveillance Testing at Koeberg Unit 2
73. 247- N/A 980624-1 Deficiencies Identified in Surveillance Procedures for Testing of Safety-Related Logic
74. 446- N/A 980308-1 Automatic Reactor Scram Caused by a Failed Level Switch
75. 457- N/A 980126-1 Automatic Scram While Troubleshooting Main Turbine Digital Electro-Hydraulic Control System
76. 498- N/A 971110-1 Reactor Trip Due to Overtemperature/Delta Temperature Actuation
77. 112- N/A 970810-1 EAR PAR 98-001, Reactor Scram Upon Power Excursion During Turbine Trip Transient at Guangdong Unit 2
78. 334- N/A 970807-1 Unit 1 Automatic Reactor Scram Caused by Feedwater Regulating Valve Failure
79. 250- N/A 970730-1 Automatic Reactor Scram Caused by Closure of the B Main Steam Isolation Valve
80. 400- N/A 970720-1 Fault In Main Generator Exciter Causes Auto Reactor Scram
81. 925- N/A 970319-1 Bruce A Unit 3 Event Report 97-033 and Revision 1, Unit Shutdown System (SDS) 1 And SDS 2 Trip on Boiler Low Level
82. 927- NO 970228-1 SER 97-025 Bruce B Unit 5 Turbine Trip Followed By a Shutdown System 1 Trip (Scram) on Low Steam Generator Level
83. 295- N/A 970221-1 Unrecognized Reactivity Mismanagement While Performing a Reactor Shutdown
84. 281- N/A 970218-1 Manual Scram Resulting from Loss of Power to the Electro-Hydraulic Controls
85. 247- N/A 970126-1 Plant Shutdown Associated With Feedwater Regulating Valve Grit-Related Damage Results in an Automatic Reactor Scram
86. 425- N/A 961023-1 Low Condenser Vacuum Causes Turbine Trip and Reactor Scram
87. 261- N/A 960907-1 Manual Trip Because Left Lower Turbine Govenor Valve Would Not Close
88. 247- A 960822-1 Reactor Scram on Turbine Trip Caused by High Level in Steam Generator
89. 302- N/A 960531-1 Reactor Trip on High Reactor Coolant Pressure During Turbine Testing Caused by Debris in Manual Isolation Valve
90. 390- N/A 960430-2 Engineered Safety Features Instrumentation not Energized
91. 334- NO 960322-2 Turbine trip and feedwater isolation caused by unanticipated steam generator high level.
92. 250- NO 960209-1 Reactor Scram on High Steam Generator Level
93. 110- NO 951215-1 EAR TYO 96-001, Turbine Trip and Reactor Scram caused by High-High Steam Generator Water Level at Qinshan Unit 1
94. 528- NO 951126-1 Reactor Scram Resulting from Steam Generator Number 1 High Water Level

95. 445- N/A 951119-1 Turbine trip and Reactor SCRAM caused by a failed feedwater pump recirculation valve

96. 335- N/A 951116-1 Manual scram due to low voltage on feedwater regulator power supply.

97. 364- N/A 940625-1 Automatic Reactor Scram on High Steam Generator Level While Switching Main Feedwater Pumps

98. 255- NO 950522-1 Main Feedwater Pump Transient Results in a Manual reactor Scram

99. 247- NO 950119-1 Automatic Turbine Trip Due to High Steam Generator Level During Plant Startup

100. 110- NO 940909-1 Steam Generator Water Level High-High Causing Turbine Trip, Reactor Scram at Qinshan Unit 1

101. 421- N/A 940714-1 EAR ATL 96-002 Improper Troubleshooting of Electrical System Problem Leads to Reactor Scram and Subsequent Failed-open AFW Control Valves at Krsko

102. 414- NO 940710-1 Main turbine trip and manual reactor scram following a malfunction and manual trip of one of the main feedwater pumps.

103. 364- N/A 931202-1 SCRAM while preparing for turbine overspeed test

104. 455- N/A 931123-1 Reactor trip/turbine trip due to solid state protection system universal logic card intermittent failure.

105. 423- N/A 931006-1 Inadequate Response Time Testing

106. 269- N/A 930823-1 Maintenance Errors Result In Loss Of Vital Power To Pannelboards Causing A Turbine Trip And Reactor Scram. Inadequate Feedwater Flow Following A Reactor Scram Initiates Emergency Feedwater System

107. 251- N/A 930816-1 Reactor Trip That Was Caused By Inadequate Restoration of High Pressure Feedwater Heaters

108. 443- NO 930522-1 Feedwater isolation due to high steam generator level

109. 280- N/A 930423-2 Logic Channels for RCS Low Flow in 2 Out of 3 Loops Reactor Trip Not Fully Tested

110. 339- NO 930416-1 Automatic reactor trip initiated from a turbine trip due to an over excitation of the main generator, and manual disabling of AFW pumps.

111. 336- NO 930223-1 Reactor Trip on Steam Generator Low Water Level

112. 336- NO 930222-1 Reactor Trip on Low Steam Generator Water Level

113. 327- N/A 921026-1 WATER IN CONTROL AIR CAUSES SECONDARY PLANT TRANSIENT RESULTING IN REACTOR SCRAM.

114. 443- N/A 920907-1 During a routine shutdown, an automatic scram occurred due to steam generator level oscillations.

115. 445- N/A 920516-1 Main turbine trip device inoperable longer than allowed by technical specifications due to a loose wire.

116. 364- N/A 920512-1 Generator Neutral Overcurrent causes reactor scram complicated by positive moderator temperature coefficient at low power

117. 247- NO 920413-1 Reactor trip initiated by a turbine tripas a result of a high level in steam generator.

118. 370- N/A 920321-1 A unit 2 reactor trip occurred from an equipment failure of the main feedwater reg valve.

119. 244- N/A 920302-1 Feedwater transient, due to loss of excitation induced turbine/generator trip, causes low low steam generator level reactor trip.

120. 281- N/A 911217-1 High Steam Generator Level Due To Main Feedwater Regulating Valve Oscillations Results In Esf Actuation And Reactor Trip

121. 255- N/A 911209-1 Loss Of Air Side Seal Oil In The Electrical Generator Results In A Turbine/Reactor Trip

122. 255- N/A 910712-1 Reactor Scram Following Main Feedwater Pump Trip

123. 275- N/A 910423-1 HIGH STEAM GENERATOR LEVEL (P-14) TURBINE TRIP CAUSES REACTOR TRIP DUE TO FEEDWATER PUMP SPEED CONTROLLER COMPONENT FAILURE

124. 344- N/A 910212-1 INADEQUATE DRAWINGS RESULT IN DEVELOPMENT OF INADEQUATE WORK INSTRUCTIONS AND LEAD TO INAPPROPRIATE JUMPER PLACEMENT AND REACTOR TRIP

125. 483- NO 901124-1 REACTOR TRIP ON LOW STEAM GENERATOR LEVEL WHICH RESULTED FROM A TURBINE TRIP ON A SPURIOUS MOISTURE SEPARATOR REHEATER HIGH LEVEL SIGNAL

126. 339- NO 901102-1 REACTOR TRIP FROM NINE PERCENT POWER DUE TO LOSS OF NORMAL FEEDWATER

127. 443- N/A 900822-1 REACTOR TRIP DUE TO LOSS OF VOLTAGE ON THE ELECTROHYDRAULIC 24 VOLT DC BUS

128. 251- N/A 900812-1 AUTOMATIC REACTOR TRIP ON LOW - LOW STEAM GENERATOR LEVEL DUE TO LOSS OF 4A STEAM GENERATOR FEEDWATER PUMP

129. 443- N/A 900705-1 REACTOR TRIP DUE TO A LOW ELECTROHYDRAULIC CONTROL OIL PRESSURE SIGNAL

130. 250- N/A 900609-1 HIGH STEAM GENERATOR LEVEL AND TURBINE TRIP/REACTOR SCRAM RESULTING FROM A FAULTY FEEDWATER CONTROL SWITCH

131. 327- NO 900602-1 SEQUOYAH UNIT 1 REACTOR TRIP CAUSED BY LOW-LOW STEAM GENERATOR LEVEL RESULTING FROM INADEQUATE COMMUNICATION BETWEEN CONTROL ROOM OPERATORS AND TURBINE BUILDING AUXILIARY UNIT OPERATORS

132. 482- NO 900514-1 REACTOR TRIP SIGNAL AND ENGINEERED SAFETY FEATURES ACTUATIONS DURING TURBINE OVERSPEED TESTING CAUSED BY DIFFICULTY IN STEAM GENERATOR LEVEL CONTROL

133. 482- NO 900510-1 FEEDWATER ISOLATION SIGNAL BECAUSE OF SURVEILLANCE TEST REQUIRING A HIGH FEED RATE AND AUXILIARY FEEDWATER ACTUATION AND REACTOR TRIP SIGNAL DURING RECOVERY

134. 499- N/A 900202-1 A REACTOR TRIP DUE TO SPURIOUS ACTUATION OF REACTOR TRIP BREAKER

135. 275- NO 870222-1 REACTOR TRIP DUE TO HIGH STEAM GENERATOR WATER LEVEL

136. 302- N/A 800226-1 Loss of Instrument Power Results in Reactor Trip, Turbine Trip, and an Engineered Safety Actuation

137. 320- N/A 790328-1 Small Break LOCA Results in Core Damage

Search Criteria **"start up, turbine trip"**
NO = reviewed OE and found to not match conditions of CR 2008-7157
N/A = reviewed OE title and found not to be applicable.
A = Applicable

1. NO 738-070717-1 Turbine trip followed by Reactor Shut Down (PAR 07-111)
2. N/A 886-070427-1 Emergency Diesel Generator B Failed to Start (EAR TYO 07-007)
3. NO 306-070408-1 Turbine Failed to Stay Tripped from Control Room - OE24887
4. NO 109-061105-1 MER ATL 06-441; Unit-2 turbine trip initiated by the turbine protection system (Koeberg Unit 2, 5 Novem ber 2006)
5. NO 811-060927-1 MER PAR 06-152- Rev1; (Cruas 2, 27 September 2006) Reactivity disturbances due to inappropriate action on turbine bypass
6. N/A 667-060807-1 Reactor and Turbine Trip due to loss of Turbine Control Fluid Pump MAX16AP001/002 (MER PAR 07-068)
7. N/A 737-060728-1 EAR PAR 06-050; T/A 4 Steam Pipework Damage During Return to Service of T/A 3
8. NO 775-060313-1 MER PAR 06-091; (Cruas 3, 13 March 2006) Automatic reactor scram initiated by turbine trip, pressure > 250 mbar.
9. NO 667-060130-1 Reactor and Turbine trip due to protection actuation after second Main Feed Water Pump (LAC) start up on power raising (MER PAR 07-060)
10. N/A 895-060109-1 EAR TYO 06-014; Plant Trip due to High Condenser Pressure (January 9, 2006, Ulchin Unit 1, KH NP)
11. N/A 110-050707-1 EAR TYO 05-021; lose Generator Stator Cooling Water resulted in turbine trip and reactor trip (July 7th, 2005, Qinshan1, CNNC)
12. N/A 899-050328-1 Main Generator Earth fault (EAR PAR 05-032)
13. N/A 667-050101-1 MER PAR 06-032; (Angra 2, 1st January 2005) Loss of external electrical power supply 138Kv and 500Kv
14. N/A 341-041204-1 OE19928 - Fermi 2 - Reactor Scram Due to Automatic Voltage Regulator Trip (LER 341-04001)

15. 387-040421-1 N/A Manual Scram due to Turbine High Vibration Following New Turbine Start-up
16. 741-040218-1 N/A EAR PAR 05-020; Unplanned Manual Trip of R2 Following Level C Turbine Expansions
17. 336-031128-1 N/A Manual Turbine Trip on High Vibration Follow ed by Manual Reactor Scram
18. 803-030318-1 NO EAR PAR 04-030; Reactor trip on 3 units due to tripping of Circulating Water System
19. 499-021202-1 N/A Auxiliary Feedwater Pump Terry Turbine Overspeed Trip Because of Inadequate Linkage Lubrication
20. 818-021026-1 N/A MER PAR 03-010; Reactor Trip Caused by Turbine Trip Due to Circulating Pump Trip
21. 989-020606-1 N/A MER TYO 02-016, Reactor Scram Caused by Loss of P-10 Block Signal
22. 270-010529-1 N/A OE13040 Manuall Turbine Trip Because Of High Vibration
23. 443-010305-2 N/A Turbine-Driven Emergency Feedwater Pump Overspeed Trip Following Reactor Scram

Search Criteria "start up, reactor trip"

NO = reviewed OE and found to not match conditions of CR 2008-7157
N/A = reviewed OE title and found not to be applicable.
A = Applicable

1. 727-071207-1 N/A — Reactor 21 Manual Trip Due to Control Rod "C11" Shear Pin Failure (EAR PAR 08-005)
2. 738-070717-1 NO — Turbine trip followed by Reactor Shut Down (PAR 07-111)
3. 664-070523-1 N/A — Unit outage due to emergency diesel generator neutral grounding resistance (NGR) bypass (MER TYO 07-101)
4. 886-070427-1 N/A — Emergency Diesel Generator B Failed to Start (EAR TYO 07-007)
5. 306-070408-1 N/A — Turbine Failed to Stay Tripped from Control Room - OE24887
6. 665-070329-1 N/A — Improperly supported current Transformer (CT) cable inside breaker cubicle leading to primary circulating pump trip and unit outage (MER TYO 07-039)
7. 727-070114-1 N/A — Reactor Trip Due to Control Rod Shear Pin Failure (EAR PAR 07-018)
8. 727-070112-1 N/A — Manual Trip of Reactor 22 Following Control Rod P53 Descent Into Core (EAR PAR 07-019)
9. 941-061130-1 NO — Reactor Trip during Start up of the Reactor to Criticality (MER PAR 07-058)
10. 811-060927-1 NO — MER PAR 06-152- Rev1; (Cruas 2, 27 September 2006) Reactivity disturbances due to inappropriate action on turbine bypass
11. 667-060807-1 N/A — Reactor and Turbine Trip due to loss of Turbine Control Fluid Pump MAX16AP001/002 (MER PAR 07-068)
12. 727-060806-1 N/A — Manual Trip Due to Control Rod Insertion (EAR PAR 07-013)
13. 327-060629-1 N/A — OE23458 - Failure of Westinghouse Type DB Reactor Trip Breaker to Close and Remain Closed
14. 802-060616-1 N/A — MER PAR 06-132; (Blayais 1, 16 June 2006) Startup of the IS (Safety Injection) and AAR (Reactor trip) following spurious closing of VVP 002 VV
15. 685-060614-1 N/A — MER MOW 2007-008; Pressurizer Level Drop and Safety System Actuation due to a Small-Scale Leak Signal (Bohunice-3, 14 June 2006)
16. 915-060603-1 N/A — Manual Reactor Trip due to Liquid Zone Control System Unreliable
17. 108-060426-1 N/A — MER ATL 06-0175; Reactor Trip Signal Generated From Loose Power Supply Line on Nuclear Flux Instrumentation Channel (Koeberg Unit 1, 26 April 2006)
18. 775-060313-1 NO — MER PAR 06-091; (Cruas 3, 13 March 2006) Automatic reactor scram initiated by turbine trip, pressure > 250 mbar.
19. 667-060130-1 NO — Reactor and Turbine trip due to protection actuation after second Main Feed Water Pump (LAC) start up on power raising (MER PAR 07-060)

20. 895- N/A 060109-1 EAR TYO 06-014; Plant Trip due to High Condenser Pressure (January 9, 2006, Ulchin Unit 1, KHNP)
21. 110- N/A 050707-1 EAR TYO 05-021; lose Generator Stator Cooling Water resulted in turbine trip and reactor trip (July 7th, 2005, Qinshan1, CNNC)
22. 667- N/A 050101-1 MER PAR 06-032; (Angra 2, 1st January 2005) Loss of external electrical power supply 138Kv and 500Kv
23. 727- N/A 040506-1 EAR PAR 05-036; Manual trip of Reactor 21 due to low superheat temperature on Boiler 22 initiated by a temperature transmitter failure.
24. 285- N/A 040406-1 OE18360 - Main Feedwater Heater Outlet Isolation Valves Closed During Plant Startup
25. 956- NO 040306-1 EAR PAR 05-014; Manual trip of reactor 2 following loss of T2 auto control
26. 741- NO 040218-1 EAR PAR 05-020; Unplanned Manual T rip of R2 Following Level C Turbine Expansions
27. 786- N/A 040124-1 ENR PAR 04-005; Reactor Coolant System Pollution by Spent Resins
28. 733- NO 040115-1 EAR PAR 05-025; (Hinkley Point B, 15 January 2004) R4 RSSE Operation during R4 start up resulting in a loss of forced cooling
29. 861- N/A 031224-1 Turbine Generator Tripped on Generator Transformer Backup Protection
30. 336- NO 031128-1 Manual Turbine Trip on High Vibration Follow ed by Manual Reactor Scram
31. 867- NO 031119-1 Start Up Transformer and Reactor Trip
32. 725- N/A 030823-1 Automatic Trip of Reactors 1 and 2 on Loss of a Unit Transformer Surge Protection
33. 727- N/A 030711-1 Auto-Trip of Reactor 21, Following Trip of the Main Boiler Feed Pump, and Subsequent Breach of the Gas Circulator 22 Inlet Temperature Limit
34. 918- N/A 030624-1 Reacto Trip on Low Start-Up Instrumentation Counts
35. 400- N/A 030615-1 OE16664 - Misposition of Main Feed Reg. Valve Controller Causes Unplanned Actuation of Aux Feedwater.
36. 798- NO 030516-1 Two reactor trips due to very high level in steam generator
37. 816- NO 030515-1 EAR PAR 04-031 Reactor trip due to very low level on SG 42.
38. 918- N/A 030514-1 Approach to Critical Terminated Due to Start-Up Instrumentation Oscillations
39. 784- N/A 030412-1 MER PAR 04-084; Reactor trip due to loss of CRDM power-supply units
40. 301- NO 030405-2 LER 301-03002 - REACTOR SHUTDOWN REQUIRED DUE TO TECHNICAL SPECIFICATION TSAC 3.1.6.B.2 NOT MET
41. 803- NO 030318-1 EAR PAR 04-030; Reactor trip on 3 units due to tripping of Circulating Water System
42. 795- EAR PAR 03-020; Unsealing of a Snubber Anchor Plate on a Main

N/A 021109-1	Feedwater Pipe
43. 818- N/A 021026-1	MER PAR 03-010; Reactor Trip Caused by Turbine Trip Due to Circulating Pump Trip
44. 989- N/A 020606-1	MER TYO 02-016, Reactor Scram Caused by Loss of P-10 Block Signal
45. 816- N/A 020121-2	Simultaneous Loss of Train A Controlbloc and Train A Electrical Swithboards for the 6.6 KV AC Normalsupplied Distribution System and 6.6 AC Emergency Supplied Distribution System
46. 727- N/A 010321-1	Trip of Reactor from Feed Flow Reduction Due to Resin Blockage of Micro-wire Filters
47. 266- N/A 971115-1	Reactor Trip System Interlocks Surveillance was Inadequate
48. 311- N/A 970814-1	Missed Auxiliary Feedwater Pump Recirculation Valve Surveillance
49. 742- N/A 951020-1	EAR PAR 96-005, Reactor Trip Monitoring Unit Offsets Found Incorrectly Set During Unit Return-to-Service at Heysham Unit 2-2
50. 423- N/A 930520-1	The current surveillance practices were not adequate to address the required surveillance of the cold overpressurization protection system
51. 412- N/A 920605-1	Auxiliary feedwater pumps auto-start upon trip of running main feedwater pump.
52. 213- N/A 920312-2	Manual Reactor Trip Due to a Rod Control System Malfunction.
53. 457- N/A 900609-1	REACTOR TRIP DURING PLANT START UP FROM LOW STEAM GENERATOR WATER LEVEL DUE TO A MALFUNCTIONING BYPASS FEEDWATER REGULATING VALVE

Key Words **"Turbine trip, steam generator level"**

NO = reviewed OE and found not to match conditions of CR 2008-7157
N/A = reviewed OE title and found not to be applicable.
A = Applicable

Number	ID	Description
1. N/A	395-080124-1	Reactor Trip Apparently Caused By Brass Check Valve Wear Particles In Air Line To Feedwater Regulating Valve Positioner (OE26210 updated by LER 395-08001)
2. N/A	315-070828-1	Automatic Reactor Scram Due to a Turbine Controls Power Supply Malfunction - OE25955 - Update to OE25508 [PE N43605] [LER 315-07001]
3. N/A	311-070806-1	Solid State Protection System (SSPS) Safeguards Output Driver Card Failure Results in a Plant Trip - OE25773 - (Final to OE25294)
4. NO	783-070415-1	Automatic Reactor Trip with Auxiliary Feedwater System start-up due to Very Low Level on Steam Generator 2 (MER PAR 07-098)
5. NO	483-070309-1	Manual Reactor Trip at Reduced Power due to Inadequate Feedwater Control (LER 483-07-002)
6. N/A	867-060130-1	Reactor and Turbine trip due to protection actuation after second Main Feed Water Pump (LAC) start up on power raising (MER PAR 07-060)
7. NO	285-050226-1	OE20441 - Unplanned Reactor Trip at Low Power Level (Fort Calhoun)
8. N/A	244-050216-1	OE20089 - Failure of redundant I/O power supplies for the Advanced Digital Feedwater Control System (ADFCS) resulted in a loss of main feedwater and an automatic reactor trip
9. N/A	457-041222-1	OE20060 - Update to OE19778 - Failure Of The Controlling Channel Steam Flow Card Initiated A Reactor Trip On LO-2 Steam Generator Level On Unit 2 At Braidwood Station
10. N/A	772-040806-1	MER PAR 05-074; (Chinon B2, 06 August 2004) Reactor trip by very high level on steam generator
11. N/A	251-040514-1	OE18827 - Potential Effect of a Feedwater Flow Controller Failure (Update to OE18508)
12. NO	316-040408-1	OE18602 - Reactor Trip as a Result of High Steam Generator Water Level
13. N/A	424-040327-1	OE18255 - Unit 1 Manual Reactor Trip due to Loss of Main Feedwater Pump Speed Control Resulting from a Stuck Open Flow Control Valve
14. NO	348-040301-1	Unit 1 Turbine Trip and Automatic Scram on High Steam Generator Water Level
15. NO	334-031014-1	LER 412-03-003 - Automatic Reactor Trip Due to Low Steam Generator Water Level
16. N/A	339-030331-1	Unit 2 Automatic Reactor Trip Caused by Main Feedwater Control Valve Controller Failure
17. N/A	316-030205-1	LER 316-03002-1 Automatic Reactor Scram on Loss of 24 VDC Control Power

18. A	280-030125-1	**Unit 1 Automatic Scram on Steam Generator Low-Low Water Level**
19. NO	499-020707-1	Automatic Reactor Scram and Main Turbine Trip Because of High Water Level in 2B Steam Generator
20. N/A	395-020617-1	Automatic Reactor Scram After Main Feedwater System Malfunctions
21. NO	364-001116-1	Automatic Reactor Scram as a Result of Feedwater Control Problems
22. N/A	414-000605-1	Rainwater Intrusion Causes Feedwater System Malfunction, Turbine Trip, and Automatic Reactor Scram
23. N/A	269-990707-1	Automatic Reactor Scram on Loss of Feedwater Signal
24. N/A	400-990312-1	Reactor Scram Due to Degraded Condition of a Steam Generator Water Level Flow Control Valve
25. N/A	499-980922-1	Maintenance Error Caused a Feedwater Isolation and Automatic Scram
26. NO	528-980222-1	Reactor Scram on Low Steam Generator Water Level
27. N/A	311-971002-1	Unit 2 Scram Resulting from Unanticipated Interaction with Data Acquisition System
28. N/A	269-970701-1	Manual Reactor Scram Resulting from Equipment Failure While Shutdown
29. N/A	499-970430-1	Malfunctioning Main Feedwater Regulating Valve Results In a Manual Reactor Scram
30. A	395-970426-1	**Turbine Trip on High Steam Generator Water Level Followed by Reactor Scram on Low Water Level**
31. N/A	323-970329-1	Automatic Reactor Scram Because of Partial Loss Of Main Feedwater
32. NO	499-970326-1	Manual Unit Reactor Scram due to Lowering Steam Generator Level
33. N/A	316-970311-1	Automatic Reactor Scram Caused by Feedwater Regulating Valve Controller Failure
34. N/A	390-970306-1	Automatic Reactor Scram Initiated By Failure Of The 1B Main Feedwater Pump Shaft
35. N/A	335-970304-1	Loss of Electrical Power to the 1A2 Reactor Coolant Pum p Causes Automatic Reactor Scram
36. N/A	400-970131-1	Reactor Trip Because Of Inadvertent Closure Of A Main Feedwater Isolation Valve
37. N/A	281-961213-1	Automatic Reactor Scram While Shutting Down for Maintenance
38. N/A	318-961117-1	Unit 2 Reactor Scram Due to Failed Bolt on Feed Regulating Valve Fischer Positioner
39. N/A	328-961011-2	Unexpected Turbine Runback Results in a Manual Reactor Scram, Main Feedwater Isolation, and Auxiliary Feedwater Start

40. N/A	412-960830-1	Manual Trip Due to Unexpected Reactor Cooldown.
41. N/A	247-960822-1	Reactor Scram on Turbine Trip Caused by High Level in Steam Generator
42. NO	454-960702-1	Closure of Feedwater Isolation Valve Prompts Manual Reactor Scram
43. N/A	275-960610-1	Loss of Both Main Feedwater Pumps Prompts a Manual Reactor Scram
44. N/A	424-960525-1	Blown Fuse Causes Feedwater Isolation Valve Closure.
45. N/A	680-960330-1	EAR MOW 96-029, Turbine Trip During A Control Valve Test Subsequently Leading To A Reactor Scram at Dukovany Unit 2
46. N/A	315-960317-1	Main Feedwater Differential Pressure Controller Failure Leads to Automatic Reactor Scram
47. N/A	269-960228-1	Automatic Reactor Scram From 100 Percent Power Caused by Loss of Main Feedwater at Unit 1
48. N/A	309-960213-1	Automatic Reactor Scram Resulting from failed Feedwater Regulating Valve Positioner
49. N/A	327-951208-1	Manual Reactor Scram Initiated as a Result of a Failed Air Line to a Feedwater Regulating Valve
50. N/A	446-951205-1	Automatic reactor SCRAM on low steam generator level
51. N/A	275-951128-1	Manual Scram on Loss of Feedwater Caused by Defective Feed Pump Speed Sensor
52. NO	528-951126-1	Reactor Scram Resulting from Steam Generator Number 1 High Water Level
53. N/A	445-951119-1	Turbine trip and Reactor SCRAM caused by a failed feedwater pump recirculation valve
54. NO	317-951109-1	Manual Reactor Trip as a Result of Increasing SG 11 Water Level
55. N/A	368-950901-1	Automatic Scram on High Steam Generator Level When Painter Accidently Opens Feedwater Flow Transmitter Orifice Flush Valve
56. N/A	529-950717-1	Reactor Scram Following Degradation of Main Feedwater Flow
57. N/A	653-950703-1	EAR MOW 96-006, Unit Scram Caused By Inappropriate Personnel Training When Three Steam Generator Reach the Low Level Scram Setpoint at South Ukraine Unit 1
58. N/A	317-950616-1	Manual Reactor Scran Resulting from Loss of 12 Steam Generator Feed Pump
59. N/A	528-950530-1	Reactor Trip Following Degradation of Main Feedwater Flow
60. N/A	255-950522-1	Main Feedwater Pump Transient Results in a Manual reactor Scram
61. N/A	910-950427-1	Detection of a Control Valve Delayed Closure During Review of Recorded Data After An Automatic Reactor Shutdown at Beznau Unit 1

62. N/A	313-950403-1	Vendor Personnel Error in Programming an Upgraded Main Feedwater Pump Turbine Controller Resulted in Manual Reactor Trip and Automatic Emergency Feedwater System Actuation
63. N/A	316-950223-1	Reactor Scram due to SG Level Controller Failure
64. N/A	389-950221-1	Automatic Reactor Trip on Low Steam Generator Level due to a Failed Level Transmitter
65. N/A	318-950113-1	Unit 2 Trip Due to Steam Generator Low Levels After Steam Generator Isolation Signal Actuation
66. N/A	250-941226-1	Loose Teminal on an I/P Transducer Caused Main Feedwater Control Valve to Fail Closed and Resulted in an Automatic Turbine Trip and Reactor Scram
67. N/A	891-941203-1	Reactor Trip Due to High Steam Generator Level Caused by O-ring Failure in the Main Feedwater Control Valve Positioner
68. NO	110-940909-1	Steam Generator Water Level High-High Causing Turbine Trip, Reactor Scram at Qinshan Unit 1
69. N/A	530-940830-1	Reactor Scram due to Component Failure in the Feedwater Control System
70. N/A	530-940819-1	Reactor Scram due to an Intermittent Failure in the Feedwater Control System and Degradation in Feedwater Flow
71. N/A	287-940810-1	Steam Generator Exceeded Tube-to-Shell Limits During a Reactor Scram
72. N/A	682-940706-1	EAR MOW 94-041, Reactor Scram Due to Exceeding of Water Level In Steam Generator at Dukovany Unit 4
73. N/A	313-940411-1	REACTOR TRIP ON HIGH REACTOR COOLANT SYSTEM PRESSURE RESULTING FROM A LIGHTNING - INDUCED CLOSURE OF THE MAIN STEAM ISOLATION VALVES
74. NO	498-940228-1	Loss of feedwater regulation and subsequent manual reactor trip
75. N/A	346-931008-1	Davis-Besse Reactor Trip Due To High Rcs Pressure
76. N/A	382-930615-1	Reactor Trip Due to Malfunction of Feedwater Flow Square Root Extractor
77. N/A	446-930504-1	Manual reactor trip following inadvertent closure of feedwater isolation valve caused by instrumentation channel error.
78. A	336-930223-1	**Reactor Trip on Steam Generator Low Water Level**
79. N/A	311-930128-1	Manual RX trip from 100 percent power upon trip of both steam generator feed pumps due to loose test jack.
80. N/A	443-930103-1	Manual reactor trip due to loss of feedwater resulting from a valve alignment error.
81. N/A	302-921229-1	Binding of main feedwater pump control actuator results in feedwater flow reduction and reactor trip due to high reactor coolant system pressure.
82.	499-	Manual reactor trip due to the closure of "D" train feedwater

N/A	921227-1	regulating valve.
83. N/A	327-921026-1	WATER IN CONTROL AIR CAUSES SECONDARY PLANT TRANSIENT RESULTING IN REACTOR SCRAM.
84. N/A	445-921012-1	Manual reactor trip due to feedwater flow control valve failure.
85. N/A	443-920907-1	During a routine shutdown, an automatic scram occurred due to steam generator level oscillations.
86. N/A	445-920720-1	Loss of main feedwater pumps due to spurious SSPS signal leads to manual scram.
87. N/A	445-920611-1	Reactor scrammed manually due to rapidly dropping steam generator levels following a loss of main feedwater caused by spurious reaction protection signal.
88. N/A	344-920605-2	Reactor Trip Caused by a Failure of a Manual Pushbutton on a Steam Generator Feedwater Regulating Valve Controller
89. N/A	483-920523-1	Reactor trip on low level steam generator due to a failed relay driver card which caused a feedwater isolation valve to close.
90. NO	311-920514-1	During a plant startup, a reactor trip on steam generator low-low level occurred from 15 percent reactor power due to operator error.
91. N/A	311-920426-1	Debris from maintenance in a Unit 2 main feedwater regulating valve prevented the valve from operating properly and led to a reactor scram from 4 percent power during startup.
92. NO	247-920413-1	Reactor trip initiated by a turbine tripas a result of a high level in steam generator.
93. N/A	339-920129-1	REACTOR TRIP CAUSED BY MFRV CLOSURE UPON FAILURE OF DRIVER CARD
94. N/A	247-920127-1	Reactor trip due to main feedwater regulating valve going closed..
95. N/A	287-920114-1	I&E technicians used an instrument with the test leads configured for current measurement rather than voltage, results in high steam generator level causing loss of main feedwater and reactor trip.
96. N/A	529-920109-1	Reactor trip on low steam generator level due to failure in feedwater valve hand switch.
97. N/A	281-911217-1	High Steam Generator Level Due To Main Feedwater Regulating Valve Oscillations Results In Esf Actuation And Reactor Trip
98. NO	455-911107-1	Reactor Scram on Low-2 Steam Generator Level During Startup Due to D-5 Steam Generator Level Control
99. N/A	456-911106-1	Reactor Scram as a Result of a Feedwater Pump Trip Die to a Loss of Electrohydraulic Fluid Pressure
100. N/A	413-910911-1	Reactor Scram on Turbine Trip Due to Loss of Both Main Feedwater Pumps on High Discharge Pressure
101 N/A.	414-901007-1	REACTOR SCRAM RELATED TO FAILURE OF LOW PRESSURE SENSING SWITCHES
102. N/A	498-900929-1	MANUAL REACTOR TRIP DUE TO FULL CLOSURE OF A FEEDWATER ISOLATION VALVE DURING PARTIAL STROKE TESTING

103. N/A	327-900914-1	Reactor scram caused by failure of a vital inverter resulting in closure of a feedwater regulating valve
104 N/A.	445-900907-1	MANUAL REACTOR TRIP DUE TO SHEARING OF FEEDWATER FLOW CONTROL VALVE FEEDBACK LINKAGE ARM
105 N/A.	269-900828-1	VALVE LIMIT SWITCH OPERATION DUE TO AN UNKNOWN CAUSE RESULTS IN CONDENSATE - FEEDWATER TRANSIENT AND REACTOR TRIP
106. N/A	281-900827-1	UNIT 2 MANUAL REACTOR TRIP FOLLOWING INADVERTENT GROUNDING OF THE "A" MAIN FEEDWATER REGULATING VALVE CONTROL SIGNAL DURING TESTING
107 N/A.	445-900825-1	REACTOR TRIP DUE TO THE FAILURE OF A FEEDWATER FLOW CONTROL VALVE LINKAGE ARM NUT
108 N/A.	498-900730-1	MANUAL REACTOR TRIP DUE TO FULL CLOSURE OF A FEEDWATER ISOLATION VALVE DURING PARTIAL STROKE TESTING
109 N/A.	425-900630-1	MANUAL REACTOR TRIP FOLLOWING DELAYS IN SYNCHRONIZATION TO GRID
110. N/A	250-900609-1	HIGH STEAM GENERATOR LEVEL AND TURBINE TRIP/REACTOR SCRAM RESULTING FROM A FAULTY FEEDWATER CONTROL SWITCH
111 N/A.	244-900609-1	Inadvertant Closure of "A" Steam Generator Main Feedwater Regulating Valve due to Controller Mal function
112 N/A.	457-900609-1	REACTOR TRIP DURING PLANT START UP FROM LOW STEAM GENERATOR WATER LEVEL DUE TO A MALFUNCTIONING BYPASS FEEDWATER REGULATING VALVE
113 N/A.	445-900527-1	REACTOR TRIP DUE TO FEEDWATER CONTROL VALVE SOLENOID FAILURE
114 N/A.	261-900517-1	REACTOR TRIP DUE TO FAILURE OF FEEDWATER REGULATING VALVE
115 N/A.	206-900515-1	MANUAL REACTOR TRIP FOLLOWING A LOSS OF FEEDWATER TO ONE STEAM GENERATOR AS THE RESULT OF UNIDENTIFIED SYSTEM INTERACTIONS
116 N/A.	244-900510-1	INADVERTENT CLOSURE OF A STEAM GENERATOR MAIN FEEDWATER REGULATING VALVE DUE TO CONTROLLER MALFUNCTION CAUSES A REACTOR TRIP ON LOW STEAM GENERATOR LEVEL
117 N/A.	445-900509-1	REACTOR TRIP DUE TO LOSS OF FEEDWATER PUMP SPEED CONTROLLERS DURING MAINTENANCE
118 N/A.	336-900508-1	MANUAL REACTOR TRIP ON STEAM GENERATOR 1 LOW LEVEL
119 N/A.	334-900330-1	REACTOR TRIP ON C STEAM GENERATOR LOW LEVEL AND STEAM FLOW / FEEDWATER FLOW MISMATCH DUE TO CLOSURE OF C MAIN FEEDWATER REGULATING VALVE
120 N/A.	498-900329-1	REACTOR TRIP ON LOW STEAM GENERATOR LEVEL DUE TO A FEEDWATER BOOSTER PUMP TRIP
121	499-	REACTOR TRIP ON LOW STEAM GENERATOR LEVEL DUE TO A

N/A.	900326-1	FEEDWATER REGULATING VALVE FAILURE
122 N/A.	338-900123-1	REACTOR TRIP ON STEAM / FEEDWATER FLOW MISMATCH DUE TO FAILED DRIVER CARD ON A FEEDWATER REGULATING VALVE
123 . NO	255-900109-1	Manual Reactor Trip
124. N/A	369-900108-1	A REACTOR TRIP OCCURRED BECAUSE OF A CLOGGED STRAINER ON FEEDWATER PUMP A SPEED CONTROLLER CAUSED BY WATER IN THE OIL SYSTEM FOR UNKNOWN REASONS
125 N/A.	270-870420-1	REACTOR TRIP FROM HIGH STEAM GENERATOR LEVEL CAUSED BY EQUIPMENT FAILURE
126 N/A.	270-870326-1	REACTOR TRIP FROM HIGH RCS PRESSURE CAUSED BY EQUIPMENT FAILURE
127 N/A.	275-870222-1	REACTOR TRIP DUE TO HIGH STEAM GENERATOR WATER LEVEL
128. N/A	302-800226-1	Loss of Instrument Power Results in Reactor Trip, Turbine Trip, and an Engineered Safety Actuation

Q.
Please provide all workpapers related to the exhibits of Gerard J. Yupp.

A.
Documents responsive to this request are provided as Bates Nos. FPL-FI-10-155 through FPL-FI-10-160.

COMPANY: FLORIDA POWER & LIGHT COMPANY

SCHEDULE A3

GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE

MONTH OF: FEBRUARY 2008

		CURRENT MONTH				PERIOD TO DATE			
				DIFFERENCE				DIFFERENCE	
		ACTUAL	ESTIMATED	AMOUNT	%	ACTUAL	ESTIMATED	AMOUNT	%
	FUEL COST OF SYSTEM NET GENERATION ($)								
1	* HEAVY OIL	22,902,013	5,017,136	17,884,877	356.5	39,586,008	26,388,299	13,527,709	51.3
2	* LIGHT OIL	840,820	0	840,820	0.0	1,021,524	66,000	955,524	1,447.8
3	COAL	12,010,804	13,929,000	(1,918,396)	(13.8)	24,560,214	28,801,000	(4,211,786)	(14.6)
4	** GAS	306,188,667	305,130,058	2,058,609	0.7	611,235,256	622,457,607	(11,222,351)	(1.8)
5	NUCLEAR	8,430,238	6,853,000	(422,762)	(4.8)	17,582,419	18,351,000	(768,581)	(4.2)
6	TOTAL ($)	352,372,341	333,929,194	18,443,147	5.5	694,324,421	696,043,906	(1,719,485)	(0.2)
	SYSTEM NET GENERATION (MWH)								
7	HEAVY OIL	222,625	60,061	162,564	270.7	380,182	290,193	95,989	33.1
8	LIGHT OIL	4,699	0	4,699	0.0	5,835	328	5,507	1,679.0
9	COAL	517,794	611,863	(94,069)	(15.4)	1,103,608	1,285,923	(182,315)	(12.8)
10	GAS	4,052,628	4,166,430	(113,805)	(2.7)	8,290,249	8,470,707	(180,458)	(2.1)
11	NUCLEAR	1,898,820	2,044,551	(145,731)	(7.1)	4,015,491	4,230,105	(214,614)	(5.1)
12	TOTAL (MWH)	6,696,564	6,882,905	(186,342)	(2.7)	13,801,365	14,257,256	(455,891)	(3.2)
	UNITS OF FUEL BURNED								
13	* HEAVY OIL (Bbl)	372,728	96,459	276,267	286.4	647,707	462,024	185,683	40.2
14	* LIGHT OIL (Bbl)	10,802	0	10,802	0.0	12,832	701	12,131	1,730.5
15	*** COAL (TON)	54,878	71,790	(16,912)	(23.6)	124,410	148,744	(24,334)	(16.4)
16	** GAS (MCF)	31,083,782	31,287,650	(203,868)	(0.7)	62,565,800	63,569,070	(1,003,270)	(1.6)
17	NUCLEAR (MMBTU)	20,573,934	22,798,320	(2,224,386)	(9.8)	43,416,790	47,168,944	(3,752,154)	(8.0)
	BTU BURNED (MMBTU)								
18	HEAVY OIL	2,300,622	617,335	1,773,287	287.2	4,155,209	2,956,953	1,198,256	40.5
19	LIGHT OIL	62,454	0	62,454	0.0	74,221	4,086	70,135	1,716.6
20	COAL	6,644,285	8,101,245	(456,960)	(7.5)	11,460,669	12,623,275	(1,162,406)	(9.0)
21	GAS	31,886,896	31,287,650	599,246	1.9	64,174,319	63,569,070	605,249	1.0
22	NUCLEAR	20,573,934	22,798,320	(2,224,386)	(9.8)	43,416,790	47,168,944	(3,752,154)	(8.0)
23	TOTAL (MMBTU)	60,558,171	60,804,550	(246,379)	(0.4)	123,301,408	126,322,328	(3,020,920)	(2.4)
	GENERATION MIX (%MWH)								
24	HEAVY OIL	3.32	0.87	2.45	280.8	2.80	2.04	0.76	37.3
25	LIGHT OIL	0.07	0.00	0.07	0.0	0.04	0.00	0.04	1,738.7
26	COAL	7.73	8.89	(1.16)	(13.0)	8.00	8.88	(0.88)	(9.9)
27	GAS	60.52	60.53	(0.02)	(0.0)	60.07	59.41	0.66	1.1
28	NUCLEAR	28.36	29.70	(1.35)	(4.5)	29.09	29.67	(0.57)	(1.9)
29	TOTAL (%)	100.00	100.00	0.00	0.0	100.00	100.00	0.00	0.0
	FUEL COST PER UNIT								
30	* HEAVY OIL ($/Bbl)	61.4446	52.0131	9.4315	18.1	61.5958	57.0713	4.5245	7.9
31	* LIGHT OIL ($/Bbl)	77.8409	0.0000	77.8409	0.0	79.6051	94.1512	(14.5461)	(15.4)
32	*** COAL ($/TON)	57.8523	55.1330	2.7192	4.9	49.7440	63.7873	(14.0433)	(22.0)
33	** GAS ($/MCF)	9.9148	9.7844	0.1304	1.3	9.7695	9.7918	(0.0224)	(0.2)
34	NUCLEAR ($/MMBTU)	0.4098	0.3883	0.0214	5.5	0.4050	0.3890	0.0159	4.1
	FUEL COST PER MMBTU ($/MMBTU)								
35	* HEAVY OIL	9.5799	8.1271	1.4529	17.9	9.6014	8.9174	0.6841	7.7
36	* LIGHT OIL	13.4630	0.0000	13.4630	0.0	13.7633	16.1627	(2.3994)	(14.8)
37	COAL	2.1279	2.2830	(0.1550)	(6.8)	2.1418	2.2816	(0.1398)	(6.1)
38	** GAS	9.8851	9.7644	(0.1193)	(1.2)	9.5246	9.7918	(0.2672)	(2.7)
39	NUCLEAR	0.4098	0.3883	0.0214	5.5	0.4050	0.3890	0.0159	4.1
40	TOTAL ($/MMBTU)	5.8187	5.4918	0.3269	6.0	5.8311	5.5101	0.1211	2.2
	BTU BURNED PER KWH (BTU/KWH)								
41	HEAVY OIL	10,738	10,278	460	4.5	10,760	10,190	570	5.6
42	LIGHT OIL	13,291	0	13,291	0.0	12,719	12,457	262	2.1
43	COAL	10,901	9,972	929	9.3	10,403	9,972	431	4.3
44	GAS	7,868	7,509	359	4.8	7,741	7,505	236	3.1
45	NUCLEAR	10,835	11,151	(316)	(2.8)	10,812	11,151	(338)	(3.0)
46	TOTAL (BTU/KWH)	9,043	8,834	209	2.4	8,934	8,860	74	0.8
	GENERATED FUEL COST PER KWH (¢/KWH)								
47	* HEAVY OIL	10.2873	8.3534	1.9339	23.2	10.3309	9.0865	1.2444	13.7
48	* LIGHT OIL	17.8943	0.0000	17.8943	0.0	17.5059	20.1220	(2.6160)	(13.0)
49	COAL	2.3196	2.2765	0.0431	1.9	2.2281	2.2751	(0.0470)	(2.1)
50	** GAS	7.6047	7.3476	0.2571	3.5	7.3729	7.3484	0.0246	0.3
51	NUCLEAR	0.4440	0.4330	0.0110	2.5	0.4378	0.4338	0.0040	0.9
52	TOTAL (¢/KWH)	5.2620	4.8516	0.4104	8.5	5.0308	4.8820	0.1488	3.0

* Distillate & Propane (Bbls & $) used for firing, hot standby, ignition, prewarming, etc. in Fossil Steam Plants is included in Heavy Oil and Light Oil. Values may not agree with Schedule A5.

. Includes gas used for Fossil Steam Plants start-up. Estimated values may not agree with Schedule A5. * Scherer coal is reported in MMBTUs only. Scherer coal is not included in TONS.

SCHEDULE A4

Florida Power & Light Company
SYSTEM NET GENERATION AND FUEL COST
ACTUAL FOR THE PERIOD/MONTH OF: FEBUARY 2008

	(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		(j)	(k)	(l)	(m)	(n)
	PLANT/UNIT		NET CAPABILITY (MW)	NET GENERATION (MWH)	CAPACITY FACTOR (%)	EQUIVALENT AVAILABILITY FACTOR (%)	NET OUTPUT FACTOR (%)	AVERAGE NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)		FUEL HEAT VALUE (MMBTU/UNIT)	FUEL BURNED (MMBTU)	AS BURNED FUEL COST ($)	FUEL COST PER KWH (¢/KWH)	COST OF FUEL ($/UNIT)
1	CAPE CANAVERAL	# 1	370	9,468	12.6	85.5	45.8	10,403	#6 OIL	15,589	BBLS	6.419	100,066	906,497	9.5743	58.15
2		# 1		21,563					GAS	218,892	MCF	1.027	222,748	2,152,872	9.9841	9.83
3		# 2	389	7,297	12.2	77.4	51.7	10,489	#6 OIL	11,775	BBLS	6.419	75,584	684,714	9.3835	58.15
4		# 2		23,217					GAS	238,048	MCF	1.027	244,475	2,382,885	10.1773	9.99
5	FT. MYERS	# 2	1440	581,075	62.2	86.9	62.2	7,150	GAS	4,061,439	MCF	1.023	4,154,852	40,156,881	6.9108	9.89
6		#3A	332	8,807	8.2	72.2	89.5	9,066	GAS	78,238	MCF	1.023	77,991	753,787	8.7578	9.89
7		#3A		27					#2 OIL	49	BBLS	5.806	284	3,768	13.9638	76.89
8		#3B	332	10,782	10.2	82.6	79.9	9,738	GAS	102,424	MCF	1.023	104,780	1,012,705	9.4100	9.89
9		#3B		0					#2 OIL	0	BBLS	5.806	0	0	0.0000	0.00
10	LAUDERDALE	# 4	437	0					#2 OIL	0	BBLS	5.639	0	0	0.0000	0.00
11		# 4		217,908	72.1	98.1	72.2	7,476	GAS	1,585,218	MCF	1.028	1,629,604	15,750,216	7.2279	9.94
12		# 5	437	0					#2 OIL	0	BBLS	5.839	0	0	0.0000	0.00
13		# 5		203,942	67.6	91.4	72.2	8,192	GAS	1,625,211	MCF	1.028	1,670,717	16,147,575	7.9177	9.94
14	MANATEE	# 1	799	-533	0.0	87.9	0.0	0	#6 OIL	0.00	BBLS	0.000	0	0	0.0000	0.00
15		# 1		-533					GAS	1	MCF	1.018	1	10	0.0018	9.84
16		# 2	783	-296	0.0	100.0	0.0	0	#6 OIL	0.00	BBLS	0.000	0	0	0.0000	0.00
17		# 2		-296					GAS	106,954	MCF	1.018	108,574	1,049,374	354.5182	9.84
18		# 3	1111	0					#2 OIL	0	BBLS	6.308	0	0	0.0000	0.00
19		# 3		578,170	79.1	96.5	79.1	7,037	GAS	3,996,529	MCF	1.018	4,068,467	39,321,965	6.8011	9.84
20	MARTIN	# 1	813	-655	0.0	100.0	0.0	0	#6 OIL	0	BBLS	6.443	0	0	0.0000	0.00
21		# 1		-655					GAS	19,345	MCF	1.028	19,887	192,209	29.3449	9.94
22		# 2	785	53,915	19.2	97.4	59.0	10,796	#6 OIL	81,457	BBLS	6.443	524,827	4,953,270	9.1872	60.81
23		# 2		52,542					GAS	607,520	MCF	1.028	624,531	6,036,128	11.4882	9.94
24		# 3	466	181,966	63.3	71.3	74.4	8,360	GAS	1,479,810	MCF	1.028	1,521,245	14,702,920	8.0800	9.94
25		# 4	466	254,564	85.7	99.8	85.7	7,366	GAS	1,824,079	MCF	1.028	1,875,153	18,123,461	7.1194	9.94
26		# 8	1112	48					#2 OIL	57	BBLS	5.874	335	4,578	9.5370	80.31
27		# 8		529,817	73.2	92.1	73.2	7,292	GAS	3,758,320	MCF	1.028	3,863,553	37,341,460	7.0480	9.94

FPL-FI-10.156 090505 Hearing Exhibits - 000484

Florida Power & Light Company
SYSTEM NET GENERATION AND FUEL COST
ACTUAL FOR THE PERIOD/MONTH OF: FEBUARY 2008

	(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		(j)	(k)	(l)	(m)	(n)
	PLANT/UNIT		NET CAPABILITY (MW)	NET GENERATION (MWH)	CAPACITY FACTOR (%)	EQUIVALENT AVAILABILITY FACTOR (%)	NET OUTPUT FACTOR (%)	AVERAGE NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)		FUEL HEAT VALUE (MMBTU/UNIT)	FUEL BURNED (MMBTU)	AS BURNED FUEL COST ($)	FUEL COST PER KWH (¢/KWH)	COST OF FUEL ($/UNIT)
1	PT EVERGLADES	# 1	205	3,718	11.2	86.5	51.6	14,753	#6 OIL	7,097	BBLS	6.382	45,293	427,937	11.5099	60.30
2		# 1		12,006					GAS	181,593	MCF	1.028	186,678	1,804,254	15.0279	9.94
3		# 2	206	11,412	15.1	82.2	60.4	13,366	#6 OIL	21,163	BBLS	6.382	135,062	1,276,094	11.1820	60.30
4		# 2		9,861					GAS	145,217	MCF	1.028	149,283	1,442,829	14.6317	9.94
5		# 3	350	30,779	28.2	76.8	62.1	11,070	#6 OIL	48,925	BBLS	6.382	312,239	2,950,086	9.5848	60.30
6		# 3		43,294					GAS	493,896	MCF	1.028	507,725	4,907,191	11.3346	9.94
7		# 4	380	26,242	28.0	94.4	52.2	12,433	#6 OIL	48,833	BBLS	6.382	311,652	2,944,546	10.4261	60.30
8		# 4		45,477					GAS	588,430	MCF	1.028	604,906	5,848,451	12.8658	9.94
9	RIVIERA	# 3	270	16,046	14.4	99.9	47.6	9,759	#6 OIL	26,798	BBLS	6.454	172,961	1,722,526	10.7349	64.28
10		# 3		11,050					GAS	88,974	MCF	1.028	91,465	884,014	8.0001	9.94
11		# 4	281	13,464	43.3	100.0	49.6	11,714	#6 OIL	21,665	BBLS	6.454	139,826	1,392,534	10.3426	64.28
12		# 4		70,946					GAS	825,850	MCF	1.028	848,974	8,205,382	11.5657	9.94
13	SANFORD	# 3	140	-210	0.0	100.0	0.0	0	#6 OIL	0	BBLS	6.362	0	0	0.0000	0.00
14		# 3		-210					GAS	0	MCF	1.027	0	0	0.0000	0.00
15		# 4	962	254,885	40.8	73.3	40.8	7,770	GAS	1,928,328	MCF	1.027	1,980,393	19,140,611	7.5095	9.93
16		# 5	948	253,887	40.8	99.6	41.3	8,255	GAS	2,040,733	MCF	1.027	2,095,833	20,256,345	7.9785	9.93
17			**	*	**		*					*				
18	TURKEY POINT	# 1	388	23,371	11.5	99.7	40.7	13,218	#6 OIL	46,334	BBLS	6.409	296,955	2,924,300	12.5125	63.11
19		# 1		6,536					GAS	95,687	MCF	1.028	98,348	950,520	14.5426	9.94
20			**	*	**			*				*				
21		# 2	380	26,607	11.3	98.1	47.6	11,175	#6 OIL	43,089	BBLS	6.409	276,157	2,719,497	10.2210	63.11
22		# 2		2,820					GAS	51,264	MCF	1.028	52,699	509,339	18.0617	9.94
23		# 5	1080	0	83.6	98.9	84.0	7,034	# 2 OIL	0	BBLS	0.001	0	0	0.0000	0.00
24		#5		612,376					GAS	4,189,846	MCF	1.028	4,307,162	41,628,966	6.7979	9.94
25	CUTLER	# 5	65	-34	0.0	100.0	0.0	0	GAS	0	MCF	1.028	0	0	0.0000	0.00
26		# 6	110	-34	0.0	0.0	0.0	0	GAS	170	MCF	1.028	175	1,691	5.0469	9.94
27	FT MYERS	1-12	627	3,851	1.0	100.0	82.6	13,265	#2 OIL	9,030	BBLS	5.804	52,410	694,300	17.5728	76.89
28	LAUDERDALE	1-12	766	39					#2 OIL	129	BBLS	5.537	714	10,239	26.2530	79.37
29		1-12		5,011	2.1	97.9	92.0	17,716	GAS	86,334	MCF	1.028	88,751	857,783	17.1180	9.94
30		13-24	766	201					#2 OIL	622	BBLS	5.537	3,444	49,368	24.5611	79.37
31		13-24		3,283	1.5	93.8	63.4	16,450	GAS	52,402	MCF	1.028	53,869	520,647	15.8589	9.94
32	EVERGLADES	1-12	383	-117					#2 OIL	20	BBLS	5.537	111	1,340	1.1457	67.02
33		1-12		2,567	1.0	99.4	63.9	17,727	GAS	42,141	MCF	1.028	43,321	418,700	16.3109	9.94

* INCLUDES CRANKING DIESELS

** EXCLUDES CRANKING DIESELS

FPL-FI-10-157 090505 Hearing Exhibits - 000485

SCHEDULE

Florida Power & Light Company
SYSTEM NET GENERATION AND FUEL COST
ACTUAL FOR THE PERIOD/MONTH OF: FEBRUARY 2008

	(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)		(j)	(k)	(l)	(m)	(n)
	PLANT/UNIT		NET CAPABILITY (MW)	NET GENERATION (MWH)	CAPACITY FACTOR (%)	EQUIVALENT AVAILABILITY FACTOR (%)	NET OUTPUT FACTOR (%)	AVERAGE NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)		FUEL HEAT VALUE (MMBTU/UNIT)	FUEL BURNED (MMBTU)	AS BURNED FUEL COST ($)	FUEL COST PER KWH (¢/KWH)	COST OF FUEL ($/UNIT)
1	PUTNAM	# 1	250	0					#2 OIL	0	BBLS	5.809	0	0	0.0000	0.00
2		# 1		32,897	19.9	99.1	48.0	10,931	GAS	350,130	MCF	1.027	359,583	3,475,390	10.5645	9.93
3		# 2	250	0					#2 OIL	0	BBLS	5.809	0	0	0.0000	0.00
4		# 2		23,358	14.2	99.9	53.0	9,895	GAS	225,078	MCF	1.027	231,155	2,234,126	9.5647	9.93
5			(A)	(B)				(B)	PET COKE /							
6	ST JOHNS (1)	# 1	128	54,458	62.7	71.5	87.9	9,323	COAL	22,969	TONS	22.104	507,698	1,204,864	2.2125	52.46
7		# 1							COAL ONLY	22,969	TONS	22.104	507,698	1,204,864		52.46
8		# 1		475					#2 OIL	769	BBLS	5.763	4,431	66,368	13.9635	86.31
9			(A)	(B)				(B)	PET COKE /							
10		# 2	128	72,442	83.5	89.8	92.3	9,736	COAL	31,909	TONS	22.104	705,317	1,673,850	2.3108	52.46
11		# 2							COAL ONLY	31,909	TONS	22.104	705,317	1,673,850		52.46
12		# 2		75					#2 OIL	126	BBLS	5.763	725	10,859	14.5759	86.31
13			(A)							(C)	(2)					
14	SCHERER (1)	# 4	622	390,895	96.6	100.0	96.6	11,336	COAL	4,431,250	MMBTU	---	4,431,250	9,131,890	2.3361	2.06
15		# 4		0					#2 OIL	0	BBLS	0.000	0	0	0.0000	0.00
16	TURKEY POINT	# 3	717	494,682	102.8	98.4	104.2	10,864	NUCLEAR	5,374,343	MMBTU	---	5,374,343	2,465,102	0.4983	0.46
17		# 4	717	491,739	102.0	98.4	103.6	10,915	NUCLEAR	5,367,353	MMBTU	---	5,367,353	2,139,076	0.4350	0.40
18	ST LUCIE	# 1	853	597,917	102.4	100.0	102.4	10,704	NUCLEAR	6,400,307	MMBTU	---	6,400,307	2,260,273	0.3780	0.35
19			***	***	***	***	***	***		***						
20		# 2	726	314,482	63.4	62.9	100.6	10,913	NUCLEAR	3,431,931	MMBTU	---	3,431,931	1,565,764	0.4979	0.46
21																
22																
23	SYSTEM TOTALS		11,618	6,696,564	---	---	---	9,043	---	383,527	BBLS	---	60,558,171	352,372,341	5.2620	---
24										31,083,782	MCF					
25	*** EXCLUDES PARTICIPANTS									4,431,250	MMBTU	COAL (C)				
26	**** INCLUDES PARTICIPANTS									54,878	TONS	COAL (C)				
27																
28										20,573,934	MMBTU	NUCLEAR				

(1) ALL COAL DATA AND GAS COST AND CONSUMPTION IS REPORTED ON A CALENDAR BASIS. ALL OTHER DATA IS FISCAL.
(A) FPL SHARE. (B) CALCULATED ON GENERATION RECEIVED NET OF LINE LOSSES. (C) SCHERER COAL IS REPORTED IN MMBTU'S ONLY. SCHERER COAL IS NOT INCLUDED IN TONS.
(2) IN MONTHS WHERE INVENTORY ADJUSTMENTS ARE BOOKED PER STOCKPILE SURVEYS AS IN FEBUARY 05 FOR SCHERER, THE MMBTU'S REPORTED MAY BE ARTIFICIALLY LOW OR HIGH AS THE RESULT OF THE SURVEY BEING RECORDED IN THE CURRENT MONTH AND NOT FLOWED BACK TO EACH AFFECTED MONTH.

Feb. 26 Disturbance - Hour Ending MWHR - Replacement Generation

Unit	13	14	15	16	17	18	19	20	21	22	Total
FM GT	0	532	559	550	559	559	550	550	485	112	4,456
FL GT 1	0	173	262	267	270	276	289	292	287	59	2,175
FL GT 2	0	178	321	335	338	347	356	357	297	72	2,601
PE GT	0	180	302	307	309	305	305	308	169	13	2,198

Transaction No.	Begin Time	End Time	Volume (MWh)	Highest Hour MW	Total Cost ($)	Total Cost (cents/KWh)
1	1400	2100	1,350	200	169,700.00	12.570
2	1500	2000	863	300	117,890.00	13.660
3	1400	1800	650	200	127,100.00	19.554
4	1500	2100	625	165	186,250.00	29.800
5	1400	2100	1,661	305	265,672.64	15.995
6	1500	2000	65	18	19,322.55	29.727
		Total	**5,214**	**305**	**885,935.19**	**16.991**

*Note: Transaction No. 5 includes a capacity payment based on 305 MW (highest demand hour)

Q.

This request relates to the documents produced by FPL in FPL's supplemental response to OPC's POD No. 26. Please provide all documents in your possession, custody or control discussing or analyzing the documents produced in FPL's supplemental response to OPC's POD No. 26. Please also provide all workpapers underlying or related to the documents produced in FPL's supplemental response to OPC's POD No. 26.

A.

Documents responsive to this request are provided as Bates Nos. FPL-FI-10-162 through FPL-FI-10-163.

Fuel Ass ons:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,626	94.69%
Light Oil	4,669	0.11%
Heavy Oil	222,625	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	628	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,608	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	75

150 + 8 } 158 HRS / TP = 3 i.e. 6½ DAYS

Turkey Point 4	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	24

99 + 0 } 107 HRS / TP = 4 i.e. 4 DAYS

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident

Replacement fuel cost ($) = (Gas fuel cost ($/MMBtu) * Lauderdale/Port Aircraft Gas-Turbine Heat Rate (MMBtu/MWh) * Lauderdale/Port Aircraft Gas Turbine MWh) + (Light Oil fuel cost ($/MMBtu) * Fort Myers Gas Turbine Heat Rate (MMBtu/MWh) * Fort Myers Gas Turbine MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	632	MWh	14	30,465	29,105	31,717	93,505	($)
15	262	321	302	559	MWh	15	46,137	52,488	53,214	98,251	($)
16	267	335	307	550	MWh	16	47,018	54,777	54,095	96,889	($)
17	270	338	309	559	MWh	17	47,548	55,267	54,446	98,251	($)
18	256	347	305	559	MWh	18	45,061	56,739	53,743	98,251	($)
19	284	356	305	520	MWh	19	50,012	58,211	53,743	91,386	($)
20	285	357	308	518	MWh	20	50,188	58,374	54,272	91,044	($)
21	275	297	169	485	MWh	21	48,427	48,563	29,779	85,244	($)
	2,072	2,529	2,185	4,282	MWh	Total	364,873	413,524	385,011	752,610	($)
Heat Rate*	17.715	16.450	17.727	13.285	MMBtu/MWh	*Values based on Schedule A4					
Fuel Price*	9.94	9.94	9.94	13.25	$/MMBtu	*Values based on Schedule A4					

Replacement Fuel Cost (Part A) Total 1,916,018 → Restaurants → 1,916,018

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A

Replacement fuel cost ($/MWh) = ((Gas fuel cost (¢/KWh) * Gas percentage) + (Light Oil fuel cost (¢/KWh) * Light Oil percentage) + (Heavy Oil fuel cost (¢/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.5047	
Light Oil fuel cost =	17.5943	
Heavy Oil fuel cost =	10.2873	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.5367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.92	per MWh

Replacement fuel cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)

where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace = ~~176,533 MWh~~

Replacement fuel cost = 14,013,610 → Storm fossil mix → 14,013,610

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)

Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Heat Rate* (MMBtu/MWh)	Fuel Cost* ($/MMBtu)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,736	53,775	10.864	0.46	28,665	268,737
TP3 March	0	53,775	10.950	0.45	0	264,976
TP4 February	5,736	53,775	10.915	0.40	25,043	234,782
TP4 March	0	17,208	10.944	0.40	0	75,330
Total	11,472	178,533			53,709	843,825

*Values based on Schedule A4

Nuclear fuel NOT USED

897,534

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE

Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($)

= 15,032,094.44

$ 15,032,094

390,605

$ 15,422,699

+ 124,429

15,547,128

Net purchased power

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Fuel Assumptions:

February Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,052,826	94.69%
Light Oil	4,669	0.11%
Heavy Oil	222,825	5.20%
Total	4,279,920	100.00%

March Gas/Heavy Oil/Light Oil Mix		
Fuel	MWh	%
Gas	4,401,718	93.34%
Light Oil	928	0.01%
Heavy Oil	313,262	6.64%
Total	4,715,908	100.00%

Outage Assumptions: Part A

Turkey Point 3 and 4	
Capacity	1,434
Outage Hours	8.17

Outage Assumptions: Part B

Turkey Point 3	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	75

Turkey Point 4	
February Capacity	717
February Outage hours	75
March Capacity	717
March Outage hours	24

REPLACEMENT FUEL COST (Part A) - Immediately Following Incident

Replacement fuel cost ($) = (Gas fuel cost ($/MMBtu) * Lauderdale/Port Aircraft Gas Turbine Heat Rate (MMBtu/MWh) * Lauderdale/Port Aircraft Gas Turbine MWh) +
(Light Oil fuel cost ($/MMBtu) * Fort Myers Gas Turbine Heat Rate (MMBtu/MWh) * Fort Myers Gas Turbine MWh)

H.E.	LG1	LG2	PGT	FMGT		H.E.	LG1	LG2	PGT	FMGT	
14	173	178	180	532	MWh	14	30,465	28,105	31,717	93,805	($)
15	282	321	302	559	MWh	15	46,137	52,488	53,214	98,251	($)
16	287	335	307	550	MWh	16	47,018	54,777	54,095	96,889	($)
17	270	338	308	559	MWh	17	47,546	55,267	54,448	98,251	($)
18	278	347	305	559	MWh	18	48,893	58,739	53,743	98,251	($)
19	289	356	305	550	MWh	19	50,862	58,211	53,743	96,889	($)
20	282	357	308	550	MWh	20	51,420	58,374	54,272	96,889	($)
21	287	287	188	486	MWh	21	50,540	46,953	29,776	85,244	($)
22	56	72	13	112	MWh	22	10,390	11,773	2,291	19,685	($)
	2,175	2,801	2,138	4,469	MWh	Total	383,011	425,287	367,302	782,192	($)
Heat Rate*	17.716	18.458	17.727	13.285	MMBtu/MWh						
Fuel Price*	9.94	9.94	9.94	13.25	$/MMBtu						

*Values based on Schedule A4

*Values based on Schedule A4

Replacement Fuel Cost (Part A) Total 1,978,802

REPLACEMENT FUEL COST (Part B) - Time Period Following Part A

Replacement fuel cost ($/MWh) = ((Gas fuel cost ($/KWh) * Gas percentage) + (Light Oil fuel cost ($/KWh) * Light Oil percentage) + (Heavy Oil fuel cost ($/KWh) * Heavy Oil percentage))*10

Based on A3 Schedule for February 2008:

Gas fuel cost =	7.8047	
Light Oil fuel cost =	17.8843	
Heavy Oil fuel cost =	10.2875	
Replacement fuel cost =	77.55	per MWh

Based on A3 Schedule for March 2008:

Gas fuel cost =	7.8367	
Light Oil fuel cost =	22.2013	
Heavy Oil fuel cost =	10.1382	
Replacement fuel cost =	79.82	per MWh

Replacement fuel cost ($) = Replacement fuel cost ($/MWh) * Energy to replace (MWh)
where Energy to replace (MWh) = (Turkey Point 3 Capacity (MW) * Outage hours (TP3)) + (Turkey Point 4 Capacity (MW) * Outage hours (TP4))

Energy to replace =	178,533 MWh
Replacement fuel cost =	14,013,610

TOTAL FUEL NOT INCURRED BY OUTAGE (Part A and Part B)

Fuel not incurred per each unit = Energy to replace (MWh) * heat rate (MMBtu/MWh) * fuel cost ($/MMBtu) (Note: Total fuel not incurred = sum of fuel not incurred for each unit)

	MWh (Part A)	MWh (Part B)	Heat Rate* (MMBtu/MWh)	Fuel Cost* ($/MMBtu)	Fuel Not Incurred ($) (Part A)	Fuel Not Incurred ($) (Part B)
TP3 February	5,858	53,775	10.864	0.46	28,274	268,737
TP3 March	0	53,775	10.860	0.46	0	264,978
TP4 February	5,858	53,775	10.915	0.40	25,578	234,782
TP4 March	0	17,208	10.944	0.40	0	75,330
Total	11,716	178,533			54,852	843,825

*Values based on Schedule A4

ADDITIONAL FUEL COST INCURRED DUE TO OUTAGE

Additional fuel cost incurred ($) = Replacement fuel cost (Part A) ($) + Replacement fuel cost (Part B) ($) - Total fuel not incurred (Part A) ($) - Total fuel not incurred (Part B) ($)

15,093,737

1,978,502
1,916,018
62,784

15,093,737
15,032,094
61,643

$124,421

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Deposition of J. A. Stall including Late-Filed Exhibit 1

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 32
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 32
DATE 03/17/10

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090505-EI

In re: Review of replacement costs associated with the February 26, 2008 outage on Florida Power & Light's electrical system.
_____/

COPY

TELEPHONE DEPOSITION OF: ART STALL

TAKEN ON BEHALF OF: Office of Public Counsel

DATE: February 5, 2010

TIME: Commenced at 9:05 a.m.
Concluded at 10:00 a.m.

LOCATION: 2894 Remington Green Lane
Tallahassee, Florida

REPORTED BY: MARY ALLEN NEEL, RPR, FPR
Notary Public, State
of Florida at Large

ACCURATE STENOTYPE REPORTERS, INC.
2894-A REMINGTON GREEN LANE
TALLAHASSEE, FLORIDA 32308
850/878-2221

CERTIFICATE OF REPORTER

STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that a review of the transcript was not requested; that my shorthand notes were thereafter translated under my supervision; and that the foregoing pages numbered 1 through 40 are a true and correct record of the aforesaid proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, or financially interested in the foregoing action.

DATED THIS 17th day of February, 2010.

MARY ALLEN NEEL, RPR, FPR
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PROCEEDINGS

The following deposition was taken on oral examination, pursuant to notice, for purposes of discovery, for use as evidence, and for such other uses and purposes as may be permitted by the applicable and governing rules. Reading and signing of the deposition transcript by the witness was not waived.

* * *

Thereupon,

ART STALL

the witness herein, having been first duly sworn by Amy Lowe, a notary public in the State of Florida, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BECK:

Q. Mr. Stall, my name is Charlie Beck with the Office of Public Counsel. Would you please state your name for the record?

A. My name is John A. Stall.

Q. Mr. Stall, you're Vice President, Nuclear Transition, of FPL Group, Inc.; is that correct?

A. Correct.

Q. Mr. Stall, I was curious about the use of the word "transition" in your title. What's the significance of the use of the word "transition"?

A. Charlie, I'm going to be retiring in early spring, and so we're in the process of transitioning the leadership position in the Nuclear Division from myself to my successor.

Q. And has your successor been named publicly?

A. Yes, Mr. Mano Nazar, N-a-z-a-r.

Q. Okay. Thank you. Mr. Stall, could I ask you to turn to your prefiled testimony in this case?

A. I have it in front of me.

Q. And on page 3, beginning on line 15, you state that it typically takes approximately 48 hours to bring a single unit back online after an unexpected plant shutdown. Do you see that?

A. I see that.

Q. Can the 48-hour period be broken down into discrete steps?

A. Well, broadly it can be. But keeping in mind that each individual reactor trip in the industry has to be analyzed for root cause, that's part of it, root cause investigation, why did the unit trip.

Surveillance testing, anytime one of these nuclear units comes offline for any reason, there's a whole set of testing, as you would expect, that needs to be done before you can restart the unit.

And then there is startup training for the

operators, and if there's any maintenance that needs to be done in order to restart the unit, and then there's the power ascension process. So that's sort of broad categories of activities that are required to be completed.

Q. Mr. Stall, I wrote down four steps, if I'm right, the root cause investigation first; second, the surveillance testing; third, the startup training; and fourth, the power ascension. Did I get that --

A. I think I mentioned maintenance, any maintenance that needs to be performed.

Q. Okay. So there's about five steps, generally speaking?

A. Well, I don't call them steps. I call them -- they're more like activities that need to be completed, and the magnitude of those activities varies depending upon the nature of the event that initiated the trip.

Q. Would it be possible in this case, the February 26, 2008 outage, to break down the amount of hours that would be roughly attributable to each of those five -- I'm going to call them steps, but whatever you would like to call them.

A. I don't think it would, Charlie. It would be very difficult, because keep in mind, a lot of these things are going on in parallel, so we don't necessarily

keep track of each individual item and its duration in that sense of things. I'm not saying it couldn't be done, but it would be a very large effort, and I'm not sure our record-keeping is set up to capture things in those specific buckets, if you will.

Q. Are you aware of any training manuals or other documents that generally describe each of those modules or steps that would be taken while restarting a nuclear reactor?

A. I think there's general industry guidance out there that just talks about, you know, these different activities, but I don't -- and there's various procedures that incorporate the requirements that I was mentioning into them, but there's no one succinct document, I don't believe, that captures all that in one place. It's typical, standard industry practice for a nuclear plant.

Q. Mr. Stall, on line 16 on page 3 still of your testimony, you state that restarting two nuclear units following an unexpected shutdown of both units is certainly more challenging than restarting a single unit and that this unique set of circumstances certainly lengthens the typical 48-hour time frame that would be required to restart a reactor following an unplanned shutdown. I was wondering if you could describe in a

little more detail why restarting both units is more challenging.

A. Well, at a very high level and simplistically, there's twice the amount of work to do in each of those areas that we talked about, and you have a fixed number of resources. Keep in mind that, you know, we have specialists in certain areas. For example, electrical engineers, we only have so many of those.

So if you have an event like we had with Turkey Point, you know, you have to lean on that expertise, and sometimes you have to give them rest. There's requirements around resting them. So there's just a lot more work with a fixed amount of resources, so it takes longer to accomplish those activities.

Q. When you say on line 19 that it certainly lengthens the time, can you quantify or approximate the extra amount of time that's required because you had to restart two reactors rather than one?

A. Well, I can only give you my personal experience, which is not only, you know, here at FPL with this specific Turkey Point, but others in the industry. And it can be as long as -- it can be as long as three to five days to restart two units following a dual unit trip, depending upon the complexity involved.

Q. And is that because of the items you described

previously, the fixed amount of manpower and the tasks to be performed?

A. That's part of it. But also keep in mind that the way we operate these plants, of course, the most important thing to us is safety first. But there are a number of things.

As we run these units -- for example, Turkey Point, we just had one of our units run breaker to breaker, and by that I mean refueling outage to refueling outage. As we go through these operating cycles, we're going to have equipment issues that develop along the way. And they may not rise to a level of significance that would require us or prompt us to shut a plant down to repair them, but in the event that we do end up with a plant shutdown for some other reason, for example, the Flagami event, we're going to go ahead and take the opportunity to fix those things while the plant is offline rather than restart the plant with those conditions out there.

So depending upon how long, how far you are into an operating cycle after refueling, that list will get longer. So there's a number of variables that are involved with something like that. And when you have a dual unit trip, you've got, again, twice the amount of work to do than you would for a single tip.

Q. Okay. On page 4 of your testimony --

A. I see it.

Q. At the top, you talk about the special training to plant operators that was provided immediately prior to the plant startup and that that added incremental time to the plant startup. Could you describe that in a little more detail?

A. Well, what we typically like to do -- you know, in the old days when I first started in this industry, you would see a plant shutting down -- you know, every few months, we would have a plant that would come offline in the industry. And as the industry has improved its performance, these plants run, like I was talking about with Turkey Point, for months, if not the whole operating cycle, without a shutdown. So the operators do not have as many startups and shutdowns as they would have in the old days.

So what the industry has done is, and it has served the industry very well, we do what's called just-in-time training. If we have a reactor shutdown, we'll bring our operators in and bring them into the simulator, and we'll have them restart the plant in the simulator, and then we'll send them over to the control room to actually restart the plant.

And in addition to that, we'll give them what

we call some operating experience training, events that have happened in the industry during startup that they should be mindful of and that can help them to start up the plant more efficiently and safely.

So that's the type of training that we typically do for our operators.

Q. Okay. And you did it in the Flagami event when that occurred?

A. Yes.

Q. Is it essentially a dress rehearsal before they do the real thing?

A. That's one way to look at it.

Q. Could you estimate how much incremental time that added to the plant startup?

A. No. I don't have that answer in front of me.

Q. Okay. In your testimony, you say that that added incremental time to the startup, and you said that you don't have that in front of you. Is there some document that would show that?

MR. ROSS: Objection. Mischaracterizes the testimony, but you can answer.

A. Well, I'm sure that we have that available somewhere in the archives, but it adds incremental time because the operating crew is over in the simulator, you know, doing a dress rehearsal, as you described it, as

opposed to being in the control room to do that.

Additionally, there are other complications involved with it around the scheduling and work hour limitations. When you have a dual unit trip, for example, you've only got so many licensed operators, so you have to manipulate their work schedules to allow them to get into the simulator to do this training just in time before you restart the plant.

And typically these simulators are not just idle, sitting there waiting for somebody to come in and use them. We use them for our training classes for future operators, so there's a lot of complexities involved in adjusting the schedule in order to get them in there. So it will in fact add incremental time to the startup, but that is -- it's standard industry practice to do that.

Q. All right. In your testimony, it says it adds -- at page 4, lines 4 through 5, it says it adds incremental time to the plant startup sequence after an unplanned reactor shutdown. Mr. Stall, my question is, would the same be true for a planned reactor shutdown?

A. No. If it was a planned reactor shutdown, we would typically be able to get those operators over there well in advance.

Now, if we decided this afternoon that we were

going to shut a unit down this evening, that would not be necessarily a planned shutdown. You know, when we talk about planned shutdowns, we're really talking about, for example, at the end of an operating cycle, going into a refueling outage. We know that on November 15th we're going to shut the plant down for refueling. We have weeks in advance to schedule these operators and get them in there. But that rarely happens except at the end of an operating cycle or something that's weeks or months in advance that we're planning.

Q. Okay. Thank you. Mr. Stall, let's move on, if we could, to the rod position indication system malfunction. At page 4, lines 13 through 14, you mention that it previously had malfunctioned in October of 2007. Could you describe that in more detail, how it was discovered and exactly what malfunctioned?

A. Yes. Maybe it would be helpful if I sort of describe this system, how it works and what its function is and how it's displayed, unless you all are already familiar with it.

Q. No. That would be terrific.

A. Okay. Of course, we have control rods that we use to adjust what we call the reactivity in the nuclear core during the operating cycles and also for startups

and shutdowns in the plants. And it's important to know the position of the control rods in the reactor core. They can either be fully inserted, as they would be if a reactor was shut down; they can be fully withdrawn, which is, you know, typically during an operating cycle at 100 percent; or they can be somewhere in between, dependent upon where the power level of the reactor is.

And there are really two ways to monitor the position of these reactor control rods. One is what is called the group step counters, which is just a pulse. Every time the rods are pulsed to move, there's a step counter that captures that, and that's an indication of the control rods.

But the other system is this RPI system, which is an acronym for rod position indicator system. And really what that is is a system that gives the operators an indication in the control room of where each individual control rod is. And I believe there are 45 control rods at Turkey Point for each unit.

So the way that works is that you have -- you send a 10-volt signal out to the reactor coil that's on top of the reactor head, and it's coupled to what we call a variable transformer. And depending upon the position of the control rod in the core, it couples with this variable transformer, and it sends a voltage signal

back to a conditioning module which translates that voltage into an analog position which reads out on the control panel.

In October of 2007, we had a problem with one particular rod -- F-2 I believe is what it was -- and it was indicating erroneously in the control room. Now, that's not a problem in and of itself to have one that indicates like that, because we have yet another way to determine the position of the rods in the reactor, and that's by running what we call a flux map, where we can send a probe into the reactor and we're able to see where the control rod is. But if you were to have a second rod that was to fail in that bank, in that cluster of control rods where that F-2 is, then we would be required to shut the plant down.

Now, our engineers, being pretty smart folks, determined that there was yet another way that was devised that we could determine where the position of that control rod was, and that was basically by taking that raw voltage signal and sending it to a recorder in the control room and setting up alarms around that recorder to alarm if that control rod was to move from the position that it was currently at in the reactor.

So we ended up going to the Nuclear Regulatory Commission with an engineering analysis that showed that

this would be a safe way of doing it, and they approved it, and we ended up putting that into service at that point in time to monitor that control rod position. But we also committed to the NRC as part of that licensing submittal that at the next shutdown, or no later than the next refueling outage, that we would go into the reactor area, the reactor containment building, and restore that back to its original functionality, even though we were able to monitor the position of it. So we had a legal commitment that we needed to fix that.

And by the way, we wouldn't have operated it to the next refueling cycle. You know, we would have most likely selected a point in time to shut the plant down and fix that anyway in a shoulder month when the power prices were down.

Q. But had the Nuclear Regulatory Commission granted you permission to continue operating the plant until the next refueling outage without that repair?

A. No later than the next refueling outage, or if we were to have an unscheduled outage, for example, the Flagami outage. Once we had that Flagami outage, we were legally required to repair that rod position indicator problem.

Q. In October of 2007, when would be the next planned refueling outage?

A. You know what? I don't have that in front of me. I don't know if -- I think that's something we could get back to you.

Q. Are you able to give us an estimate or no?

A. Not off the top of my head. You know what? With eight units, it's hard to keep track of when each of the refueling outages are.

Q. I can appreciate that. Do you know whether there has been a refueling outage since October of 2007?

A. Yes, there has been.

Q. Okay. Had the plant operated continuously until that refueling outage, would this repair have extended the length of time for the refueling outage?

A. Most likely not, because we would have been able to integrate that in with all of the other work activities during that refueling outage, which typically could last 30 to 40 days.

Q. Mr. Stall, let me ask you to turn -- and thank you for the description. That was very helpful. Could you turn to page 6?

A. Okay.

Q. And the question says, on line 6, "Would FPL ultimately have experienced the same amount of outage time to repair the RPI system during any unexpected outage as was incurred following the Flagami

Transmission Event?" Do you see that?

A. I see that.

Q. If that question were changed to would FPL ultimately have experienced the same amount of outage time to repair the RPI system during an expected outage as was incurred following the Flagami Transmission Event, your answer would be different, would it not?

A. No. It would be -- an expected outage could be -- any outage that we would have during the operating cycle, even had we planned this shutdown, it would have taken the same amount of time. The only circumstance that I think that you could make a statement that it wouldn't have affected the duration of the outage would have been during a planned refueling outage. And it's very unusual for one of these plants to be able to operate breaker to breaker and not have an outage sometime during the cycle for some piece of equipment. I mean, that's basically perfect operation. It can't get any better than that, and that's not the norm in the industry.

Q. Was October of 2007 the time of a refueling outage also when this problem was discovered?

A. Yes, I believe it was.

MR. BECK: Okay. Mr. Stall, that is all I have. Thank you very much.

MS. KAUFMAN: This is Vicki Kaufman. I don't think I have any questions, but I would like to wait until after staff goes, if staff has any questions.

MS. BENNETT: I do have questions.

MS. KAUFMAN: Okay.

CROSS-EXAMINATION

BY MS. BENNETT:

Q. Mr. Stall, this is Lisa Bennett. I'm an attorney with the Public Service Commission. I probably am going to go over some of the same questions Mr. Beck asked, but maybe in a little bit of a different way, so bear with me.

We've already talked about your position as VP of Nuclear Transition for FPL Group, and you testified that you have overall strategic direction for all FPL and FPL Group nuclear assets; is that correct?

A. Yes.

Q. Okay. Forgive me for this silly question, but what does it mean to have strategic direction?

A. Looking at long-term planning; working with the industry trade group, the Nuclear Energy Institute, regarding current and potential future regulations that are going to affect the operation of our units and other units across the country; overseeing power uprate

activities, Turkey Point 6 and 7 activities, being involved with counsel and advice regarding that; and pretty much any nuclear matters other than the day-to-day, moment-to-moment operation of the plant.

Q. So it would be fair to say you're familiar with nationwide the industry as it relates to nuclear; is that correct?

A. Generally, yes.

Q. And also with the NRC, Nuclear Regulatory Commission requirements for the nuclear assets?

A. Yes.

Q. And I think I saw in your testimony that not only are you responsible for the two Turkey Point units, but there are two others in Florida, correct?

A. Yes.

Q. And then you've got -- your responsibility includes the FPL Group assets, which includes one in New Hampshire, one in Iowa, and two in Wisconsin; is that correct?

A. Yes.

Q. For this next set of questions, I'm going to ask you to use your overall knowledge of the industry as well as that of the Florida and FPL Group plants to respond.

On page 3 of your testimony, you state that a

single nuclear unit can be brought back online in as little as 24 hours after a plant shutdown. Is that accurate?

A. It can be done, but I think that is quite unusual in today's world with all of the requirements regarding analysis and the things I talked about with Charlie that have to be done. And it's even becoming more constrained with the new NRC work hour rules that put limits on how many hours of overtime you can work operators or maintenance technicians. But it's physically possible.

Q. It's physically possible, but I think I'm hearing you say -- my next question was, is that the industry standard, to bring it up in 24 hours?

A. No. I think it's more typically around 48 hours.

Q. You believe the industry standard would be 48 hours?

A. I think that's typical. But again, keep in mind that every event or every reactor trip that happens in the industry, you know, they generally have different initiating causes, and depending upon the complexity of that, that drives the duration of that outage. For example, if it's an obvious problem and there's no follow-on maintenance required, you're going to be on

the shorter end of that. But if it's a typical problem where you had an equipment malfunction, it's going to take longer.

Q. I believe in your testimony on page 3, you say the company can set a time frame as a goal; is that correct?

A. Absolutely. We have to do that. We always will.

Q. Is that on an incident-by-incident basis, or is that an overall goal?

A. That's generally on an incident-by-incident basis. We will establish early on a projected schedule for the return of that unit to service. Now, we recognize that right after you have the event that that schedule will need to be adjusted depending upon circumstances, but we think that it's quite important to set a goal out there in front of the organization to focus everybody on an outcome.

Q. What was FPL's goal for bringing Turkey Point Unit 3 back online after the February 26 outage?

A. I don't have that in front of me.

Q. Could you provide that to us?

A. I'm sure we could get that.

MS. BENNETT: Could that be Late-filed Deposition Exhibit Number 1?

MR. ROSS: I'm sorry. Can you repeat the request again, Lisa?

MS. BENNETT: I wanted to know what FPL's goal was for bringing Turkey Point Unit 3 back online. And I'm going to ask the same question for Turkey Point Unit 4.

MR. ROSS: After the Flagami induced trip?

MS. BENNETT: That's correct.

MR. ROSS: Okay.

(Late-filed Deposition Exhibit Number 1 was identified for the record.)

BY MS. BENNETT:

Q. Going back to the industry standards, how would you characterize FPL's goal in bringing Turkey Point Unit 3 back online? Was it an aggressive goal, or was it a conservative goal?

MR. ROSS: I'm going to object. I think he just testified he didn't know what the goal was, so I don't know how he can characterize it.

BY MS. BENNETT:

Q. Can you characterize it, Mr. Stall?

A. Not without having the schedule in front of me. But I can tell you that our philosophy is, of course, safety first, but we also will have aggressive goals out there initially to focus the organization, and

then we will adjust those goals as events unfold before us.

Q. And when we say aggressive, I guess I'm thinking getting it back online as quickly as possible. Is that how you would define aggressive?

A. As quickly as reasonably possible, keeping in mind that we will be in compliance with all of our requirements and we will have a safe, conservative approach to operations, and we will understand fully the root cause of any event that happened, those things.

Q. Okay. I don't know if you have Mr. Jones' testimony in front of you from 2008, the 080001 docket. Do you by any chance have that with you?

A. I don't have it, but perhaps someone else in the room has it. I only have my testimony.

MR. ROSS: Lisa, give us a minute.

MS. BENNETT: Okay. If not, I have the question and answer from it that I want to talk about, so I can read it into the record if you don't have it.

MR. BECK: Lisa, this is Charlie. Did you say Mr. Jones?

MS. BENNETT: Correct, Terry Jones' testimony from 080001. It was dated September 2nd, 2008.

MR. ROSS: Lisa, we have maybe only a couple

of pages from the testimony, so unless we're reading off the same sheet of music, perhaps you can just ask your question more generally.

BY MR. BECK:

Q. On page 8 -- this is really going to be, I think, a fairly simple question. On page 8, Mr. Jones was asked the question, "What caused the 4A steam generator water level to exceed 75 percent?"

And his answer was, "In an effort to accelerate the return of Unit 4 to service, the operator implemented fast generator loading that created steam generator level fluctuations and the loss of steam generator level control which resulted in the manual trip of the reactor."

What I'm curious to know is, what does the term "fast generator loading" mean?

A. Okay. Let me first explain the context of his answer there. When we restart one of these nuclear units, specifically in this case, Turkey Point, at low power levels, what you're trying to do is -- you start up on what we call the bypass feedwater system, which is a small feedwater valve for finer control of the steam generator level. That's a manual operation. In other words, it's not controlled automatically, so the operator has to manually control levels in the steam

generator. The goal is to as quickly as possible get to a point where you can transition off of these bypass valves that are manually controlled into what we call the main feedwater valves, which are automatically controlled.

So the operators are trained to, for lack of a better word, not to dilly-dally around down at that low power level where you're not as stable as you would like to be, so they generally will attempt to load the generator, which is raising reactor power and electrical power as fast as they can, keeping in mind, you know, the importance of controlling the level, in order to get into this automatic mode of control, if that makes sense, Lisa.

Q. I'm going to look at my engineer and see he nods his head, does that make sense. He says he thinks so.

So that's what Mr. Jones was referring to as fast generator loading; is that correct?

A. He's certainly not sitting here in the room, but having worked with him and been an operator myself, you know, I'm quite confident that's what he was talking about.

Q. And forgive me if you've answered the question, but is there an alternative to fast generator

loading?

A. Well, you know, fast generator loading is a relative term. Really, what you're attempting to do and what you want the operators to do is to as quickly as they can, while maintaining control and stability, to move through that region and not loiter, if you will, and get off of these bypass valves and onto the main valves and get into automatic control.

So the rate of loading that an operator will use during that period of time is highly dependent upon some environmental conditions around it. For example, let's say, for example, you're coming up out of a refueling outage and we're in what we call a cold environment position, where your whole feedwater system is not hot. You're going to have colder feedwater than normal, so it's going to be a little more difficult to control levels, so they're going to want to move a little faster.

If it's a startup out of what we call a hot shutdown condition where the plant is hot, they don't have to go as fast. If it happens to be a period of time, for example, like we had a few weeks ago with very cold weather where the canals are cold, that's going to influence the rate of loading.

So there is no -- what I'm trying to suggest

here is that there is no "one size fits all" solution where you can say, "Load the generator at this rate," and capture that and expect that that always is going to present a successful outcome.

I think the other thing to keep in mind that's important here for context is that a steam generator level trip in a pressurized water reactor is not an unusual event. We did a cursory review of the industry database as we were preparing these documents, and we found very easily over 129 events where this has happened in the industry. So it's not atypical for this to happen.

Q. Okay. Well, who decides how fast to implement this generator loading?

A. The steam reactor operator in the control room is the license holder who's responsible for the operation of that unit. That would be his or her decision to establish the loading criteria based upon the conditions of the plant.

Q. We've talked a lot about the different circumstances and when you would go faster and slower. You explained several of them to me. Can you talk to me about the increased risks that occur with fast generator loading?

MR. ROSS: Object to the form. You can

answer.

A. Well, I don't think that you can say that there is an increased risk or there isn't an increased risk. It depends upon the unique circumstances at that time. In other words, if you are in a situation where you know you've got, for example, cold feedwater, you know, going faster and getting on the main feedwater valves and automatic is not an increased risk. So if you're looking for a quantifiable answer, there really isn't a way to do that.

Q. Okay. Excuse me for just a minute.

One other question on the fast generator loading, and then I'm going to move on to another set of questions. I think you told me, but tell me again. You went over how many nuclear plants had the water reactor issue on a fast generator loading, and you said something like 179. Am I recalling that correctly?

A. No. What I said was we did a cursory review -- and I'm sure it's not all-encompassing. I suspect there's more, but I think we identified 129 events in the industry where we had steam generator water level trips.

You can have high level trips, and you can have low level trips. It's not just a high water level. There's a very narrow operating band that you must keep

these levels in in order to avoid a trip. It's not just the high levels. It's the low levels as well that you're susceptible to. That's why moving through this and getting into automatic is important, and that's how operators are trained across the country.

Q. I'm going to ask a few questions from page 4 of your testimony about the rod position indicator system and the repairs.

You went over for Mr. Beck the malfunction and how it was discovered in October of 2007. You said that FPL obtained permission from the NRC to defer the rod position indication repairs until the next unit shutdown in order to minimize the overall outage time for the unit; is that correct?

A. Just to be clear, the next reactor shutdown or the next refueling outage, not to exceed the next refueling outage. In other words, if we had operated until the next refueling outage, we would have been obligated then to shut it down. We couldn't have come back. So in no case would we have been able to proceed without repairing it until the next refueling outage. And we wouldn't have done that anyway. I think I mentioned that earlier.

Q. Why did FPL want to minimize the outage time for Turkey Point Unit 3 in October of 2007?

A. Want to minimize the outage time?

Q. Uh-huh.

A. I think we're very sensitive to the fact that these plants are a low-cost source of safe, reliability generation for our customers. And keeping in mind that we want to be conservative and operate safely, if we can do that and we can find ways to maximize the benefits to the customers without compromising safety, we're going to do that. This is an example of us proactively going to the NRC to be able to continue to provide the benefits of that plant to our customers.

Q. Well, why would it be better later than right then when you knew it, when you knew what the problem was?

A. Oh, I see where you're going. That's a good question.

Primarily, first of all, the hurdle you've got to -- there's two things you have to get over here. The first is, you have to convince yourself, and we have to have a clear understanding and alignment in the organization that it's safe to continue to operate. That's the first thing.

Second, once we establish that, we have that dialogue with the Nuclear Regulatory Commission, and they agree. Then what it does for us is, it allows us

time to plan and procure materials to do the repair in the most efficient and expedited manner.

If we were to have just simply shut that plant down when that event occurred in October, we wouldn't have necessarily had the materials. We wouldn't have had the work orders planned. We wouldn't have had the vendor support lined up. It gives us a chance to have everything ready to go so that when we find ourselves like we did with Flagami, we absolutely minimize the amount of time it takes to do the repair.

Q. I think you're saying that because of the additional time after the October 2007, FPL did go ahead and plan for the repair of the RPI system; is that correct?

A. Right. We had everything ready to go.

Q. The agreement that FPL reached with the NRC to postpone it until the next outage, planned or unplanned, was that in the license agreement?

MR. ROSS: Object to the form. You can answer.

A. It was in what we call the tech spec change request. Our license or tech specs, which take our license and translate them into operating requirements, have very specific requirements around the operability of this RPI system.

And again, had we experienced a second rod problem in that particular control rod bank, we would have been required to shut the unit down. So we were -- this was an example of our engineers, you know, looking ahead and saying what if, what if we have another problem? Where will we be? Why don't we see if there's an alternative that's safe where we can get ourselves positioned so that we can avoid an unnecessary shutdown and placing that burden on our customers?

Q. So it's the tech spec change that encompasses the agreement between the NRC and FPL; is that correct? I'm asking this because I want a copy of it.

MR. ROSS: Okay. This is another data request. Did they already ask for that in discovery?

MS. BENNETT: We were about to.

MR. ROSS: I think you already have. I think in the discovery that we are going to be producing, I believe that the document that you've asked for, which is the NRC license amendment granting the request, I think that's one of the documents that will be produced.

MR. BECK: Ross, this is Charlie. Just to be clear, that's included in a pending request for documents our office served.

MR. ROSS: That's right. It's Public Counsel's.

MS. BENNETT: Right. I presume, then, that we will get a copy of that.

MR. ROSS: Sure. No problem.

THE WITNESS: And it will be very obvious and clear to you that it's in there.

MS. BENNETT: Okay. So the item that's going to OPC, staff will also get a copy of that. As I stated early, we're interested in the specific wording of the agreement or the tech spec change.

MR. ROSS: It will be in the document, and we'll give you the specific -- what's the number? It's Citizens' Sixth Set of Requests for Production of Documents to FPL. It's Document Request Number 30. And this document will be responsive to -- the document you're asking for will be responsive to that request.

MS. BENNETT: Okay. Good. Then we don't need a late-filed for this.

BY MS. BENNETT:

Q. Mr. Stall, I think you've also testified that it was FPL's expectation that the next unit shutdown would not necessarily be a planned outage; is that correct?

I'm sorry. I know that that was a confusing statement.

When you reached the agreement with NRC to the next outage that you had, you would repair the RPI system, was that the next planned outage that you were intending to do the repairs at?

A. Well, no. It was the next outage, regardless of whether it was planned or unplanned. It was the next time the unit went out of service for any reason at all, we were going to do that repair.

Q. Okay. And FPL's next planned outage was spring 2009; correct?

A. This is the question I was asked earlier. I don't have the operating cycle information in front of me, but I guess that would have been the next refueling outage, perhaps, but we would have to verify that.

Q. And since you don't have the document in front of you, I'm assuming you don't know the nature of the planned outage.

A. The next refueling outage was a refueling outage, to shut the plant down and refuel the reactor and do all of the standard maintenance and testing that we do every 18 months.

Q. Okay. Do you know what the schedule of that outage was, specifically the timing of each item,

including the RPI system had it been part of that planned outage?

A. I don't have that in front of me. And I can tell you, Lisa, that in a refueling outage like that that goes on for 30 to 45 days typically, we would have had a crew in there working on that, but they wouldn't have gone in and worked that job continuously necessarily, because there's other activities that need to be done. You wouldn't be able to find a document that shows necessarily how long it would have taken to do that particular job in a refueling outage, because it's not a continuous nature job. Do you understand the nuance there?

Q. I think so.

How long did FPL's repair of the rod position indication system take on the Flagami event?

A. I don't have that directly in front of me.

Q. Bear with me. I'm just going through questions that I think you've already answered that I don't want to ask again.

This is another question for -- just to explain to me what -- on page of 6 of your testimony, you indicate that the RPI system issue was discovered when Unit 3 was in power ascension at 30 percent. Can you explain to me what power ascension is, and what does

the 30 percent relate to?

A. Power ascension is the set of activities that occur between closing the main generator output breaker coming out of an outage, whether it's planned or unplanned, and taking the plant from zero percent power to 100 percent power. 30 percent power is typically a place where we will stabilize the plant coming out of a refueling outage and take what we call the first set of flux maps to look at the power distribution in the reactor core to make sure that it is within the design limits that we establish for that next operating cycle.

In essence, what you're doing is, you've reloaded about a third of the reactor with new fuel, and you have a predicted power distribution at 30 percent power. Now you're going in there with what we call our flux mapping system and actually measuring that power distribution and comparing it to the design to make sure that it's consistent, and that's where this problem revealed itself.

Q. Okay. Do you remember how long the refueling outage was in October of 2007? I guess maybe it started before October of 2007.

A. No, I do not.

Q. On page 7 of your testimony, you state that the nuclear industry experience is that most units will

have one or more unscheduled shutdowns during a fuel cycle; is that accurate?

A. That's correct.

Q. And earlier you indicated that it was FPL's expectation to make the repairs at the next outage, whether it was planned or unplanned; is that correct?

A. Which repairs are you referring to?

Q. The RPI repairs.

Let's just scratch that question. You've answered that, I'm sorry.

Mr. Stall, were there other utilities that felt the impact of the Flagami Transmission Event, to your knowledge?

A. I'm not the right witness to ask that, because my knowledge and responsibilities are solely to the nuclear plants, so I don't know how the system interfaces with other utilities who responded.

Q. Who would be the correct witness to ask that question?

A. Help me out, guys.

MR. BUTLER: Lisa, this is John Butler. I think that perhaps Gerry Yupp might have some information on that subject, but I am reluctant to offer him for that purpose. And it's not really something that is specifically covered by any of

our witnesses' testimony.

BY MS. BENNETT:

Q. Let me ask this next question, then. It's probably for Mr. Yupp again. Is FPL aware of any other utilities contacting FPL regarding replacement power costs or -- regarding replacement power costs?

MR. ROSS: You definitely have the wrong witness here. Is Gerry possibly the one to testify to that?

MR. BUTLER: Honestly, Lisa, if those are questions you want us to answer, I would suggest that you ask them as interrogatories, and we will answer them, because I'm not at all confident that Gerry would be the person, just sort of sitting in a deposition, that would be in a position to do that either.

MS. BENNETT: All right. We'll do that by interrogatories. Give me just a minute. I think that's all my questions.

Mr. Stall, that's all the questions I have. Thank you for your time.

MS. KAUFMAN: This is Vicki Kaufman. I don't have any further questions. Thank you.

MR. BECK: I guess that concludes it.

MR. ROSS: Can you please give us just a

minute? We may have a few redirect for Mr. Stall.

(Off the record briefly.)

MR. ROSS: We have no questions.

MR. BECK: Okay. Mr. Stall, thank you very much.

(Deposition concluded at 10:00 a.m.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that a review of the transcript was not requested; that my shorthand notes were thereafter translated under my supervision; and that the foregoing pages numbered 1 through 40 are a true and correct record of the aforesaid proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, or financially interested in the foregoing action.

DATED THIS 17th day of February, 2010.

MARY ALLEN NEEL, RPR, FPR
2894-A Remington Green Lane
Tallahassee, Florida 32308
(850) 878-2221

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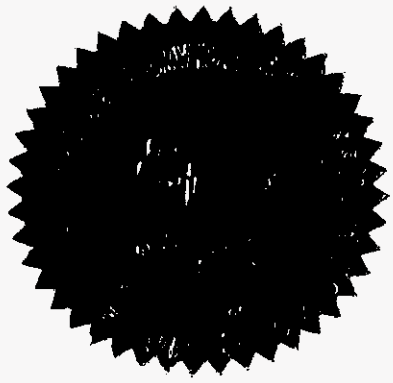
Deposition of Gerard J. Yupp including Late-Filed Exhibits 1-3

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 33
COMPANY Florida Public Service Commission Staff
WITNESS Staff Exhibit 33
DATE 03/17/10

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of: DOCKET NO. 090505-EI

REVIEW OF REPLACEMENT FUEL COSTS ASSOCIATED WITH THE FEBRUARY 26, 2008 OUTAGE ON FLORIDA POWER & LIGHT'S ELECTRICAL SYSTEM.
_____/



TELEPHONIC DEPOSITION OF: GERARD YUPP

TAKEN AT THE INSTANCE OF: The Staff of the Florida Public Service Commission

PLACE: Room 382D
Gerald L. Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, Florida

TIME: Commenced at 9:35 a.m.
Concluded at 11:18 a.m.

DATE: Monday, March 1, 2010

REPORTED BY: LINDA BOLES, RPR, CRR
Official FPSC Reporter
(850) 413-6734

090505 Hearing Exhibits - 000535

APPEARANCES:

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CHARLES BECK, ESQUIRE, and JOSEPH McGLOTHLIN, ESQUIRE, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of the State of Florida.

LISA BENNETT, ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf of the Florida Public Service Commission Staff.

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WITNESS

NAME:	PAGE NO.:
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EXHIBITS

NUMBER:		ID.
1	(Late-Filed) System Marginal Cost 2-24-08	22
2	(Late-Filed) Comparison of Actual Ascension Megawatt Hours Versus Model Assumed Ascension Megawatt Hours	54
3	(Late-Filed) Backup to Interrogatory 42	58

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P R O C E E D I N G S

MS. BENNETT: All right. We're going to go on the record and take appearances. I think that will be the best solution.

So on behalf of the Public Service Commission, this is Lisa Bennett, and I have Robert Graves and Daniel Lee with me.

MR. BECK: This is Charlie Beck and Joe McGlothlin from the Office of Public Counsel appearing on behalf of the citizens of Florida.

MS. KAUFMAN: Vicki Kaufman and John McWhirter for FIPUG.

MR. BUTLER: And this is John Butler appearing on behalf of FPL, and I have with me the witness, Mr. Yupp, and Damaris Rodriguez. We also have in the room Amy Lowe, who is the notary who will be swearing in Mr. Yupp.

MS. BENNETT: Okay. And we are ready to go ahead and swear Mr. Yupp in.

THE NOTARY: My name is Amy Lowe, and I'm a duly appointed notary in commission here in the State of Florida.

Whereupon,

GERARD YUPP

was called as a witness telephonically, was sworn to

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tell the truth by the notary present with the witness, and testified as follows:

MR. BUTLER: Thank you. We'll, we'll fax the Certificate of Oath to the number you gave us.

MS. BENNETT: Very good. Thank you.

DIRECT EXAMINATION

BY MS. BENNETT:

Q. Mr. Yupp, this is Lisa Bennett, and we've met several times. I believe I've taken your deposition several times. But let's go over kind of my guidelines. Any time that you don't quite understand a question that I have, please stop me and let's see if I can't clarify the question for you. We'll probably go for about an hour. That's probably about all the questions I have. But at any time if you need a break, let me know and we'll stop and give you a break or me a break. I know that both FIPUG and OPC have cross noticed this, so they'll also be asking you questions. Are we agreed on everything?

A. Yes.

Q. Do you have any questions before I get started?

A. No, I don't.

Q. Very good. And you provided testimony in this docket, 090505, both direct and rebuttal testimony;

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correct?

A. That is correct.

Q. And we are talking about the replacement power costs for Florida Power & Light that they will refund or credit to customers based upon the Flagami transmission event which happened February 26th, 2008; is that correct?

A. That is correct.

Q. Would Turkey Point Unit 3, that's one of your nuclear power plants, would it have been out for 158 hours during February and March 2008 if it hadn't been for the Flagami transmission event?

A. I would say the answer is no. I know my testimony doesn't really go into the details of why the units were out or what work was necessarily done or the sequence of starting the units back up to come, to come online again, but my answer would be no.

Q. Okay. Would Turkey Point Unit 4 have been out for 107 hours during February and March of 2008 if it hadn't been for the Flagami transmission event?

A. Maybe a, maybe a better answer to that question is no; however, I don't -- we would not have known what was going to -- if anything else could have potentially happened in that time period. But the answer simply I guess upfront would be no.

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Q. Okay. In your direct testimony I understand that it is FPL's position that it will be responsible for eight hours of replacement power costs; is that correct?

A. That is correct.

Q. When I read your rebuttal testimony, I was a little confused. Is it your rebuttal testimony now that FPL will be responsible for 48 hours of outage time to refund to the customers?

A. No. It is, it is not that. However, my testimony -- the 48-hour calculations that I did, did provide as part of my rebuttal testimony were really as a backup, so to speak, to the testimony of Witness Stall, who in his rebuttal testimony and in his direct testimony did talk about the fact that typically it takes approximately 48 hours to, to restart a nuclear unit after it is shut down. And so as part of my rebuttal testimony I wanted to provide the calculation different than what I had provided in my direct of eight hours, just provide a calculation for 48 hours supporting those statements that were made by Witness Stall.

Q. Okay. There's been a diversity of testimony on what the amount should be and how to calculate the amount of the refund. And I'm going to go through a lot

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of questions that are mathematically based and see if we can't, if I can't come to an understanding about what the amounts are that you're, that you're suggesting and, or FPL is suggesting and OPC is suggesting and what the differences are.

So let's start with Exhibit GJY-6, which is part of your direct testimony. Let me know when you're there.

A. Okay. I'm there.

Q. In Exhibit GJY-6 you identify a total of 11,430 megawatt hours that were produced by FPL's peaking units during the first eight hours of the outage; is that accurate?

A. That is correct.

Q. Then I'm going to ask you to turn to GJY-9. Let me know when you're there.

A. Okay. I am there.

Q. In GJY-9 you identify a total of 5,214 megawatt hours received from purchased power; is that correct?

A. That is correct.

Q. And that was for the eight hours of, first eight hours of the outage?

A. Yes, that is also correct.

Q. Did FPL purchase any additional power after

the first eight hours and before the conclusion of the 158 for Unit 3 and the 107 for Unit 4?

A. Yes. FPL did purchase power even -- well, starting on the 26th prior to the event, and then what you, what we show here and/or what I show in Exhibit GJY-9 was what we purchased during the event. We did purchase power after the event up through the 158 hours that you just described. That we have provided or are providing, I believe have provided now in response to interrogatory number -- hang on one second. I just have to get to that interrogatory.

Q. Interrogatory Number 18 perhaps?

A. That sounds very familiar. Yes. I will agree with that.

In Interrogatory 18 we do -- that has several different tables showing all of the purchased power that we did procure after the event, up to 158 hours after the event.

Q. Okay. Do any of your calculations include, that you did to come to a conclusion that FPL needs to refund the customers, I believe it's 2.9 million, does that include that additional purchased power that you listed in Interrogatory 18?

A. None of the what I'll call manual calculations such as what was done in Exhibit GJY-6 and so forth

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include additional purchased power that FPL procured during that 158 hours or as several different scenarios were laid out.

There is one -- or I should say four cases that, that would include additional purchased power, and those are related to Interrogatory Number 42 in the same set of interrogatories, staff's first set, which asked us to use a production cost model to calculate replacement power costs as opposed to all of the manual calculations that we, that we have been doing.

In running that production cost model, we did model the actual net interchange that we had each hour of the day from the time of the event through, I believe, the, the furthest or greatest duration case would be 158 hours outage on Turkey Point 3. We did use the actual net interchange. So I would say that those cases do include additional purchased power; however, they were used in the model at no additional cost.

When we ran the model, what we were trying to determine was the difference in a base case, assuming the event did not occur, with, with the replacement power costs that would have occurred given several different scenarios that are asked in the interrogatories. So any of the additional purchased power would have been the same in the base case or

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likewise after the fact or after the event occurred. So they are modeled with no cost. I bring them up here purely because you did ask had we looked, you know, was that included in any of the calculations. And, yes, it is included in the GenTrader production cost model calculations.

Q. Okay. You've probably answered this and, but I'm going to try and ask it and make sure I understand.

In response to those interrogatories, did you indicate at what point in time during the outage that you purchased the additional, purchased the additional power so that I would understand that in the first 48 hours you may have purchased 1,000 megawatts and in the next 150 hours you purchased another? Do you understand my question?

A. I think so. And I'll answer it this way, and I think this answers your question. Yes. In interrogatory, in the response to Interrogatory 18 I did break it down by day. So I do show the total purchases outside of this power that we talked about here that was specifically bought for the event that occurred, I do show the volume of megawatt hours as well as the hours on each day. So it is broken out from the 26th of February through March 4th, 2008. I think that answers your question.

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Q. Yes, it did.

And the additional power that you purchased after the first eight hours -- and I apologize again, you probably have answered this, but I want to make sure I'm clear. That additional purchased power was not, was purchased because the nuclear plants were out; is that correct?

A. That is not, not correct. The additional purchased power after the event occurred, and by event I will say the first eight hours, that, that purchased power was bought as we would at Florida Power & Light buy any of the day-to-day purchased power transactions that we enter into, they are based on economics. And so we run basically production cost models to determine our marginal costs, whether it be for next hour, for next day, for a certain number of hours, and we go to the market to see if we can procure power cheaper than that than what our own generation would cost to run.

So after this event occurred, even with all of our other generation on the line, and I think I described it in, in the, in the interrogatory itself -- yes, I did. Basically when you look at Florida Power & Light, even with those two nuclear units off, our marginal cost throughout most days is highly, or is primarily driven by the fact that gas and oil are on the

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margin for us. So during a good portion of most days, to the extent that we can, we're purchasing power versus a marginal cost that is reflective of the gas and oil prices at that time. And when you look through the tables that were provided in response to Interrogatory 18, that's the marginal cost that you, or the purchased power costs that you see in those tables.

Again, even with Turkey Point 3 and 4 off, our marginal cost was in the range of gas and oil, and that's -- and so we did purchase that power on an economic basis. While the rate -- while the cost could be a little bit higher in the range of gas and oil, it would not have varied significantly. We would have purchased that power whether the two units were on or not. I guess the easiest way to say it through, after all that dissertation, we would have purchased that power whether they were on or not.

Q. That was my question, my next question was with Turkey Point 3 and 4 on would you have still purchased that power? Would the marginal costs have been different?

A. The marginal costs may have been slightly different. I don't have any way of determining that as I sit here right now. I think they would have been within a very narrow range, and so the answer would be,

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yes, we would have purchased that power whether Turkey Point 3 and 4 were -- if Turkey Point 3 and 4 had been on, we still would have purchased the power.

Q. Okay. Let me -- I kind of got diverted there. But let's go back to GJY-9 where you identified that the 5,214 megawatt hours received through purchased power, and you agreed that that was the amount for the first eight hours. So approximately 16,500 megawatt hours were either produced by peaking units or purchased in order to make up for lost generation during the first eight hours of the outage; is that correct?

A. That is correct.

Q. Could you calculate the lost energy production from Turkey Point Unit 3 and 4 over an eight-hour period?

A. Did you say, "Can I calculate that?"

Q. Would you? Yes.

A. Yes. That's roughly 11,472 megawatt hours.

Q. Okay. So of the approximately 16,500 megawatt hours necessary to offset lost generation, roughly 11,500 were from lost nuclear generation; is that reasonable?

A. Correct. That is reasonable.

Q. Is there a better number?

A. Than 11,500?

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Q. Uh-huh.

A. No.

Q. Okay.

A. I would say that is a reasonable number.

Q. Would it be reasonable to assume that the remaining 5,000 megawatt hours replaced natural gas generation?

A. Yes. Yes, it would be reasonable to say that.

Q. Do you know which natural gas power plants were tripped offline?

A. I do. If you can give me one second, I will get those units.

(Pause.)

Okay. From the natural gas side we lost Turkey Point 5, which was combustion turbine 5A, B, C and D, as well as the steam turbine. We lost Martin Unit 8; however, we did not lose the full unit. We lost CTs or combustion turbines 8A, B and C. We lost one CT at Ft. Lauderdale 5. And I believe that, that should be the entire list of the gas burner, gas burning plants that came off as a result of the Flagami event.

Q. You said one CT. What does CT stand for?

A. Combustion turbine.

Q. Thank you. The next few questions I'm going to ask are from OPC's request to produce number 35. Do

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you have that in front of you?

A. Yes. Yes, I do.

MR. BUTLER: Just to be clear, Lisa, you're referring to a pair of two pages, spreadsheets that have FPL FI-10 162 and 163 as page numbers on them?

MS. BENNETT: That's correct.

MR. BUTLER: Okay.

BY MS. BENNETT:

Q. Do you know who developed the documents provided to OPC in response to this 35th POD request?

A. Yes. Yes. These, the comments on the documents are, are not mine; however, the documents themselves were, were developed by myself.

Q. Okay. When you say the comments on the documents, you're talking about the handwritten notes?

A. The handwritten notes. Correct. That, that is not my comments.

Q. Do you know whose those comments are?

MR. BUTLER: I believe that they're Bill Feaster's, Lisa.

MS. BENNETT: Okay.

BY MS. BENNETT:

Q. Do you know what the 15,547,126 value on Bate Stamp Page 162 represents?

MR. BUTLER: You're talking about the very

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bottom of the page there?

MS. BENNETT: Correct. I'm talking about the handwritten portion of it.

THE WITNESS: I'm not 100 percent sure what it represents. It's -- I believe that the -- well, first of all, going down the list, the 15.032 million which is shown two lines up above that is, is a match for the number that is shown over to the left that is not handwritten, which is the additional fuel costs incurred due to the outage based on the assumptions that are on this sheet.

The 390,605 below that would be the net differential of the purchased power cost as, as was calculated in this, in this scenario here, which yields 15.422 million as total net purchase or net replacement power costs due to the event.

Now the 124 which is below that number, if I go over to the second page of the exhibit, which I'm not sure how to refer to it, it's at Bate stamped 163.

MR. BUTLER: Yeah.

THE WITNESS: That number 124,427 shows up on that page. However, when I, when I look at how it was derived, I, I see that the, that $62,784 of it, which is, which is on the top of the Bate Stamp 163 page, is the differential in, of replacement power costs for Part

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A between the two documents.

And there is a slight differential there because Bate Stamp 163 page is a little bit more refined as far as outage hours go, and so it resulted in a slight differential of power costs in Part A.

Now below that is a calculation that I, that I, that I think was made to show the difference between the final overall fuel costs. In other words, the 15.093 million, which is, which is shown on the Bate Stamp 163 page, versus the 15.032 million, which was shown on the 162 page, why those numbers are added together and then added to the final replacement cost numbers on the 162 page I, I am not sure. That to me in just taking a quick look at this map, if you look at the replacement fuel costs on both pages in Part B, they are identical. So to add together the differential not only in Part A but overall is double counting the differential, and so I'm not sure why 124,427 was, was added. I know that's a long response, but that's what I see out of looking at these two pages and trying to interpret the handwritten notes.

Q. Do you, do you think instead of the 124,427 it should be 61,643?

A. I think a more appropriate number would be the 62,784, which is really just the difference between the

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fuel in Part A, and the difference again driven by using 8.17 hours a little bit more refined as the initial hours of the event as opposed to eight hours, which is used on 162.

Q. Okay. I'm going to now ask you to look at your response to Interrogatory Number 67 from Docket Number 080001, or FPL's response. Let me know when you have that in front of you.

MS. KAUFMAN: I'm sorry, Lisa. Which number?

MS. BENNETT: Number 67.

MS. KAUFMAN: Thank you.

THE WITNESS: Okay. I, I do have Number 67 in front of me now.

BY MS. BENNETT:

Q. Did you provide this response to staff's Interrogatory Number 67?

A. Yes, I did.

Q. Okay. In this response you provide a net cost for purchased power of $390,605; is that correct?

A. That is correct.

Q. And that value is also in FPL's response to OPC's 35th POD request; is that correct?

A. Yes, that is correct.

Q. In your response to Interrogatory 67 you indicate that FPL's marginal cost of power production

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during the time period that purchase was, purchase was being made was estimated at $95 per megawatt hour. Do you see that?

A. Yes, I do.

Q. Okay. How is that $95 per megawatt hour estimated?

A. After the event had occurred, I do have some documentation in my files print -- it's basically a screen printout of our, one of the pages in our energy management system which does show FPL's marginal cost on an hourly basis. And so what I did was I printed out the prior day marginal cost. I believe that the February 25th was a very similar load date of February 26th. And so just utilizing February 25th as a reference, that's why I made the statement here that had the event not occurred, our marginal cost would have been some, approximately $95 per megawatt hour over that eight-hour period as it was the day before.

Q. Could I get a copy of that document that you just referred to?

A. Yes, you can.

MS. BENNETT: I guess that would be Late-Filed Exhibit Number 1. And, John, can you help me out on a -- or, Mr. Yupp, can you help me out on a name of that document?

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THE WITNESS: We could -- oh, I guess we could just call it System Marginal Cost, February 25th, 2008.

MR. BUTLER: Yeah. Okay.

THE WITNESS: And I -- and that is subject to check. I believe that I used the 25th. I may have even printed the 24th out, but I will provide what we have. I believe it is the 25th.

BY MS. BENNETT:

Q. All right. So it will be either the 25th or the 24th, but one of those two days.

A. Correct.

(Late-Filed Exhibit 1 identified for the record.)

Q. Okay. I'm going to ask now that you turn to FPL's response to Interrogatory Number 70 from Docket Number 080001.

A. Okay. I have that in front of me.

Q. Do you need, do you need a minute to review that?

A. No, I don't believe I do.

Q. Okay. And that was your response; correct?

A. That is correct.

Q. And that interrogatory asked for an estimate of the net replacement power costs associated with the Flagami transmission event; is that correct?

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A. That is correct.

Q. What was your response to that interrogatory?

A. My response to that interrogatory was again a calculation of very similar -- in fact, it might actually be the, the Bates Page 163. But it was based on 48 hours of outage time for Turkey Point 3 and 4.

Q. Would that amount be 6.1 million; is that correct?

A. Oh, I'm sorry. That is correct. It is not -- it is, it is calculations that are similar to 163 with the attached spreadsheet to this interrogatory. However, the outage hours are 48 hours full length duration for both 3 and 4, and yet the final additional fuel cost incurred due to the outage was approximately $6.1 million, just slightly less than that.

Q. Okay. And in that response what cost basis did you use for the comparison with replacement fuel cost?

A. The cost basis used in this response was the nuclear avoided fuel cost.

Q. Would that have been 44 cents per megawatt hour?

A. Yes. It would have been -- I think to, to just clarify it a little bit more, the 44 cents is probably, is a good average. I'm looking at the actual

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attached spreadsheet to the interrogatory, and I believe for Turkey Point 3 it was 45 cents in February, 45 cents in March, and for -- which would not have come into play in this calculation because it was done on 48 hours. And it was 40 cents for Turkey Point 4. So 46 cents for Turkey Point 3 and 40 cents for Turkey Point 4.

Q. And the time frame you based your calculation on was 48 hours; is that correct?

A. That is correct.

Q. In FPL's response to Interrogatory 70 it states that the RPI system, that's the rod position indicator system, replacement was planned during the next available outage or significant load curtailment; is that correct?

A. I do not believe that was part of my --

MR. BUTLER: We're not seeing that here.

BY MS. BENNETT:

Q. Okay. Let's, let's strike that question.

During Witness Stall's deposition he indicated that FPL would have likely shut the plant down to repair the RPI system during a shoulder month; is that correct?

A. I did not read the transcript of Witness Stall's deposition.

Q. Okay. Do you know whether that would be correct, not from his deposition, but would FPL have

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likely shut the plant down to repair the RPI system during a shoulder month?

A. I couldn't say confidently one, one way or another yes or no.

Q. Okay. On Page 5 of your testimony -- let me know when you're there.

MR. BUTLER: The direct, the direct or rebuttal?

MS. BENNETT: Direct.

THE WITNESS: Okay. I'm there.

BY MS. BENNETT:

Q. You used a system average cost as a basis for comparison to the peaking units to determine the net cost of replacement fuel; correct?

A. That is correct.

Q. Is this methodology of using a system average cost for comparison with a marginal cost consistent with past Commission calculations of replacement fuel costs? And I'm going to start with the one that I'm most familiar with, the drilled hole outage that the Commission considered last year. Did, did the Commission or did FPL calculate replacement costs for the drilled hole outage as they do for this one, as they did for this one?

A. No. System average cost was not used in the

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drilled hole calculations.

Q. What was used in the drilled hole calculations?

A. The, for comparison's sake the nuclear avoided fuel cost was used to compare to system marginal costs.

Q. Has FPL had any other outages in which it has refunded or credited customers for replacement power costs?

A. Can you repeat the question, please?

Q. Yeah. I'm asking if there's any other outages to which you're aware that FPL has refunded or credited customers for replacement power costs? What I'm getting at is I want to compare what we've done in the past, what the Commission's practice has been, what FPL's practice has been in prior situations, whether it's been the nuclear avoided cost or whether it's been the system average cost.

A. Okay. Outside of the, or in addition to the drilled hole event, I am not myself specifically aware of any other cases where FPL was required to refund replacement fuel costs.

Q. Have there been times where FPL has removed that from, the replacement power cost from its request for fuel cost recovery without direction of the Commission?

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A. Not that I am aware of.

Q. Okay. I am surrounded by mathematicians who are asking all kinds of specific mathematical questions. My next question is kind of an overall basis.

Why wouldn't it be appropriate for the Commission to look at the day before the outage and determine on a megawatt hour what that day's cost was and compare it to the outage, either the first eight hours, the first 48 hours, 158 hours on an overall cost? In other words, it costs $5 on February 25th to run your entire system, and on February 26th it costs $7.50, so the refund to customers is $2.50. Wouldn't that make sense and is that what FPL is proposing? Or did my lack of mathematical understanding totally stump you?

A. I'm thinking. That is in effect what has been done through numerous different methodologies and cases and assumptions, everything from what we have filed in our direct testimony to the interrogatories where we've run our production cost model. So I --

MR. BUTLER: Let me just be sure, Lisa, if I may, I just want to be sure I understand what you're, what you're proposing.

You would be taking, what, the system average cost from the day before, comparing it to the system average cost day of, and then sort of the difference

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between those two times the megawatt hours would be the replacement power cost? Or how -- what is that cost that you'd be using to multiply times the, you know, sort of avoided generation? Or are you not doing it on an avoided generation basis?

MS. BENNETT: I'm not sure the answer to that question.

MR. BUTLER: I mean, if you just took the fuel cost from day one, compared it to day two, obviously a variable in there is that you may end up having sold more megawatt hours on one day versus the other. So it seems like you have to do something to normalize for that.

BY MS. BENNETT:

Q. My math geniuses are looking at me going, nah, don't ask anymore questions, so I'm going to move on to a different set of questions.

What is FPL's recourse or any other company's recourse regarding the liability for replacement fuel costs from another company causing an outage event? Let's just give a hypothetical that TECO causes an outage event that affects FPL. What is FPL's recourse for the replacement power costs?

MR. BUTLER: I'm going to say that that may very well call for a legal conclusion. If Mr. Yupp has

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a sort of nonlegal answer to it, he's welcome to give it, but ultimately it would be what the contracts provide.

BY MS. BENNETT:

Q. Back to you, Mr. Yupp.

A. Let me make sure I understand the question first.

So if another utility had an event similar to what we had on our system and it resulted in replacement fuel costs for us, what would our recourse be at that point?

Q. That's correct.

A. I do not know the answer to that question. I don't even think it contractually has anything -- to the extent that we experience replacement power costs, I don't know what our recourse would be to go to the other company and, and try to recover those costs. I do not know the answer to that question.

Q. Would -- do you know if it would be a FERC or NERC jurisdictional issue?

MR. BUTLER: Let me make the same objection about that sounding like it's calling for a legal conclusion. But --

MS. BENNETT: If he can answer it, that would be fine.

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THE WITNESS: I do not know. Again, I do not know the answer to that question.

BY MS. BENNETT:

Q. To your knowledge, did FPL's payment to the FERC address any of the -- NERC and FERC address any of the potential liability between companies? I guess probably the same answer.

A. That's correct. I do not know the answer to that question.

Q. Okay. I'm going to ask you to refer to GJY-7 on the top. Let me know when you get there.

A. Okay. I'm there.

Q. On the top of GJY-7 you've got a table that says "Original A3 Data"; is that correct?

A. That is correct.

Q. And that A3 data is for February 26th, 2008; is that correct?

A. That is correct. The A3 data is for February of 2008.

Q. So the nuclear unit on that table, those are the ones that weren't out, correct, St. Lucie's?

A. Correct, with a minor clarification. The nuclear cost as well as megawatt hours would include a portion of Turkey Point 3 and 4 all the way up to February 26th at approximately 1:10 p.m.

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Q. Okay. So these February '08 A3 data are actual, and that is that they reflect the lost Turkey Point nuclear megawatt production for 82 hours and 50 minutes. Is that what this document is telling me?

A. That is correct.

Q. In the following two tables FPL combines heavy oil, light oil and natural gas as blended marginal; is that correct?

A. That is correct.

Q. So going back to that original A3 data on the top table, we can consider with blended marginal, that represents 64 percent, meaning the heavy oil, light oil and natural gas combined represents 64 percent of production, megawatt hour production, coal is 8 percent and nuclear is 28 percent; is that correct?

A. I did not do the calculation on it, but, yes, nuclear is 28.36 percent, gas -- well, and on the Schedule A3 itself it is broken down by percentage of generation mix. And so, yes, I do agree that nuclear is, without doing the calculation of this table, nuclear is 28 percent approximately, gas 60 percent, coal I show approximately getting close to 8 percent.

Q. Okay. Therefore, the nuclear $4.44 per megawatt hour, which is up on the original A3 data, that cost carries about 28 percent weight in getting to the

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$52.62 megawatt hour system average cost; is that correct?

A. Yes, that would be correct.

Q. And down at the bottom of Exhibit GJY-7 you adjusted the system average cost downward to $51.32 per megawatt hours; correct?

A. That is correct.

Q. And that amount, that lower amount, $51.32, would reduce the amount recoverable by FPL from customers and therefore has the effect of increasing the refund amount; is that correct?

A. That is correct. That reduction in system average costs would have the effect of increasing the refund amount.

Q. Do you agree that the nuclear cost carries about 30 percent of the weight in getting to this $51.32 megawatt hour adjusted system average cost?

MR. BUTLER: What was the percentage?

MS. BENNETT: 30 percent, three zero.

THE WITNESS: I can't confirm whether it's 30 percent. I would actually have to go through the calculations of subtracting approximately $9 million from, from the gas and oil and then adding in an additional nuclear cost. Directionally it is higher than, than where it would have been in the original

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data.

BY MS. BENNETT:

Q. So that would be perhaps subject to check, the 30 percent?

A. Subject to check, yes.

Q. Your testimony also discussed the cost impact on the middle of your Exhibit 7, and the total February lost nuclear production is 118,783 megawatt hours; is that correct?

A. That is correct.

Q. This 118,783 megawatt hours multiplied by the blended marginal cost of $77.55 gets you the $9.2 million total cost impact for February; is that correct?

A. That is correct.

Q. OPC's witness used 11,472 megawatt hours for the first eight hours and 107,311 megawatts for the February non-peak period. So it's my understanding that OPC and FPL agree that the total February lost nuclear production is 118,783 megawatt hours. Is that your understanding?

A. Again, just to make sure I'm clear, the question is is my understanding that FPL and OPC agree that the total lost megawatt hour production in February for 3 and 4 is 118,783 megawatt hours?

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Q. Yes, that's my question.

A. Okay. I don't know. I don't -- I guess I don't have that understanding. But not necessarily because it's not true, I just, I have not thought about that. If I go back to OPC Witness Dismukes' exhibits, I can certainly confirm that. I don't recall off the top of my head whether his numbers equaled 118,783. I'm assuming they were very close.

Q. But FPL's equals 118,783.

A. That is correct.

Q. Okay. If you use OPC's 107,311 megawatt hours for the February non-peak period multiplied by the blended marginal cost that FPL provides of $77.55, you get the 8.3 million total cost impact for February non-peak period; is that correct?

A. Yes. You get -- yes. That calculation yields 8 point -- approximately $8.3 million, of which you would need to subtract out the -- for our purposes here, what we're discussing, you would need to subtract out the nuclear fuel cost that was not incurred.

Q. I'm going to ask you to turn to your Exhibit 6.

A. Okay. I am at my Exhibit 6.

Q. You showed the peaking unit cost of 1.99 million, with production of 11,430 megawatt hours

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in the first eight-hour period. This is incurred cost embedded in the February A3 data; is that correct?

A. That is correct.

Q. If you divide the 1.99 million by the megawatt hours, you get $174 per megawatt hour for the peaking unit cost; is that correct?

A. That is correct.

Q. I'm going to ask you to turn to GJY-8 now.

A. Okay. I'm there.

Q. In Exhibit GJY-8 you multiplied the $51.32 by the same 11,430 megawatt hours to get the 586,588. And that amount is what you believe is recoverable by FPL and should be netted against the 1.99 million; is that correct?

A. That is correct.

Q. Instead of using the $51.32 megawatt hour adjusted system average cost, OPC Witness Dismukes used the fuel cost for the lost nuclear megawatt hours to get the not incurred but recoverable amount of 53,709. Is that your understanding?

A. Yes. I believe Witness Dismukes used that in his second exhibit, DED-8, I believe. Yes, that is correct.

Q. Okay. If you divide that 53,709 from DED-8 by the megawatt hours, you get $4.68 per megawatt hour for

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the nuclear cost used by OPC; is that correct?

A. And let me clarify again. Dividing $53,709, which is the peak fuel cost not incurred by Turkey Point 3 and 4, dividing that by 11,472 yields, yes, $4.68 per megawatt hour.

Q. For the peak-period replacement generation cost refund, do you agree the main reason for the difference between OPC and FPL is the $4.68 versus the $51.32 per megawatt hours?

A. Yes, I do agree with that.

Q. Mathematically, if the as-burned cost of 174 per megawatt hour were used for comparison to get the not incurred but recoverable amount, there would be no refund; is that correct?

A. That -- yes, that is correct.

Q. And no refund would be what is expected if the cause of the outage were deemed prudent such as in a normal refueling; is that correct?

A. Yes, that is correct.

Q. You may want to, I don't know, you may want to refer to Page 3 of your direct testimony as you respond to this.

A. Okay. I'm, I am on Page 3.

Q. You used the system average method because FPL believes it's unfair as a policy to use only the nuclear

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unit cost when the outage was not a result of any imprudence in the operation of these units; is that correct?

A. That is -- yes, as stated by Witness Avera, that is correct.

Q. Okay. Well, then if an outage is a result of imprudence in the operation of a nuclear unit, it's not necessarily unfair to use only the nuclear unit cost; do you agree?

A. I think, I think I would agree with that. If, if the cause of the outage was imprudent operation, yes, I do not believe that it would be unfair to just -- of the nuclear unit to use, to use a nuclear avoided fuel cost.

Q. And so then we would be using OPC's $4.68 per megawatt hour; is that correct?

A. Yes. Under that case, if we were stating that it was imprudent operation of the nuclear units, I do not believe it would be unfair to use the $4.68 per megawatt hour.

Q. So then if you believe FPL is prudent, why do you use the system average and not the as-burned cost of 174 per megawatt hour, which would result in no refund?

A. The system average cost in the calculations that I completed was based on distributing the results

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of the event, I guess, for, for lack of a better description, across the entire fleet. So it was not imprudent operation of the nuclear unit. Something did happen in our system that, that took several units off as well as the nuclear units. And so the system average approach was a methodology that we employed to not isolate one specific type of unit coming off, off the line as a result of the event. So it had the effect of distributing that replacement value across the entire fleet and not making a differentiation of what type of unit came off.

I think, you know -- well, I mean, I'll leave it at that and then see what the next question is.

Q. My next question is that you used the system average for the eight-hour period and in your rebuttal you also provided the amount using the same method for the 48-hour period. Why didn't you use the same for the 8.3 million cost impact in the total non-peak period as suggested by OPC's Alternative 1?

A. I'm not sure I follow that. Can you repeat that question?

Q. Sure. You used the system average for the eight hours and also for the 48 hours that you talk about in your rebuttal.

A. Okay.

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Q. Why didn't you use the same alternative for the 8.3 million cost impact in the total non-peak period? I think that was suggested by OPC's Alternative 1.

A. I'm still not sure I follow the 8.3 impact.

Q. Okay.

A. The 8.3 impact was the, the reduction that we utilized --

MR. BUTLER: Where do you get the 8.3? I'm sorry.

MS. BENNETT: Let me, let me come back to that one in a couple of minutes. Give me just a minute. Okay?

(Pause.)

BY MS. BENNETT:

Q. Okay. Earlier we talked about if you use OPC's 107,311 megawatt hours for the February non-peak period multiplied by the blended marginal cost of $77.55, you get 8.3 million total cost impact for the February non-peak period.

A. Oh, okay.

Q. And that's the 8.3 million that I was talking about.

A. Okay.

Q. Do you want me to repeat the question?

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A. That would be great. Please.

Q. Okay. Why didn't you use the same methodology for the 8.3 million cost impact in the total non-peak period?

A. I'm not sure I follow. Why, why didn't we use the 8.3 million? I -- in what calculation specifically?

Q. You know what, let me, let me scratch that question. And if you'll give me just a minute to check with Daniel and Robert, see if we have any other questions. Oh, my. We do.

(Pause.)

Okay. Mr. Yupp, I've got about three more questions.

A. Okay.

Q. Earlier, earlier you noted that FPL purchased roughly 5,000 megawatts of purchased power during the first eight hours of the event; correct?

A. That is correct.

Q. And you agreed that it is reasonable to assume that 5,000 megawatt hours of natural gas generation was replaced; is that correct?

A. I think it's reasonable to assume that. There, there may have been a little bit of oil generation -- well, no. I'm sorry. No.

Going back to what was lost in addition to

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Turkey Point, yes, that is reasonable. It should be to replace gas-fired generation.

Q. And you identified the natural gas units that tripped offline. Would it be reasonable to net the purchased power, to net the purchased power against the power production cost of those units that tripped as opposed to FPL's marginal cost found in Interrogatory 67?

A. I guess our calculation in what we filed in direct testimony does not, does not calculate a net cost impact for purchased power based on marginal cost. We kept our methodology consistent and used system average. So that's the first point I would make.

To answer your question, would it be appropriate if, if you were going to utilize that type of methodology outside of our system average, would it be appropriate to just subtract from the cost of purchased power the marginal cost of gas versus a combination of marginal costs as, as what we have done in several calculations of using gas and oil? If that is the methodology you're going to use, I believe that our initial calculation as to the net cost impact really should be done based on an estimated marginal cost at the time.

In other words, as I had stated previously, if

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we were generating power at $95 per megawatt hour on average across that eight-hour peak the prior day and on February 26th, barring the event happening, load with similar, similar types of units on, then I think that the evaluation should be done off of the marginal cost and not those specific gas units. That's just my theory, but I believe that is appropriate as opposed to just basing it off a specific type of unit that was lost.

Q. How would we derive those estimates?

A. How would we derive the estimates of marginal cost?

Q. Yes.

A. What the marginal cost would have been?

Q. Yes.

A. I think, again, and I'll quantify this by saying that assuming that loads as well as units that were running were, would have been similar from one day to the next and fuel prices remain the same, and I can confirm fuel prices over that stretch of time were, were pretty similar from day to day, I think that's a good estimate of what the prior day was. I think that's what our marginal costs would have been across those eight hours had the event not occurred. So I believe prior day's data is probably as good as we have to make that

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estimation.

Q. That Late-Filed Exhibit Number 1, does that include the marginal cost per fuels type?

A. No. I -- the printout that I referred to and what we would supply in this late-filed exhibit is, is really a series of, I'll call it, if I recollect correctly, 24 numbers of here was our marginal cost the prior day each hour of the day. It does not show a breakdown of by unit what the marginal cost would be. And I guess that might be a little bit of a misnomer anyway. The marginal cost is driven by what it costs to produce the next megawatt hour.

So it would, it would be -- I think I could look at the marginal cost and make a determination of what units were making up that marginal cost at each hour. It wouldn't be too difficult to do that based on fuel prices and heat rates of our system. But, no, it does not have that specific breakdown as it, as it stands.

MS. BENNETT: That's all the questions I have. We're right at an hour. Would you like a break before we start with the next set of questions?

MR. BUTLER: Excuse me. May I ask Public Counsel and FIPUG, you know, an idea of how many questions, how much examination you have for Mr. Yupp?

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MR. BECK: John, this is Charlie. I'd say five to ten minutes.

MR. BUTLER: Okay.

MS. KAUFMAN: This is Vicki. I was going to let Charlie go first, if he likes, and I have very little.

MR. BUTLER: Okay. Well, why don't we take five minutes and then we can come back.

MS. BENNETT: Thank you. I'll just leave the phone on.

MR. BUTLER: Thank you.

(Recess taken.)

CROSS EXAMINATION

BY MR. BECK:

Q. Mr. Yupp, good morning. Can you hear me all right?

A. Yes, I can. Good morning.

Q. Okay. Good morning. Thank you.

Mr. Yupp, I'd like to ask you some questions about your response to staff's first interrogatories Number 42.

A. Okay.

Q. And I'm going to be specifically looking at Part D of your response.

A. Okay. Interrogatory Number 42 to staff's

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first set. And you said specifically at Part D?

Q. Yes.

A. Okay.

Q. Just some background. FPL provided this response this morning just minutes before the deposition; is that right?

MR. BUTLER: That's right, Charlie. I had spoken to Lisa Bennett on Friday and said I would try to get the stuff out in case anybody wanted to use it, recognizing obviously it's just shortly before the deposition. But I didn't want the stuff to come in just shortly after the deposition and people wished that they had had it.

BY MR. BECK:

Q. Okay. And, Mr. Yupp, your response to Interrogatory 42 addresses a production costing simulation which staff asked you to perform; is that, is that correct?

A. That is correct.

Q. Okay. Your rebuttal testimony filed in this, in this case does not refer to this simulation, does it?

A. No. My rebuttal testimony does not refer to the simulation.

Q. When was the simulation conducted?

A. I believe the final run that was made on the

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simulation or with the simulation model was I think concluded on Thursday of last week, which would have been March 20 -- I'm sorry, February 25th. I believe we had to make a couple of last runs with the simulation model at that point.

Q. Okay. How many runs of the model did you conduct?

A. We did an initial set of runs and reviewed the data. And then as I was reviewing the data, looking at the purchased power piece of the data that we put in, I discovered that a better, not a better approach, but we needed to make one correction to the net interchange amount primarily on that first day when we ran -- or I won't say first day -- but through all the days when we ran the base case, in other words, the optimal case as if nothing had occurred, we had to slightly modify the purchased power on that, on that one day.

And so discovering that, on Thursday afternoon we made a set of four additional runs which correlate to, or I should say five additional runs, base case and then four additional runs for 42A through D on that Thursday afternoon, and I believe we were complete at that point.

Q. Okay. When were the initial set of runs conducted?

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A. I believe it may have been in the Monday to Tuesday time frame of that week. So if I have my dates correct, maybe February 22nd to 23rd is when we were, when we made those runs. The group that made the runs, I'm not responsible for that group, but I know we had talked the prior week about making the runs. We were still trying to compile all the data we needed to do that though from actual load to fuel prices to actual unit trip times and all of that kind of data we were still compiling. So I believe they may have made those first or those initial runs somewhere in that 22nd to 23rd timeframe.

Q. Okay. And what is the group that actually did the runs?

A. That is our analytics group. They do our portfolio optimization. They, they do a lot of runs which I know you would be familiar with, at least through the early years we talked about this group, for our future fuel projection needs, for our hedge program, same group. They run our volume forecasting model, which happens to be GenTrader, and that reports to a different manager on our, in our business unit. But we all sit in the same area.

Q. Okay. I'd like to try to get an understanding a little bit more of what is involved in one of these

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runs. Could you discuss the amount of data that's processed and what happens?

A. Yes. Basically it's, it's not too complicated. I think to describe the algorithm of the model is, I'm sure, fairly complicated. But the way we approached this was to run a base case that would set our, our reference point. So we basically -- it's a, it's a production model that has all of our units' heat rates, all unit data captured in the model. And when, when you throw in fuel prices as well as load data -- on a daily basis we use it to not only project what our fuel requirements would be, but also to buy and sell power, what our, what our marginal costs would be throughout each day.

So basically what the model does is it optimally dispatches the system based on load fuel prices and unit availability as well as the unit data specific to each unit to, to determine an output that I guess, for lack of a better way to describe it, you would say run your system this way to achieve the best economics given the data that you have provided into the model. So it's an economic system dispatch.

And in this case we would have run that base case based on, or we did run that base case based on actual load that we had incurred through, from

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February 26th through March 4th, actual fuel prices that we, that were in place at that time. As I described before, actual net interchange on all given days.

Now the base case would not include the net interchange that we, or the purchased power that we purchased as a result of the event. The other days would include the actual net interchange that we had. And so we run a base case and that sets basically a production cost: Here is what it would have cost to run your system for that period of time based on all the inputs you gave and all units available. So it's an optimal case as if nothing had occurred, so the Flagami event did not occur.

And then starting with 42A, and it would be the same for B, C and D, only different outage durations, we began to, in 42A's case, say, okay, Turkey Point 3 as well as Turkey Point 4 tripped on February 26th at 1:10 p.m. And in that scenario, we're going to leave them both off for 48 hours and then we're going to bring them back on after 48 hours and ramp them up in an identical manner to the way the units actually did ramp in reality coming out of their outages that were a result of this event, and what that will yield is another production cost number.

So as you can see in the response to the

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interrogatory, in case 42A we determined that it would be 92 -- and I don't think the actual magnitude, I should say, of the number is important in this case, what's coming out of the model, it's the differential that we're looking at.

So in 42A an addition -- $92 million, slightly over that, for production costs over that period of time in the case where two nuclear units are off for 48 hours apiece as compared to a base case system optimal dispatch as if the Flagami event did not occur of 86 point almost three million dollars. And so that yields a production cost differential of $5.7 million.

Now the purchased power cost as I described at the beginning of the deposition, we add in the full amount of purchased power cost here because when we modeled this, we did not include what the cost of any of the purchased power was. So, in other words, we just let the system dispatch around units -- our units will move up and down based on the net interchange that we had each hour. We don't put a cost to it.

So when we go back and look at the differential between 42A in the base case, I needed to go back in and add the full cost of the purchased power that we did procure after the event because it's not captured in the model. And it is the only difference of

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purchased power between 42A and the base case. And I know that gets a little complicated or it might be, sound a little convoluted with me describing it, but that is, that is why purchased power at its full cost is added back in. And you can see that yields a replacement power cost utilizing the model in 42A of about $6.6 million.

Q. Okay. Mr. Yupp --

A. 42B, C and D are done identical.

Q. Okay. Let me -- Mr. --

A. I'm sorry. Go ahead.

Q. Could I ask you about 42D?

A. Yes, you can.

Q. You have a total production cost in the model of $99,964,935.

A. That is correct.

Q. Is that the actual production cost over that period?

A. I would not describe it as the actual production cost over that period. Again, we're running a model, so we're trying to get, we're trying to get it as close to reality as, as we can. And by that, I mean using actual load, using actual unit return times like the gas units that came off the line as a result of the Flagami event. We modeled them coming back at the exact

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times that they did. Fuel prices from that period of time. So basically it's, it's as, as close as we can get it. You know, is it exact? Certainly not.

Q. Okay. The outage times you have for the two nuclear plants for the Part D, those are the actual outage times, are they not?

A. Those are the actual outage times, and they, they do include the ascension power. So, in other words, I think what -- an important point to make when looking at this table is that if a unit -- if we were asked to model this with one of the units being off for 48 hours and then the other one, whether it was, you know, 107 or 158 in a couple of the different scenarios, 48 hours, we took the unit off for 48 full hours and then we ramped the unit up.

In the 42D case of 158 and 107, we brought the units back on when they actually came back on the line and we ramped them up according to how they did in reality. And so I think when you look at this table and see lower replacement costs based on this type of methodology of using nuclear avoided, that it's, it's more accurate than what a manual calculation on a piece of paper would be because it does include the ramped energy, which, which is important to the calculation since the units were not off for a full 158 and 107 or,

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you know, as, as some of the manual calculations portray it.

Q. How long were the ascension periods for each of the two nuclear plants?

A. If you could give me one minute, I can look through my paperwork here, and I do believe that I have that. Yes. In fact, I do.

Power ascension on Unit 3 began on March 3rd at 15:22, so 3:22 p.m., and the unit was at full load at 3:15 in the morning on 3/4. So that's approximately three -- I think that's almost, it should be about 12 hours. About a 12-hour ascension time on Unit 3. And on Unit 4 the ascension time was slightly greater than that. According to what I have here, it was slightly over 14 hours.

Q. And you used the actual outputs at each, during each of those hours that it was ascending?

A. I would -- that is subject to check. I will, would have to go back and check exactly what they used. They may have, they may have pro rated that ramp over the 12 hours.

I know the GenTrader production cost model has a field to, to put in data as to a typical ascension of a nuclear unit. I would have to go back and look at that, whether they did it pro rata or whether they

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actually took the megawatt hours that we showed for each hour during that ascension.

Q. Could you provide that in a late-filed exhibit, please?

A. Yes, I can.

Q. And that would be Late-Filed 2.

A. Okay.

Q. You know, describe it as you want, the actual versus the typical or the modeled ascension rates.

A. What do we want to call it?

Q. Yeah.

A. Oh, okay. So it will be a, it will be a comparison of actual ascension megawatt hours versus model assumed megawatt, ascension megawatt hours.

(Late-Filed Exhibit 2 identified for the record.)

BY MR. BECK:

Q. Is there any reason you wouldn't use the actual data if you have it available?

A. I'm not sure we had it specifically available. That doesn't mean it isn't available. But I know that it took a little bit of time to make these runs, and I, we may not have actually gone back and just pulled the actual data. Is there any reason why we, we couldn't? No. If we do have the data, it certainly could be

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modeled that way. And we'll see what it looks like as, from the comparison of, you know, Late-Filed Exhibit 2, whether it's -- if we did use a, an estimate of how it ramped in those 12 hours, how different that is than reality.

Q. And if you used the estimate or the model amount as opposed to actual, then that would be an assumption that was made, would it not?

A. Correct.

Q. Okay. And that's not listed as an assumption on your response to Interrogatory 42, is it?

A. No. I -- no. I did not list that as an assumption. In fact, the only thing I put in there in regard to power ascension was that, you know, cases involving, whether it be 158 or 107, included power ascension was in the outage duration time frame. So, no, I did not reference whether it was actual or not, and I will certainly find that out.

Q. Okay. Are there any other assumptions that were used in the modeling that are not listed in your response to Interrogatory 42?

A. Not that I am aware of, no. The actual load unit initial conditions, actual fuel prices, and then the base case, the actual interchange was adjusted to remove the purchased power that we, that we had in

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response to the event.

And I did make one assumption on 226 taking out the purchased power that we did in response to the event. I, I made a little bit of an estimate as to how much power we probably would have bought that day, just normal economic purchases, based on what we had done prior, but that was not a big assumption. And then power ascension. No, there are no other assumptions that I can think of currently that are not listed in this response.

Q. In your response a few minutes ago to a question you referenced some document that you were looking at and that you had in front of you. What's that document?

A. In the ascension hours?

Q. What was the document you were looking at?

MR. BUTLER: What was the question about? Just help him reference what it was he was --

MR. BECK: I believe it was about -- John, I believe it was about ascensions.

THE WITNESS: Yes. I have a document that was provided to me by nuclear, which is simply just information obtained from our, one of the systems that we have internally at Florida Power & Light, and the document just shows Unit 3 breaker trip, breaker closed,

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and then power ascension and at 100 percent power, and it does the same for Unit 4. And that's -- I think these times have all been communicated out there. But that, the document is from a system we have internally which, which shows us exact times.

BY MR. BECK:

Q. Okay. And is this a, is this among some other documents that you have that are some backup or refer to your responses to Interrogatory 42?

A. Yes. There are, there are a couple of other documents such as fuel prices, unit initial conditions and the load, actual load as well as -- and we had talked about this prior and this is the document I referred to on the gas unit tripped four times and what components of each unit tripped. That I have as backup documentation for Interrogatory 42. That was what was provided to our analytics group as some, as the data that they used to run the model.

Q. Okay. And are those all of the documents that you have in your possession right now related to Interrogatory Number 42?

A. Yes. That is correct.

Q. Okay. I'd like to ask for those documents as Late-Filed Exhibit 3.

A. Okay.

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Q. That would be backup to Interrogatory 42.

MR. BUTLER: Okay.

(Late-Filed Exhibit 3 identified for the record.)

BY MR. BECK:

Q. Mr. Yupp, would it be fair to say that we could not duplicate the results of your response to Interrogatory 42 because we don't have the model and the data that you have?

A. It would be fair to say that because you don't have the model. The data we could certainly provide, but, yes, the model is the key. That's the program that we used to, to run the scenarios.

Q. Okay. Now you say that data you could provide. What do you mean by that?

A. Well, part of it was just requested for Late-Filed Exhibit 3. As far as unit information and heat rate data, we have all that data. Essentially the model is, is a snapshot of our system, and the data that drives it would be, you know, unit data from, from how much capacity to the heat rate, you know, different components if it's a combined cycle. So all that data is available. But the bottom line is you need the model to duplicate exactly what we did in this interrogatory.

MR. BECK: Okay. Mr. Yupp, thank you very

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much. That's all I have.

THE WITNESS: Okay.

MS. KAUFMAN: Are y'all ready for me? This is Vicki Kaufman.

MR. BUTLER: That's fine.

CROSS EXAMINATION

BY MS. KAUFMAN:

Q. Okay. Good morning, Mr. Yupp. I'm Vicki Kaufman on behalf of FIPUG. I just have one or two questions for you, so we'll definitely be out of here before lunch.

My first question is were you part of the team, if I can call it that, who decided in what manner you were going to calculate the replacement fuel cost to present to the Commission?

A. I would not consider myself a member of the team that decided the approach that FPL was going to take. My, basically my testimony really covers -- you know, once the approach was developed, my testimony really covers the calculation piece of that.

Q. Okay. So, so another team or group decided on the approach and you were informed of it, and then you performed the calculation to support that; is that accurate?

A. Yeah. That's a good way to describe it.

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Q. Okay. Who was part of the decision-making group that decided on this approach? Do you know?

A. Offhand I'm not really 100 percent sure who would have been all of the individuals on that. I worked -- you know, my direction in this came from Mr. Butler, who is my attorney or our attorney.

Q. Would I be correct to assume that in addition to Mr. Butler there were certainly company employees involved in making this decision?

A. Yes, I would think that would probably be logical.

Q. Are you aware of who any of these folks were in addition to Mr. Butler?

A. Not specifically. No, I'm not.

Q. Are you aware generally, or you just don't have any idea who came to this conclusion?

A. No. Again, my work on this has been really through the interface with John Butler.

Q. Okay. Ms. Bennett asked you some questions earlier on about the methodology that you have used and its consistency with other approaches that have been taken.

Let me ask you, are you aware of any Commission decision on replacement fuel costs that utilizes the methodology that the company has proposed

here?

A. No. Again, I'm not aware of any Commission decisions that have utilized a system average approach methodology on replacement fuel costs.

MS. KAUFMAN: That's all I have. Thank you.

MR. BUTLER: Okay. Any other questions from anyone?

MS. BENNETT: None from staff.

MR. BUTLER: I have a few redirect for Mr. Yupp.

REDIRECT EXAMINATION

BY MR. BUTLER:

Q. Mr. Yupp, actually I'm working backwards from what Ms. Kaufman just asked you.

Are you aware of any Florida PSC decisions on replacement power costs where the, involving a nuclear --

MS. KAUFMAN: John, I'm sorry to interrupt. Can you speak up a little bit?

MR. BUTLER: I'm sorry. Sure.

MS. KAUFMAN: Thanks.

BY MR. BUTLER:

Q. Mr. Yupp, are you aware of any Florida Power -- Florida Public Service Commission decisions involving replacement power costs for nuclear units

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where the cause of the outage for the nuclear unit was not imprudence in the operation of the nuclear units?

A. I'm not aware of that.

Q. Okay. Mr. Beck had asked you some questions about Interrogatory 42. And am I correct, Mr. Yupp, that the calculations of replacement power cost using the GenTrader model as portrayed on Interrogatory 42 generally show a little bit smaller replacement power cost under any of the four scenarios you were evaluating than the results under the method that FPL used in response to other staff interrogatories that didn't use the GenTrader approach?

A. Yes. Particularly in 42D -- well, I'll say at least three of them, B, C and D. Wherever there was a case where one of the scenarios that we were asked to perform was based on, and I can go through the list, either 158 hours for Unit 3, 107 hours for Unit 4 or, as in the case of 42D, which was 158 and 107 combined in the case, wherever we were asked to do that, the numbers would be, would be less just because of the ascension power that is not accounted for in any of the manual calculations that we have done.

Q. What did you assume for the manual calculations about the sort of power ascension?

A. That power ascension did not occur in any of

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the cases, whether we ran eight hours, 48 hours, 158, 107, that it did not occur until that full duration of zero. And then let's just take 158 hours on Unit 3, for example, that the unit would not have returned to service until the 159th hour and then it would have been on full, so.

Q. Were there actually periods of time for both Units 3 and 4 when ascension occurred?

A. Yes. As I had referenced in my data, I believe, approximately in the 12- to 14-hour range of power ascension for each unit.

Q. Did not taking that ascension period into account in doing the, we'll call it manual calculations, result in those calculations being higher or lower than they would have been if you had included the ascension?

A. Yes. The results that we did manually would, would show higher values with not taking into account power ascension.

Q. Back at the beginning, I think very close to the beginning of the deposition Ms. Bennett asked you some questions about the outage duration associated with the Flagami transmission event.

Do you have any personal knowledge, Mr. Yupp, of what, if any, events occurred during the course of the Turkey Point Unit 3 or 4 outages once they came

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offline because of the Flagami transmission event that extended those outages beyond what might otherwise have been required?

A. No, I don't. My knowledge is that the units came off at approximately 1:10 on the 26th and that there was work that was done. But outside of that what has generally been talked about, I have no specific knowledge of what occurred during that outage, during those outage periods for both Turkey 3 and 4.

MR. BUTLER: Thank you. That's all the redirect that I have. I believe that concludes the deposition.

MR. BECK: John, do you have an estimate on when you could provide the late fileds?

MR. BUTLER: Let's talk about that for a second. I think that 1 and 3 we should be able to do just almost immediately, probably within, say, a couple of days at most.

Jerry, what's your thought about Late-Filed Exhibit Request 2, the comparison of the model to actual ascension rates?

THE WITNESS: I should be able to, I should be able to get that fairly quickly. I'll start as soon as we leave here. I don't -- that shouldn't be an issue.

MR. BUTLER: Okay. So probably a couple of

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days, two or three days, Charlie, for all of it.

MR. BECK: Terrific. Thank you, John.

MR. BUTLER: Certainly.

MS. BENNETT: Before -- once we go off the record I have a couple of administrative questions to ask, if you guys will bear with me.

MR. BUTLER: Okay. That's fine. I think the deposition from our perspective is concluded. We would like to read and sign the depo, and I think that's it.

MS. BENNETT: Do you want copies?

MR. BECK: Oh, yes. Please.

MS. BENNETT: Vicki, do you guys want copies of the depo?

MS. KAUFMAN: I'll let you know. Can you tell me again who the court reporter was? I'm sorry.

THE COURT REPORTER: This is Linda Boles.

MS. KAUFMAN: Linda, I'll let you know.

(Deposition concluded at 11:18 a.m.)

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IN RE: DOCKET NO. 090505-EI
NAME: GERARD YUPP
DATE: March 1, 2010

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: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, CRR, RPR, Official FPSC Commission Reporter, do hereby certify that I was authorized to and did stenographically report the foregoing deposition at the time and place herein stated.

I FURTHER CERTIFY that this transcript constitutes a true record of the testimony given by the witness.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 8th day of March, 2010.

Linda Boles

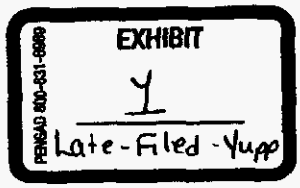
LINDA BOLES, CRR, RPR
Official FPSC Hearings Reporter
850/413-6734

090505 Hearing Exhibits - 000601

The attached screenshot shows two measures of system marginal cost, designated as "Control Lambda" and "Advisory Lambda." FPL's replacement power cost calculation that is reflected in Interrogatory No. 67 of Staff's Fifth Set of Interrogatories in Docket No. 080001-EI used the Control Lambda value (rounded value). Below are descriptions of the two measures:

Control Economic Dispatch (CED) System Incremental Cost (Control Lambda): CED provides economic basepoints for all units that are on Automatic Generation Control (AGC). AGC uses these basepoints to move the units on control to the desired level. The Control Lambda represents the actual system marginal cost of the units that are on AGC. Units that are in Manual Status or OFF are not considered in this lambda calculation. Additionally, in CED, the available units' operational economic limits are determined by the economic limits as well as the units' current generation and response rate limits (MSR).

Advisory Economic Dispatch (AED) System Incremental Cost (Advisory Lambda): AED is essentially the same as CED except it provides theoretical optimum desired basepoints for all units in AGC and Manual Status that would apply in the absence of the system constraints under which the units are actually operating. AED basepoints are advisory only and are not used for AGC. For units that are not AGC capable, the AED basepoint can be communicated to the plant operator so, if possible, the unit can be manually moved to the desired level. The Advisory Lambda represents the system marginal cost based on the optimum desired basepoints of all operating units. The AED dispatch range for each unit is determined by a separate set of AED economic limits; AED is not set up to consider the units' current generation and response rate limits (MSR) in its solution.



Previous Next

Lambda History

DateTime	Control Lambda	Advisory Lambda
02/25/08 23:30	56.53	54.54
02/25/08 22:30	73.89	58.65
02/25/08 21:30	96.59	84.99
02/25/08 20:30	107.06	101.75
02/25/08 19:30	95.96	97.59
02/25/08 18:30	66.6	57.60
02/25/08 17:30	54.76	52.88
02/25/08 16:30	96.93	118.88
02/25/08 15:30	119.65	123.16
02/25/08 14:30	109.7	107.63
02/25/08 13:30	109.29	103.49
02/25/08 12:30	92.43	89.22
02/25/08 11:30	97.27	97.48
02/25/08 10:30	59.71	85.32
02/25/08 09:30	56.38	57.49
02/25/08 08:30	55.77	55.67
02/25/08 07:30	53.62	54.55
02/25/08 06:30	52.07	53.35
02/25/08 05:30	50.2	50.91
02/25/08 04:30	22.69	23.32
02/25/08 03:30	24.55	24.06
02/25/08 02:30	49.2	34.70
02/25/08 01:30	51.44	49.66
02/25/08 00:30	50.81	35.81
02/24/08 23:30	51.02	50.86
02/24/08 22:30	53.48	54.10
02/24/08 21:30	87.09	58.88
02/24/08 20:30	27.01	27.12
02/24/08 19:30	121.99	115.63
02/24/08 18:30	57.11	103.75
02/24/08 17:30	51.9	106.93
02/24/08 16:30	57.96	107.32
02/24/08 15:30	65.87	111.66

Con. 95.17
Adv. 94.22

Comparison of Actual Ascension MWh versus Modeled Ascension MWh

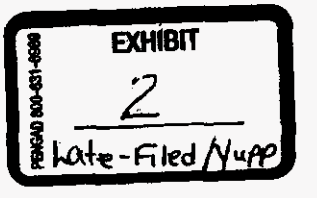
Turkey Point Unit No. 3

Date	Hour Ending	Actual MWh	Modeled MWh
3/3/2008	1600	18	18
3/3/2008	1700	139	139
3/3/2008	1800	200	200
3/3/2008	1900	268	268
3/3/2008	2000	305	305
3/3/2008	2100	307	307
3/3/2008	2200	359	359
3/3/2008	2300	422	422
3/3/2008	2400	490	490
3/4/2008	0100	582	582
3/4/2008	0200	622	622
3/4/2008	0300	668	668
3/4/2008	0400	710	710
	Total MWh	**5,090**	**5,090**

Turkey Point Unit No. 4

Date	Hour Ending	Actual MWh	Modeled MWh
3/1/2008	1100	1	0
3/1/2008	1200	74	0
3/1/2008	1300	129	74
3/1/2008	1400	181	129
3/1/2008	1500	247	181
3/1/2008	1600	320	247
3/1/2008	1700	345	320
3/1/2008	1800	392	345
3/1/2008	1900	442	392
3/1/2008	2000	515	442
3/1/2008	2100	581	515
3/1/2008	2200	621	581
3/1/2008	2300	631	621
3/1/2008	2400	644	631
3/2/2008	0100	683	717
3/2/2008	0200	713	717
	Total MWh	**6,519**	**5,912**

Note: The ascension profile utilized for Turkey Point Unit 4 in the production model was 607 MWh less than actual. From a directional standpoint, the variance between actual MWh output during ascension compared to the MWh output used in the model causes an overstatement of replacement fuel costs in all cases that included 107 hours of outage



duration for Turkey Point Unit 4. An approximation of this overstatement of replacement fuel costs is shown below:
(607 MWh * $79.92/MWh) – (607 MWh * $4.33/MWh) = $45,883

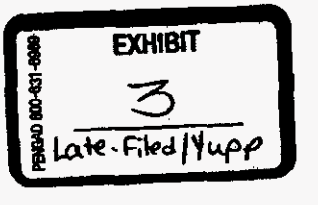
Documents Included:

1. Fuel Price Data (1 page)
2. Unit Initial Conditions Data (2 pages)
3. Actual Load Data - 2/26/2008 through 3/4/2008 (1 page)
4. Summary of Unit Outages Data (1 page)
5. Turkey Point Units 3 and 4 Timeline Data (1 page)

Note: Document No. 5 shows that Turkey Point Unit 4 reached 100% power in 108 hours, rather than 107 hours as reflected in FPL's replacement power calculations. During hour 108, the unit was completing its ramp to 100% power. The unit's integrated output for this hour was 683 MWh, which is approximately 34 MWh less than what the integrated output would be at 100% power. If FPL adjusted its replacement power cost calculations for the fact that Turkey point Unit 4 was completing its ascension to 100% power in hour 108, the impact would be as follows for the Adjusted System Average approach and the Nuclear Avoided Fuel Cost approach:

Adjusted System Average
(34 MWh * $79.92/MWh) – (34 MWh * $55.34/MWh) = $836 (additional replacement fuel cost)

Nuclear Avoided Fuel Cost
(34 MWh * $79.92/MWh) – (34 MWh * $4.33/MWh) = $2,570 (additional replacement fuel cost)



Fuel Price Forecast & Gas Pipeline Data

	Current Day 2/26/2008 Gas $/MMBTU	Next Day 2/27/2008 Gas $/MMBTU	Current Day 2/26/2008 Martin 1&2 70/30 Blend	Next Day 2/27/2008 Martin 1&2 70/30 Blend	2/26/2008 Heavy Oil $/MMBTU	2/26/2008 0.7% $/MMBTU	2/26/2008 Lite Oil $/MMBTU	2/26/2008 Coal/Nuclear $/MMBTU
FGT Firm	$ 9.52	$ 9.50						
FGT Non-Firm	$ 9.64	$ 9.62						
GS Firm	$ 9.34	$ 9.32						
GS Non-Firm	$ 9.94	$ 9.92						
Transco Zone 4	$ 9.29	$ 9.27						
Henry Hub	$ 9.16	$ 9.14						
Florida City-Gates	$ 9.60	$ 9.48						
Cape Canaveral					$ 11.80			
Indian River					$ 11.93			
Lauderdale							$ 22.02	
Fort Myers							$ 22.31	
Manatee					$ 11.77			
Martin			$ 11.12	$ 11.11	$ 11.80	$ 13.02	$ 22.31	
Oleander							$ 22.36	
Port Everglades					$ 11.78		$ 22.02	
Putnam							$ 22.37	
Riviera					$ 11.76			
Sanford					$ 12.48			
Turkey Point (Oil)					$ 11.86		$ 22.45	
Cedar Bay								$ 2.23
ICL								$ 3.07
St. John								$ 2.09
Scherer								$ 2.31
St. Lucie 1								$ 0.61
St. Lucie 2								$ 0.47
Turkey Point 3								$ 0.41
Turkey Point 4								$ 0.44

FGT		Gas Alert
Schedule ending 10am	800,583	
Schedule beginning 10am	746,173	26%
FGT MTD Imbalance	111,488	under

GULFSTREAM		Gas Alert
Schedule ending 10am	369,728	
Schedule beginning 10am	352,954	
Gulfstream MTD Imbalance	(18,954)	over

STORAGE	
Bay Gas Storage:	712,358
Gulfstream Storage:	-
Total Storage:	712,358

GAS SUMMARY		
Totals for Yesterday's Gas Day:		
Total Schedule	1,170,311	
Projected FGT Burn	830,583	
Projected GS Burn	369,728	
Total Proj Burn ending 10am	1,200,311	
Projected Daily Imbalance	(30,000)	over
Gas Schedule beginning 10am	1,099,127	
Avail Capacity into Mkt Area-FGT:	540,258	Allocations: CS #6 vidor, NGPL vermilion, EWLL-south
Avail Capacity into Mkt Area-GS:	542,002	

Power Call Options:	2/26/2008	2/27/2008
Ber ergy	$ 83.610	$ 83.448
Co ition	$ 108.761	$ 108.548

GAS OPERATIONS INFORMATION

Imbalances

	Begin Imbal	Est Daily	MTD Est
FGT	111,488	(30,000)	81,488 under
GS	(18,954)	0	(18,954) over
Total Imb MTD	92,534	(30,000)	62,534 under

Gulfstream Breakout

	Mobile	Martin	Backhaul
ending 10am	216,790	152,938	
begin 10 am	216,790	136,164	

GAS DAILY PRICES

	Yesterday	Today	Deltas	vs
FGT Zone 1	$8.475	$8.950	($0.205)	vs HH
FGT Zone 2	$8.180	$9.180	$0.025	vs HH
FGT Zone 3	$8.620	$9.210	$0.055	vs HH
Henry Hub	$8.650	$9.155	$0.505	vs HH yest
Sonat	$8.650	$9.195	($0.015)	vs z3
Transco Z4	$8.740	$9.290	$0.080	vs z3
Florida CG	$8.905	$9.495	$0.285	vs z3

FRCC 2007 WINTER BASE CASE MODIFIED TO
2/26/2008 PREFAULT CONDITIONS,
AREA 1 (FPL) GENERATOR SUMMARY:

BUS#	X-- NAME	--X BASKV	# MACH ON/OFF		TYP	MW
1	TP.1	22.000	1	0	2	121.0
2	TP.2	22.000	1	0	2	98.0
3	TP.3	22.000	1	0	2	771.0
4	TP.4	22.000	1	0	2	740.0
129	PT.EVGL1	22.000	1	0	2	127.0
131	PT.EVGL3	22.000	1	0	2	364.0
132	PT.EVGL4	22.000	1	0	2	369.0
193	RIVIERA3	20.000	1	0	2	285.0
194	RIVIERA4	20.000	1	0	2	274.0
199	STLUCIE1	22.000	1	0	2	902.0
200	STLUCIE2	22.000	1	0	2	857.0
279	FT.MYER1	18.000	1	0	2	37.0
280	FT.MYER2	22.000	1	0	-2	289.0
357	PUTN.1CT	13.800	1	0	2	121.0
359	PUTN.1ST	13.800	1	0	2	88.0
362	CAPECAN1	22.000	1	0	2	87.0
363	CAPECAN2	22.000	1	0	2	88.0
364	SANFORD4	24.000	1	0	2	312.0
365	SANFORD5	24.000	1	0	2	154.0
527	BIOM-POM	18.000	1	0	-2	7.0
592	LEE_CTY	13.800	1	0	2	39.0
604	PBRR	13.800	1	0	-2	43.5
623	BRR-S	13.800	1	0	-2	54.1
641	MDRR	13.800	1	0	-2	43.0
661	BRR-N	13.800	1	0	-2	56.0
798	USSC-BRY	13.800	1	0	-2	17.0
799	INDTN.CG	24.000	1	0	2	323.0
930	SAN.CT4A	18.000	1	0	2	149.0
931	SAN.CT4B	18.000	1	0	2	149.0
933	SAN.CT4D	18.000	1	0	2	147.0
934	SAN.CT5A	18.000	1	0	2	148.0
935	SAN.CT5B	18.000	1	0	2	153.0
936	SAN.CT5C	18.000	1	0	2	153.0
950	FT.MYR2A	18.000	1	0	2	150.0
951	FT.MYR2B	18.000	1	0	2	151.0
952	FT.MYR2C	18.000	1	0	2	151.0
953	FT.MYR2D	18.000	1	0	2	150.0
954	FT.MYR2E	18.000	1	0	2	155.0
1201	MR8 CT1	18.000	1	0	2	150.0
1202	MR8 CT2	18.000	1	0	2	153.0
1203	MR8 CT3	18.000	1	0	2	154.0
1204	MR8 CT4	18.000	1	0	2	116.0
1205	MR8 ST1	18.000	1	0	2	380.0
1211	MN3 CTA	18.000	1	0	2	156.0
1212	MN3 CTB	18.000	1	0	2	154.0
1213	MN3 CTC	18.000	1	0	2	157.0
1214	MN3 CTD	18.000	1	0	2	156.0
1215	MN3 STM	18.000	1	0	2	409.0
1260	LAUD.4CA	18.000	1	0	2	135.0
1261	LAUD.4CB	18.000	1	0	2	126.0
1262	LAUD.4ST	18.000	1	0	2	153.0
1265	LAUD.5CA	18.000	1	0	2	153.0

1266	LAUD.5CB	18.000	1	0		
1267	LAUD.5ST	18.000	1	0	2	155.0
1270	MAR.3CTA	20.000	1	0	2	153.0
1271	MAR.3CTB	20.000	1	0	2	152.0
1272	MR3.ST	20.000	1	0	2	153.0
1275	MAR.4CTA	20.000	1	0	2	153.0
1276	MAR.4CTB	20.000	1	0	2	140.0
1277	MR4.ST	20.000	1	0	2	141.0
1281	TP5CTA1	18.000	1	0	2	155.0
1282	TP5CTA2	18.000	1	0	2	155.0
1283	TP5CTB1	18.000	1	0	2	155.0
1284	TP5CTB2	18.000	1	0	2	156.0
1285	TP5STEAM	18.000	1	0	2	466.0
SUBSYSTEM TOTALS						13163.6

Date	HR-1	HR-2	HR-3	HR-4	HR-5	HR-6	HR-7	HR-8	HR-9	HR-10	HR-11	HR-12	HR-13	HR-14	HR-15	HR-16	HR-17	HR-18	HR-19	HR-20	HR-21	HR-22	HR-23	HR-24
2/26/2009	8,965	8,594	8,118	7,501	7,997	8,558	10,145	11,034	11,816	12,799	13,731	14,428	14,957	15,502	14,222	14,200	14,334	14,346	14,600	15,388	14,806	13,800	12,356	10,883
2/27/2009	9,720	8,942	8,517	8,230	8,295	8,539	10,273	11,032	11,300	11,841	11,780	11,886	11,991	11,214	10,653	10,885	10,985	11,265	12,305	12,740	12,273	11,823	10,672	9,624
2/28/2009	8,901	8,896	8,554	8,703	9,181	10,377	12,460	13,575	13,263	12,888	12,530	12,063	11,648	11,392	11,012	10,857	10,918	11,161	12,251	13,059	12,808	12,148	11,273	10,175
2/25/2009	9,366	9,043	8,961	9,021	9,254	10,228	12,002	12,702	12,260	11,805	11,704	11,518	11,368	11,249	11,061	11,045	11,037	11,060	11,888	12,092	11,516	10,853	9,981	9,014
3/1/2009	9,148	7,841	7,277	7,380	7,359	7,982	9,327	9,182	10,149	10,778	11,259	11,463	11,834	11,577	11,067	11,066	11,083	11,611	11,903	12,078	11,577	10,842	9,988	9,088
3/2/2009	8,213	7,609	7,271	7,165	7,185	7,347	7,749	8,435	8,837	10,385	11,167	11,531	11,723	11,876	11,848	12,017	12,016	11,888	12,266	12,710	12,204	11,319	10,307	9,089
3/3/2009	8,202	7,611	7,366	7,265	7,491	8,234	9,991	10,517	11,125	11,844	12,497	12,963	13,357	13,455	13,705	13,904	13,968	13,903	14,196	14,549	13,903	12,876	11,578	10,203
3/4/2009	9,127	8,464	8,103	7,940	8,092	8,883	10,120	11,033	11,887	12,736	13,367	13,844	14,122	14,288	14,223	14,158	14,124	14,158	14,700	15,009	14,365	13,364	12,104	10,783

Back Up Documents to Staff's First Set of Interrogatories No. 42

Trip	Unit	MW Lost	
1:09 PM	TP5	1,087	5A, B, C, D and ST
1:09 PM	MR8	457	8A, B, C
1:09 PM	FL5	153	5A
1:10 PM	TN3	718	
1:09 PM	TN4	712	
		3,127	

Turkey Point 5 Return

5B	4:50 PM	26-Feb
5A	5:33 PM	26-Feb
5D	7:30 PM	26-Feb
5ST	11:20 PM	26-Feb
5C	2:40 AM	27-Feb

Martin 8 Return

8A	3:00 PM	26-Feb
8B	4:48 PM	26-Feb
8C	6:32 PM	26-Feb

Fort Lauderdale 5 Return

5A	7:10 PM	26-Feb

Nuclear Unit Return

TN3	3:15 AM	4-Mar
TN4	1:10 AM	2-Mar

Information obtained from GADS - see attached GADS report for Unit 3 & Unit 4

Unit 3:

	Date	Time	Duration
Breaker Trip Opened	2/26/2008	13:10	
Breaker Trip Closed	3/3/2008	15:21	146.18
Power Ascension	3/3/2008	15:22	
At 100%	3/4/2008	3:15	11.88
Total Duration			**158.07**

Unit 4:

Breaker Trip Opened	2/26/2008	13:09	
Breaker Trip Closed	2/29/2008	4:47	63.63
Reactor Trip due to SGWL greater than 75%	2/29/2008	4:47	
	2/29/2008	4:50	0.05
Trip due to SGWL greater than 75%	2/29/2008	4:50	
Breaker Trip Closed	3/1/2008	10:53	30.05
Power Ascension	3/1/2008	10:54	
At 100%	3/2/2008	1:10	14.27
Total Duration			**108.00** [1]

[1] Amount referenced in Art's testimony is consistent with the POD provided for replacement fuel costs. A discussion with Gerry Yupp indicated the POD reflects 107.17 hours vs. GADS of 108 hours.

34

EXHIBIT NO. _____

DOCKET NO: 090505-EI

WITNESS: J. A. STALL

PARTY: FPL

DESCRIPTION: STAFF'S HEARING EXHIBIT

DOCUMENT:

Second Deposition of J. A. Stall in Docket No. 090505-EI, March 11, 2010

PROFFERED BY: STAFF

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 34
COMPANY Florida Public Service Commission Staff
WITNESS Second Deposition of J. A. Stall
DATE 03/17/10

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 090505-EI

REVIEW OF REPLACEMENT FUEL COSTS ASSOCIATED WITH THE FEBRUARY 26, 2008 OUTAGE ON FLORIDA POWER & LIGHT'S ELECTRICAL SYSTEM.
_____/



TELEPHONIC DEPOSITION OF: J. A. STALL

TAKEN AT THE INSTANCE OF: The Staff of the Florida Public Service Commission

PLACE: Room 382D
Gerald L. Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, Florida

TIME: Commenced at 9:33 a.m.
Concluded at 10:46 a.m.

DATE: Thursday, March 11, 2010

REPORTED BY: LINDA BOLES, RPR, CRR
Official FPSC Reporter
(850) 413-6734

APPEARANCES:

JOHN T. BUTLER, ESQUIRE, and MITCHELL S. ROSS, ESQUIRE, Florida Power & Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408-0420, appearing on behalf of Florida Power & Light Company.

VICKI GORDON KAUFMAN, ESQUIRE, Keefe Law Firm, 118 North Gadsden Street, Tallahassee, Florida 32301, appearing on behalf of the Florida Industrial Power Users Group.

CHARLES J. BECK, ESQUIRE, and JOSEPH A. McGLOTHLIN, ESQUIRE, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of the State of Florida.

LISA BENNETT, ESQUIRE, and KEINO YOUNG, ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf of the Florida Public Service Commission Staff.

I N D E X

WITNESSES

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EXHIBITS

NUMBER:	ID.	ADMTD.

(REPORTER'S NOTE: No exhibits were marked and/or identified.)

DEPOSITION

MR. YOUNG: Okay. We're on the record. Mr. Stall.

THE WITNESS: Yes. Good morning.

MR. YOUNG: Good morning. My name is Keino Young. I am an attorney here at the Florida Public Service Commission. I wanted to first thank you for making your schedule available this morning so we can take this deposition. Okay?

THE WITNESS: You're welcome. It's a pleasure.

MR. YOUNG: All right. Before we, before we administer the oath, I'd like to take appearances, first starting with me.

Again, my name is Keino Young. I am legal staff at the Florida Public Service Commission. In the room I have --

MS. BENNETT: Lisa Bennett.

MR. GRAVES: Robert Graves.

MR. YOUNG: And, Mitch, if you want to introduce yours folks, we can go from there.

MR. ROSS: Okay. This is Mitch Ross, counsel for FPL. And Mr. Stall is here, also Damaris Rodriguez and Lisa Fuca.

MR. BECK: Hey, Keino. This is Charlie Beck

and Joe McGlothlin. We're with the Office of Public Counsel, and we're appearing on behalf of the citizens of Florida.

MS. KAUFMAN: This is Vicki Gordon Kaufman. I'm with the law firm of Keefe, Anchors, Gordon & Moyle, and I am appearing on behalf of the Florida Industrial Power Users Group.

MR. YOUNG: Okay. All right. If you can do me a favor and speak into the phone when, when you're, when you're talking. We're having a little problem hearing on this end. Okay?

THE WITNESS: Very well.

MR. YOUNG: All right. At this time, Mitch, if you could have the notary administer the oath.

MR. ROSS: Okay.

THE NOTARY: My name is Amy Lowe, and I'm a notary duly appointed and commissioned here in the State of Florida, and I will now swear in the witness.

Whereupon,

J. A. STALL

was called as a witness and, after being duly sworn by the notary present with the witness, testified as follows:

DIRECT EXAMINATION

BY MR. YOUNG:

Q. I heard a beep earlier. Did somebody just join the line? Okay. I guess not.

Mr. Stall?

A. Yes.

Q. Thank you for -- again, thank you for joining us this morning. The way I like to conduct my depositions, I think you and I have -- I've conducted a deposition with you before, but in case, in case you've forgotten, let me, let me just tell you the way I like to conduct depositions.

I like to go for 50, 50 minutes to an hour and then take like a five-, ten-minute break. Okay?

A. Okay.

Q. All right. During the course of this deposition I might ask you a series of questions. If you don't understand or if you could not -- and you cannot -- or you cannot hear the question, please ask me to repeat it or, or, or I, or rephrase the question. Okay?

A. All right.

Q. And in the event that I totally get lost, the court reporter will repeat the question. Okay?

A. Yes.

Q. All right. Also during the course of this deposition I might ask a series of questions that your

attorney objects to. Okay? I believe, despite the objection, if you can answer the question, that would be great, unless he instructs you not to. Okay?

A. Yes.

Q. I don't think I am going to deal with any confidential information, but in case I do or in case I am asking a question that is confidential, please do not hesitate to stop me if you feel I'm going to divulge confidential information. Okay?

A. Yes.

Q. All right. With that, Mr. Stall, we can begin.

Can you please state your name, your full name, spell your last name for the record, please.

A. My name is John Arthur Stall, S-T-A-L-L.

Q. And how are you employed, Mr. Stall?

A. I'm employed as Vice President, Nuclear Transition.

Q. Okay.

A. FPL Group.

Q. And you are the John Arthur Stall who filed testimony on January 13th, 2010, in this docket; correct?

A. Yes.

Q. All right. And you also -- give me one

second. You also filed rebuttal testimony in this, in this docket; correct?

A. Yes.

Q. And that testimony was filed on February 24th, 2010; correct?

A. Well, I take your word for it that it was February 24th.

Q. February 24th. Excuse me if I said anything else.

A. Yes.

Q. You also filed a revised errata sheet; correct?

A. Yes.

Q. When was that errata sheet filed, do you know?

A. Hold on one moment.

Q. Was it March, was it March 2nd, 2010?

A. One moment, please. I'm looking for the date as we speak.

The date was March 2nd, 2010.

Q. Okay. And also you have -- you were deposed in this case before; correct?

A. Yes.

Q. And that date was March 5th, 2010; correct?

A. Yes.

Q. Okay. Mr. Stall, one second, please.

(Pause.)

All right. Mr. Stall, let's look, let's look -- can you please turn to your direct testimony?

A. One, one correction. The depo was February 5th. I believe we heard you say March 5th.

Q. Oh, I'm sorry.

A. So let's make sure we have that corrected on the record.

Q. Okay. February 5th. I'm sorry for misspeaking, if I misspoke.

Can you please turn to your direct testimony, please?

A. Yes.

Q. On Page 3 of your direct testimony you indicated that it took approximately 48 hours to bring a single unit back online after an unexpected plant shutdown. Do you see that?

A. Yes.

Q. Okay. What is the basis -- can you please -- what is your basis for making that comment or that statement?

A. The basis is my experience in the industry both here at FPL Group as well as previous positions in the industry and as a licensed Senior Reactor Operator.

And just to provide a little bit of context

around that 48 hours, that would typically be for a reactor trip where the cause was immediately obvious and there was no particular maintenance that needed to be done. In other words, we could turn the plant around and bring it back up without any attendant maintenance that would need to be done.

Q. Okay. Now you also indicated that restarting two nuclear units following an unplanned shutdown lengthens the typical 48-hour timeframe; correct?

A. Correct.

Q. Okay. Based on that comment, can you -- how long -- how much time would, would, would it add to the typical 48-hour timeframe to bring two nuclear, two nuclear units back up?

A. Well, Keino, there's no, there's no obvious answer to that because it's highly dependent upon the nature of the event that brought the two units down. It's also dependent upon the amount of maintenance that would need to be performed and surveillance testing when those units were brought down. And also finally but not least of importance would be resource constraints as well; a fixed number of staff available now having to support two units to restart.

So that is why I said I think in some earlier testimony that we thought on the order of three to five

days.

Q. Three to five days to bring two, to bring two units up; correct? If all things being considered from my previous question that you're saying, you know, basically you can just restart, restart the units, it'll take three to five days?

A. That would be correct.

Q. Okay.

MR. ROSS: Keino, could I inquire for a moment? The, the opportunity to, to take additional deposition of Mr. Stall, as I understand it, was offered to the parties because of the errata that was filed with respect to Mr. Stall's testimony.

MR. YOUNG: Yeah. We're going --

MR. ROSS: I think some of the questions that you're asking have -- were addressed in the previous deposition.

MR. YOUNG: Yes. We're going to get to the, we're going to get to that errata. I just want to lay -- I just want to get some background and everything else in terms of this deposition. I did not take the last deposition. I took -- I'm taking this deposition, Mitch.

MR. ROSS: I understand. But Ms. Bennett is there. She took the last deposition.

MR. YOUNG: Yeah. Uh-huh.

MR. ROSS: So we look forward to you getting to the errata.

MR. YOUNG: Yeah. Yeah. But, you know, you know, we're going to get there. Okay?

MR. ROSS: Okay. Proceed.

BY MR. YOUNG:

Q. Was the cause of the trip in this docket immediately obvious?

A. Yes.

Q. Okay.

A. Keino, I presume you're speaking to the Flagami trip at Turkey Point.

Q. Yes. The Flagami trip. And let me clarify, let me just state that any time I'm talking about the trip in terms of the shutdown, I'm trying to really focus on the Flagami trip. Okay?

A. Okay.

Q. The Flagami shutdown.

All right. Hold on one second.

(Pause.)

In your response to Interrogatory Number 43 you were asked if the total outage time for Turkey Point Unit 3 would have been 128 hours if Turkey Point Unit 4 had not been manually tripped. Do you remember that?

A. Give me a moment to find that interrogatory, please.

Q. All right.

A. I do. I have it now in front of me and I do remember that.

Q. Okay. And your response was that it was impossible to create a hypothetical scenario that models all the factors that would be required to definitively question -- definitively answer the question; correct?

A. Correct.

Q. Do you believe that a manual trip of Unit 4 had an impact on the total outage time for Turkey Point Unit 3?

A. Yes. I believe there was an impact, but I also believe, as I stated in the interrogatory, that to be able to suggest that it was 30 hours or some other discrete number of hours is, is impossible.

Q. But do you believe the impact had a significant -- do you believe that the trip of Unit 4 had a significant impact on Unit 3?

A. No.

Q. Okay. In your response to Interrogatory Number 9 you provided a list of operational modes for Turkey Point, the Turkey Point units; correct?

A. One moment. I'm looking for Interrogatory

Number 9, please.

I have that now in front of me. I have it, Keino.

Q. Yeah. And let me, let me repeat the question.

In your response to that interrogatory, Number 9, you provided a list of operational modes for Turkey Point, for the Turkey Point units; correct?

A. Correct.

Q. And if a unit goes -- and the mode -- you list several modes. What -- how many modes are those, are there?

A. There are six modes.

Q. Okay. Now focusing on the first three modes, if a unit goes from Mode 1 -- what is Mode 1?

A. Mode 1 is defined as power operations.

Q. Okay. What is Mode 2?

A. Start-up.

Q. And Mode 3?

A. Hot standby.

Q. Okay. Now if a unit goes from Mode 1 to Mode 3, is that considered an outage?

A. Yes.

Q. Okay. In your response to Interrogatory Number 4 you provided a list of unscheduled outages for Turkey Point Unit 3. And the last outage for Turkey

Point Unit 3 occurred --

A. One moment, Keino. When you flip between interrogatories, it would be helpful to me if you would give me a moment to catch up with you and find the interrogatory.

Q. Sure. I'm going to give you a moment. I just wanted to get the question out of the way first. So when you get it -- so -- and if you need me to repeat the question, I can repeat the question. Okay?

A. Okay.

MR. ROSS: Keino, just for the record, John Butler has just joined.

MR. YOUNG: Okay. Hey.

MR. BUTLER: Hey, Keino.

MR. YOUNG: Hey, John. How are you?

MR. BUTLER: Good. How are you?

MR. YOUNG: All right.

THE WITNESS: Okay. I have that now.

BY MR. YOUNG:

Q. All right. In that response, it's Interrogatory Number 4, you provided a list of unscheduled outages for Turkey Point Unit 3. And the last outage, the last outage, the last outage listed for Turkey Point Unit 3 occurred in June of 2008; is that correct?

A. Correct.

Q. Did Turkey Point Unit 3 enter Mode 3 operation during that, during that outage?

A. I'd have to go back and look. I suspect based on experience with this that they may have entered Mode 2 or Mode 3. You could have done this work in either mode.

Q. Okay. What's, what's an RPI system repair, what's that?

A. RPI system is the rod position indicator system.

Q. Okay. And why, why is an RPI system significant?

MR. ROSS: Keino, again, we are -- this, I think, was covered extensively in the deposition and is not -- the RPI is not dealt with in the errata for the, for the direct and the rebuttal testimony. So, again, I'm going to request that you stick to the, the errata because that, again, was the basis for FPL's offer to allow Mr. Stall to be re-deposed.

MR. YOUNG: Yeah. I understand that. It's okay. We're get -- we're going to get to the errata. We're getting there. We've just got to lay, we've just got to lay certain questions. Okay?

BY MR. YOUNG:

Q. So, Mr. Stall?

A. Yes.

Q. Well, you answered my question in terms of the RPI system.

If not for the event on February 26th, do you believe FPL would have performed an RPI system repair during the outage?

A. We were obligated to repair the RPI system at the next outage, whether it was a forced outage or whether it was a refueling outage, which would have been, you know, 18 months from October of 2007.

MR. BUTLER: Hey, Keino, I'm sorry. This is John Butler, and I apologize for jumping in here. But, you know, the RPI repair was on Unit 3. The errata that we are talking about is on Unit 4 and is about something that doesn't have to do with the RPI system. And I understand your need to have some background to go into the errata, but it's really hard for me to understand the connection between what we have added as errata, which is just specifically referring to a turbine trip at Unit 4 because of a reverse power switch, with these questions about the RPI system at Unit 3.

MR. YOUNG: Well, John, here's the thing. The errata -- I read the errata sheet and I'm familiar with the errata sheet. The errata sheet talks about trips in

terms of the unit tripping more than once. Well, we need to get back -- I want to get for me, for my understanding I want to get down to similar units in terms of Turkey Point Unit 3 as it relates to Turkey Point Unit 4, as it relates to the errata sheet. Okay? So I think it's relevant and I'm going to ask it.

MR. BUTLER: Well, keep going, but it's kind of hard for us to see any connection. And I think clearly --

MR. YOUNG: I understand that. I understand that. And my thing is if you want to object to it, you can object to it and preserve your objection for the record. That's fine with me. Okay?

MR. BUTLER: We would object to it as irrelevant. I won't direct at this point Mr. Stall not to answer the questions, but I do not see this as relevant to the intended topic of this continuation of the deposition.

MR. YOUNG: I understand that. You have, you have, you have that option, if you want to do that. That's fine with me. Okay?

MR. BUTLER: Okay.

MR. YOUNG: All right. Hold on one second.

(Pause.)

BY MR. YOUNG:

Q. Mr. Stall, how long does it typically take to go from Mode 2 to Mode 1?

A. Well, that's a difficult question because it's very dependent upon specific plant conditions at the time. For example, if it's occurring during a period of time when you have a shift turnover, we'll stabilize the plant and turn the shift over because of overtime requirements. So that would add another hour and a half to the transition.

If you're having a problem with some piece of instrumentation or equipment, that could delay the, the timeframe. But I would say, you know, on average, a ballpark, it could be a shift.

Q. And how long is a shift?

A. It could be eight to 12 hours.

Q. Okay. Looking at Interrogatory Number 13, you indicated that FPL commenced startup of the Turkey Point Unit 4 on February 28th at four fifty -- 4:58 p.m. If you can turn to that and I'll repeat the question.

A. I have it.

Q. All right. You indicate -- you stated that FPL commenced startup of Turkey Point Unit 4 on February 28th at 4:58 p.m.; correct? 4:58; is that correct?

A. 04:58, not 4:58 p.m.

Q. Yeah. 04:58; is that correct?

A. That's 4:58 in the morning.

Q. Yes. All right. Now based on that, based on that statement, does this mean that Turkey Point Unit 4 entered Mode 2 operation at that time?

A. No. Typically, and I'd have to go back and look at the operator logs on this, but typically I would define commence startup as beginning to what we call pull rods for criticality.

Q. Okay. Hold on one second. All right.

(Pause.)

Mr. Stall, let me ask you a question. What is the typical time for power ascension?

A. Again, Keino, there is no typical time because it depends upon whether or not you're coming out of a refueling outage with fresh fuel, for example, where you have very specific fuel preconditioning guidelines that limit your ramp rate and power ascension to condition the fuel or whether you're in the middle of an operating cycle and starting up. So I can't, I can't answer that with any specificity.

Q. Based on your experience, can you guestimate?

A. No, I can't guestimate on that because there's, there's just too many variables.

Q. Okay. Okay.

(Pause.)

Mr. Stall?

A. Yes.

Q. This is pertaining to, this is pertaining to Turkey Point 3 or 4. Okay? Are you aware of any documentation pertaining to the decision or potential decisions to shut down Turkey Point 3 or 4 during the shoulder months in order to perform the RPI system repairs?

A. No.

Q. So FPL never discussed whether to shut down the Turkey Point, whether to shut down Turkey Point 3 or 4 during the shoulder months in order to perform the repair or any repairs, any other repairs?

A. Well, if you mean was there any talk about doing that, I can tell you that in my mind, I was the Chief Nuclear Officer responsible for operations at that time, I had mulled over in my mind that we would most likely take an outage in the shoulder months and do that repair even though we weren't obligated by the Nuclear Regulatory Commission to do it. And it was simply based upon my experience of gaining incremental margin with our regulators, not taking advantage of everything that we had available to us, but being proactive and going after this in a conservative way, and also recognizing

that we want these units to be in service during the peak load months in the winter and the summer, and that by looking for an opportunity over, over a period of time in the shoulder months where we could do some maintenance to position the unit for the peak summer loads, that that would be a smart thing to do.

But did -- we did not create any paper or documentation about that, but I can tell you that's, that's sort of an operational thought pattern that we -- that I went through.

Q. Did you discuss that, did you discuss your thought pattern in terms of taking, shutting down on the shoulder months the units to do the RPI repair system or any repair with anyone in the company?

A. No.

Q. So you just -- it was just a thought for yourself?

A. Well, it was something that was in my mind that as we approached that period of time, then, you know, I would have had those discussions with our system operator and our power resource planning department to look for opportunities there. But it was -- you know, February is premature. I wouldn't have been doing that at that point in time. So I did not have specific discussion with anybody on that.

Q. Did you talk to your staff about it?

A. No. I said I haven't, I didn't speak to anybody about that.

Q. I know, I know what you said, sir. Let me -- I just want, I just want to be totally clear. So you did not talk to your staff about shoulder months, possibly shutting the units down during the shoulder months to do the repairs or any other repairs?

A. No, I did not speak to my staff.

Q. Okay. Okay. And now you said you talked to your resource -- usually you talk to your resource planning person, correct, if you're going to do that?

A. Correct.

Q. Did you talk to them about that?

A. No, I did not speak to the resource planning personnel --

Q. Okay.

A. -- regarding a potential shutdown of the unit to do the RPI repairs in the shoulder months.

Q. I'm not -- let me, let me be clear. I'm not talking about the RPI repairs. I'm talking about any repairs.

A. I would not have those, that discussion with, at that level of detail with them in any event.

Q. Okay. Well --

A. If we would have had a forced outage, we were required by law to go do the repair like we did when we had the Flagami event. I wouldn't have had that discussion with them.

Q. I'm not talking about a forced outage, sir. Let me, let me -- let's, let's back up for a second.

I asked you in terms of whether you considered bringing down the units during the shoulder months to conduct any, the RPI system repair or any other repairs. That's what I'm focusing on. And I want to make, I want to make the record very -- I want to clarify the record. You did not talk to anyone, that means the RPI resource, any employees, any upper management person or any, any of your counterparts as it relates to possibly shutting, shutting the units down to do any repairs during the shoulder months.

MR. ROSS: Keino, are you, are you asking at any point in time or are you asking specifically about, you know, a particular date?

MR. YOUNG: I'm talking about --

MR. ROSS: Because I'm sure Mr. Stall has had discussions with numerous people about potential unit shutdowns. He's been with the company for many years, so it's a pretty broad and open-ended question.

BY MR. YOUNG:

Q. I'm talking about from the point in time you got the letter from the NRC stating that you need to do, you need to do the RPI system repairs to the shutdown of the units. So in that timeframe.

A. Well, the answer to that question is yes because I, we specifically directed the sites to prepare all the planning and packages for the next opportunity to repair that, which could have been any forced shutdown. It could have been the day of Flagami or it could have been the next day or two weeks or a month later. We had to direct the staff to be prepared to execute that repair no matter when it happened in order to minimize the out of service time in advantage to our customers.

Q. All right. And did you talk about shoulder months?

A. No.

Q. Okay. Shoulder months was not an option?

A. Shoulder months would have been an option, but, you know, the discussion was around this event could happen at any point in time. We need to be prepared to execute the repair regardless of when it happens.

Q. Okay. I get, I get -- well, let me ask it this way because I think we're talking in circles.

During that discussion in terms of we need to be prepared, when you told your staff and you told, and FPL was discussing, saying we need to be prepared, did, did a discussion of bringing the units down during the shoulder months ever appear at all?

A. Keino, I've told you three times now there was no discussion around specifically shutting the unit down in a shoulder month. The discussions were around being fully prepared to execute the repair on the RPI system at any point in time, any moment in time.

The thoughts around the shoulder months were in my mind if the units continued to run, perhaps an opportunity would present itself to proactively go do that. But that was in my mind solely and not discussed with anybody else.

Q. That was in your mind solely. And explain to me a reason why you never actually, since, since it was an option in your mind, why you never actually brought it to the forefront of anyone, brought it to the discussion of anyone as an alternative?

A. Would you please repeat that question? I mis --

Q. Can you please explain to me why you never brought it as an alternative since you had, since you logically thought a shoulder month might be an option,

why you never alerted anyone of that option?

A. Because it was -- the period of time when we would have done that was still in the, in the near to distant future, and the opportunity for presenting itself and discussing that with the staff had not arrived yet.

For example, what if we had had two St. Lucie units down during that period of time? Then that wouldn't have even been an option to do that. So it was something in the back of my mind that if the system was in good shape, all of our other nuclear units were running well with no problems, then I could approach our power resource department and have that conversation. But it was, it was, it was too far in the future, if you understand what I'm trying to say.

Q. Yes.

A. I needed to see how things played out with how the system was performing, what the loads were like, whether or not we had any threats at any of our other nuclear units before I would, you know, go to our power systems people and suggest that that, you know, or request that opportunity.

Q. Okay. Let me ask you, what is the philosophy for shutting, for shutting service down during the shoulder months instead of over the peak months, peak

loads?

A. Well, let's just, let's take an example at the extreme. Let's say it's, you know, it's July and the loads are, system loads are at an all-time high and, you know, we're running the most expensive generation in the system to keep load going. Well, then you wouldn't want to take down a low-cost nuclear unit at that point in time.

On the other hand, if it was a shoulder month, loads were very low and, you know, our average cost in the system was very low, that would be an opportune time if you had a problem with a nuclear unit to take a planned, we call it a planned outage to resolve that problem so that you eliminate or at least minimize the potential of a forced shutdown at the worst time with the highest loads that would inflict the most cost on the customers.

Q. Okay. Now, so shoulder months are cheaper than peak load months; right?

A. Correct.

Q. Okay. And it's -- okay. Now you indicated that on February 28th that there was an automatic shutdown due to the reserve power protection; correct?

A. Incorrect.

Q. Okay. Please correct the statement.

A. Maybe you need to ask the question again. Maybe perhaps I misunderstood. Say it again.

Q. Oh, I'm sorry.

MR. ROSS: Keino, are you directing Mr. Stall to a particular document? Because your question started "You stated that."

MR. YOUNG: We are, we now are at the errata sheet.

THE WITNESS: Okay. We're at the errata sheet. Okay. Give me a moment.

MR. BUTLER: I think you meant reverse instead of reserve.

MR. YOUNG: Yeah. I mean reverse. I'm sorry. I was going to correct that.

THE WITNESS: Now I understand what you're saying. So why don't you just repeat it again just so that I'm for sure what you want.

BY MR. YOUNG:

Q. I will. Okay. So you indicated that there, you indicated on February 28th that there was an automatic shutdown due to the reverse power protection; correct?

A. Yes. An automatic shutdown of the turbine, to be clear, not the reactor.

Q. Okay. What happened? Why was there a reverse

power -- why did you shut down the units for the reverse, reverse power protection?

A. Well, first of all, let me, let me clarify one thing. There was not an actual reverse power condition. It was a failure of a relay that would sense for reverse power protection.

The reverse power protection scheme is in place, a lot of people think to protect the generator. Actually it's there to protect the turbine. And what, what it's all about is if you have too low a steam flow through the turbine, the tips of the blades can overheat and you can damage them. So there is protection associated with the turbine for that, but there's a redundancy in this reverse power relay. Because if you've got too little steam flow going through the turbine, then it also means that you're not producing enough power. And what'll happen is you'll reverse flow power from the system back into the generator and it'll actually turn the generator into a motor. So this particular relay failed. There was no actual reverse power condition.

Q. Okay. Now you just discussed the relay, the failure of the relay for the protective circuits. How often do these relays -- how often are these relays tested?

A. Every refueling outage, which is every 18 months.

Q. Okay. How much time does it take to replace the relay?

A. About eight hours.

Q. Are these relays unique to nuclear power plants?

A. I can't answer that with certainty. I just, I suspect that they're not unique to -- they're used in general industry, but I don't know for certain.

Q. Okay. Has a similar failure, has a similar failure occurred in the past?

A. I'm not aware of a similar failure.

MR. BUTLER: I'm sorry. Do you mean at FPL's nuclear facilities, Keino?

MR. YOUNG: Yes.

THE WITNESS: I'm not aware of any.

BY MR. YOUNG:

Q. When you say you're not aware of any -- I don't want to parse words here, but when you say you're not aware of any, that means that you just, you just don't know?

A. I just don't know.

Q. So, so given the fact of your position, had a, had a failure occurred before, you would have known,

correct, based on your position?

A. Not necessarily.

Q. Not necessarily. Can you please explain that?

A. Yes. Let's say, for example, that -- as I indicated earlier, these relays are calibrated, tested every refueling outage. If, for example, during one of the refueling outages one of these relays is tested and it's found to be somewhat out of calibration and can't be calibrated, that relay would be replaced and I would not be aware of that.

Q. What --

A. And I can't say that I would even be aware of an event like this, and I wasn't on this particular event initially until we found it in the records, because it just wouldn't rise to the level of, of concern to me because it was not, did not manifest itself in a reactor trip. It was not reportable to the Nuclear Regulatory Commission.

Q. So you only deal with things that are reportable to the Nuclear Regulatory Commission, that's the only time you want to know something?

A. No. That's not what I said, Keino.

Q. Well --

A. I said that I would not be aware of every, you know, of, of this particular relay failure because it

would not have been reportable to the Nuclear Regulatory Commission. There could have been a failure during a routine outage.

You have to realize there's thousands of, tens of thousands of components in these plants that have problems from time to time and fail, and there's no possible way that any one person can be aware of all of those things. You multiply that times four nuclear power plants in Florida.

Q. So that's just a part, so that's just, so that's just a part of the startup of a nuclear power plant, a nuclear plant startup; right?

A. What's just a part of it?

Q. Failures.

A. Failures are going to occur. These are complex machines. There are going to be equipment problems that occur from time to time. And our challenge, not just at FPL but in the industry, is to have the right personnel trained and to be able to respond to those equipment failures and correct them, and then incorporate that lessons learned or that operating experience into our database to further refine our approach to maintenance in the future.

Q. Okay. Would this failure occur, would this failure had occurred, have occurred if Turkey Point Unit

4 was operating in the operation Mode 1?

A. I can't say that. I don't know. It would be speculative.

Q. Okay. Now looking at, still focusing on the errata sheet, you indicated that Unit 4 had two shutdowns; right?

A. Where are you at exactly in the errata sheet?

Q. I'm on page, I'm on, I'm on Line Number 4. There were two planned shutdowns that extended the outage of Unit 4.

A. Yes.

Q. Okay. I know you might have talked about it already, but what were the problems that caused the shutdown?

MR. ROSS: Objection. Asked and answered. You can answer it.

THE WITNESS: Are you referring -- are you now moving off of the relay and now do you want to talk about the steam generator level reactor trip?

BY MR. YOUNG:

Q. I'm -- yeah. Focusing, focusing on, focusing on your errata sheet, what caused the two shutdowns, what --

MR. ROSS: You know, again, Keino, the errata sheet does not deal --

(Simultaneous conversation.)

THE COURT REPORTER: Wait. Wait. Wait. Tell him to start over. Excuse me.

MR. YOUNG: Time out. Time out, Mitch.

THE COURT REPORTER: Excuse me.

MR. YOUNG: Mitch. Mitch, time out. She wants -- the court reporter wants you to start over again.

THE COURT REPORTER: You guys were talking over each other, so --

MR. ROSS: Okay.

THE COURT REPORTER: Thank you.

MR. ROSS: Yeah. Keino, the, the errata sheet does not deal with the steam generator water level issue. That was dealt with in the direct testimony. That was explored extensively in the deposition. And the errata sheet simply changes the number of, you know, that indicates that there were two shutdowns that extended the outage. One is the steam generator issue. One is the issue that Mr. Stall just testified about.

MR. YOUNG: Okay. Well, then he can, he can -- if you just repeat what Mr., what Mr. Mitch said -- Mr. Ross said, then, Mr. Stall, we'll be fine.

BY MR. YOUNG:

Q. What were the two -- what caused the two

shutdowns?

A. The first shutdown was a shutdown of the turbine only. The reactor stayed critical. That was due to the, excuse me, to the failure of the reverse power relay associated with the generator protection that we just finished discussing.

The second shutdown was a manual reactor trip associated with a high, high level in the steam generator at Turkey Point Unit 4.

Q. Okay. When did, when did you alert the Commission of the two planned shutdowns?

MR. ROSS: I'm sorry, Keino. Which Commission?

BY MR. YOUNG:

Q. The Public Service Commission, the Florida Public Service Commission of the two planned shutdowns.

A. You're going to need to give me a moment to look at the paperwork here for that.

Keino, I'm not exactly sure if this is what you're after, but we, we discussed the steam generator level trip in the direct testimony in January, and we discussed the turbine trip due to reverse power protection in this errata sheet that we're currently discussing. There is no requirement for us to notify the Public Service Commission realtime of these events.

Q. When did you know, when did you know about the shutdown that caused the errata sheet?

A. Let me look at the date for this errata sheet.

Q. Well, let me ask you, when did you know of the shutdown that caused you to file the errata sheet? When were you alerted of the shutdown that caused you to file the errata sheet?

A. One moment, please.

We filed the errata on March the 2nd, so it would have been probably the day before, March 1st, the turbine shutdown.

Q. That's when you were, that's when you were notified that there was a shutdown, there were two shutdowns on Unit 4?

A. On or around March 1st I became aware of the shutdown due to reverse power protection relay failure on Unit 4.

Q. And that's March 1st -- you said March. Is that 2010?

A. Correct.

Q. Okay. Let's focus more on the, on that relay.

Would that relay have failed if Turkey Point 4 was not down?

MR. ROSS: Objection. Asked and answered. You can answer, Mr. Stall.

THE WITNESS: As I said before when you asked me this question, I can't -- that would be speculative and I can't say that with certainty.

BY MR. YOUNG:

Q. During, during -- you said that you go down every 18 months; correct?

A. That's for planned refueling outages. Correct.

Q. Okay. All right. And you inspect, you inspect the relay then; right?

A. Yes.

Q. Okay. Based on your experience then, in terms of your industry experience and what you've learned in the industry in over, over 30 some plus years, would the relay have failed if Turkey Point Unit 4 were not down?

MR. ROSS: Objection. Asked and answered. Mr. Stall has answered the question twice already, that same question.

MR. YOUNG: Okay. Are you instructing him not to answer?

MR. ROSS: I'm not instructing him not to answer, but.

BY MR. YOUNG:

Q. Okay. Mr. Stall, then answer the question, please.

MR. ROSS: You can answer the question again.

THE WITNESS: The answer to the question is, again, I don't -- I can't say that. It was speculative. I don't know whether it would have failed or it wouldn't have failed.

BY MR. YOUNG:

Q. Have you ever heard of a relay failing from, at another plant when a unit, when a unit was not down?

MR. ROSS: Are you asking about any particular relay?

BY MR. YOUNG:

Q. Any particular, any particular relay, any particular plant. Have you ever heard of it in the industry?

A. Yes. But it's, it's immaterial, not germane to the discussion on this particular relay. It's apples and oranges.

Q. Okay. Why?

A. Because relays are designed to function in a variety of ways. Some are energized to actuate, some are de-energized to actuate, some are master relays, some are slave relays. It just depends upon the application and the environment that the relay is located in. So there is no way on this earth to extrapolate operating experience in general with relays

to this specific relay.

Q. Okay. You just, you just, you just did -- you just said a mouthful in terms of the types of relays. Which relay is this one that caused the, that caused the trip?

A. I don't know, Keino.

Q. Did you investigate, did you investigate which relay it was that caused the trip?

A. Our staff investigated the failure of this particular relay and took corrective actions associated with its failure.

Q. Okay. So you know they took corrective action associated with the failure. Did you bother asking which relay tripped, which relay caused the trip?

A. I became aware of it on or about March 1st, and it was self-revealing to me when I saw the documentation. I knew what relay it was because it was described.

Q. Okay. And so I'm asking you, which relay caused the trip? You said --

A. The reverse power protection relay caused the trip.

Q. Okay. Now let's go back on the time frame. So this thing happened, so the trip, the trip happened in 2008. You were notified, you were notified in March

of 2010; correct?

A. Correct.

Q. Okay. Was there -- did any of your supervisors, were any of your supervisors notified before March of 2010 that it --

A. Yes. They were, they -- the operating staff and maintenance staff at Turkey Point was notified immediately upon the failure of the, upon the turbine trip, and they were dispatched with a work order to investigate and repair.

Q. Okay. Did you have to -- I think you might have answered this already. Give me one second.

(Pause.)

Mr. Stall?

A. Hey, Keino.

Q. All right. Now let me -- back to the relay. Were you up at full power before the trip, and how long were you at full power?

MR. ROSS: Keino, are you asking before the trip on reverse power protection?

MR. YOUNG: Yes.

MR. ROSS: The question you're being asked is were you -- was the plant online at power when this trip occurred?

THE WITNESS: The answer to that is, no, we

were not at power. We were in startup operations. We were, we were, we were preparing to place the generator online and go into service and produce electricity.

(Pause.)

MR. YOUNG: Okay. Mr. Stall?

THE WITNESS: Yes.

MR. YOUNG: I thank you. You've been -- you're a great sport. I have no further questions.

THE WITNESS: Okay. Thank you.

MR. YOUNG: I think OPC and FIPUG did cross-notice.

MR. BECK: Yeah. Keino, this is Charlie. I have no questions. Thank you.

MR. YOUNG: All right. Vicki?

MS. KAUFMAN: Yeah. I have a couple of questions.

CROSS EXAMINATION

BY MS. KAUFMAN:

Q. Good morning, Mr. Stall.

A. Good morning, Vicki.

Q. I wanted to just follow up a little bit on what Keino asked you so that I can be sure that I understand the genesis and the timing of this errata sheet.

You filed direct testimony in January,

rebuttal testimony in February. You had your deposition taken I think at the beginning of February, you said, and then you filed this errata March 2nd, and I think you said you were, you became aware of the relay issue on March 1. Is that chronology correct?

A. I said on or about March 1.

Q. Okay. On or about March 1.

How is it after filing all that testimony, and I'm assuming, and you can correct me if I'm wrong, that you reviewed the documentation relating to this outage, why is it that you didn't discover this additional relay issue until on or about March 1?

A. Well, Vicki, if you go back to my direct testimony, it's, it's really written at a relatively high level with events that occurred during that period of time that really rose to a significance level. And by that I mean, you know, reportability, for example, to the Nuclear Regulatory Commission.

So if you take the two events that we've been discussing here this morning, one being the failure of the reverse power relay and the other the steam generator level trip, on the one hand the steam generator level trip resulted in a reactor trip which was reportable to the Nuclear Regulatory Commission and the actuation of a safety system in the plant. So that

rises to a much higher level of significance and even internal reporting in the nuclear division. So you have that one example.

And then you have this other example that we're talking about, which was the failure of a reverse power relay which occurred somewhere between 3 and, say, 7 percent power, and the important thing being that the reactor power was less than 10 percent. So we have what's an interlock down there that means that if the turbine trips, the reactor will not trip, so you don't have a reportable event to the Nuclear Regulatory Commission.

So these sorts of things, events like this relay failure are not atypical during the startup of a nuclear power plant from whether it's a refueling outage or any condition. And so there is no formal reporting requirement within the division to notify the chief nuclear officer of an event like that. So it only revealed itself to us when we -- I think we were, I think we were requested to go back and take, take another look at this from a staff question, and we went back and further reviewed our documentation and then we found this event. And we felt like in the spirit of full transparency that we ought to go ahead and reveal that, and that's the genesis of the errata sheet.

Q. So I'm going to paraphrase your answer as I understand it, and if I misspeak, I'm sure you'll tell me.

In your mind the relay issue was not a significant issue; is that right?

MR. ROSS: Objection. Objection. Mischaracterizes the testimony.

BY MS. KAUFMAN:

Q. Okay. Well, I thought I heard you say that this didn't come to your attention because in the scheme of things it wasn't as significant as the other issue that you did testify about originally.

A. That's correct. It was, it was not an actuation of a safety system. It did not result in a reactor trip. It was a straightforward failure of a relay, and it was a failure of a relay that occurred when there wasn't even an actual reverse power condition. So it, it, it caused no equipment damage. It, it was a straightforward repair, so it would not have been reported up the chain to my level.

Q. Well, let me ask you this, Mr. Stall. When a nuclear unit goes down for whatever reason, would I be correct that Florida Power & Light does what I might refer to as a root cause analysis as to why the unit went down and then what has to be done to bring it back

up?

A. Yes.

Q. Is that a written form?

A. Yes. It is a written form, and I believe we have actually supplied that document to the PSC for this particular relay.

Q. And that was supplied, I'm assuming, in response to a discovery request?

A. Yes.

Q. Mr. Young might have answered this question and I -- asked you and I apologize, but am I correct that you cannot tell us the time that the unit was down that's attributable to this relay issue?

MR. ROSS: Objection. Mischaracterizes the testimony.

THE WITNESS: I think we're able to go back and look at the sequence of events and the operator logs and ascertain that it was approximately eight hours associated with the failure of this particular relay.

BY MS. KAUFMAN:

Q. Mr. Young also asked you some questions about shoulder months and your view of that. What does FPL consider to be the shoulder months?

A. In my experience, the shoulder months would be from probably late March through maybe perhaps early May

for the spring. And in the summer it would be, you know, several weeks after Labor Day into October perhaps. But, you know, that's just my personal experience. I'm sure you could get a slightly different answer if you were speaking to our power resource folks.

Q. But you'd agree certainly that February wouldn't be included as a shoulder month; correct?

A. No. February would not be a shoulder month.

Q. And everything being equal, that would be the time when the company would like to see their nuclear plants at full operation, would you agree?

A. Yes. Because there would still be potential for cold weather in February.

Q. In your errata sheet, back to this relay issue, you say in -- I'm sorry. I'm not clear what the line numbers are on this errata sheet. But the question is, it's in the middle of the page, "What was the cause of the relay malfunction?"

A. Yes. I see that, Vicki.

Q. And in the second sentence you say, "The malfunction was a random mechanical failure."

Can you tell me what that means? What do you mean by that?

A. Well, if you have a large population or batch of any particular component, in this case relays, there

are going to be over a period of time a certain amount of failures of these relays. And it's, it's -- they don't necessarily all have the same cause, initiating event, and they will be randomly distributed across that population of components, in this case relays.

Q. So would it be correct to say that by random you might mean unpredictable, that you wouldn't know when it would happen?

A. That's correct. For example, to maybe even further provide a little context to you, as I said earlier to Keino, we, every refueling outage our technicians would go in and look at these relays, this particular relay in this case, and check, check it functionally to make sure it works properly, cycle it, check, you know, all of the proper checks on it, calibration, et cetera, to make sure that it is in our eyes worthy for operation for the next cycle.

And so in this particular case there was nothing that was found the last time that relay was examined to suggest that there was a potential failure or otherwise we would have replaced it at that time, but yet it failed before the next refueling outage. So that's an example of, of a random failure. That happens from time to time.

Q. And likewise I guess there would be no, no

reason to conclude that if the unit had not gone down, there would have been this random failure.

A. That's correct. And that's why, why I spoke to Keino to say that, you know, we couldn't say one way or the other whether or not this relay would have failed had the unit not gone down. It's impossible.

Q. Back to your errata sheet, are you now comfortable that you have provided all of the events that led to the shutdown?

MR. ROSS: Objection. Which -- I'm not sure which shutdown you're, you're speaking of.

BY MS. KAUFMAN:

Q. Well, I'm referring to your errata sheet that you amended to add this relay issue, and I just want to understand if it's your position now you have told the Commission and the parties about all of the issues that have resulted from the nuclear shutdown.

MR. ROSS: Again, that question -- objection. Question is vague and ambiguous. If you can understand it, you can answer it.

THE WITNESS: Well, I think I understand what you're asking, and, and all I can say is I certainly hope so. I know now that our staff has had two bites at the apple at this thing and they've looked at it, and I think that we've, we've gotten everything. But I -- if

you were to ask me absolutely, you know, I couldn't say because I didn't personally do the work. But I feel very comfortable that after two passes through the data that this is it.

BY MS. KAUFMAN:

Q. Is your staff still continuing to review the data?

A. No. I think the staff has moved on to other assignments at this point in time.

MS. KAUFMAN: Thank you, Mr. Stall.

THE WITNESS: You're welcome, Vicki.

MR. ROSS: This is Mitch Ross. I have a few questions for Mr. Stall.

CROSS EXAMINATION

BY MR. ROSS:

Q. You were asked about a root cause analysis that's done for certain issues at the nuclear plants.

A. Yes.

Q. And was the root cause analysis of this reverse power protection relay issue, was that provided to the parties in this case?

A. Yes, it was.

Q. And can you just identify for the record the, the question that -- and who asked it and where it was provided?

A. Interrogatory 1, OPC 3/3/2010 request Interrogatory 1, question, "Provide the root cause analysis of the malfunction in the reverse power protection system which occurred during the restart of Turkey Point Unit 4."

Answer, "Documents responsive to this request are Bates Number FPL-FI-10-176 through FPL-FI-10-301."

Q. You were asked some questions about whether your staff was notified of this, this relay issue and the shutdown at the time. Would this root cause analysis document show who at the plant reviewed the issues and came up with the corrective action and so on?

A. Yes. This root cause analysis would provide that level of detail.

Q. How many, if you can approximately, how many root cause analysis are prepared at, say, Turkey Point on an annual basis?

A. Well, I'd start with the number of condition reports which are the genesis document for this, and there's thousands of those literally prepared each year. Root cause documents, I suspect on the order of hundreds.

Q. Are you required, when you were the Chief Nuclear Officer, are you required to review every root cause analysis prepared by your Turkey Point plant?

A. No.

Q. One moment, please.

(Pause.)

Mr. Stall, with respect to the root cause analysis of the reverse power protection relay issue at Turkey Point 4, does the root cause analysis, this document, does it demonstrate that the staff, the Turkey Point staff took the issue seriously and addressed it responsibly?

A. As you read through the root cause, it's, it's apparent that as soon as this trip occurred on reverse power, that the operating staff and maintenance staff initiated promptly the right corrective actions. By that I mean to assign technicians to troubleshoot and repair the relay, which we did.

And then we took that failed relay and we sent it to a laboratory for analysis to understand what the failure mechanism was for that relay, and we took that information that came from the laboratory and applied it to the rest of our nuclear plants to see if we had any similar vulnerabilities out there. So as I read through the root cause, I was quite satisfied that we took it very seriously and we promptly addressed and corrected the problem and applied those lessons learned to the rest of our plants in the fleet.

Q. Can you compare a turbine trip without affecting reactor operations versus a reactor trip in terms of the significance level from your perspective?

A. Well, as I was indicating earlier to Keino, on the one hand, if you have a reactor trip and safety systems actuate, that's a reportable event to the Nuclear Regulatory Commission. It is at a very high level of management attention and resource commitment to that.

On the other hand, in this particular case with a turbine trip with a reactor power less than 10 percent, it's not a, what we call, it's not a shot on goal for a safety system, no safety system actuation. The reactor in fact is designed to stay at power with a turbine trip less than 10 percent. It's not reportable to the Nuclear Regulatory Commission. It doesn't mean that it doesn't get the prompt attention from our maintenance and operating personnel to correct the condition, as I said earlier, but it does mean that it's at a different level of significance in terms of nuclear safety concern, regulatory concerns, those sorts of things.

Q. You were asked some questions about what triggered the discovery of this issue and why you filed your errata sheet. Do you remember the staff issuing an

interrogatory that requested the company to identify the last three unsuccessful start-ups on each of the Turkey Point nuclear units?

A. Yes, I do. And that was how this particular failure of this relay was brought to light was through that staff request.

Q. So this came up, was identified as an unsuccessful start-up in response to the staff's interrogatory?

A. Correct.

MR. ROSS: No further questions.

MR. YOUNG: Okay. You guys, do you want to read and sign?

MR. ROSS: We'll read and sign.

(Deposition concluded at 10:46 a.m.)

ERRATA SHEET
DO NOT WRITE ON TRANSCRIPT - ENTER CHANGES HERE

IN RE: DOCKET NO. 090505-EI
NAME: J. A. STALL
DATE: March 11, 2010

PAGE	LINE	CHANGE

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, CRR, RPR, Official FPSC Commission Reporter, do hereby certify that I was authorized to and did stenographically report the foregoing deposition at the time and place herein stated.

I FURTHER CERTIFY that this transcript constitutes a true record of the testimony given by the witness.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 15th day of March, 2010.

Linda Boles

LINDA BOLES, CRR, RPR
Official FPSC Hearings Reporter
850/413-6734

STATE OF FLORIDA

COUNTY OF PALM BEACH

CERTIFICATE OF OATH

I, the undersigned authority, certify that **ART STALL** personally appeared before me at Florida Power & Light Company, 700 Universe Blvd., Juno Beach, Florida, and was duly sworn by me to tell the truth.

WITNESS my hand and official seal in the City of Juno Beach, County of Palm Beach, State of Florida, this 11th day of March, 2010.

AMY LOWE
Commission DD 782917
Expires May 11, 2012
Bonded Thru Troy Fain Insurance 800-385-7019

Notary Public
State of Florida

My Commission Expires:

Personally known X or who has produced _____.
Type of identification produced _____

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In Re: Review of Replacement Fuel Costs)
Associated with the February 26, 2008, outage)
On Florida Power & Light's electrical system.)

DEPOSITION OF DAVID E. DISMUKES, PH.D.

Monday, March 8, 2010
1:40 - 3:38 p.m.

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

Reported By:
Barbara Haralambous, Court Reporter
Notary Public, State of Florida
West Palm Beach Office Job #153313

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ALSO PRESENT:
ROBERT GRAVE

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LATE-FILED DEPOSITION EX. 2	REMAINING PAGES (AFTER 16) FROM NRRI ARTICLE BY KEN COSTELLO, DATED SEPTEMBER 2009	69
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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 35
COMPANY Florida Power & Light
WITNESS Dep. of David A. Dismukes taken 3/08/10
DATE 03/17/10

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PROCEEDINGS

- - -

Deposition taken before Barbara Haralambous, Court Reporter and Notary Public in and for the State of Florida at Large, in the above cause.

- - -

MR. BUTLER: This is John Butler, representing Florida Power & Light Company.

MR. BECK: This is Charlie Beck. And with me is Joe McGlothlin. We're with the Office of Public Counsel, appearing on behalf of the citizens of Florida.

MS. BRADLEY: This is Cecilia Bradley, appearing on behalf of the Attorney General for the State of Florida.

THE REPORTER: You need to speak up, please.

MR. BUTLER: I think they spoke over each other. That was Cecilia Bradley.

MS. BENNETT: This is Lisa Bennett, with the Public Service Commission. And with me, I have Robert Grave.

MS. KAUFMAN: And this is Vicki Kaufman of Keefe, Anchors, Gordon & Moyle, on behalf of The Florida Industrial Power Users Group.

MR. BUTLER: Okay.

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Okay, Dr. Dismukes?

I guess he's still retrieving the notary.

(Discussion held off the record.)

THE WITNESS: Are you ready?

MR. BUTLER: I am.

THE WITNESS: Okay. You all ready?

MR. BUTLER: Yes.

Do you have the notary with you?

THE WITNESS: I sure do.

MR. BUTLER: If you could have him or her identify themselves and then administer the oath.

And the court reporter here can give you an e-mail address, which if you are set up to do, and if you could just scan the oath and e-mail it to her, that would be great.

THE WITNESS: Okay.

MR. BUTLER: Okay. So, the notary is?

MS. McKEITHEN: Marjorie McKeithen.

MR. BUTLER: How do you spell your last name?

MS. McKEITHEN: M-c-K-e-i-t-h-e-n.

MR. BUTLER: Okay. Thank you.

MS. McKEITHEN: All right.

Will you, please, raise your right hand.

- - -

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Thereupon,

(DAVID E. DISMUKES, PH.D.)

having been first duly sworn or affirmed, was examined and testified as follows:

THE WITNESS: Yes, I do.

MS. McKEITHEN: All right, he is sworn.

THE REPORTER: Okay, let me give you my e-mail address.

(Discussion held off the record.)

MR. BUTLER: And if you wouldn't mind, if you could, just for redundancy sake, e-mail it to me, as well, to John.Butler at FPL.com.

THE WITNESS: Sure thing.

MR. BUTLER: That would be great. Thank you. All right, I think we're ready to get started.

DIRECT EXAMINATION

BY MR. BUTLER:

Q. Good afternoon, Dr. Dismukes.

A. Good afternoon.

Q. I would bet you've had your deposition taken a few times before; is that correct?

A. Yes, sir, that's correct.

Q. Okay. So, you've pretty familiar with the process?

A. Yes, sir.

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Q. All right. I will be, as you know, asking you questions; looking to you to answer the questions as I've asked them. If you have any question or confusion about the question, please ask me to clarify or repeat it; and I'll try my best to clarify it for you.

If you don't say anything about the question, we will assume that you understood it; is that fair?

A. That's clear.

Q. Okay. Thank you.

Let me start, Dr. Dismukes, by just asking you about the deposition notice and the materials that you have provided to us.

Do you have a copy of the deposition notice?

A. Yes, sir, I believe I do.

Q. Okay. And you're aware that the notice has three categories of documents that we asked that you have available; is that correct?

A. Yes, sir.

Q. Okay. And your counsel has interposed some objections, including the timeliness of the request; but am I correct that, to the extent you have documents responsive to these three categories, you have provided them?

A Yes, sir.

Q. Okay. Thank you.

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And am I also correct that all of the documents you provided or that your counsel provided to me, are responsive to the first request, which asks for workpapers and materials related to preparing your testimony?

A. Yes, sir.

Q. And you do not have any testimony that you've filed or provided previously addressing the manner of calculating a utility's replacement power or replacement fuel costs, which is the subject of the second request; is that correct?

A. There are no documents responsive to that request.

Q. Okay. And, similarly, you don't have any documents responsive to the third request, which is for copies of orders or opinions issued by a regulatory body that has concluded that a utility is responsible for replacement power costs associated with the full duration of an outage irrespective of whether imprudence on the part of the utility prompted the entire outage duration?

A. There are no documents responsive to that request.

Q. Okay. Thank you.

Now, let me ask you -- Well, first of all,

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beyond the documents that have been provided to me in advance of the deposition, is there anything that you have, you're aware of, responsive to those three requests beyond those materials?

A. Not that I'm aware of at this time.

Q. Okay. Are you conducting any investigations or research to identify further responsive documents at this time?

A. No, sir, I am not.

Q. Now, you have -- your counsel has for you, filed some errata to your pre-filed testimony; is that right?

A. Yes, sir.

Q. Okay. And there was an original errata that was filed on March 5. And then I just was e-mailed an amended errata, a little while ago, to your testimony.

Are you familiar with both of those documents?

A. Yes, sir, I am.

Q. Okay. It looks to me like that all of the original errata from the March 5 filing are on this amended list, but then you've added three additional corrections; is that right?

A. Yes, sir, that's correct.

Q. Okay. Let me do this. I'm going to ask the court reporter to mark as Exhibit 1 to the

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deposition your amended errata sheet, just so we can be sure that we've got something that's showing what we're talking about.

A. Okay.

MR. BUTLER: If you could just mark this as Deposition Exhibit 1, please.

(Deposition Exhibit No. 1 was marked for identification.)

MR. BUTLER: Thank you.

BY MR. BUTLER:

Q. I'd like to go through, just have you tell me the reason for each of these changes. And the first one is on page four, line 13 of your testimony.

A. Yes, sir.

Q. And you changed from a figure of 3,750 megawatts of customer load, to a figure of 3,650 megawatts of customer load, correct?

A. Yes, sir.

Q. And what was the reason for that change?

A. I believe it was a typo.

Q. Okay.

All right, let's go to the next one, which is on page 12, line one.

And, here, you changed a figure of $4.5 per megawatt hour to $4.4 per megawatt hour, correct?

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A. Yes, sir.

Q. And what was the reason for that change?

A. I believe it was another typo.

Q. All right, let's go to page 15, line one.

And you changed a figure of $15,977,050 to a figure of $15,974,055, correct?

A. Yes, sir.

Q. And what was the reason for that change?

A. I believe that was another typo.

Q. Well, Dr. Dismukes, let me ask you about that.

The first two, it's easy to imagine inadvertently typing three seven five oh for three six five oh or 4.5 for 4.4. It's a little harder to imagine typing fifteen nine seven seven oh five oh, when what you meant is fifteen nine seven four oh five five.

Was there something that changed in your calculation from when you originally prepared the testimony that made that later figure, you know, more accurate or more appropriate?

MR. BECK: John, let me interpose an objection that it's argumentative and object to the form of the question.

But, David, you can go ahead and answer.

THE WITNESS: Mr. Butler, I don't know. As I recall, in checking the workpapers to the

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testimony, the number was off and I corrected it based on that. And I don't recall where the earlier number came from.

BY MR. BUTLER:

Q. So, you don't recall any change in the calculation; just, somehow or another, it got entered into your testimony differently than what your workpapers showed?

A. There may have been. It's a relatively small, $2,000 difference; but I can't recall what the change resulted from.

Q. Okay.

All right, the next one, on page 17, lines 13 and 14; particularly, I guess, it's 14. There was the figure of $51.32 per megawatt hour, that you've changed to $52.55 per megawatt hour, correct?

A. Correct.

Q. And what was the reason for that change?

A. That -- the fifty-two fifty-five represents what was in my workpaper. I believe, when I originally wrote the fifty-one thirty-two, that was based off the Company's number, that I mis-transposed in there.

Q. So, you just recorded the company's number; but you had separately calculated this adjusted system average costs, and the value you got was fifty-two

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fifty-five?

A. That's correct.

Q. Okay. Then page 18, line five, it looks like the same change. Is that for the same reason?

A. Yes, sir, it's the same reason.

Q. Okay. And then page 19, line 18, we have, again, this change from $4.5 per megawatt hour to $4.4 per megawatt hour. Is that, again, a typo?

A. Yes, sir.

Q. Okay.

All right, page 35, line five, you had a figure here of $14 million net RPC credit, that you've changed to 16 million net RPC credit, correct?

A. Correct.

Q. And what was the reason for that change?

A. I think, when I had originally drafted the testimony, I had put the number in as the net difference between the company's proposal and mine. And then I changed the wording, because I thought it was confusing, to the total amount, but failed to change the number.

So, if you take 16, minus the two that the company's proposing, that would be a net of 14 million. And I just forgot to change it to 16 when I was -- when I decided to make it -- to discuss the idea in its absolute.

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Q. Okay. So, initially you were showing what the difference in taking your position versus the company's position would be; and then you changed it to just showing the total dollar amount of the credit under your position; is that right?

A. Yes, sir, that's correct.

Q. Okay. And then on page 37, there's the same change, would I be correct, and it's for the same reason?

A. Yes, sir.

Q. Okay. Beyond those errata that we've just discussed, that are on Deposition Document 1, are there any other changes or corrections to your testimony that you're aware of at this time?

A. No, sir, not that I'm aware of at this time.

Q. Okay. Are you conducting any reviews or evaluations that are intended to result in any further corrections or changes to the testimony at this point?

A. Not for that explicit purpose, no; but I'm sure I'll continue to review my testimony prior to testifying. And if I find anything, I'll certainly notify Counsel, who will, in turn, notify parties.

Q. That sounds good. Thank you.

All right. Let me ask you, do you have a copy with you of the documents that you had -- your counsel

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had provided in response to the request number one, the document request in your deposition notice?

A. I have those documents with me. I don't have the Bates stamped version of those, so; but I do have the documents with me.

Q. Okay. Well, that's going to make what I wanted to do here a little bit more complicated; but, maybe, we can do this anyway.

In the documents, Dr. Dismukes, there's an NRRI article by Ken Costello, dated September 2009.

A. Yes, sir.

Q. And in the copy of this that is, uhm -- the copy that was provided to me, that, the Bates number, it starts at Bates number OPC000126. And then the last page, it appears, of that article, that I have, is -- the page number on the article is page 16.

A. Okay.

Q. And it's, then it's Bates numbered OPC000145.

The next page in the Bates sequence, OPC000146, is the first page of an order approving stipulation and consent agreement.

So, in other words, there isn't anything, at least in sequence, after page 16 in this Costello article.

A. Okay.

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Q. Is that incomplete for a reason? Do you have the -- Were you using a complete version of this, because it doesn't look like that this is the, you know, complete version of the article?

A. I see what you're saying, and I have the same version of that. Somehow or another, it looks like this was scanned into a PDF, and it looks as though the remaining portion of the article didn't make it.

I can, uh -- I will get you a copy of the balance of the article as soon as I can.

Q. Okay. That would be good. Thank you.

A. I will say this, though, if you go to NRRI's homepage, you could probably download it; but I'll make sure I get you a copy, as well.

Q. I would appreciate it if you would do that.

Can we make that Late-Filed Exhibit 2 to the deposition, and just have you provide the, uhm, sort of remaining pages to the article after page 16?

A. Sure.

THE REPORTER: Just the remaining part?

MR. BUTLER: Yeah, just the remaining pages to the September 2009 NRRI article.

THE REPORTER: Can you e-mail that to me, also?

THE WITNESS: Yes, ma'am.

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BY MR. BUTLER:

Q. And, then, there was a similar point, really, on the very last document in what you have provided, which is the Bonbright Principles of Public Utility Rates.

A. Right.

Q. And the Bates number, the cover to it is, in my copy here, OPC000428. The only page I received is Bates numbered 429. And it looks like it's page number 138, that starts with lack of symmetry between producer and consumer; and then the next heading on the page is moral hazard.

A. Okay.

Q. Were you intending to refer only to that page, or was there more of this that you intended to include?

A. It was my understanding that the page that was referenced was provided. And, as you know, it's a textbook. It came from a textbook. And, so, we didn't copy the full textbook.

Q. Okay. Nor the full section on moral hazard?

A. Hold on just a second. I've got the book with me, and I'll look.

I'd be more than happy to provide you with page 139. There's only another paragraph on the other page, if you want it?

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Q. That would be good, if you would, please.

A. Sure.

MR. BUTLER: And we'll just call that Late-Filed Exhibit 3. And it will be completion of moral hazard topic in Bonbright.

Is that okay as a title?

THE WITNESS: Okay.

THE REPORTER: And all of these, you'll be e-mailing to the court reporter, also?

THE WITNESS: Yes, ma'am.

THE REPORTER: Thank you.

BY MR. BUTLER:

Q. I want to ask you a few questions, Dr. Dismukes, about your background. And I will say in advance, no offense intended by defining the scope of your experience. I just want to know what, you know, you do and don't have experience in.

A. Sure.

Q. Are you trained as a nuclear engineer?

A. No, sir, I'm a professional energy economist by training.

Q. Energy economist?

A. Yes, sir.

Q. Okay. Have you ever been employed by a utility?

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A. No, sir, I have not.

Q. Okay. Have you ever been involved in the operation of a nuclear power plant?

A. No, sir, I have not.

Q. Okay. I assume, therefore, you've never been licensed by the Nuclear Regulatory Commission to operate a nuclear power plant?

A. No, sir, I have not.

Q. Okay. Have you ever worked at a nuclear power plant?

A. No, sir, I have not.

Q. Okay. Have you ever had responsibility for overseeing the operations of a nuclear power plant?

A. No, sir, I have not.

Q. Okay. Have you ever visited FPL's Turkey Point Nuclear Power Plant?

A. No, sir, I wasn't asked to do that for this engagement.

Q. And have you done it on any prior occasions?

A. No, sir, I have not.

Q. Okay. Have you spoken to any of FPL's plant operators regarding either the Flagami transmission event or the efforts to bring Turkey Point nuclear units back on line after that event?

A. No, sir.

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Q. Okay. What knowledge do you have of the, what I'm calling the Flagami transmission event, the event that occurred on February 26, 2008, that initiated the Turkey Point nuclear units coming off line?
A. My knowledge is based off of the documents that have been filed in this proceeding and the testimony that's been filed in this proceeding, as well as the review of various FERC orders on that subject.
Q. Okay. Beyond those materials, have you done any independent investigation of the event or its causes?
A. No, sir, I haven't reviewed anything that's been outside of the scope of this proceeding.
Q. Okay. And am I correct that you have not visited the Flagami transmission substation of FPL?
A. No, sir. I wasn't asked to do that in this engagement.
Q. All right. And am I correct you haven't done it on prior occasions?
A. No, sir. I was only asked to do replacement cost analysis in this engagement, not to review the operations of the substation.
Q. Okay. Now, in the scope of your testimony, are you making any claim that the Turkey Point nuclear units were operated imprudently?

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A. No, sir, I am not.
Q. From the information you have reviewed, do you have any reason to believe that the Turkey Point nuclear units could have been safely returned to service more rapidly than they were following the Flagami transmission event?
A. I don't have an opinion on that topic.
Q. Okay. Do you have any knowledge on, about FPL's track record or performance record in the operation of its nuclear units?
A. Only generally.
Q. What is your general understanding of FPL's performance record in operating its nuclear units?
A. Just generally, that they operate a fleet of regulated and unregulated nuclear assets.
Q. So you don't have any knowledge, in terms of the relative performance of FPL in operating its nuclear units, compared to the industry?
A. No, sir. I wasn't asked to do that in this engagement. It was just to, primarily, offer an opinion on a replacement cost estimate.
Q. Okay, if you would turn to your testimony, to page three, line 20.
Are you there?
A. Yes, sir.

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Q. You say that -- well, starting, actually, up on line 18 -- the Company's proposal does not reflect the true replacement cost of energy associated with the transmission-created outages of February 2008, etc.
I'm focusing, really, on that phrase transmission-created outages.
How are you using that phrase?
A. I'm using that phrase in the context of the outages at the Flagami transmission station that had the effect of taking the Turkey Point nuclear units off line.
Q. Are you aware of anything else about the Turkey Point nuclear units that would have caused them to come off line at that time, other than this transmission event?
A. I'm not aware of any other event.
Q. Okay. Hold on just one second.
Do you have a copy of the NRRI article available to you?
A. I have the same version that you have.
Q. Okay. I think that will do for my purposes.
Hold on just a second.
MS. KAUFMAN: John, this is Vicki. Could we go off record just for one second?
MR. BUTLER: Okay.

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(Discussion held off the record.)
BY MR. BUTLER:
Q. Okay, Dr. Dismukes, do you have page three?
A. Yes, sir.
Q. The top portion of that, there's a section entitled II.A. "Reasonable opportunity" criterion.
Do you see that?
A. Yes, sir.
Q. And the second and third sentences in that read: Regulators are legally bound to allow utilities the opportunity to recover prudently incurred costs. Prudent costs reflect manage -- or, utility management that makes rational and well-informed decisions.
Do you see that?
A. Yes, sir.
Q. Do you agree with that statement?
A. Yes, sir.
Q. Is the, or the converse of that, the utility would be not permitted to recover its costs under this sort of regulatory regime, only if there has been a finding that the utility is imprudent?
A. It is typically the case that utilities are not allowed to recover imprudently incurred costs.
Q. Okay. Do you believe that it would be prudent for a utility that owns a nuclear unit to

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perform necessary maintenance work if the unit is required to come off line because of an unplanned outage?

A. I don't have an opinion on that. And I wasn't asked to look into any prudence of operations issues.

Q. Okay. I'd like you to look at page five of the NRRI article.

A. Okay.

Q. Okay. If you look at the last paragraph on page five, that starts, cost trackers, in the long run -- You see that?

A. Yes, sir.

Q. -- it says that, can bias a utility's technological and investment decisions. A utility recovering fuel costs through a FAC -- And you 3411 that to mean Fuel Adjustment Clause?

A. Yes, sir.

Q. -- for example, might want to adopt fuel-intensive generation technologies even if they are more expensive from a life-cycle perspective.

Do you see that?

A. Yes, sir.

Q. Would you agree that construction of nuclear units and operation of nuclear units represents kind of the opposite of that point, the investment in a high

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capital cost-low fuel cost generating technology?

A. Uhm, I would agree that a nuclear power plant tends to have higher capital cost than it does fuel cost; but from a life-cycle perspective, it tends to still be more expensive than most other generating technologies.

Q. But this point is about adopting a fuel-intensive generation technology even if they are more expensive from a life-cycle perspective.

That's the reference here, isn't it?

A. Yeah, but I disagree. I think the point is, is that it would choose something from -- that would not be cost effective from a life-cycle perspective, or from a total net present value revenue requirement perspective, because of the FAC.

Q. Well, is it your understanding that this paragraph is suggesting that the FAC would encourage the utilities to invest in something that is high capital cost, low fuel cost, or the other way around?

A. I think the sentence says what it says. It says, a utility recovering fuel costs through a FAC, for example, might want to adopt a fuel-intensive generating technology even if they are more expensive from a life-cycle perspective.

Q. Fuel-intensive generating technology, would

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you understand that to be referring to something that is low capital cost, but high fuel cost, as opposed to the other way around, high capital cost, low fuel cost?

A. I don't know that it presents anything from a capital perspective. It's just speaking about fuel intensive. It could be both.

Q. Do you consider nuclear plants to be fuel intensive?

A. No, sir, they tend to be capital intensive.

Q. Would you agree that fundamentally the point of the paragraph we've just been talking about, in the author's opinion, is that regulatory actions by a Public Service Commission can send incentives or disincentives that drive a utility's actions?

A. No, I think that the purpose of the paragraph here is to show that cost trackers can send negative incentives to utilities, in terms of their operating performance, when it comes to fuel costs.

Q. But would you generalize from that to say that the incentives that are sent by a regulator's form of regulation will influence utilities or have the potential to influence utilities' actions?

A. No. This is talking about cost trackers. I don't know that it tries to generalize.

Q. Well, what about cost trackers, do you think

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that the choice of a utility regulatory commission's actions with respect to how it implements its cost trackers send incentives or disincentives to utilities?

A. Clearly, the regulatory parameters that define how cost trackers work will influence utility decisions.

Q. Would that include how the Regulatory Commission determines that decisions on disallowing recovery of costs should be made?

A. I don't understand your question. Could you rephrase that.

Q. I'll try.

If a Regulatory Commission has a particular approach to determining whether fuel costs that are subject to a cost tracker are going to be disallowed, will the way that the Commission decides whether or not costs will be disallowed, is that something that could be an incentive or a disincentive to the utility's decisions?

A. I would stand by my prior answer; I mean, to the extent that the Utility Commission defines the rules by which fuel costs to recover in a tracker is going to influence utility decisions.

Q. Okay. Now, let me ask you to turn to, let's see, page eight of the NRRI article.

And if you'll look at the top of the page, I'm

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focusing on the sentence in the first paragraph that ends with footnote 22: Regulators often less rigorously scrutinize a utility's costs when recovered through a tracker. Do you see that?

A. Yes, sir.

Q. Okay. Is it your opinion that the Florida Public Service Commission exercises less than rigorous scrutiny of utility costs that it allows to recover through the Fuel Adjustment Clause?

A. I haven't been asked to offer an opinion on that?

Q. Do you have an opinion?

A. I don't have any knowledge of that.

Q. Are you familiar with the Commission -- the Florida Public Service Commission's process for auditing costs that are recovered through the fuel and other adjustment clauses?

A. Generally.

Q. Okay. Do you consider that a rigorous audit process?

A. I wasn't asked to do an audit of -- a management audit of the Commission's fuel recovery practices in this proceeding, only to develop a replacement cost estimate.

Q. So, you don't have an opinion on that one way

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or the other?

A. No, sir.

Q. Let me ask you to turn to page 29 of your testimony. I will try to do the same. I'm having problems with document management here.

Okay. Do you have that page?

A. Yes, sir.

Q. Okay. I do, too; but hold on a moment, because I'm trying to find where I'm wanting to specifically reference you to here. So, my apologies. It will just take me a moment to --

A. That's okay.

Q. -- find the reference.

Well, I'm going to direct your attention to lines 29 through 31 in your testimony.

A. On page 28?

Q. No, on page 29.

A. Oh, sorry.

Q. This is a quote from the same NRRI article; is that right?

A. Hold on a second. I'm having some of the same issues you are.

Okay, yes, sir.

Q. Okay. On page 29 -- I'm sorry, lines 29 through 31 on page 29, there is a sentence that says:

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Regulators should closely monitor and scrutinize costs like those subject to cost trackers that utilities have little incentive to control.

And this kind of goes to what I was just asking you. I gather from your prior answers, that you were not engaged to evaluate or to have an opinion on the adequacy of the Florida PSC's scrutiny of fuel adjustment costs; is that right?

A. Yes, sir.

Q. Okay. So, you are not in a position to comment, I guess, one way or the other on whether the portion of this article you quoted would have any application to the Florida PSC?

A. The point in quoting the article was, as a general matter, Fuel Adjustment Clause and trackers have benefits to utilities, as well as they do to rate payers, in terms of getting a guaranteed, uh, or a pass-through of costs that are incurred by the utility. That was the point made by the Company.

Q. You don't have anything to -- any information to suggest that the Florida PSC does not closely monitor and scrutinize the costs that are recovered through the Fuel Adjustment Clause Mechanism?

A. I haven't gone and done an audit to find out if they have or haven't.

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Q. Okay. You're aware that FPL, in this case, has accepted responsibility for the replacement power costs associated with the Flagami transmission event, correct?

A. That's my understanding, yes, sir.

Q. Okay. Do you have any evidence that FPL has been irresponsible in its operation of the nuclear units that it owns and operates?

A. I don't have an opinion on how they've operated the nuclear units.

Q. If FPL had actually returned Turkey Point Units 3 and 4 to service within eight hours after the Flagami transmission event started, would your replacement power cost calculation be limited to that eight-hour period?

A. Yes, sir.

Q. Okay. And same answer, if the units had returned to service after 48 hours?

A. Yes, sir.

Q. Okay. Do you have any objection to FPL's decision to follow its commitment to the NRC and repair the Turkey Point Unit-3 rod position indicator system during the outage that was initiated by the Flagami transmission event?

A. I don't have an opinion on that.

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Q. Okay. Do you know whether that was in fact required by the NRC before the unit restarted?
A. All I know is that is what was represented by the company's testimony.
Q. And if that representation were correct, would you agree that it was appropriate for FPL to make the repairs, rather than to try to re-start the units without making them?
A. I don't have an opinion on that.
Q. You don't have an opinion on whether it would be a good idea for FPL to abide by commitments to the U.S. Nuclear Regulatory Commission?
A. It's usually a good idea for utilities to follow the instructions of their regulators; but outside of that, I don't have an opinion specifically with regard to that particular activity.
Q. Okay. I'd like you to assume, as a hypothetical, that the outage that occurred on February 26 at Turkey Point Units 3 and 4 had been initiated by a lightening strike on the electric system, as opposed to the problem that happened at the Flagami transmission substation.
If that were the case, sort of an act of God type of cause for the outage to commence, would you believe, in those circumstances, that FPL should be held

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responsible for the replacement power costs associated with the full duration of the outage?
A. I don't have an opinion. It would depend on the other terms and conditions of the outage.
Q. Well, here's what I'm trying to get at. Maybe I need to refine the hypothetical event; but assume, for the sake of the hypothetical, that the outage was initiated by something that did not involve imprudence or improper action on the part of FPL.
And then assume that everything else happened the same as it did, that the units, you know, were -- or, the Company did all that it could to bring them back into power, and did so -- or, on line and did so in 158 hours and 107 hours, respectively, for Turkey Point Units 3 and 4.
If those were the facts, would you recommend any replacement power cost refund be required for FPL?
A. Again, I don't know. I can't offer an opinion on that hypothetical.
Q. What information is missing from the hypothetical that would provide you with what you would need in order to respond to it?
A. I don't understand the outage durations and why they would be set for the period that they were set at.

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Q. Here's what I'm trying to convey, and let me try to lay it out and see if this helps.
Would you agree, Dr. Dismukes, to the extent you're aware of it, that basically these outages were commenced because of a voltage condition that caused the units to trip off line, and that voltage condition was a result of the event that occurred at the Flagami transmission station?
A. That's my understanding, yes, sir.
Q. What I'm trying to do to pose as the hypothetical, is that everything else happened the same except, you know, just using lightening strike as an example, some act of God occurred which caused that same sort of voltage condition, so the units came off line as a result of the voltage condition; but the reason for the voltage condition was something beyond FPL's control, instead of something that it's accepted responsibility for.
Do you understand the distinction I'm trying to make there?
A. Sure.
Q. Okay. So, with that as the hypothetical, that everything else happened the same as we're talking about, but the, sort of initiating event for that voltage condition that caused them to come off line had

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been something that was beyond FPL's control, under that hypothetical, do you believe that FPL should be responsible for refunding replacement power costs to customers?
A. No.
Q. Okay. The next question I have for you is actually pretty similar to what, I guess, was the request number three in the document production request; and I'm just looking for any knowledge you have independently of the documents that may exist.
Are you aware of any instances where a regulatory agency or court has held a utility responsible for replacement power costs associated with an unplanned outage without regard to prudence on the part of the utility in operating the power plant?
A. I'm not aware of any orders.
Q. Are you aware of any circumstances, you know, other than through an order, in which that has been the consequence for a utility?
A. I'm not aware that there are or not. I simply don't know.
Q. Okay.
Are you aware of any instances in which the Florida Public Service Commission has disallowed replacement power costs for a power plant that came off

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line for a reason that had to do with something outside the power plant, as opposed to, you know, actions, imprudent actions taken with respect to operating the power plant?

A. I'm not aware of any orders.

Q. Okay. Now, what is your understanding, Dr. Dismukes, of the Florida Public Service Commission's practice, with respect to the portion of an outage for which replacement power costs will be disallowed, if the outage has both portions that were conducted prudently and then other portions that the Commission has found to have been conducted imprudently?

A. I'm not aware of any orders where that kind of segmentation has been made.

Q. Are you aware of any orders of the Florida Public Service Commission that have disallowed replacement power costs?

A. I believe there was an issue recently with the, uh, the, the, uh --

Q. The drilled hole?

A. Thank you. I was trying to think of a way to characterize it. Yes, sir.

Q. Is it your understanding that the entire outage period that was, you know, that the unit in question was out of service was, uh -- that replacement

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power costs for that period was disallowed?

A. Uhm, it was my understanding that it was, that the replacement amount was agreed to by a settlement.

Q. You mean, that the dollar amount that would be disallowed had been agreed prior to hearing?

A. That was my understanding.

Q. Okay, but you don't know what that outage -- or, what that replacement power cost amount represented, in terms of the amount of outage time; is that right?

A. I haven't seen the documents on how that number was calculated or arrived at.

Q. Okay. Do you know whether -- Well, first of all, do you know what FPL nuclear unit was involved in that incident?

A. I remember looking at the order, and I don't recall right now.

Q Do you know whether the unit in question, the nuclear unit in question was already out of service, in an outage, at the time that the hole drilling incident apparently occurred?

A. I don't recall what the status was, at this time

Q. And do you know whether the replacement power costs that were disallowed had to do with the whole time that the unit was out of service or the extra

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time that resulted from the fact that the drilled hole was discovered?

A. As I said before, I didn't see the documents on how those numbers were calculated. So, I can't say.

Q. Okay. Are you aware of any other instances in which the Florida Public Service Commission has disallowed replacement power costs for power plants being out of service?

A. I'm not aware of any.

Q. Okay. What about other regulatory jurisdictions, are you aware of other jurisdictions elsewhere in the country where they have disallowed -- the jurisdiction has disallowed replacement power costs associated with the outage of a power plant?

A. Yes, I'm generally familiar that there have been those instances.

Q. Can you describe all of the instances elsewhere in the country that you are aware of?

A. I don't have a list of them all, you know, in the history of utility regulation. I think that there were a number that occurred during the brownouts and rolling blackouts during the late '90s and early 2000, when we had some generation availability issues. There may have been another series of them after the big outages in the northeast several years ago.

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That's my general recollection of the more recent regulatory findings in that area.

Q. Do you have any information on the portion of the outage time associated with those events for which replacement power costs were disallowed?

In other words, if the unit was out of service for "X" days, was the replacement power cost calculation done on the full period of "X" days or on some shorter period of time?

A. I do not have a survey of that.

Q. Okay. Do you know what basis was used in those cases for calculating the measure of replacement power costs?

A. I do not have a survey on each and every instance.

Q. Do you know what approach was taken in any of those other cases?

A. As a general rule of thumb, I would say that the approaches tended to be, uhm, along two different lines. One was, I would characterize as being comparable to the types of calculations that have been done in this proceeding, in the sense that they were manual types of calculations based on the opportunity cost of the outage from the units that were taken off line and the next best alternative.

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And then, I think, the other kind of general line of approach that has been used has been in modeling those outage -- those replacement costs from outages on a multi-area dispatch type model approach.

Q. Do you know of -- in those instances of which you're aware, do you know whether the replacement, or the avoided fuel cost used for making the calculation was based on the specific units involved or on an average of the system costs?

A. In the, in the -- I don't have a survey explicitly, no, sir.

Q. Okay. Now, your calculation of replacement power costs for -- or, your preferred calculation that results in the roughly $16 million disallowance, would you agree that that calculation would be the same calculation if Turkey Point Units 3 and 4 had come off line because of some specific imprudent act with respect to the operation of those units?

A. I don't know.

Q. Well, let me be sure I understand your answer.

What I'm hypothesizing is -- I think we talked about a little while ago that the -- we both understand that units came off of line because of a voltage condition that had arisen as a result of the Flagami transmission event, correct?

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A. Correct.

Q. What I'm hypothesizing is, instead of that, suppose that Turkey Point Units 3 and 4 came off line because of, you know, some particular problem that FPL was responsible for in how it operated the nuclear units, there wasn't some offsite voltage condition issue, but it actually did something incorrect in operating the units.

What I'm asking is, with that circumstance, would your replacement power cost calculation be the same as it is in your proposal for this docket?

A. If all the circumstances were the same and the duration times were the same and the other costs and drivers were the same, and it was an issue of the imprudence, it would -- you would, more than likely, come up with a calculation that was comparable.

Q. Okay. So, from the utility's perspective, it's going to see the same disallowance whether the operations of the nuclear units were prudent or imprudent, under those two examples, correct?

A. Can you rephrase that. I didn't catch -- I got lost in the first part of the question.

Q. I'm saying, from the utility's perspective, it would see the same replacement power cost disallowance regardless of whether the units are off line because of

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something external and no imprudence on the operating nuclear units, on one hand, or because it operated the nuclear units imprudently, on the other hand, correct?

A. I thought we had agreed on the act of God, that there wouldn't be a prudence disallowance there.

Q. Okay. That was an earlier hypothetical. I'm sorry. What I'm trying to distinguish here, FPL has accepted responsibility for the consequences of the Flagami transmission event, in terms of replacement power costs, correct?

A. Yes, sir.

Q. Okay, but would you agree that, so far as you know, the operation of the -- you know, whatever actions were taken at the Flagami transmission substation, didn't have to do with the prudence of the operation of Turkey Point Nuclear Unit-3 or Unit-4, correct?

I think you testified earlier, you're not aware of anything -- I think you said you don't have an opinion whether there's anything imprudent in the -- FPL's operation of the nuclear units themselves; is that right?

A. That's correct.

Q. Okay. So, what I'm taking on the one hand, is a circumstance where FPL has accepted responsibility for the operation -- or, I'm sorry, for the replacement

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power costs attributable to the Flagami transmission event and, you know, the two nuclear units tripped off line because of this low voltage condition, on the one hand; on the other, if you had the same outage durations at Turkey Point Units 3 and 4, but they were the result of, actually, actions that were imprudent at the power plants themselves. Those are the two comparisons I'm making.

My question to you is whether, under your calculation, the replacement power costs that the utility would be responsible for would be the same under both versions of that scenario?

A. Mathematically, they'd be the same.

Q. Okay. If the Flagami transmission event had not caused Turkey Point Units 3 and 4 to trip off line, but, instead, had caused a series of combustion turbines to trip off line, how would you have calculated replacement power costs that, in your view, FPL should be responsible for in that situation?

A. I don't know. It would depend on how that power was replaced.

Q. Let's say that it was replaced by power purchases.

A. Then you would look at the difference in the purchase power price and the, uhm, average operating

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cost of the units that were displaced.
Q. And would you agree, in the case of combustion turbines, that average fuel costs or power costs would be far higher than for nuclear units?
A. Uhm, on a marginal cost basis, yes.
Q. Yeah, just looking at the fuel costs.
The fuel costs are what are recovered through the Fuel Clause, right?
A. Correct.
Q. Dr. Dismukes, you have used in your testimony on a few instances the term windfall, referring to what FPL might receive if it did not refund your calculation of replacement power costs.
I want to ask you a couple of questions, just to be sure that I understand your understanding of where FPL is in terms of cost recovery here.
Is it your understanding that at this point, FPL has recovered any more fuel costs than it actually paid for the period in which Turkey Point Units 3 and 4 were out of service following the Flagami transmission event?
A. That's not my testimony.
Q. Is it your understanding, and did FPL recover any more than it actually spent for fuel and purchase power in that period?

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A. That's not my understanding. No, I do not believe that's the case.
Q. Okay. Putting aside the issue of imprudence for a moment. Would you agree that at this point FPL has been made whole, and nothing more or nothing less than that, for what it actually incurred in fuel costs through the period when Turkey Point Units 3 and 4 were out of service?
A. That's my understanding.
Q. So, this docket is about how much of the cost that FPL actually incurred it should give back to customers, and therefore, essentially, not recover; is that correct?
A. Yes, sir.
Q. Okay. How is recovering costs that are actually paid a windfall?
A. Well, in this instance, it would be a situation where the full amount of the credit is not returned to customers for the outage in question.
Q. But you would agree that, even in that extreme example where the full amount hasn't been returned to customers, the utility only has in its pocket what it actually spent for the fuel?
A. The utility has in its pocket what it spent on the fuel, but it hasn't applied the full amount of

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the credit associated with the assumption of responsibility of the outage to rate payers.
Q. But you would agree that there's no windfall, in the sense of the utility having more money than it actually spent, under any of the scenarios that have been proposed for the replacement power costs in this docket?
A. No, I would say that the utility has not given back the full credit to rate payers, and as a consequence of that, would benefit from not having to do that.
Q. Thank you, but I don't think that really answered my question.
The question's just whether the utility, under any of the scenarios that are under consideration in this docket, would end up having recovered from customers more than it actually paid for fuel?
A. I'm sorry, Mr. Butler, I -- The full amount of the credit wouldn't go back to customers. So, it would be a windfall for the Company, in not returning back the full credit to rate payers.
Q. Yes, I understand, Dr. Dismukes, that's your position; but you're not answering my question. And I would direct you to answer the question.
MR. BUTLER: I'll ask the court reporter

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to read back the last question, please.
(A portion of the record was read by the reporter.)
BY MR. BUTLER:
Q. And that's the question that I'm asking you to answer.
A. Again, my testimony is, the windfall, the nature of the windfall is associated with not making the full credit back to rate payers. The rate payers will incur costs that they should not have incurred but for that outage.
Q. And I think -- I have no objection to you having that position. You, I'm sure, will express it at the hearing; but I'm asking you a different question. I would appreciate an answer to it.
And that question is whether, under any of the replacement power cost scenarios under consideration in this docket, the end result would be FPL recovering more than it actually paid for fuel and purchase power?
A. And I think we agreed to that earlier and I said, no, that wasn't the case.
Q. Okay. Dr. Dismukes, is it your understanding that the Florida Fuel Adjustment Clause is levelized over the course of a year, or do you know?
A. I do not recall. I thought it was every six

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months, for a, for six, six months' basis.
Q. You haven't been back to Florida for a while.
A. Yeah.
Q. It used to be that way. It's actually been changed to a year --
A. Okay.
Q. -- I will represent to you. And your counsel can object if I'm misrepresenting it.
And is it your understanding that that is based on a projection of fuel costs to be incurred in that subsequent period?
A. It's my understanding that the process works as both a reconciliation and projection basis, that you're reconciling from the prior period and forecasting for the future period.
Q. All right. So, the fuel factor in, say, year three will have a, projection of fuel costs for year three will have an estimated actual TrueOp for year two, and the final TrueOp for year one; is that your understanding?
A. Yes, sir.
Q. Okay. And, then, those costs will be levelized over that time period; meaning, that the fuel charge is uniform through the year even if the fuel costs aren't uniform throughout the year, correct?

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A. Correct.
Q. Okay. Would you agree that the fuel charge resulting from what we just described is substantially removed from the concept of a real-time price for fuel at any point within the year when that charge is being applied?
A. Yes, sir.
Q. Okay. Do you know whether nuclear units are more prone than other types of generation to come off line in the event of electrical system disturbances?
A. I am not aware specifically.
Q. Okay.
A. It's my understanding that most of the performance for nuclear units over the last several years has been relatively good, and their capacity factors and utilization factors have been at levels that have been relatively high.
Q. Do you know whether a nuclear unit, if it comes off line due to an unplanned outage, is likely to take longer to be brought back into service than other types of generations, such as, for example, a combined-cycle unit?
A. That's my understanding, yes, sir.
Q. Okay. And would you expect the difference, in terms of replacement power costs, between the fuel

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cost for the nuclear unit and the fuel cost for whatever would have to replace it during a period of outage, would be a larger differential than with respect to a combined-cycle unit?
A. Are you speaking because of the duration?
Q. No, no, I'm just talking about the, uhm -- thinking of the differential as the difference between the cost that you have to incur to provide the replacement power, less the avoided cost, and the avoided cost for the nuclear unit being lower than the avoided cost for the combined-cycle unit.
A. Yes, sir.
Q. Okay. Would you agree that, in terms of exposure to replacement power costs, that the two factors we just described, being the likelihood of being – taking longer to get back into service and this larger differential in replacement power costs, are vulnerabilities that a utility has to accept if it owns nuclear units?
A. Yes, sir, I would agree with that.
Q. Okay. Do you know whether there are any environmental benefits to low energy cost generation, such as nuclear, wind and solar, compared to fossil fuel generation?
A. As a general matter, yes, sir.

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Q. And as a general matter, what would you say those environmental benefits would be?
A. Well, with renewables, lower air emissions, with NOx, and potentially with carbon.
Q. Would that also apply to nuclear units?
A. Yes, but there would be a corresponding waste issue that would need to be offset with that environmental benefit.
Q. I'd like you to turn in your testimony to page 35.
A. Yes, sir.
Q. On lines six through nine, you have the sentence: An appropriately determined net RPC credit will not deny the Company one dollar in capital cost recovery of its nuclear assets, so it should not, by definition, create a disincentive in developing new nuclear assets.
Do you see that?
A. Yes, sir.
Q. Is it your testimony that non-recovery of capital cost is the only form of disincentive that might be created by regulatory policy for construction of nuclear units?
A. Uhm, it is my testimony that that's the primary factor.

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Q. Okay. Well, let me pose a really absurd hypothetical, just to illustrate what I want to ask you about.

Say that a utility were guaranteed to recover all of its capital costs associated with a nuclear unit; but that it was obliged to enter into a lottery in which it had a 50/50 chance from one year to the next of recovering any of the fuel costs associated with the facility.

Would you consider that lottery requirement to be a disincentive to the construction of the nuclear plants?

A. On a 50/50 basis, it could be.

Q. Could be or would be?

A. I don't know. I haven't sat down and -- It would depend on the rate of return that would be allowed on a nuclear asset.

Q. Do you think that utilities are often allowed enough of a return on their investment in nuclear facilities, that it would be worth a gamble of not recovering any of your fuel costs 50 percent of the time?

A. No, but I don't know too many regulatory commissions that roll the dice on fuel recovery, either.

Q. That was the purpose of my illustration.

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MR. BECK: John, this is Charlie. It's almost 3:00. Do you have a ways to go, or no?

MR. BUTLER: I don't have a long ways to go, but it has been a while. Why don't we take a ten-minute break. And, then, I don't think it will be more than another half hour or 45 minutes, at most, after that.

MR. BECK: Okay, let's take ten, then.

MR. BUTLER: Okay, very good.

(A recess was taken.)

MR. BUTLER: This is John Butler. I'm back; and we can pick back up whenever the witness and you are ready, Charlie.

MR. BECK: Okay, I'm here, John.

THE WITNESS: I'm here.

MR. BUTLER: All right, great.

BY MR. BUTLER:

Q. Dr. Dismukes, are you aware of any experts that have taken the position that disallowances of replacement power costs related to low fuel cost generation does not affect investor perceptions of the risk associated with investing in that type of generation?

A. I haven't done a survey on expert witness opinions.

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Q. Okay. Same question with respect to rating agencies, financial rating agencies?

A. And what is that question, again?

Q. Okay. Are you aware of any rating agencies who have taken the position that disallowances of replacement power costs related to low fuel cost generation does not affect investor perceptions of the risk associated with investing in that form of generation?

A. As to existing units or future units?

Q. Future units.

A. I'm not aware of any on future units.

Q. Okay. And that same question, which I hope now we've got the form of the question and I don't need to repeat it a third time, with respect to financial analysts. Are you aware of any fianancial analysts who have taken that position?

A. Would this be on future or existing units?

Q. Same thing, on future units?

A. I'm not aware of any.

Q. Okay. How about the same question with respect to investors in utilities that would have that type of low fuel cost generation, again, referring to future generation?

A. I'm not aware of any.

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Q. Okay. Under the Florida Fuel Adjustment Mechanism, do utilities profit from their -- from the fuel costs that they incur?

A. Not that I'm aware of.

Q. And as we've been discussing, there is potential at least, if a utility is found to have been imprudent, that it won't be allowed to recover all of its fuel costs, correct?

A. That's correct.

Q. So, would you agree that, from the perspective of an investor looking at the utility, the best the utility can do is to recover its fuel costs, and there is at least the possibility that it won't be allowed to recover all of those fuel costs?

A. I don't think I would be looking at it from that perspective. I would be looking at it, also, from a perspective that a utility would be insulated from movement in fuel costs, that it could pass along to its rate payers, on a more periodic basis than true traditional regulation; thereby, reducing the risk associated with fuel cost movement in operating generating units.

Q. But by the same token, you would agree it would also be insulated from any potential benefits from those movements, correct?

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A. That's correct, in the sense that benefits are earnings on those fuels.
Q. Right, yeah, in the sense that it could recover more than its actual cost of fuel, because the price was set at some level and then the fuel prices dropped. It doesn't have the opportunity to benefit from that, correct?
A. Provided it's not under a performance-based plan.
Q. Okay. To your knowledge, is Florida's Fuel Adjustment Clause structured as a performance-based plan, the way that you just used the term?
A. No, sir, it's not.
Q. Okay. Now, if a company owned a merchant nuclear generating plant and it sold power into a system at some measure of the system's incremental power costs, if those incremental power costs are substantially above the fuel costs for the nuclear unit, would it be possible for the merchant nuclear plant owner to make a substantial profit off of those sales on a merchant basis?
A. I don't understand your question.
Q. Okay. Do you understand my use of the term merchant nuclear plant?
A. I do. I don't understand the comparison to

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the nuclear plant.
Q. Would you agree that the fuel costs for a nuclear plant, including merchant nuclear plants, is often well below the system lambda, the marginal power cost for systems into which the merchant nuclear plant might be selling its power?
A. That is typically the case. At least, it has been over the last several years.
Q. To the extent that would be the case, would you agree that there is the potential, if the utility is able to operate that plant at a, you know, substantial capacity factor, sells a lot of megawatt hours, that it will make a substantial profit on its sales of power to, into that market?
A. There's a possibility. It depends on the contractual relationships that that nuclear unit may have with customers, to the extent it has any.
Q. Is there any corresponding opportunity for Florida Power & Light Company to profit on the sales of low cost nuclear power into -- or, that is used by Florida retail customers?
A. I guess, an allowed rate of return on its capital investment for nuclear.
Q. But is there any possibility for profiting beyond that, in terms of selling the nuclear power at

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some large differential between the system lambda cost and the nuclear fuel cost?
A. In theory, I guess there is.
Q. There is an opportunity for the -- for FPL to sell power to retail customers at greater than the actual fuel cost for the nuclear units?
A. Oh, I thought you said sell it into the market.
Q. No, no, no, I'm sorry, sell it to Florida retail customers. Yeah, I did use the term market. My apology. I know it's confusing.
A. No, not outside their authorized rate of return.
Q. Okay. Do you know what FPL's current authorized rate of return is?
A. I don't recall.
Q. Okay. Let me ask you a little bit about your testimony on moral hazard, ask you to turn to page 24.
A. Okay.
Q. You have in the lines 14 through 16 the definition of what a moral hazard is, correct?
A. Correct.
Q. Okay. Would you agree that a moral hazard arises when parties act irresponsibly because they are shielded from economic consequences of their acts?

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A. That could be one example.
Q. Are you aware of anything -- any instance in which FPL has acted irresponsibly with respect to its operation of Turkey Point Units 3 and 4 and the outage that followed the Flagami transmission event?
A. I don't have any opinion.
Q. Do you have any evidence that FPL acted irresponsibly in that timeframe?
A. Again, I, I -- only outside of what I've seen in this proceeding, I don't, I don't have an opinion on the utility's actions.
Q. So, you wouldn't have any opinion, I guess, on how, whether FPL operated its units aggressively, in the sense of trying to return them to service as promptly as possible after the Flagami transmission event?
A. I wasn't asked to look at the prudence of the Company's operating performance or restoration, just the replacement cost estimate.
Q. Do you agree that the U.S. Nuclear Regulatory Commission has substantial authority to take actions to ensure that nuclear operations are safe and well-managed at utilities such as FPL?
A. That's my general understanding, yes, sir.
Q. Okay. Similarly, is it your opinion that the

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North American Electric Reliability Council has substantial authority to ensure that transmission systems such as FPL's are operated in a safe and reliable fashion?

A. That is my understanding of part of their responsibilities.

Q. Would you agree that that substantial regulatory authority would limit significantly the opportunity for a moral hazard's connection with the operation of either nuclear plants or transmission systems?

A. I don't know. I haven't done a study of their governance and done an audit of that governance to know one way or another.

Q. On page 25 of your testimony, you talk about the recent banking and financial crisis led to bailout policies as being an example of a moral hazard problem?

A. Correct.

Q. Are you suggesting any comparison between FPL's operation of its nuclear units and the management of the banks and financial institutions that led to that crisis?

A. No, it's just an example.

Q. Okay, let me ask you to look at page 25, lines 19 and 20.

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This is continuing on the point of, about moral hazard; but am I correct in reading this to be suggesting that if FPL were not responsible for your full measurement for replacement power costs as you've calculated them here, that it might lead to some sort of moral hazard for FPL to not operate its system as reliably and efficiently as it otherwise would; is that the point you're trying to make there?

A. That's not my testimony.

Q. Okay. Are you suggesting that FPL would ever cut corners or not operate its system as reliably and effectively if the Commission were to adopt the FPL view of replacement power costs instead of yours?

A. I haven't tried to make any inference that the Company would act irresponsibly, in this portion of my testimony.

Q. Or elsewhere?

A. Not that I'm aware of.

Q. No, I mean, or elsewhere in your testimony, is what I meant?

A. No, that's what I – Yeah, that's my answer, not that I'm aware of.

Q. Okay. I'm sort of counting on you to be aware of your testimony.

A. No, I mean, I -- Based on my interpretation,

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no.

Q. Okay. Thank you.

On page 32 of your testimony, you have a discussion of the Duff and Phelps analysis.

You see that?

A. Yes, sir.

Q. And am I correct that the, the bottom line was that there wasn't any statistically significant empirical evidence one way or the other on whether the regulatory climates affected the investment in nuclear generation?

A. Yeah, based on this article, yes, sir.

Q. Okay. So, essentially, this article isn't going to shed any light, one way or the other, on the contention of whether there are, you know, significant disincentives from the replacement power cost calculation on investments in low fuel cost generation; is that correct?

A. No.

Q. That's not correct or there's not any relevance? I'm sorry.

A. Let's say that it's not correct that there is no relevance to that.

Q. Okay. So, what relevance is there of this article?

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A. Well, I would argue that even in an environment where capital cost recovery was being considered, regulatory decisions and regulatory climate ratings have very little to do with the impact of capital investment decisions.

Q. But, in fact, the article wasn't able to conclude one way or the other empirically, correct?

A. There was no statistically significant impact of utility ratings on those investment decisions.

Q. I want to try a -- ask you to consider a hypothetical here, Dr. Dismukes.

Suppose that a utility has a choice between two generating options, a low fuel cost unit that is especially vulnerable to transmission disturbances and is likely to remain off line for an extended periods -- I'm sorry, extended period once an unplanned outage is initiated; then the second possibility, second choice is a high fuel cost unit that is less vulnerable to transmission disturbances, and can typically be returned to service quickly if there is an unplanned outage.

If the utility knew it would have to absorb the full additional cost of replacement power in the event that either of those units were to go off line following a transmission disturbance, which of those units would it prefer from the standpoint of minimizing

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the risk of fuel cost non-recovery?
A. I don't, uh -- I don't know. I don't think that would be a relevant question in making a decision like that.
Q. You don't think that the utility would consider the greater exposure in the one instance than in the other to absorbing replacement power costs in making a decision between the two?
A. It's my experience that at the end of the day, utility's like every other type of firm, in the sense that they try to maximize profits and they're going to make the investment in the most profitable asset.
Q. Would you agree that part of the calculus in looking at profit or expected profit is an assessment of what your risk or potential exposure to losses is?
A. Yes.
Q. Okay.
MR. BUTLER: I think that's all the questions that I have for you. Give me one minute just to check my notes here and be sure.
(Discussion held off the record.)
BY MR. BUTLER:
Q. Dr. Dismukes --
A. Yes, sir.
Q. -- do you have a copy of The Rand Journal Of

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Economics article available to you?
And I'll give you a hint. If you look at OPC000016, I think that's the article.
A. I do. I do.
Q. Okay. Can you turn to, it's page 642 in the article, which is OPC000030.
A. Six forty-two, yes, sir.
Q. Okay. If you'll look at the first full paragraph on that page.
A. All right.
Q. And this kind of goes to what I was just asking you about, I think:
The empirical results do not support the proposition that there was a violation of the regulatory contract as a result of the cost disallowances of the 1980s.
And then it says: Regulators may have become more stringent in their treatment of nuclear plant operators, but they may simply have been responding to lax cost control by the operators of nuclear plants with highly dispersed ownership structures.
Do you see that?
A. Yes, sir.
Q. Okay. Are you aware of any evidence of

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lax cost control or lax operational control on the part of FPL with respect to its nuclear plants?
A. I don't have any opinion on that.
Q. Okay.
MR. BUTLER: All right, thank you, Dr. Dismukes. That's all the questions that I have.
THE WITNESS: Okay. You're welcome.
MR. BECK: Okay. Is there anyone else with questions?
MS. BENNETT: This is Lisa Bennett. The Public Service Commission does not have questions.
MS. KAUFMAN: Charlie, this is Vicki. I just had one question.
MR. BECK: Okay, go away.
CROSS (DAVID E. DISMUKES, PH.D.)
BY MS. KAUFMAN:
Q. Good afternoon, Dr. Dismukes. I just wanted to ask you, follow up on some questions that Mr. Butler was asking you about.
Are you aware of any merchant nuclear power plants in Florida?
A. I'm not aware of any, no, ma'am.
Q. Thank you.
MR. BECK: Cecilia, do you have any questions?

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MS. BRADLEY: I don't think so, right now. Thank you, though.
MR. BECK: Okay, John, I have no redirect. And we will not waive reading and signing.
MS. BENNETT: Charlie, this is Lisa.
MR. BECK: Yeah?
MS. BENNETT: Can I get the name of the court reporter in case we do want to order a copy.
THE REPORTER: Yes.
(Discussion held off the record.)
MR. BECK: And, Barbara, this is Charlie Beck. I would like to order a copy.
MR. BUTLER: As would FPL.
THE REPORTER: Okay.
MR. BUTLER: Thank you, everyone.
THE REPORTER: And you all are going to send me copies of the exhibits via e-mail?
MR. BECK: Right, we owe you Late-Filed 2 and 3, we'll send you by e-mail as soon as we can get them.
THE REPORTER: And the Notary's Certificate page. Okay, thank you.
MR. BUTLER: Thank you, everyone.
THE WITNESS: You're welcome.
MR. BUTLER: Take care, bye.

(Witness excused.)
(Deposition was concluded.)
- - -
THE REPORTER: Is this regular time?
MR. BUTLER: No, we're going to need it quicker than that. If we could get -- can we get it by the end of this week, Friday?
THE REPORTER: Yes.
- - -
(Late-Filed Deposition Exhibit No. 2 was marked for identification.)
(Late-Filed Deposition Exhibit No. 3 was marked for identification.)

DEPOSITION ERRATA SHEET

Our Assignment No. 153313

Case Caption: IN RE: REVIEW OF REPLACEMENT FUEL COSTS ASSOCIATED WITH THE FEBRUARY 26, 2008 OUTAGE ON FLORIDA POWER & LIGHT'S ELECTRICAL SYSTEM

DECLARATION UNDER PENALTY OF PERJURY

I declare under penalty of perjury that I have read the entire transcript of my Deposition taken in the captioned matter or the same has been read to me, and the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer these changes as if still under oath.

Signed on the _____ day of_____, 20___.

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DAVID E. DISMUKES, PH.D. JOB # 153313

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CERTIFICATE

STATE OF FLORIDA
COUNTY OF MARTIN

I, Barbara Haralambous, Professional Reporter and Notary Public in and for the State of Florida at Large, do hereby certify that the aforementioned witness was first duly sworn to testify the whole truth; that I was authorized to and did report said deposition in stenotype; and that the foregoing pages are a true and correct transcription of my shorthand notes of said deposition.

I further certify that said deposition was taken at the time and place hereinabove set forth and that the taking of said deposition was commenced and completed as hereinabove set out.

I further certify that I am not attorney or counsel of any of the parties, nor am I a relative or employee of any attorney or counsel of party connected with the action, nor am I financially interested in the action.

The foregoing certification of this transcript does not apply to any reproduction of the same by any means unless under the direct control and/or direction of the certifying reporter.

Dated this 10th day of March, 2010.

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Barbara Haralambous, Court Reporter
Job # 153313

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CERTIFICATE OF OATH

STATE OF Louisiana

COUNTY OF Orleans

I, the undersigned authority, certify that David Dismukes personally appeared before me at 201 St Charles Ave, N.O, LA and was duly sworn by me to tell the truth.

WITNESS my hand and official seal in the City of New Orleans, County of Orleans, State of Louisiana, this 8th day of March, 2010.

Marjorie A. McKeithen
Notary Public Bar Roll # 21767
State of Louisiana
my commission expires at death

(SEAL)

Personally known ✓ OR produced identification _____.

Type of identification produced _____.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Review of Replacement Fuel Costs Associated with the February 26, 2008 outage On Florida Power & Light's electrical system	))))	Docket No. 090505-EI

OPC CROSS-EXAMINATION EXHIBIT NO. _____

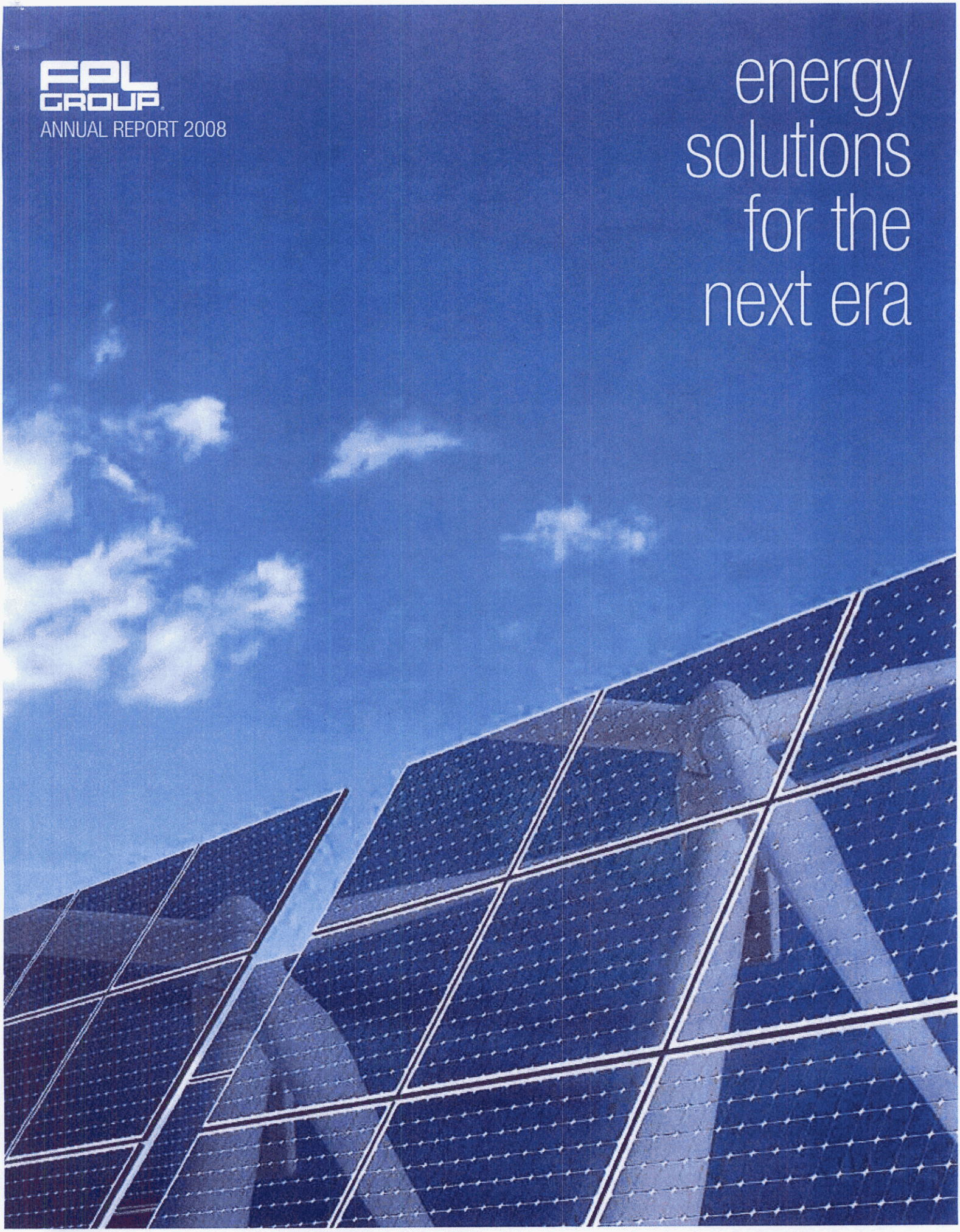
Excerpt, FPL Group Annual Report 2008

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 36
COMPANY Office of Public Counsel
WITNESS Excerpt, FPL Group Annual Report 2008
DATE 03/17/10

FPL GROUP

ANNUAL REPORT 2008

energy solutions for the next era



FINANCIAL HIGHLIGHTS

Years Ended December 31,	2008	2007	% change
FINANCIAL RESULTS			
($ in millions, except per share amounts)			
Net Income	$ 1,639	$ 1,312	24.9
Adjustments, net of income taxes:			
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges – NextEra Energy Resources	(170)	86	
Other than temporary impairment losses-net	76	6	
Adjusted Earnings	$ 1,545	$ 1,404	10.0
Earnings Per Share (assuming dilution)	$ 4.07	$ 3.27	24.5
Adjustments:			
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges – NextEra Energy Resources	(0.42)	0.21	
Other than temporary impairment losses-net	0.19	0.01	
Adjusted Earnings Per Share (assuming dilution)	$ 3.84	$ 3.49	10.0
Operating Revenues	$ 16,410	$ 15,263	7.5
Operating Income	$ 2,825	$ 2,283	23.7
Cash Flows from Operating Activities	$ 3,403	$ 3,593	(5.3)
Total Assets	$ 44,821	$ 40,123	11.7
COMMON STOCK DATA			
Weighted-Average Shares Outstanding (assuming dilution–millions)	403	401	0.5
Dividends Per Share	$ 1.78	$ 1.64	8.5
Book Value Per Share	$ 29.11	$ 26.93	8.1
Market Price Per Share (high-low)	$ 73.75-$33.81	$ 72.77-$53.72	
OPERATING DATA			
Utility Energy Sales (kwh - millions)	105,406	108,636	(3.0)
FPL Customer Accounts (year end - thousands)	4,498	4,509	(0.2)
Employees (year end)	15,296	14,602	4.8

SAFE HARBOR STATEMENT Any statements made herein about future operating results or other future events are forward-looking statements under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Actual results may differ substantially from such forward-looking statements. A discussion of factors that could cause actual results or events to vary is contained in Item 1A. Risk Factors in the enclosed FPL Group Annual Report on Form 10-K.





UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2008**

Commission File Number	Exact name of registrants as specified in their charters, address of principal executive offices and registrants' telephone number	IRS Employer Identification Number
1-8841	**FPL GROUP, INC.**	59-2449419
2-27612	**FLORIDA POWER & LIGHT COMPANY**	59-0247775

700 Universe Boulevard
Juno Beach, Florida 33408
(561) 694-4000

State or other jurisdiction of incorporation or organization: Florida

Securities registered pursuant to Section 12(b) of the Act:	Name of exchange on which registered
FPL Group, Inc.: Common Stock, $0.01 Par Value	New York Stock Exchange
Florida Power & Light Company: None	

Indicate by check mark if the registrants are well-known seasoned issuers, as defined in Rule 405 of the Securities Act of 1933.
FPL Group, Inc. Yes ☑ No ☐ Florida Power & Light Company Yes ☑ No ☐

Indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934.
FPL Group, Inc. Yes ☐ No ☑ Florida Power & Light Company Yes ☐ No ☑

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months, and (2) have been subject to such filing requirements for the past 90 days.
FPL Group, Inc. Yes ☑ No ☐ Florida Power & Light Company Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrants' knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrants are a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934.

FPL Group, Inc.	Large Accelerated Filer ☑	Accelerated Filer ☐	Non-Accelerated Filer ☐	Smaller Reporting Company ☐
Florida Power & Light Company	Large Accelerated Filer ☐	Accelerated Filer ☐	Non-Accelerated Filer ☑	Smaller Reporting Company ☐

Indicate by check mark whether the registrants are shell companies (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ☐ No ☑

Aggregate market value of the voting and non-voting common equity of FPL Group, Inc. held by non-affiliates as of June 30, 2008 (based on the closing market price on the Composite Tape on June 30, 2008) was $26,714,502,227.

There was no voting or non-voting common equity of Florida Power & Light Company held by non-affiliates as of June 30, 2008.

The number of shares outstanding of FPL Group, Inc. common stock, as of the latest practicable date: Common Stock, $0.01 par value, outstanding at January 31, 2009: 408,946,823 shares.

As of January 31, 2009, there were issued and outstanding 1,000 shares of Florida Power & Light Company common stock, without par value, all of which were held, beneficially and of record, by FPL Group, Inc.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of FPL Group, Inc.'s Proxy Statement for the 2009 Annual Meeting of Shareholders are incorporated by reference in Part III hereof.

This combined Form 10-K represents separate filings by FPL Group, Inc. and Florida Power & Light Company. Information contained herein relating to an individual registrant is filed by that registrant on its own behalf. Florida Power & Light Company makes no representations as to the information relating to FPL Group, Inc.'s other operations.

Florida Power & Light Company meets the conditions set forth in General Instruction I.(1)(a) and (b) of Form 10-K and is therefore filing this Form with the reduced disclosure format.

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FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions, future events or performance, climate change strategy or growth strategies (often, but not always, through the use of words or phrases such as will, will likely result, are expected to, will continue, is anticipated, aim, believe, could, should, would, estimated, may, plan, potential, projection, target, outlook, predict and intend or words of similar meaning) are not statements of historical facts and may be forward-looking. Forward-looking statements involve estimates, assumptions and uncertainties. Accordingly, any such statements are qualified in their entirety by reference to important factors included in Part I, Item 1A. Risk Factors (in addition to any assumptions and other factors referred to specifically in connection with such forward-looking statements) that could have a significant impact on FPL Group's and/or FPL's operations and financial results, and could cause FPL Group's and/or FPL's actual results to differ materially from those contained or implied in forward-looking statements made by or on behalf of FPL Group and/or FPL in this combined Form 10-K, in presentations, on their respective websites, in response to questions or otherwise.

Any forward-looking statement speaks only as of the date on which such statement is made, and FPL Group and FPL undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date on which such statement is made, unless otherwise required by law. New factors emerge from time to time and it is not possible for management to predict all of such factors, nor can it assess the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained or implied in any forward-looking statement.

PART I

Item 1. Business

FPL GROUP

FPL Group was incorporated in 1984 under the laws of Florida. FPL Group has two principal operating subsidiaries, FPL and NextEra Energy Resources (formerly known as FPL Energy, LLC). FPL is a rate-regulated utility engaged primarily in the generation, transmission, distribution and sale of electric energy. NextEra Energy Resources is FPL Group's competitive energy subsidiary which produces the majority of its electricity from clean and renewable fuels. FPL Group Capital, a wholly-owned subsidiary of FPL Group, holds the capital stock of, or has equity interests in, FPL Group's operating subsidiaries, other than FPL, and provides funding for those subsidiaries, including NextEra Energy Resources. At December 31, 2008, FPL Group and its subsidiaries employed approximately 15,300 people. For a discussion of FPL's and NextEra Energy Resources' businesses, see FPL Operations and NextEra Energy Resources Operations. For financial information regarding FPL Group's business segments, see Note 16.

In February 2009, the American Recovery and Reinvestment Act of 2009 (Recovery Act) was signed into law. It includes approximately $787 billion in tax incentives and new spending, a portion of which relates to renewable energy, energy efficiency and energy reliability. The Recovery Act includes, among other things, provisions that allow companies building wind facilities the option to choose between three investment cost recovery mechanisms: (i) PTCs which were extended for wind facilities through 2012, (ii) investment tax credits of 30% of the cost for qualifying wind facilities placed in service prior to 2013, or (iii) an election to receive a cash grant of 30% of the cost of qualifying wind facilities placed in service in 2009 or 2010, or if construction began prior to December 31, 2010 and the wind facility is placed in service prior to 2013. An election to receive a cash grant of 30%, in lieu of the 30% investment tax credit allowable under present law, also applies to the cost of qualifying solar facilities placed in service in either 2009 or 2010, or if construction began prior to December 31, 2010 and the solar facility is placed in service prior to 2017. In addition, 50% bonus depreciation was extended on most types of property placed in service in 2009, and certain property placed in service in 2010. FPL Group and FPL are in the process of evaluating the effect of the Recovery Act on their businesses.

Website Access to SEC Filings. FPL Group and FPL make their SEC filings, including the annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, available free of charge on FPL Group's internet website, www.fplgroup.com, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Information on FPL Group's website (or any of its subsidiaries' websites) is not incorporated by reference in this annual report on Form 10-K. The SEC maintains an internet website at www.sec.gov that contains reports, proxy and other information about FPL Group and FPL filed electronically with the SEC.

FPL OPERATIONS

General. FPL was incorporated under the laws of Florida in 1925 and is a wholly-owned subsidiary of FPL Group. FPL supplies electric service to a population of more than 8.7 million throughout most of the east and lower west coasts of Florida. During 2008, FPL served approximately 4.5 million customer accounts. The percentage of FPL's operating revenues by customer class was as follows:

	Years Ended December 31,		
	2008	2007	2006
Residential	53%	54%	54%
Commercial	40	39	39
Industrial	3	3	3
Other, including deferred or recovered clause revenues, the net change in unbilled revenues, transmission and wholesale sales and customer-related fees	4	4	4
	100%	100%	100%

Over the last ten years, FPL's average annual customer growth has been 2.1%. However, beginning in 2007, FPL has experienced a slowdown in retail customer growth and a decline in non-weather related usage per retail customer. Retail customer growth in 2008 was 0.3%, although during the fourth quarter of 2008 FPL experienced a decline in customer accounts of 0.2%. FPL believes that the economic slowdown, the downturn in the housing market and the credit crisis that have affected the country and the state of Florida have contributed to the slowdown in customer growth and to the decline in non-weather related usage per retail customer. In 2008, FPL experienced an increase in inactive accounts (accounts with installed meters without corresponding customer names) and in low-usage customers (customers using less than 200 kwh per month), which have contributed to the decline in retail customer growth and non-weather related usage per retail customer.

Regulation. FPL's retail operations provided approximately 99% of FPL's 2008 operating revenues. Retail operations are regulated by the FPSC, which has jurisdiction over retail rates, service territory, issuances of securities, planning, siting and construction of facilities and other matters. FPL is also subject to regulation by the FERC with respect to certain aspects of its operations, including, but not limited to, the acquisition and disposition of facilities, interchange and transmission services and wholesale purchases and sales of electric energy. In addition, FPL's nuclear power plants are subject to the jurisdiction of the NRC. NRC regulations govern the granting of licenses for the construction, operation and retirement of nuclear power plants and subject these plants to continuing review and regulation.

Retail Ratemaking. The underlying concept of utility ratemaking is to set rates at a level that allows the utility the opportunity to collect from customers total revenues (revenue requirements) equal to its cost of providing service, including a reasonable rate of return on invested capital. To accomplish this, the FPSC uses various ratemaking mechanisms, including, among other things, base rates and cost recovery clauses.

In general, the basic costs of providing electric service, other than fuel and certain other costs, are recovered through base rates, which are designed to recover the costs of constructing, operating and maintaining the utility system. These basic costs include O&M expenses, depreciation and taxes, as well as a return on FPL's investment in assets used and useful in providing electric service (rate base). At the time base rates are determined, the allowed rate of return on rate base approximates FPL's estimated weighted-average cost of capital, which includes its costs for outstanding debt and, typically, an allowed ROE. The FPSC monitors FPL's actual regulatory ROE through a surveillance report that is filed monthly by FPL with the FPSC. The FPSC does not provide assurance that an allowed ROE will be achieved. Base rates are determined in rate proceedings or through negotiations, which occur at irregular intervals at the initiative of FPL, the FPSC, the State of Florida Office of Public Counsel or a substantially affected party.

Base Rates – In 2005, the FPSC approved a stipulation and settlement agreement regarding FPL's retail base rates (2005 rate agreement), signed by FPL and all of the interveners in its 2005 base rate proceeding. FPL expects the 2005 rate agreement to be in effect through December 31, 2009; thereafter, it shall remain in effect until terminated on the date new retail base rates become effective pursuant to an FPSC order.

The 2005 rate agreement provides that retail base rates will not increase during the term of the agreement except to allow recovery of the revenue requirements of any power plant approved pursuant to the Florida Power Plant Siting Act (Siting Act) that achieves commercial operation during the term of the 2005 rate agreement. Retail base rates increased on May 1, 2007 when a 1,144 mw natural gas-fired plant at FPL's Turkey Point site (Turkey Point Unit No. 5) was placed in service. As approved by the FPSC, FPL's retail base revenues will increase in 2009 when two natural gas-fired combined-cycle units (West County Energy Center Units Nos. 1 and 2), each with approximately 1,220 mw of net generating capacity, are placed in service, which is expected to occur by the third quarter of 2009 and fourth quarter of 2009, respectively (see Fossil Operations below). The 2005 rate agreement also has a revenue sharing mechanism, whereby revenues from retail base operations in excess of certain thresholds will be shared with customers on the basis of two-thirds refunded to customers and one-third retained by FPL. Revenues from retail base operations in excess of a second, higher threshold (cap) will be refunded 100% to customers. The revenue sharing threshold and cap are established by increasing the prior year's threshold and cap by the sum of the following: (i) the average annual growth rate in retail kwh sales for the ten-year period ending December 31 of the preceding year multiplied by the prior year's retail base rate revenue sharing threshold and cap and (ii) the amount of any incremental base rate increases for power plants approved pursuant to the Siting Act that achieve commercial operation during the term of the 2005 rate agreement. The revenue sharing threshold and cap for 2009 are estimated to be $4,534 million and $4,713 million, respectively. For the year ended December 31, 2008, revenues from retail base operations did not exceed the 2008 thresholds.

Under the terms of the 2005 rate agreement: (i) FPL's electric property depreciation rates are based upon the comprehensive depreciation studies it filed with the FPSC in March 2005; however, FPL may reduce depreciation by up to $125 million annually, (ii) FPL has the ability to recover prudently incurred storm restoration costs, either through securitization provisions pursuant to the Florida Statutes or through surcharges, and (iii) FPL will be allowed to recover through a cost recovery clause prudently incurred incremental costs associated with complying with an FPSC or FERC order regarding a regional transmission organization.

FPL does not have an authorized regulatory ROE under the 2005 rate agreement for the purpose of addressing earnings levels. For all other regulatory purposes, FPL has an ROE of 11.75%. Under the 2005 rate agreement, the revenue sharing mechanism described above is the appropriate and exclusive mechanism to address earnings levels. However, if FPL's regulatory ROE, as reported to the FPSC in FPL's monthly earnings surveillance report, falls below 10% during the term of the 2005 rate agreement, FPL may petition the FPSC to amend its base rates.

In November 2008, FPL notified the FPSC that it intends to initiate a base rate proceeding in March 2009. In the notification, FPL stated that it expects to request an $800 million to $950 million annual increase in base rates beginning on January 1, 2010 and an additional annual base rate increase beginning on January 1, 2011. These amounts exclude the effects of depreciation, which depend in part on the results of a detailed depreciation study that FPL is currently finalizing. Further, FPL expects to request that the FPSC continue to allow FPL to use the mechanism for recovery of the revenue requirements of any new power plant approved pursuant to the Siting Act that was established in FPL's 2005 rate agreement. Hearings on the base rate proceeding are expected during the third quarter of 2009 and a final decision is expected by the end of 2009. The final decision may approve rates that are different from those that FPL will request.

Cost Recovery Clauses – Fuel costs are recovered from customers through levelized charges per kwh established under the fuel clause. These charges are calculated annually based on estimated fuel costs and estimated customer usage for the following year, plus or minus a true-up adjustment to reflect the variance of actual costs and usage from the estimates used in setting the fuel adjustment charges for prior periods. An adjustment to the levelized charges may be approved during the course of a year to reflect a projected variance based on actual costs and usage. In 2008, approximately $6.1 billion of costs were recovered through the fuel clause. FPL uses a risk management fuel procurement program which was approved by the FPSC at the program's inception. The FPSC reviews the program activities and results for prudence on an annual basis as part of its annual review of fuel costs. The program is intended to manage fuel price volatility by locking in fuel prices for a portion of FPL's fuel requirements. See Energy Marketing and Trading, Management's Discussion – Results of Operations, Note 1 – Regulation and Note 3.

Capacity payments to other utilities and generating companies for purchased power are recovered from customers through the capacity clause and base rates. In 2008, approximately $517 million of these costs were recovered through the capacity clause. Beginning in 2009, FPL will recover pre-construction costs and carrying charges (equal to the pretax AFUDC rate) on construction costs for new nuclear capacity through the capacity clause. Once the new capacity goes into service, construction costs will be recovered through base rate increases. See Nuclear Operations below.

Costs associated with implementing energy conservation programs totaled approximately $182 million in 2008 and were recovered from customers through the energy conservation cost recovery clause. Costs of complying with federal, state and local environmental regulations enacted after April 1993 are recovered through the environmental clause to the extent not included in base rates. In 2008, approximately $40 million of these costs were recovered through the environmental clause. Beginning in 2009, FPL will recover costs associated with its proposed solar generating facilities through the environmental clause. See Solar Operations below.

Other Recovery Mechanisms – FPL maintains a funded storm and property insurance reserve. Four hurricanes in 2005 and three hurricanes in 2004 caused major damage in parts of FPL's service territory. Storm restoration costs incurred by FPL during 2005 and 2004 exceeded the amount in the storm and property insurance reserve, resulting in a storm reserve deficiency. In 2007, FPL formed a wholly-owned bankruptcy remote special purpose subsidiary for the purpose of issuing storm-recovery bonds, pursuant to the securitization provisions of the Florida Statutes and an FPSC financing order. In May 2007, the FPL subsidiary issued $652 million aggregate principal amount of senior secured bonds (storm-recovery bonds), primarily for the after-tax equivalent of the total of FPL's unrecovered balance of the 2004 storm restoration costs, the 2005 storm restoration costs and approximately $200 million to reestablish FPL's storm and property insurance reserve. The storm-recovery bonds, including interest and bond issuance costs, are being repaid through a surcharge to retail customers. Prior to the issuance of these storm-recovery bonds, FPL had been recovering the 2004 storm restoration costs from retail customers through a storm damage surcharge. See Management's Discussion – Results of Operations – FPL and Note 9 – FPL.

In 2007, the FPSC denied FPL's need petition for two ultra super critical pulverized coal generating units in Glades County, Florida. In December 2008, the FPSC approved the recovery of approximately $34 million of pre-construction costs associated with these units over a five-year period beginning January 2010.

The FPSC has the authority to disallow recovery of costs that it considers excessive or imprudently incurred. Such costs may include, among others, fuel and O&M expenses, the cost of replacing power lost when fossil and nuclear units are unavailable, storm restoration costs and costs associated with the construction or acquisition of new facilities.

Competition. FPL currently holds 176 franchise agreements to provide electric service in various municipalities and counties in Florida with varying expiration dates through 2039. Of the 176 franchise agreements, three expire in 2009, 14 expire in 2010 and 159 expire during the period 2011 through 2039. Negotiations are ongoing to renew franchises with upcoming expirations. FPL also provides service to 13 other municipalities and to 22 unincorporated areas within its service area without franchise agreements. FPL considers its franchises to be adequate for the conduct of its business.

FPL currently faces competition from other suppliers of electrical energy to wholesale customers and from alternative energy sources and self-generation for other customer groups, primarily industrial customers. The FERC has jurisdiction over potential changes that could affect competition in wholesale transactions. In 2008, operating revenues from wholesale and industrial customers combined represented less than 4% of FPL's total operating revenues. Various states, other than Florida, have enacted legislation or have state commissions that have issued orders designed to allow retail customers to choose their electricity supplier. Management believes it is unlikely there will be any state actions to restructure the retail electric industry in Florida in the near future. If the basis of regulation for some or all of FPL's business changes from cost-based regulation, existing regulatory assets and liabilities would be written off unless regulators specify an alternative means of recovery or refund. Further, other aspects of the business, such as generation assets and long-term power purchase commitments, would need to be reviewed to assess their recoverability in a changed regulatory environment. See Management's Discussion – Critical Accounting Policies and Estimates – Regulatory Accounting.

Item 1A. Risk Factors

Risks Relating to FPL Group's and FPL's Business

FPL Group and FPL are subject to complex laws and regulations and to changes in laws and regulations as well as changing governmental policies and regulatory actions. FPL holds franchise agreements with local municipalities and counties, and must renegotiate expiring agreements. These factors may have a negative impact on the business and results of operations of FPL Group and FPL.

- FPL Group and FPL are subject to complex laws and regulations, and to changes in laws or regulations, with respect to, among other things, allowed rates of return, industry and rate structure, operation of nuclear power facilities, construction and operation of generation facilities, construction and operation of transmission and distribution facilities, acquisition, disposal, depreciation and amortization of assets and facilities, recovery of fuel and purchased power costs, decommissioning costs, ROE and equity ratio limits, transmission reliability and present or prospective wholesale and retail competition. This substantial and complex framework exposes FPL Group and FPL to increased compliance costs and potentially significant monetary penalties for non-compliance. The FPSC has the authority to disallow recovery by FPL of any and all costs that it considers excessive or imprudently incurred. The regulatory process generally restricts FPL's ability to grow earnings and does not provide any assurance as to achievement of earnings levels.

- FPL Group and FPL also are subject to extensive federal, state and local environmental statutes, rules and regulations, as well as the effect of changes in or additions to applicable statutes, rules and regulations that relate to, or in the future may relate to, for example, air quality, water quality, climate change, greenhouse gas emissions, CO_2 emissions, waste management, marine and wildlife mortality, natural resources, health, safety and renewable portfolio standards that could, among other things, restrict or limit the output of certain facilities or the use of certain fuels required for the production of electricity and/or require additional pollution control equipment and otherwise increase costs. There are significant capital, operating and other costs associated with compliance with these environmental statutes, rules and regulations, and those costs could be even more significant in the future.

- FPL Group and FPL operate in a changing market environment influenced by various legislative and regulatory initiatives regarding regulation, deregulation or restructuring of the energy industry, including, for example, deregulation or restructuring of the production and sale of electricity, as well as increased focus on renewable and clean energy sources and reduction of carbon emissions. FPL Group and its subsidiaries will need to adapt to these changes and may face increasing costs and competitive pressure in doing so.

- FPL Group's and FPL's results of operations could be affected by FPL's ability to negotiate or renegotiate franchise agreements with municipalities and counties in Florida.

The operation and maintenance of power generation, transmission and distribution facilities involve significant risks that could adversely affect the results of operations and financial condition of FPL Group and FPL.

- The operation and maintenance of power generation, transmission and distribution facilities involve many risks, including, for example, start up risks, breakdown or failure of equipment, transmission and distribution lines or pipelines, the inability to properly manage or mitigate known equipment defects throughout FPL Group's and FPL's generation fleets and transmission and distribution systems, use of new or unproven technology, the dependence on a specific fuel source, failures in the supply or transportation of fuel, the impact of unusual or adverse weather conditions (including natural disasters such as hurricanes, floods and droughts), and performance below expected or contracted levels of output or efficiency. This could result in lost revenues and/or increased expenses, including, for example, lost revenues due to prolonged outages and increased expenses due to monetary penalties or fines, replacement equipment costs or an obligation to purchase or generate replacement power at potentially higher prices to meet contractual obligations. Insurance, warranties or performance guarantees may not cover any or all of the lost revenues or increased expenses. Breakdown or failure of an operating facility of NextEra Energy Resources may, for example, prevent the facility from performing under applicable power sales agreements which, in certain situations, could result in termination of the agreement or subject NextEra Energy Resources to incurring a liability for liquidated damages.

The operation and maintenance of nuclear facilities involves inherent risks, including environmental, health, regulatory, terrorism and financial risks, that could result in fines or the closure of nuclear units owned by FPL or NextEra Energy Resources, and which may present potential exposures in excess of insurance coverage.

- FPL and NextEra Energy Resources own, or hold undivided interests in, nuclear generation facilities in four states. These nuclear facilities are subject to environmental, health and financial risks such as on-site storage of spent nuclear fuel, the ability to dispose of spent nuclear fuel, the ability to maintain adequate reserves for decommissioning, potential liabilities arising out of the operation of these facilities, and the threat of a possible terrorist attack. Although FPL and NextEra Energy Resources maintain decommissioning trusts and external insurance coverage to minimize the financial exposure to these risks, it is possible that the cost of decommissioning the facilities could exceed the amount available in the decommissioning trusts, and that liability and property damages could exceed the amount of insurance coverage.

- The NRC has broad authority to impose licensing and safety-related requirements for the construction and operation and maintenance of nuclear generation facilities. In the event of non-compliance, the NRC has the authority to impose fines or shut down a unit, or both, depending upon its assessment of the severity of the situation, until compliance is achieved. NRC orders or new regulations related to increased security measures and any future safety requirements promulgated by the NRC could require FPL and NextEra Energy Resources to incur substantial operating and capital expenditures at their nuclear plants. In addition, if a serious nuclear incident were to occur at an FPL or NextEra Energy Resources plant, it could result in substantial costs. A major incident at a nuclear facility anywhere in the world could cause the NRC to limit or prohibit the operation or licensing of any domestic nuclear unit.

- In addition, potential terrorist threats and increased public scrutiny of utilities could result in increased nuclear licensing or compliance costs which are difficult or impossible to predict.

The construction of, and capital improvements to, power generation and transmission facilities involve substantial risks. Should construction or capital improvement efforts be unsuccessful or delayed, the results of operations and financial condition of FPL Group and FPL could be adversely affected.

- The ability of FPL Group and FPL to complete construction of, and capital improvement projects for, their power generation and transmission facilities on schedule and within budget are contingent upon many variables that could delay completion, increase costs or otherwise adversely affect operational and financial results, including, for example, limitations related to transmission interconnection issues, escalating costs for materials and labor and environmental compliance, delays with respect to permits and other approvals, and disputes involving third parties, and are subject to substantial risks. Should any such efforts be unsuccessful or delayed, FPL Group and FPL could be subject to additional costs, termination payments under committed contracts, loss of tax credits and/or the write-off of their investment in the project or improvement.

The use of derivative contracts by FPL Group and FPL in the normal course of business could result in financial losses or the payment of margin cash collateral that adversely impact the results of operations or cash flows of FPL Group and FPL.

- FPL Group and FPL use derivative instruments, such as swaps, options, futures and forwards, some of which are traded in the over-the-counter markets or on exchanges, to manage their commodity and financial market risks, and for FPL Group to engage in trading and marketing activities. FPL Group could recognize financial losses as a result of volatility in the market values of these derivative instruments, or if a counterparty fails to perform or make payments under these derivative instruments and could suffer a reduction in operating cash flows as a result of the requirement to post margin cash collateral. In the absence of actively quoted market prices and pricing information from external sources, the valuation of these derivative instruments involves management's judgment or use of estimates. As a result, changes in the underlying assumptions or use of alternative valuation methods could affect the reported fair value of these derivative instruments. In addition, FPL's use of such instruments could be subject to prudence challenges and, if found imprudent, cost recovery could be disallowed by the FPSC.

- FPL Group provides full energy and capacity requirement services, which include load-following services and various ancillary services, primarily to distribution utilities to satisfy all or a portion of such utilities' power supply obligations to their customers. The supply costs for these transactions may be affected by a number of factors, such as weather conditions, fluctuating prices for energy and ancillary services, and the ability of the distribution utilities' customers to elect to receive service from competing suppliers, which could negatively affect FPL Group's results of operations from these transactions.

FPL Group's competitive energy business is subject to risks, many of which are beyond the control of FPL Group, including, but not limited to, the efficient development and operation of generating assets, the successful and timely completion of project restructuring activities, the price and supply of fuel and equipment, transmission constraints, competition from other generators, including those using new sources of generation, excess generation capacity and demand for power, that may reduce the revenues and adversely impact the results of operations and financial condition of FPL Group.

- There are various risks associated with FPL Group's competitive energy business. In addition to risks discussed elsewhere, risk factors specifically affecting NextEra Energy Resources' success in competitive wholesale markets include, for example, the ability to efficiently develop and operate generating assets, the successful and timely completion of project restructuring activities, maintenance of the qualifying facility status of certain projects, the price and supply of fuel (including transportation) and equipment, transmission constraints, the ability to utilize PTCs, competition from other and new sources of generation, excess generation capacity and shifting demand for power. There can be significant volatility in market prices for fuel, electricity and renewable and other energy commodities, and there are other financial, counterparty and market risks that are beyond the control of NextEra Energy Resources. NextEra Energy Resources' inability or failure to effectively hedge its assets or positions against changes in commodity prices, interest rates, counterparty credit risk or other risk measures could significantly impair FPL Group's future financial results. In keeping with industry trends, a portion of NextEra Energy Resources' power generation facilities operate wholly or partially without long-term power purchase agreements. As a result, power from these facilities is sold on the spot market or on a short-term contractual basis, which may increase the volatility of FPL Group's financial results. In addition, NextEra Energy Resources' business depends upon power transmission and natural gas transportation facilities owned and operated by others; if transmission or transportation is disrupted or capacity is inadequate or unavailable, NextEra Energy Resources' ability to sell and deliver its wholesale power or natural gas may be limited.

FPL Group's ability to successfully identify, complete and integrate acquisitions is subject to significant risks, including, but not limited to, the effect of increased competition for acquisitions resulting from the consolidation of the power industry.

- FPL Group is likely to encounter significant competition for acquisition opportunities that may become available as a result of the consolidation of the power industry in general. In addition, FPL Group may be unable to identify attractive acquisition opportunities at favorable prices and to complete and integrate them successfully and in a timely manner.

FPL Group and FPL participate in markets that are often subject to uncertain economic conditions, which makes it difficult to estimate growth, future income and expenditures.

- FPL Group and FPL participate in markets that are susceptible to uncertain economic conditions, which complicate estimates of revenue growth. Because components of budgeting and forecasting are dependent upon estimates of revenue growth in the markets FPL Group and FPL serve, the uncertainty makes estimates of future income and expenditures more difficult. As a result, FPL Group and FPL may make significant investments and expenditures but never realize the anticipated benefits, which could adversely affect results of operations. The future direction of the overall economy also may have a significant effect on the overall performance and financial condition of FPL Group and FPL.

Customer growth and customer usage in FPL's service area affect FPL Group's and FPL's results of operations.

- FPL Group's and FPL's results of operations are affected by the growth in customer accounts in FPL's service area and by customer usage. Customer growth can be affected by population growth. Customer growth and customer usage can be affected by economic factors in Florida and elsewhere, including, for example, job and income growth, housing starts and new home prices. Customer growth and customer usage directly influence the demand for electricity and the need for additional power generation and power delivery facilities at FPL.

Weather affects FPL Group's and FPL's results of operations, as can the impact of severe weather. Weather conditions directly influence the demand for electricity and natural gas, affect the price of energy commodities, and can affect the production of electricity at power generating facilities.

- FPL Group's and FPL's results of operations are affected by changes in the weather. Weather conditions directly influence the demand for electricity and natural gas, affect the price of energy commodities, and can affect the production of electricity at power generating facilities, including, but not limited to, wind, solar and hydro-powered facilities. FPL Group's and FPL's results of operations can be affected by the impact of severe weather which can be destructive, causing outages and/or property damage, may affect fuel supply, and could require additional costs to be incurred. At FPL, recovery of these costs is subject to FPSC approval.

Adverse capital and credit market conditions may adversely affect FPL Group's and FPL's ability to meet liquidity needs, access capital and operate and grow their businesses, and increase the cost of capital. Disruptions, uncertainty or volatility in the financial markets can also adversely impact the results of operations and financial condition of FPL Group and FPL, as well as exert downward pressure on the market price of FPL Group's common stock.

- Having access to the credit and capital markets, at a reasonable cost, is necessary for FPL Group and FPL to fund their operations, including their capital requirements. Those markets have provided FPL Group and FPL with the liquidity to operate and grow their businesses that is not otherwise provided from operating cash flows. Disruptions, uncertainty or volatility in those markets can increase FPL Group's and FPL's cost of capital. If FPL Group and FPL are unable to access the credit and capital markets on terms that are reasonable, they may have to delay raising capital, issue shorter-term securities and/or bear an unfavorable cost of capital, which, in turn, could adversely impact their ability to grow their businesses, decrease earnings, significantly reduce financial flexibility and/or limit FPL Group's ability to sustain its current common stock dividend level.

- The market price and trading volume of FPL Group's common stock could be subject to significant fluctuations due to, among other things, general stock market conditions and changes in market sentiment regarding FPL Group and its subsidiaries' operations, business, growth prospects and financing strategies.

FPL Group's, FPL Group Capital's and FPL's inability to maintain their current credit ratings may adversely affect FPL Group's and FPL's liquidity, limit the ability of FPL Group and FPL to grow their businesses, and would likely increase interest costs.

- FPL Group and FPL rely on access to capital and credit markets as significant sources of liquidity for capital requirements not satisfied by operating cash flows. The inability of FPL Group, FPL Group Capital and FPL to maintain their current credit ratings could affect their ability to raise capital or obtain credit on favorable terms, which, in turn, could impact FPL Group's and FPL's ability to grow their businesses and would likely increase their interest costs.

FPL Group and FPL are subject to credit and performance risk from third parties under supply and service contracts.

- FPL Group and FPL rely on contracts with vendors for the supply of equipment, materials, fuel and other goods and services required for the construction and operation of, and for capital improvements to, their facilities, as well as for business operations. If vendors fail to fulfill their contractual obligations, FPL Group and FPL may need to make arrangements with other suppliers, which could result in higher costs, untimely completion of power generation facilities and other projects, and/or a disruption to their operations.

FPL Group and FPL are subject to costs and other potentially adverse effects of legal and regulatory proceedings, as well as regulatory compliance and changes in or additions to applicable tax laws, rates or policies, rates of inflation, accounting standards, securities laws, corporate governance requirements and labor and employment laws.

- FPL Group and FPL are subject to costs and other potentially adverse effects of legal and regulatory proceedings, settlements, investigations and claims, as well as regulatory compliance and the effect of new, or changes in, tax laws, rates or policies, rates of inflation, accounting standards, securities laws, corporate governance requirements and labor and employment laws.

- FPL and NextEra Energy Resources, as owners and operators of bulk power transmission systems and/or critical assets within various regions throughout the United States, are subject to mandatory reliability standards promulgated by the North American Electric Reliability Corporation and enforced by the FERC. These standards, which previously were being applied on a voluntary basis, became mandatory in June 2007. Noncompliance with these mandatory reliability standards could result in sanctions, including substantial monetary penalties, which likely would not be recoverable from customers.

Threats of terrorism and catastrophic events that could result from terrorism, cyber attacks, or individuals and/or groups attempting to disrupt FPL Group's and FPL's business may impact the operations of FPL Group and FPL in unpredictable ways.

- FPL Group and FPL are subject to direct and indirect effects of terrorist threats and activities, as well as cyber attacks and disruptive activities of individuals and/or groups. Infrastructure facilities and systems, including, for example, generation, transmission and distribution facilities, physical assets and information systems, in general, have been identified as potential targets. The effects of these threats and activities include, but are not limited to, the inability to generate, purchase or transmit power, the delay in development and construction of new generating facilities, the risk of a significant slowdown in growth or a decline in the U.S. economy, delay in economic recovery in the United States, and the increased cost and adequacy of security and insurance.

The ability of FPL Group and FPL to obtain insurance and the terms of any available insurance coverage could be adversely affected by international, national, state or local events and company-specific events.

- FPL Group's and FPL's ability to obtain insurance, and the cost of and coverage provided by such insurance, could be adversely affected by international, national, state or local events as well as company-specific events.

FPL Group and FPL are subject to employee workforce factors that could adversely affect the businesses and financial condition of FPL Group and FPL.

- FPL Group and FPL are subject to employee workforce factors, including, for example, loss or retirement of key executives, availability of qualified personnel, inflationary pressures on payroll and benefits costs and collective bargaining agreements with union employees and work stoppage that could adversely affect the businesses and financial condition of FPL Group and FPL.

The risks described herein are not the only risks facing FPL Group and FPL. Additional risks and uncertainties also may materially adversely affect FPL Group's or FPL's business, financial condition and/or future operating results.

Item 1B. Unresolved Staff Comments

None

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Review of Replacement Fuel Costs Associated with the February 26, 2008 outage On Florida Power & Light's electrical system	))))	Docket No. 090505-EI

OPC CROSS-EXAMINATION EXHIBIT NO. _____

FPL News Release dated September 26, 2007

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 37
COMPANY Office of Public Counsel
WITNESS FPL News Release dated September 26, 2007
DATE 03/17/10

September 26, 2007

FPL Group plans to boost U.S. solar energy production; Will invest in smart network to enhance utility customers' energy management and offer renewable energy products nationwide

JUNO BEACH, Fla. – FPL Group, Inc., (NYSE: FPL) one of the country's leading generators of renewable electric power, today announced a $2.4 billion investment program aimed at increasing U.S. solar thermal energy output and reducing carbon dioxide emissions that contribute to global warming.

FPL Group, and its subsidiaries Florida Power & Light and FPL Energy, announced the following three initiatives today:

- Investment of up to $1.5 billion in new solar thermal generating facilities in Florida and California over the next seven years, starting with a project at Florida Power & Light (FPL).
- Investment of up to $500 million by FPL to create a smart network that will provide its 4.5 million customers with enhanced energy management capabilities.
- The launch by FPL Energy of a new consumer education program and new products that could increase renewable energy resources by at least $400 million over the first five years of the program.

"These new investments, coupled with our recent announcement to invest an estimated $20 billion in new wind generation, demonstrate FPL Group's continued commitment to improve the environment and reaffirm our leadership position among U.S. utilities to combat global warming," said Lew Hay, chairman and CEO of FPL Group.

Former President Bill Clinton announced FPL Group's new commitments at today's session of the 2007 Clinton Global Initiative in New York City, an event that fosters shared commitment by individuals, businesses and governments to confront major world issues and achieve real change.

"We at FPL Group are proud of our leadership position in clean energy and are pleased to take yet another step towards helping to reduce greenhouse gas emissions," said Hay. "We thank President Clinton for challenging leaders throughout the world to address energy and climate change issues, and we are pleased that we can respond to his call with action.

"We also are deeply honored that Florida Governor Charlie Crist joined us in person today to receive this recognition at the Clinton Global Initiative Forum. Gov. Crist is providing great leadership in our state in addressing climate change," said Hay.

Florida Power & Light to build new solar thermal facility

One of the country's largest electric utilities, FPL is planning to build 300 megawatts of solar generating capacity in Florida using Ausra, Inc.'s solar thermal technology. According to estimates, this new facility will avoid nearly 11 million tons of carbon dioxide emissions over a 20-year period. As a first step, FPL expects to construct a 10-megawatt project. Subject to Ausra meeting agreed-upon cost and technical specifications, as well as FPL gaining regulatory and

related approvals, the utility will expand the project to a 300-megawatt facility.

Florida Power & Light to create smart network

In a second initiative, FPL said it plans to invest up to $500 million to install a smart network utilizing state-of-the-art technology in the 35 Florida counties it serves.

This new program will allow customers to view their energy consumption online every day. Real-time understanding of energy use means real-time opportunities to conserve. Smart meters installed at residences and businesses will offer customers the chance to cut power bills and lower electricity demand.

At the same time, FPL will be able to use this new smart network to develop better energy management programs. The combination of improved energy management and lower electricity demand from customers means that FPL will be able to reduce the volume of fossil fuels burned, thus cutting carbon dioxide emissions even more.

FPL Energy to launch renewable energy education and consumer participation program

In a third initiative, FPL Energy plans to launch a nationwide renewable energy program early next year that will allow residential and business customers to take an active role in reducing greenhouse gas emissions and developing new sources of renewable energy. This project is expected to generate revenues of about $400 million during its first five years of operation, and 100 percent of these revenues will be used to develop new capacity in renewable energy.

Under this program, consumers will be able to purchase products associated with Renewable Energy Credits (REC) generated by FPL Energy's renewable energy facilities. By doing so, participants will be able to help offset their own carbon footprints.

The program will be supported by a national educational effort that will explain how our products work and how purchasing them will help reduce greenhouse gas emissions.

FPL Group building on clean energy leadership position

These new programs will build on FPL Group's long-standing commitment to improve the environment, and represent important additions to the company's clean energy portfolio.

FPL Group's competitive energy supplier subsidiary, FPL Energy, has many years of experience in solar power. It owns and operates the world's largest solar thermal fields, located in the Mojave Desert. FPL Energy also is the country's largest generator of wind power, with 52 wind facilities in 16 states.

In July, FPL Energy made another major decision aimed at reducing greenhouse gases, unveiling a $20 billion plan to triple its nearly 4,500-megawatt wind generating capacity. The company expects to add between 8,000 and 10,000 megawatts of wind energy by the end of 2012.

FPL is also a leader in energy conservation and efficiency

Department of Energy data show that FPL is No. 1 in energy conservation programs among U.S. electric utilities and No. 4 in energy efficiency programs.

FPL Group's 36,000-megawatt power generation fleet has one of the lowest carbon dioxide emission rates in the country. For example, if the rest of the electric utility industry were generating electricity with the same carbon dioxide emissions rate per megawatt hour as FPL Group, the U.S. would be able to meet its Kyoto target for total carbon emissions without any emissions reductions from other sectors.

FPL Group's CEO Hay is a strong advocate for a mandatory, nationwide policy to place a price on greenhouse gases. He advocates a carbon fee, calling it the most efficient and effective manner to slow, stop and eventually reduce carbon emissions. A copy of FPL Group's proposed carbon fee policy can be obtained on **www.fplgroup.com**.

Profile

FPL Group, with annual revenues of nearly $16 billion, is nationally known as a high quality, efficient, and customer-driven organization focused on energy-related products and services. With a growing presence in 26 states, it is widely recognized as one of the country's premier power companies. Its principal subsidiary, Florida Power & Light Company, serves 4.5 million customer accounts in Florida. FPL Energy, LLC, an FPL Group competitive energy subsidiary, is a leader in producing electricity from clean and renewable fuels. Additional information is available on the Internet at **www.FPLGroup.com** , **www.FPL.com** and **www.FPLEnergy.com**

Cautionary Statements And Risk Factors That May Affect Future Results

In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 (Reform Act), FPL Group, Inc. (FPL Group) and Florida Power & Light Company (FPL) are hereby providing cautionary statements identifying important factors that could cause FPL Group's or FPL's actual results to differ materially from those projected in forward-looking statements (as such term is defined in the Reform Act) made by or on behalf of FPL Group and FPL in this press release, on their respective websites, in response to questions or otherwise. Any statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as will likely result, are expected to, will continue, is anticipated, believe, could, estimated, may, plan, potential, projection, target, outlook) are not statements of historical facts and may be forward-looking. Forward-looking statements involve estimates, assumptions and uncertainties. Accordingly, any such statements are qualified in their entirety by reference to, and are accompanied by, the following important factors (in addition to any assumptions and other factors referred to specifically in connection with such forward-looking statements) that could cause FPL Group's or FPL's actual results to differ materially from those contained in forward-looking statements made by or on behalf of FPL Group and FPL.

Any forward-looking statement speaks only as of the date on which such statement is made, and FPL Group and FPL undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date on which such statement is made. New factors emerge from time to time and it is not possible for management to predict all of such factors, nor can it assess the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement.

The following are some important factors that could have a significant impact on FPL Group's and FPL's operations and financial results, and could cause FPL Group's and FPL's actual results or outcomes to differ materially from those discussed in the forward-looking statements:

FPL Group and FPL are subject to complex laws and regulations and to changes in laws and regulations as well as changing governmental policies and regulatory actions, including initiatives regarding deregulation and restructuring of the energy industry and environmental matters. FPL holds franchise agreements with local municipalities and counties, and must renegotiate expiring agreements. These factors may have a negative impact on the business and results of operations of FPL Group and FPL.

- FPL Group and FPL are subject to complex laws and regulations, and to changes in laws or regulations, including the Public Utility Regulatory Policies Act of 1978, as amended, the Public Utility Holding Company Act of 2005, the Federal Power Act, the Atomic

Energy Act of 1954, as amended, the Energy Policy Act of 2005 (2005 Energy Act) and certain sections of the Florida statutes relating to public utilities, changing governmental policies and regulatory actions, including those of the Federal Energy Regulatory Commission (FERC), the Florida Public Service Commission (FPSC) and the legislatures and utility commissions of other states in which FPL Group has operations, and the Nuclear Regulatory Commission (NRC), with respect to, among other things, allowed rates of return, industry and rate structure, operation of nuclear power facilities, operation and construction of plant facilities, operation and construction of transmission facilities, acquisition, disposal, depreciation and amortization of assets and facilities, recovery of fuel and purchased power costs, decommissioning costs, return on common equity and equity ratio limits, and present or prospective wholesale and retail competition (including but not limited to retail wheeling and transmission costs). The FPSC has the authority to disallow recovery by FPL of any and all costs that it considers excessive or imprudently incurred. The regulatory process generally restricts FPL's ability to grow earnings and does not provide any assurance as to achievement of earnings levels.

- FPL Group and FPL are subject to extensive federal, state and local environmental statutes as well as the effect of changes in or additions to applicable statutes, rules and regulations relating to air quality, water quality, climate change, waste management, wildlife mortality, natural resources and health and safety that could, among other things, restrict or limit the output of certain facilities or the use of certain fuels required for the production of electricity and/or require additional pollution control equipment and otherwise increase costs. There are significant capital, operating and other costs associated with compliance with these environmental statutes, rules and regulations, and those costs could be even more significant in the future.

- FPL Group and FPL operate in a changing market environment influenced by various legislative and regulatory initiatives regarding deregulation, regulation or restructuring of the energy industry, including deregulation or restructuring of the production and sale of electricity. FPL Group and its subsidiaries will need to adapt to these changes and may face increasing competitive pressure.

- FPL Group's and FPL's results of operations could be affected by FPL's ability to renegotiate franchise agreements with municipalities and counties in Florida.

The operation and maintenance of power generation facilities, including nuclear facilities, involve significant risks that could adversely affect the results of operations and financial condition of FPL Group and FPL.

- The operation and maintenance of power generation facilities involve many risks, including, but not limited to, start up risks, breakdown or failure of equipment, transmission lines or pipelines, the inability to properly manage or mitigate known equipment defects throughout our generation fleets unless and until such defects are remediated, use of new technology, the dependence on a specific fuel source, including the supply and transportation of fuel, or the impact of unusual or adverse weather conditions (including natural disasters such as hurricanes), as well as the risk of performance below expected or contracted levels of output or efficiency. This could result in lost revenues and/or increased expenses, including, but not limited to, the requirement to purchase power in the market at potentially higher prices to meet contractual obligations. Insurance, warranties or performance guarantees may not cover any or all of the lost revenues or increased expenses, including the cost of replacement power. In addition to these risks, FPL Group's and FPL's nuclear units face certain risks that are unique to the nuclear industry including, but not limited to, the ability to store and/or dispose of spent nuclear fuel and the potential payment of significant retrospective insurance premiums, as well as additional regulatory actions up to and including shutdown of the units stemming from public safety concerns, whether at FPL Group's and FPL's

plants, or at the plants of other nuclear operators. Breakdown or failure of an operating facility of FPL Energy may prevent the facility from performing under applicable power sales agreements which, in certain situations, could result in termination of the agreement or incurring a liability for liquidated damages.

The construction of, and capital improvements to, power generation facilities involve substantial risks. Should construction or capital improvement efforts be unsuccessful, the results of operations and financial condition of FPL Group and FPL could be adversely affected.

- FPL Group's and FPL's ability to successfully and timely complete their power generation facilities currently under construction, those projects yet to begin construction or capital improvements to existing facilities within established budgets is contingent upon many variables and subject to substantial risks. Should any such efforts be unsuccessful, FPL Group and FPL could be subject to additional costs, termination payments under committed contracts, and/or the write-off of their investment in the project or improvement.

The use of derivative contracts by FPL Group and FPL in the normal course of business could result in financial losses that negatively impact the results of operations of FPL Group and FPL.

- FPL Group and FPL use derivative instruments, such as swaps, options and forwards to manage their commodity and financial market risks. FPL Group provides full energy and capacity requirements services and engages in trading activities. FPL Group could recognize financial losses as a result of volatility in the market values of these contracts, or if a counterparty fails to perform. In the absence of actively quoted market prices and pricing information from external sources, the valuation of these derivative instruments involves management's judgment or use of estimates. As a result, changes in the underlying assumptions or use of alternative valuation methods could affect the reported fair value of these contracts. In addition, FPL's use of such instruments could be subject to prudency challenges and if found imprudent, cost recovery could be disallowed by the FPSC.

FPL Group's competitive energy business is subject to risks, many of which are beyond the control of FPL Group, that may reduce the revenues and adversely impact the results of operations and financial condition of FPL Group.

- There are other risks associated with FPL Group's competitive energy business. In addition to risks discussed elsewhere, risk factors specifically affecting FPL Energy's success in competitive wholesale markets include the ability to efficiently develop and operate generating assets, the successful and timely completion of project restructuring activities, maintenance of the qualifying facility status of certain projects, the price and supply of fuel (including transportation), transmission constraints, competition from new sources of generation, excess generation capacity and demand for power. There can be significant volatility in market prices for fuel and electricity, and there are other financial, counterparty and market risks that are beyond the control of FPL Energy. FPL Energy's inability or failure to effectively hedge its assets or positions against changes in commodity prices, interest rates, counterparty credit risk or other risk measures could significantly impair FPL Group's future financial results. In keeping with industry trends, a portion of FPL Energy's power generation facilities operate wholly or partially without long-term power purchase agreements. As a result, power from these facilities is sold on the spot market or on a short-term contractual basis, which may affect the volatility of FPL Group's financial results. In addition, FPL Energy's business depends upon transmission facilities owned and operated by others; if transmission is disrupted or capacity is inadequate or unavailable, FPL Energy's ability to sell and deliver its wholesale power may be limited.

FPL Group's ability to successfully identify, complete and integrate acquisitions is subject to significant risks, including the effect of increased competition for acquisitions resulting from the consolidation of the power industry.

- FPL Group is likely to encounter significant competition for acquisition opportunities that may become available as a result of the consolidation of the power industry, in general, as well as the passage of the 2005 Energy Act. In addition, FPL Group may be unable to identify attractive acquisition opportunities at favorable prices and to successfully and timely complete and integrate them.

Because FPL Group and FPL rely on access to capital markets, the inability to maintain current credit ratings and access capital markets on favorable terms may limit the ability of FPL Group and FPL to grow their businesses and would likely increase interest costs.

- FPL Group and FPL rely on access to capital markets as a significant source of liquidity for capital requirements not satisfied by operating cash flows. The inability of FPL Group, FPL Group Capital Inc and FPL to maintain their current credit ratings could affect their ability to raise capital on favorable terms, particularly during times of uncertainty in the capital markets, which, in turn, could impact FPL Group's and FPL's ability to grow their businesses and would likely increase their interest costs.

Customer growth in FPL's service area affects FPL Group's and FPL's results of operations.

- FPL Group's and FPL's results of operations are affected by the growth in customer accounts in FPL's service area. Customer growth can be affected by population growth as well as economic factors in Florida, including job and income growth, housing starts and new home prices. Customer growth directly influences the demand for electricity and the need for additional power generation and power delivery facilities at FPL.

Weather affects FPL Group's and FPL's results of operations.

- FPL Group's and FPL's results of operations are affected by changes in the weather. Weather conditions directly influence the demand for electricity and natural gas and affect the price of energy commodities, and can affect the production of electricity at wind and hydro-powered facilities. FPL Group's and FPL's results of operations can be affected by the impact of severe weather which can be destructive, causing outages and/or property damage, may affect fuel supply, and could require additional costs to be incurred. At FPL, recovery of these costs is subject to FPSC approval.

FPL Group and FPL are subject to costs and other effects of legal proceedings as well as changes in or additions to applicable tax laws, rates or policies, rates of inflation, accounting standards, securities laws and corporate governance requirements.

- FPL Group and FPL are subject to costs and other effects of legal and administrative proceedings, settlements, investigations and claims, as well as the effect of new, or changes in, tax laws, rates or policies, rates of inflation, accounting standards, securities laws and corporate governance requirements.

Threats of terrorism and catastrophic events that could result from terrorism may impact the operations of FPL Group and FPL in unpredictable ways.

- FPL Group and FPL are subject to direct and indirect effects of terrorist threats and activities. Generation and transmission facilities, in general, have been identified as potential targets. The effects of terrorist threats and activities include, among other things, terrorist actions or responses to such actions or threats, the inability to generate, purchase or transmit power, the risk of a significant slowdown in growth or a decline in the U.S.

economy, delay in economic recovery in the U.S., and the increased cost and adequacy of security and insurance.

The ability of FPL Group and FPL to obtain insurance and the terms of any available insurance coverage could be affected by national, state or local events and company-specific events.

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FPL Group and FPL are subject to employee workforce factors that could affect the businesses and financial condition of FPL Group and FPL.

- FPL Group and FPL are subject to employee workforce factors, including loss or retirement of key executives, availability of qualified personnel, collective bargaining agreements with union employees and work stoppage that could affect the businesses and financial condition of FPL Group and FPL.

The risks described herein are not the only risks facing FPL Group and FPL. Additional risks and uncertainties not currently known to FPL Group or FPL, or that are currently deemed to be immaterial, also may materially adversely affect FPL Group's or FPL's business, financial condition and/or future operating results.

Legal Notices | **Privacy Policy** | **Terms**

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Review of Replacement Fuel Costs Associated with the February 26, 2008 outage On Florida Power & Light's electrical system	))))	Docket No. 090505-EI

OPC CROSS-EXAMINATION EXHIBIT NO. _____

Information for Earnings Conference Call

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI EXHIBIT 38
COMPANY Office of Public Counsel
WITNESS *Information for Earnings Conference Call*
DATE 03/17/10



Earnings Conference Call

Fourth Quarter and Full Year 2009
January 26, 2010

Cautionary Statements And Risk Factors That May Affect Future Results

Any statements made herein about future operating and/or financial results and/or other future events are forward-looking statements under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include, for example, statements regarding anticipated future financial and operating performance and results, including estimates for growth. Actual results may differ materially from such forward-looking statements. A discussion of factors that could cause actual results or events to vary is contained in the Appendix herein and in our Securities and Exchange Commission (SEC) filings.

FPL GROUP

Non-GAAP Financial Information

This presentation refers to adjusted earnings, which are not financial measurements prepared in accordance with GAAP. Adjusted earnings, as defined by FPL Group, represent net income before the mark-to-market effects of non-qualifying hedges and the net effect of other than temporary impairments (OTTI) on certain investments, both of which relate to the NextEra Energy Resources business of FPL Group. Quantitative reconciliations of the differences between historical adjusted earnings to net income, which is the most comparable GAAP measure to adjusted earnings, are included in the attached Appendix. Prospective adjusted earnings amounts cannot be reconciled to net income because net income includes the mark-to-market effects of non-qualifying hedges and OTTI on certain investments, neither of which can be determined at this time. Adjusted earnings does not represent a substitute for net income, as prepared in accordance with GAAP.

FPL GROUP

FPL Group delivered earnings growth despite some challenges at our two main businesses

FPL Group Overview – Full Year 2009

- FPL Group delivered over 5% adjusted EPS growth
- Achieved 13.5% adjusted return on equity
- NextEra Energy Resources delivered another record year of adjusted earnings in spite of challenges
- Florida Power & Light's growth benefited from favorable weather and asset additions

See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

Despite some challenges in 2009, we continued our focus on long-term value creation at both businesses

FPL Group Highlights for Full Year 2009

- **Florida Power & Light**
  - West County Units 1 and 2 placed into service
  - DeSoto Next Generation Solar Energy Center commissioned
  - Recent capital investments reduced carbon dioxide emissions and produced an estimated $440 million in fuel savings for customers
  - 2009 O&M expense was $1.42 per kilowatt hour, well below the industry's average
- **NextEra Energy Resources**
  - Added ~1,170 MW of wind assets
  - Remained the market leader in North America with 7,544 MW of wind assets and a total of $11 billion invested
  - Signed a long-term contract for the proposed 250 MW Genesis Solar Energy Project
  - Completed a 200+ mile generation tie line in Texas
  - Entered into $1.1 billion of non-recourse financing over the last ~12 months

See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

The Florida Public Service Commission's decision in the rate case was extremely disappointing

Florida Power & Light Rate Case

- We believe the historically constructive regulatory environment has been affected by the poor economic climate in Florida
- We believe Florida's attributes will ultimately result in a return of strong growth in the state
- The low regulatory ROE and lack of recovery for West County 3 in 2011 were disappointing
- Outcome requires us to review future plans for significant capital expenditures in Florida
- Despite the setback at FPL, we expect decent growth for FPL Group in 2010

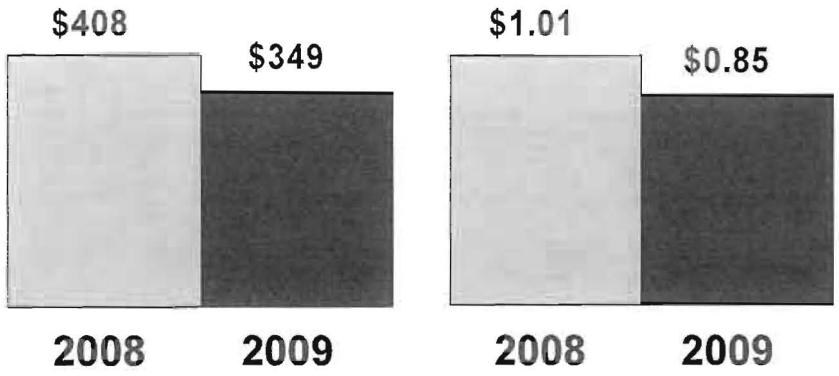
FPL GROUP

FPL Group's 2009 fourth quarter adjusted EPS declined year over year

FPL Group Results – Fourth Quarter

GAAP

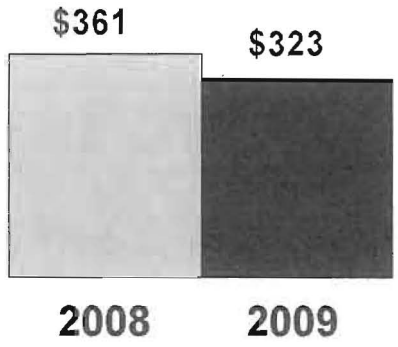
Net Income *($ millions)*



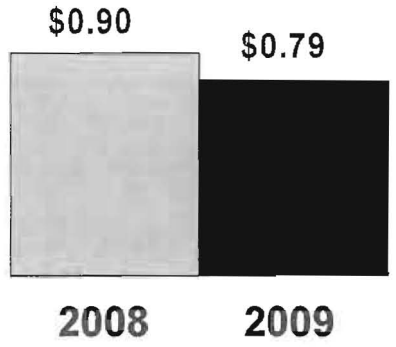
EPS

Adjusted

Net Income *($ millions)*



EPS

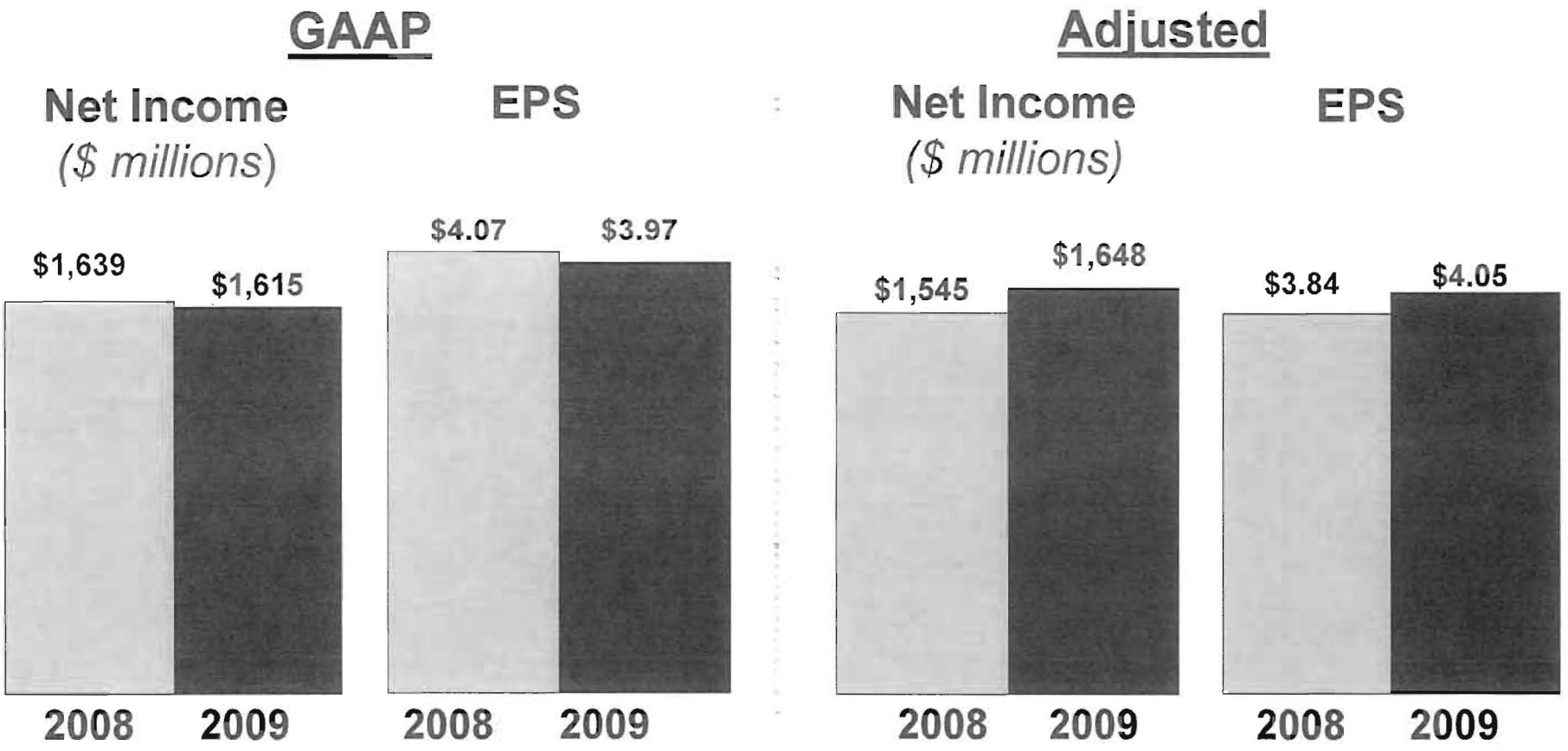


See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

FPL Group's 2009 adjusted EPS increased by over 5%

FPL Group Results – Full Year



See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL Group's diversity moderated overall weather impact

Aggregate Effect of Weather Across FPL Group

	Fourth Quarter ($/share)		Full Year 2009 ($/share)	
	Vs. Prior	Vs. Normal	Vs. Prior	Vs. Normal
FPL Weather	$0.10	$0.07	$0.14	$0.13
NextEra Energy Resources Wind	($0.11)	($0.12)	($0.20)	($0.25)
NextEra Energy Resources Hydro	($0.01)	$0.00	($0.02)	$0.03
Net Weather Impact	**($0.02)**	**($0.05)**	**($0.08)**	**($0.09)**

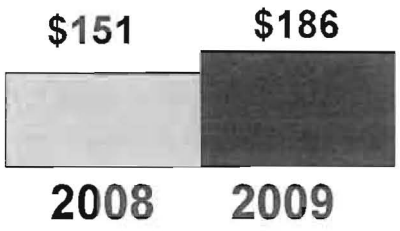
FPL GROUP

FPL's contributions were higher for both the quarter and year

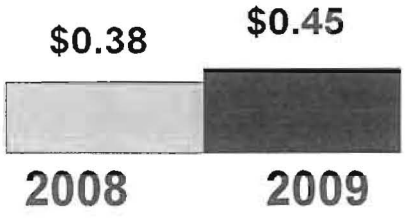
Florida Power & Light – 2009 Results

Fourth Quarter

Net Income *($ millions)*

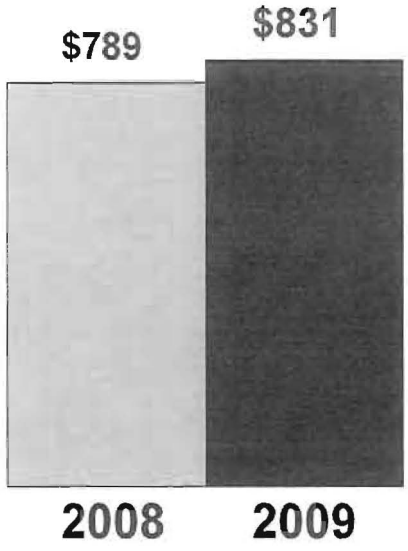


EPS

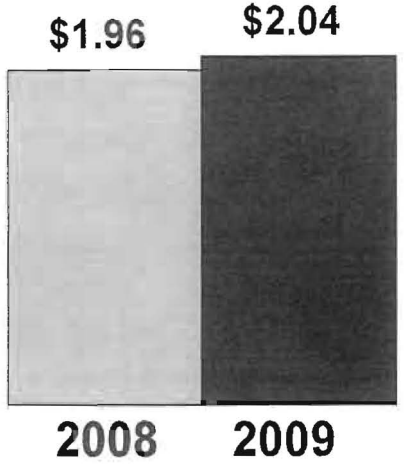


Full Year

Net Income *($ millions)*



EPS



FPL GROUP

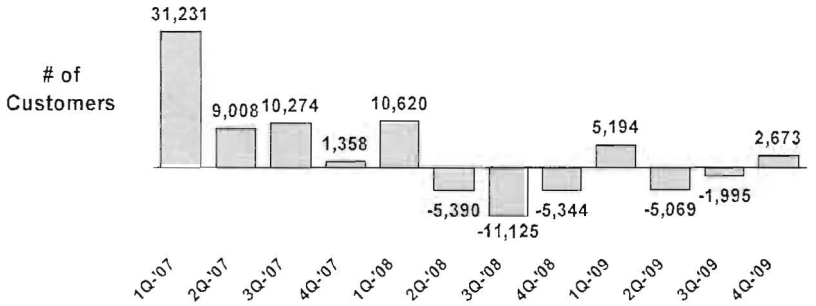
While not yet recovering, Florida's economy is showing signs that the deterioration may be easing

Customer Characteristics – Fourth Quarter 2009

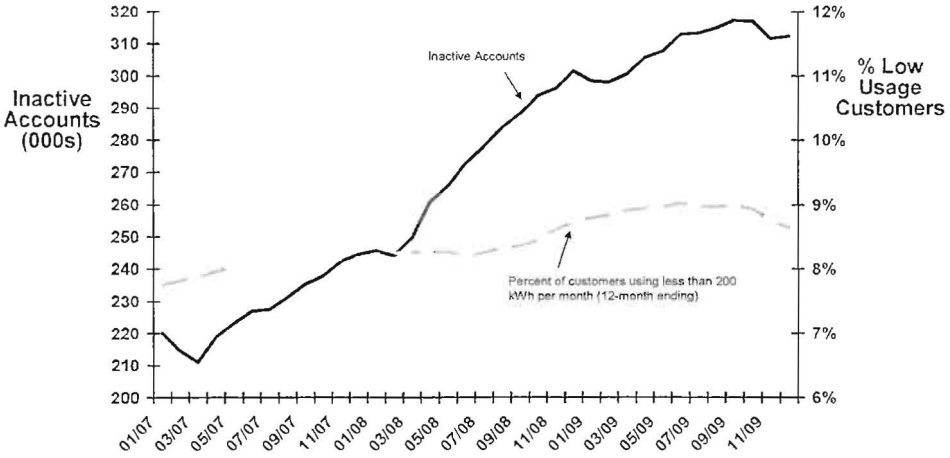
Retail kWh Sales
(Change vs. prior year quarter)

Customer growth	0.0%
+ Usage growth due to weather	7.7%
+ Underlying usage growth, mix and other	0.0%
= Retail kWh sales growth	7.7%

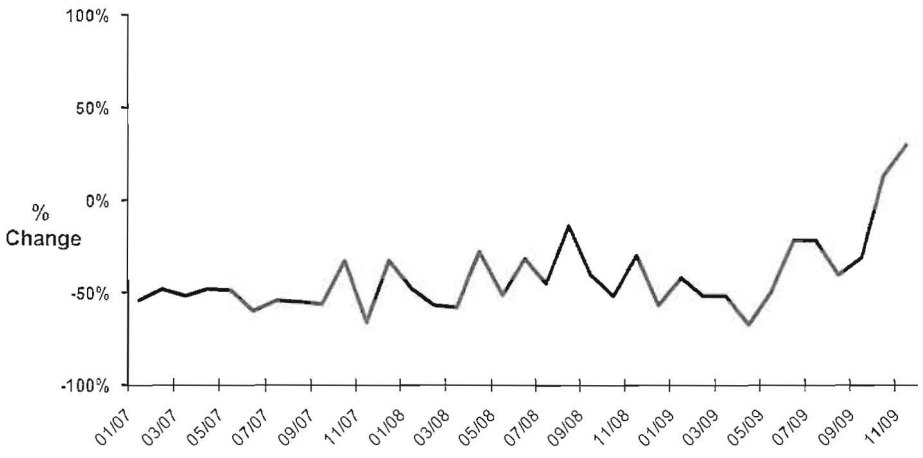
Customer Growth[1]
(Change vs. previous quarter)



Inactive and Low Usage Customers



Single Family Home Starts in Florida Change from Prior Year[2]



(1) Sequential change in actual customers, based on period end customer accounts
(2) Source: Florida Association of Realtors and University of Florida

FPL GROUP

Better than normal weather drove improvements in earnings

FPL EPS Contribution Drivers – 2009

	Fourth Quarter	Full Year
FPL – 2008 EPS	**$0.38**	**$1.96**
Drivers:		
Customer growth	$0.00	($0.01)
Usage growth, weather	$0.10	$0.14
Usage growth, underlying w/ mix	$0.00	($0.10)
West County 1 and 2 rate adjustment	$0.07	$0.10
O&M	($0.06)	($0.01)
Depreciation	($0.03)	($0.06)
Cost Recovery Clauses	$0.01	$0.04
AFUDC	($0.02)	$0.04
Other[1]	$0.00	($0.06)
FPL – 2009 EPS	**$0.45**	**$2.04**

[1] Includes interest expense, share dilution, and rounding.

FPL GROUP

In January, the Florida Public Service Commission voted on our rate case request

Florida Power & Light Rate Proceeding

- **$75 million annual increase in base revenues approved**
  - Maintain the equity ratio FPL has had for more than a decade
  - 10.0% regulatory ROE +/- 100 basis points
  - $895 million amortization of theoretical net depreciation surplus over four years
  - 2010 base depreciation expense to be slightly lower than in 2009
- **No subsequent year adjustment for 2011**
- **Generation Base Rate Adjustment (GBRA) mechanism not extended**
- **Cash flow from operations in 2010 expected to be slightly higher than 2009, excluding the effects of the fuel clause**

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NextEra Energy Resources' financial results remain solid despite several challenges

NextEra Energy Resources Overview

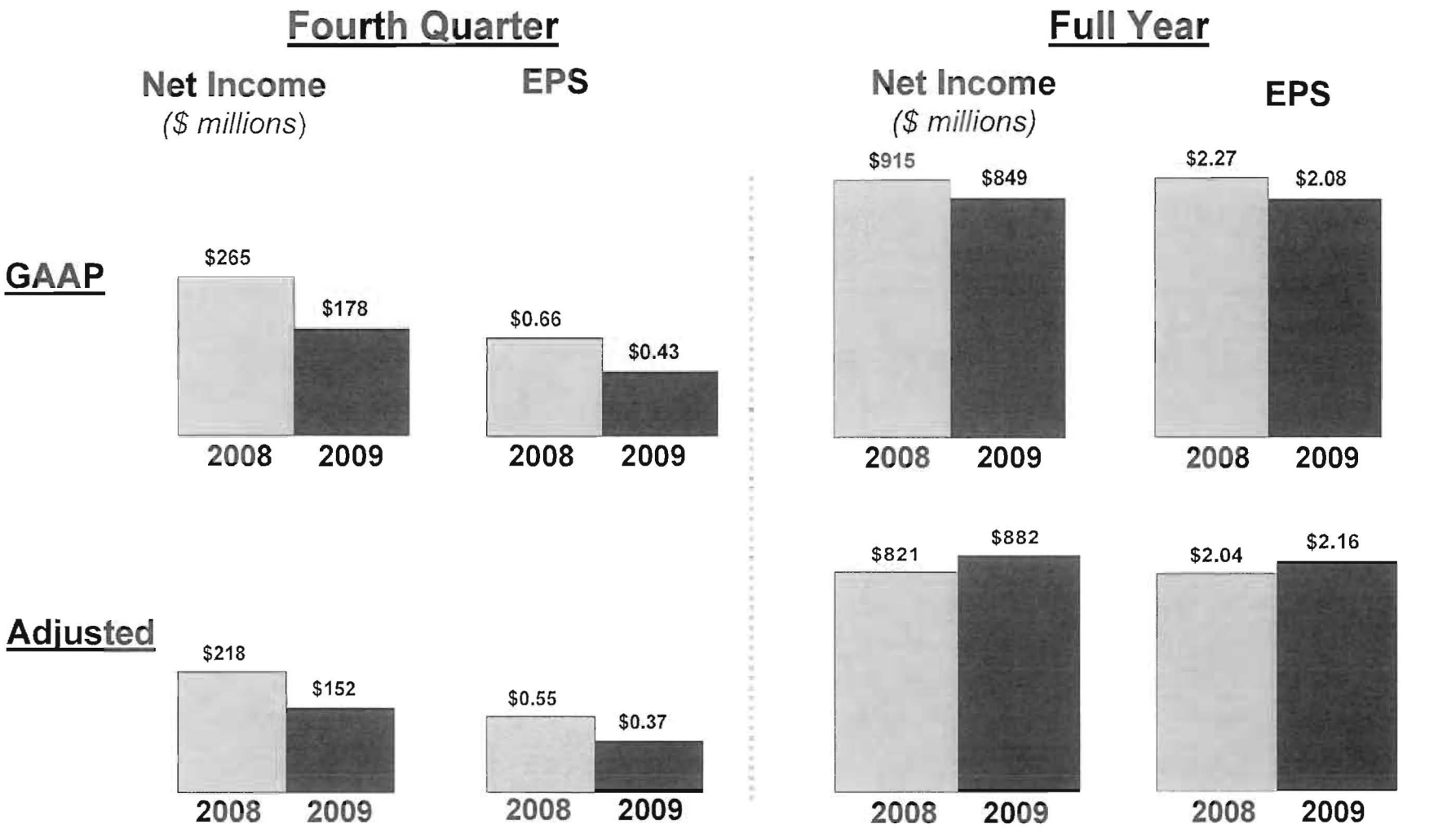
- **Approximately 6% improvement in adjusted EPS results for the full year 2009**
- **Key drivers:**
  - New wind
  - Favorable contributions from retail and wholesale marketing and trading
  - Outage at Seabrook Station
  - Poor wind resource relative to normal
  - Lower pricing on merchant Texas fossil assets
- **Existing assets well hedged for 2010 and 2011**
  - Weighted average contract lives and PTC expiration added to gross margin information located in the appendix

See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

Quarterly results were affected by Seabrook and wind resource while full year results benefited from new wind and non-asset based businesses

NextEra Energy Resources Results



See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

NextEra Energy Resources' growth was driven primarily by new investments

NextEra Energy Resources EPS Contribution Drivers – 2009

	Fourth Quarter	Full Year
NextEra Energy Resources – 2008 Adjusted EPS	**$0.55**	**$2.04**
Drivers:		
New investments	$0.10	$0.43
Existing assets	($0.32)	($0.42)
Wholesale marketing and trading	$0.09	$0.19
Restructuring and asset sales	($0.01)	$0.01
Other[1]	($0.04)	($0.09)
NextEra Energy Resources – 2009 Adjusted EPS	**$0.37**	**$2.16**

[1] Includes G&A, interest expense, differential membership interest costs, income tax adjustments, share dilution, and rounding.

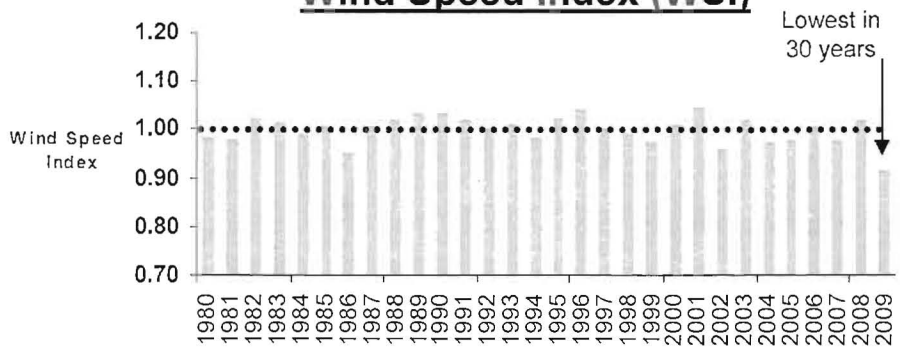
See Appendix for reconciliation of adjusted amounts to GAAP amounts.

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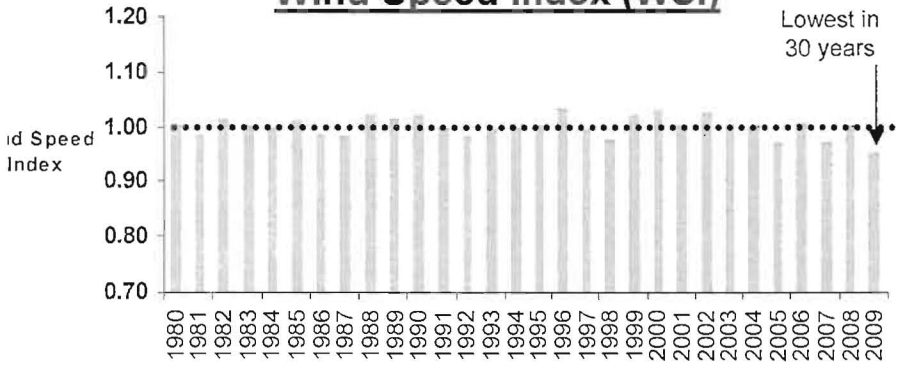
Wind speeds at public reference towers were the lowest in 30 years in the fourth quarter and full year 2009

Wind Resource Analysis

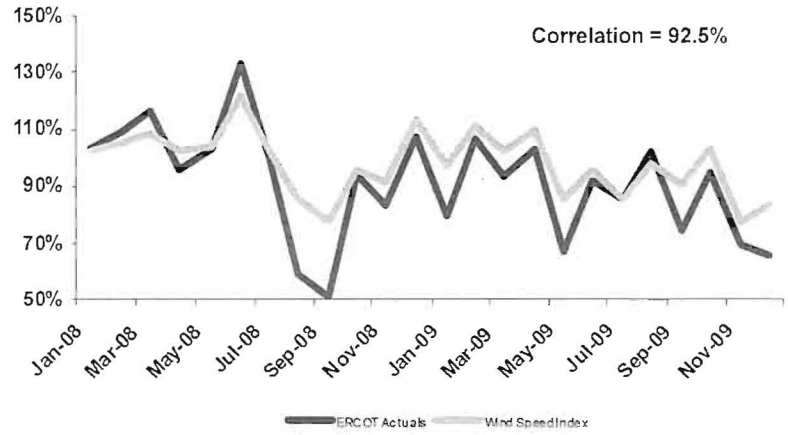
Fourth Quarter Wind Speed Index (WSI)



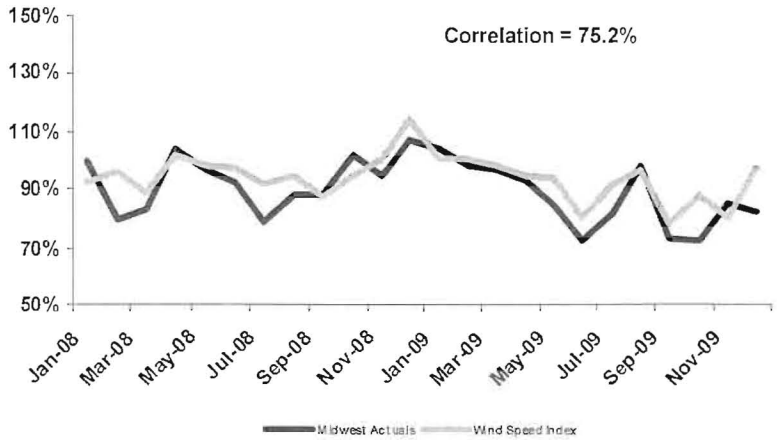
Full Year Wind Speed Index (WSI)



Texas WSI and Actual Wind Performance



Midwest WSI and Actual Wind Performance



Source data is accessible on the website http://ftp3.ncdc.noaa.gov/pub/data/noaa/.

NextEra Energy Resources' supply-related and non-asset based business contributed to 2009 growth

Gross Margin Contribution from Supply-Related and Non-Asset Based Businesses

	($ millions) 2008	2009
Supply-Related Businesses		
Full requirements	$76	$74
Retail supply	$48	$132
Total supply-related businesses	**$124**	**$206**
Non-Asset Based Businesses		
Power and gas marketing and trading	**$76**	**$205**

FPL GROUP

Despite a weak quarter, NextEra Energy Resources remains the adjusted EPS growth driver for FPL Group

FPL Group EPS Summary – Fourth Quarter 2009

GAAP	2008	2009	Change
FPL	$0.38	$0.45	$0.07
NextEra Energy Resources	$0.66	$0.43	($0.23)
Corporate and Other	($0.03)	($0.03)	$0.00
Total	$1.01	$0.85	($0.16)

Adjusted	2008	2009	Change
FPL	$0.38	$0.45	$0.07
NextEra Energy Resources	$0.55	$0.37	($0.18)
Corporate and Other	($0.03)	($0.03)	$0.00
Total	$0.90	$0.79	($0.11)

See Appendix for reconciliation of adjusted amounts to GAAP amounts.

FPL GROUP

Solid growth from both businesses contributed to 2009 adjusted results

FPL Group EPS Contributions – Full Year 2009

GAAP	2008	2009	Change
FPL	$1.96	$2.04	$0.08
NextEra Energy Resources	$2.27	$2.08	($0.19)
Corporate and Other	($0.16)	($0.15)	$0.01
Total	$4.07	$3.97	($0.10)

Adjusted	2008	2009	Change
FPL	$1.96	$2.04	$0.08
NextEra Energy Resources	$2.04	$2.16	$0.12
Corporate and Other	($0.16)	($0.15)	$0.01
Total	$3.84	$4.05	$0.21

See Appendix for reconciliation of adjusted amounts to GAAP amounts.

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Our adjusted EPS expectations for 2010

Adjusted Earnings Per Share Expectations

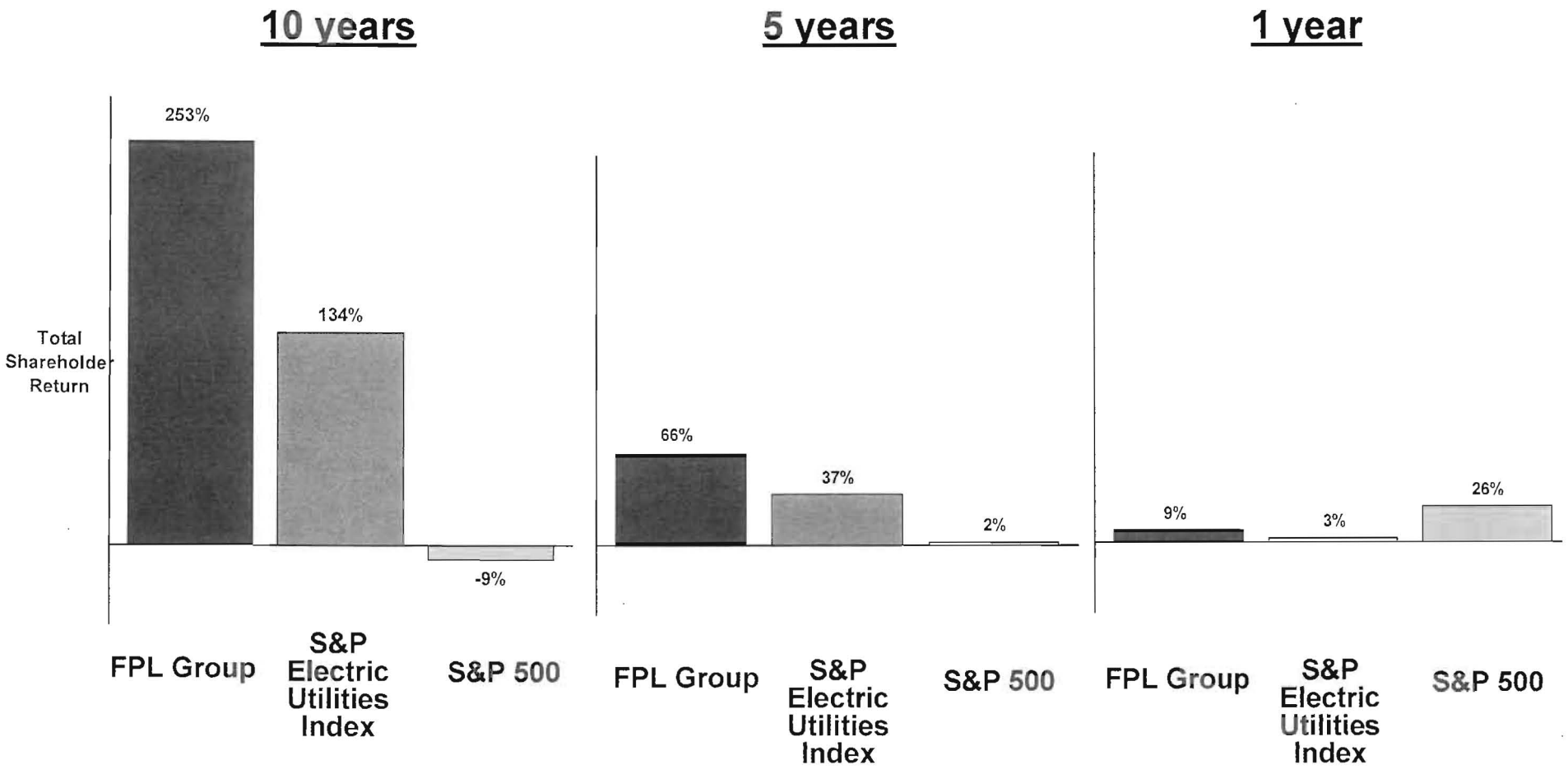
2010	$4.25 - $4.65

Assumes normal weather and operating conditions, no further decline in the national or state economy, a reasonable capital markets atmosphere, and excludes the cumulative effect of adopting new accounting standards, if any, the mark-to-market effect of non-qualifying hedges and other than temporary impairments (OTTI), none of which can be determined at this time. The 2010 adjusted earnings expectations are valid only as of January 26, 2010 and are subject to and should be viewed together with FPL Group's Cautionary Statements contained in the Appendix to this presentation. See Key Assumptions slide shown in the Appendix.

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FPL Group has consistently outperformed the utility sector…

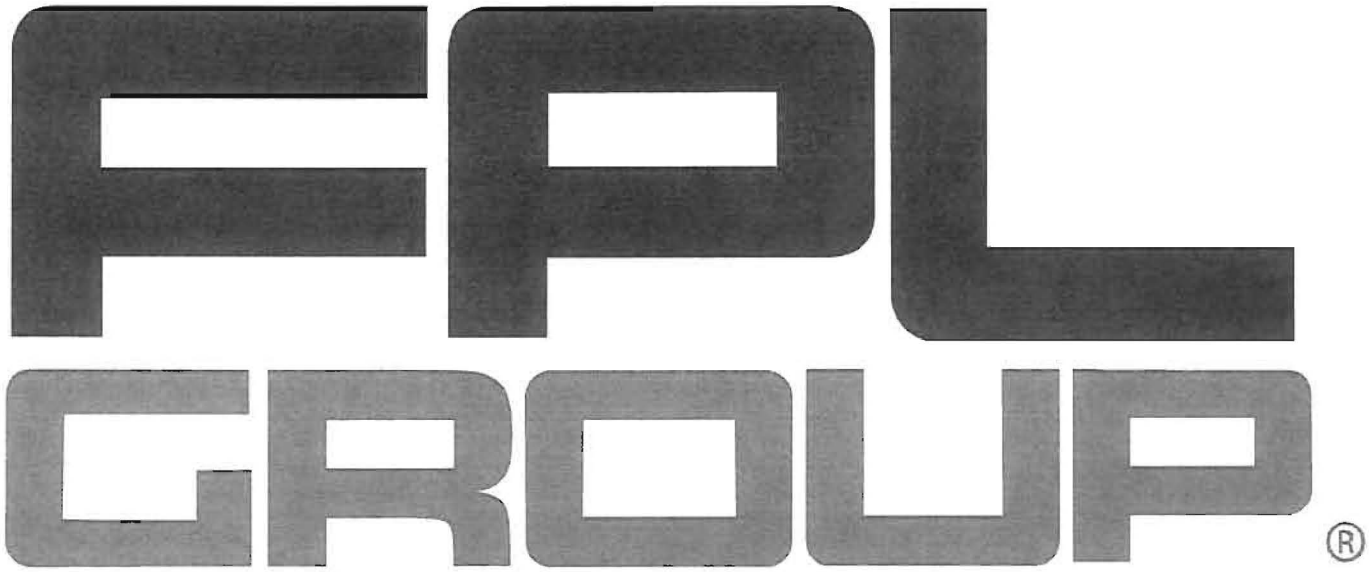
Total Shareholder Return (1)



(1) Source: FactSet. 10 year data 12/31/1999 -12/31/2009, 5 year data 12/31/2004-12/31/2009, 1 year data 12/31/2008 -12/31/2009.

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Q&A Session


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Appendix

Several key assumptions support our financial outlook

Key Assumptions [1]

- Normal weather and operating conditions
- No further significant decline in the national or the Florida economy
- Supportive commodity markets
- Continued public policy support for wind and solar development and construction
- Continued market demand and supply chain expansion for wind and solar
- Transmission expansion to support wind and solar development
- Access to capital at reasonable cost and terms
- No acquisitions

[1] This is not intended to be a full list of factors which could cause FPL Group's future results to differ from current expectations. For a discussion of risk factors please consult FPL Group's SEC filings and the cautionary statements attached to this presentation.

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We remain comfortable with our 2010 hedging position

NextEra Energy Resources – 2010 Hedging[1]

($ millions)

		Nameplate MWs	Equivalent Gross Margin [3]	% Gross Margin Sold		Wgt Ave Remaining Contract Life (in years)	Lower PTCs in 2011 relative to 2010 due to expiration
Existing Assets	Contracted Wind	5,755	$1,160 - $1,160	100%	96%	17	$24
	Contracted Other	4,369	$895 - $915	95%		15	
	Merchant						
	NEPOOL						
	Spark Spread	1,346	$90 - $100	88%			
	Other	1,459	$810 - $820	100%			
	ERCOT						
	Spark Spread	2,792	$155 - $195	59%			
	Other	1,709	$390 - $400	99%			
	Other	828	$55 - $75	70%			
	Other Asset Based	-	$40 - $50	78%			
New Assets	Expected 2010 Asset Additions[2]		$205 - $205	100%			
				% Margin in Backlog			
Supply-Related	Full Requirements		$65 - $75	72%			
	Retail		$90 - $110	65%			
Non-Asset Based	Power and Gas Trading		$155 - $235	7%			

(1) Represents an approximation of gross margin exposure to commodity price risk. This analysis does not include other risk factors such as energy or fuel basis, weather including wind, hydro, and solar resource, operational performance, and development and construction timing and success.

(2) Includes expected new wind and solar development for 2010 only.

(3) Includes NextEra Energy Resources' share of revenues, pre-tax effect of production and investment tax credits, pretax impact of stimulus bill and fuel expense for consolidated and equity method investments.

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Our existing assets are well hedged for 2011

NextEra Energy Resources – 2011 Hedging[1]

($ millions)

		Nameplate MWs	Equivalent Gross Margin [3]	% Gross Margin Sold		Wgt Ave Remaining Contract Life (in years)	Lower PTCs in 2012 relative to 2011 due to expiration
Existing Assets	Contracted Wind	5,755	$1,190 - $1,190	100%		16	$60
	Contracted Other	4,961	$920 - $960	93%		14	
	Merchant						
	NEPOOL						
	Spark Spread	1,346	$85 - $105	69%			
	Other	1,464	$685 - $705	96%	92%		
	ERCOT						
	Spark Spread	2,792	$145 - $215	36%			
	Other	1,709	$340 - $350	96%			
	Other	321	$30 - $50	53%			
	Other Asset Based	-	$50 - $60	100%			
New Assets	Expected 2010 Asset Additions[2]		$250 - $250	100%			
				% Margin in Backlog			
Supply-Related	Full Requirements		$50 - $60	44%			
	Retail		$85 - $115	28%			
Non-Asset Based	Power and Gas Trading		$200 - $310	0%			

(1) Represents an approximation of gross margin exposure to commodity price risk. This analysis does not include other risk factors such as energy or fuel basis, weather including wind, hydro, and solar resource, operational performance, and development and construction timing and success.

(2) Includes expected new wind and solar development for 2010 only.

(3) Includes NextEra Energy Resources' share of revenues, pre-tax effect of production and investment tax credits, pretax impact of stimulus bill and fuel expense for consolidated and equity method investments.

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Wind Resource Performance

Gross[1] MWh Production: Actual vs. Long Term Expected Average

(Twelve month trend ended December 31, 2009 [2])

	2009											
	1st QTR		2nd QTR		3rd QTR		4th QTR					Full Year
Location [3]	MW	%	MW	%	MW	%	MW	Oct	Nov	Dec	QTD	%
ERCOT	2,371	93%	2,371	88%	2,371	87%	2,371	95%	69%	66%	76%	86%
West	1,746	103%	1,746	92%	1,746	88%	1,920	97%	88%	74%	86%	92%
Midwest	1,489	99%	1,689	83%	1,689	83%	1,859	71%	83%	81%	79%	86%
Other South	361	112%	361	95%	361	93%	361	97%	98%	100%	98%	100%
Northeast	195	80%	195	118%	195	109%	195	99%	83%	87%	89%	93%
Total	6,162	98%	6,362	89%	6,362	87%	6,706	88%	80%	75%	81%	88%

	2008											
	1st QTR		2nd QTR		3rd QTR		4th QTR					Full Year
Location [3]	MW	%	MW	%	MW	%	MW	Oct	Nov	Dec	QTD	%
ERCOT	1,961	110%	2,259	110%	2,259	72%	2,371	94%	83%	107%	95%	98%
West	1,746	110%	1,746	99%	1,746	82%	1,746	83%	98%	96%	92%	96%
Midwest	766	88%	766	98%	951	86%	1,341	102%	95%	107%	102%	94%
Other South	361	119%	361	124%	361	101%	361	122%	119%	116%	119%	117%
Northeast	195	91%	195	108%	195	101%	195	100%	79%	85%	87%	94%
Total	5,029	106%	5,327	106%	5,512	80%	6,014	95%	91%	104%	97%	98%

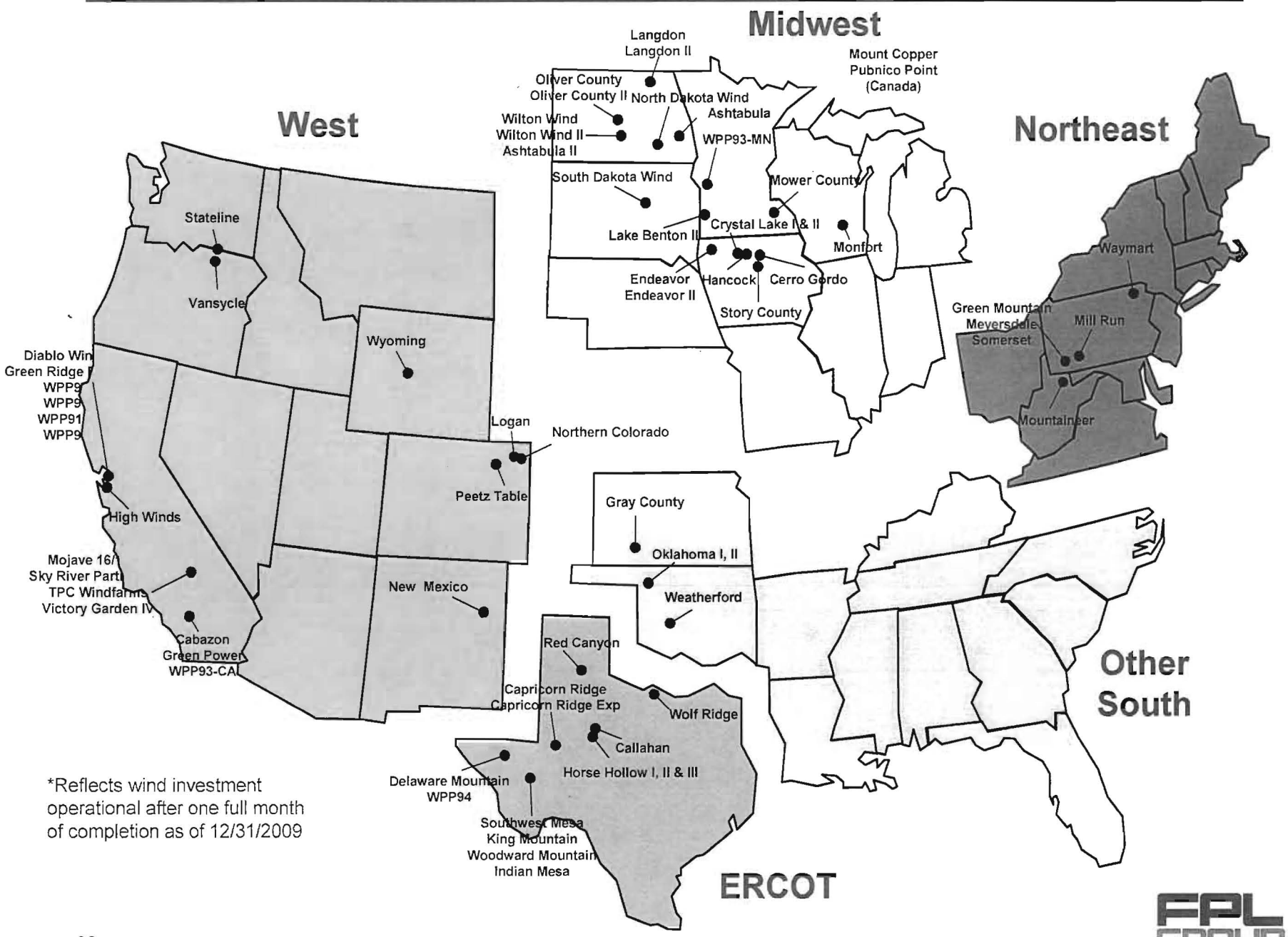
[1] MWh production from wind resource prior to reductions for actual and planned outages and curtailments.

[2] Includes incremental new wind investment beginning in the first full month of operations after completion; MW presented reflects total in operation at quarter end and excludes Mojave 3/5, a 22 mw leveraged lease.

[3] See the accompanying map for a description of geographic locations.

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NextEra Energy Resources – Wind Portfolio Locations*



*Reflects wind investment operational after one full month of completion as of 12/31/2009

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Non-Qualifying Hedges[1] – Summary of Activity

($ millions, after-tax)

Asset/(Liability) Balance as of 9/30/09	**$51.6**
Amounts Realized During 4th Quarter	**(34.4)**
Change in Forward Prices (all positions)	**48.6**
Subtotal	**14.2**
Asset/(Liability) Balance as of 12/31/09	**$65.8**

Primary Drivers:

Revenue Hedges – Gas & Power Prices	**$63.7**
All Other - Net	**(15.1)**
	$48.6

(1) Includes contracts of NextEra Energy Resources' consolidated projects plus its share of the contracts of equity method investees.

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Non-Qualifying Hedges[1] – Summary of Activity

($ thousands, after-tax)

	4th Quarter					
	Asset/ (Liability) Balance 9/30/09	Amounts Realized	Change in Forward Prices	Deals Executed During Period (1)	Total Unrealized MTM	Asset/ (Liability) Balance 12/31/09
Natural Gas related positions	$ 9,843	$ (8,014)	$ 54,276	$ (5,264)	$ 40,998	$ 50,841
Spark Spread related positions	24,280	(17,802)	4,365	(5,274)	(18,711)	5,569
Other - net (3)	17,632	(8,534)	351	120	(8,063)	9,569
	$ 51,755	$ (34,350)	$ 58,992	$ (10,418)	$ 14,224	$ 65,979

	Year to Date					
	Asset/ (Liability) Balance 12/31/08	Amounts Realized	Change in Forward Prices	Deals Executed During Period (1)	Total Unrealized MTM	Asset/ (Liability) Balance 12/31/09
Natural gas related positions	$ 28,276	$ (46,657)	$ 90,375	$ (21,153)	$ 22,565	$ 50,841
Spark spread related positions	34,319	(50,563)	26,966	(5,153)	(28,750)	5,569
Other - net (3)	23,223	(22,740)	9,693	(607)	(13,654)	9,569
Total	$ 85,818	$ (119,960)	$ 127,034	$ (26,913)	$ (19,839)	$ 65,979

(1) Includes contracts of NextEra Energy Resources' consolidated projects plus its share of the contracts of equity method investees.
(2) Amount represents the change in value of deals executed during the quarter from the execution date through quarter end.
(3) Primarily represents power basis positions.

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Non-Qualifying Hedges[1] – Summary of Forward Maturity

($ thousands, after-tax)

Description	Asset / (Liability) Balance 12/31/09	Gain / (Loss) (2) 2010	2011	2012	2013	2014 - 2016	Total 2010 - 2016
Natural gas related positions	$ 50,841	$ (35,304)	$ (12,734)	$ (13,317)	$ 1,908	$ 8,606	$ (50,841)
Spark spread related positions	5,569	(3,806)	(1,763)	-	-	-	(5,569)
Other - net	9,569	(10,739)	(1,309)	2,477	2	-	(9,569)
Total	**$ 65,979**	**$ (49,849)**	**$ (15,806)**	**$ (10,840)**	**$ 1,910**	**$ 8,606**	**$ (65,979)**

2010 Forward Maturity by Quarter

	1Q 2010	2Q 2010	3Q 2010	4Q 2010	Total 2010
Natural gas related positions	$ (7,191)	$ (9,920)	$ (6,608)	$ (11,585)	$ (35,304)
Spark spread related positions	(3,670)	(54)	1,899	(1,981)	(3,806)
Other - net	(1,220)	(3,270)	(3,107)	(3,142)	(10,739)
Total	**$ (12,081)**	**$ (13,244)**	**$ (7,816)**	**$ (16,708)**	**$ (49,849)**

(1) Includes contracts of NextEra Energy Resources' consolidated projects plus its share of the contracts of equity method investees.
(2) Gain/(loss) based on existing contracts and forward prices as of 12/31/09.

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Reconciliation of Adjusted Earnings to GAAP Net Income

(Three Months Ended December 31, 2009)

(millions, except per share amounts)	Florida Power & Light	NextEra Energy Resources	Corporate & Other	FPL Group, Inc.
Net Income (Loss)	$ 186	$ 178	$ (15)	$ 349
Adjustments, net of income taxes:				
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(13)		(13)
Other than temporary impairment losses - net		(13)		(13)
Adjusted Earnings (Loss)	**$ 186**	**$ 152**	**$ (15)**	**$ 323**
Earnings (Loss) Per Share (assuming dilution)	**$ 0.45**	**$ 0.43**	**$ (0.03)**	**$ 0.85**
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(0.03)		(0.03)
Other than temporary impairment losses - net		(0.03)		(0.03)
Adjusted Earnings (Loss) Per Share	**$ 0.45**	**$ 0.37**	**$ (0.03)**	**$ 0.79**

Adjusted earnings, as defined by FPL Group, represents net income before the mark-to-market effects of non-qualifying hedges and net OTTI on certain investments. FPL Group's management uses adjusted earnings internally for financial planning, for analysis of performance, for reporting of results to the Board of Directors and as input in determining whether certain performance targets are met for performance-based compensation under the company's employee incentive compensation plan. FPL Group also uses earnings expressed in this fashion when communicating its earnings outlook to analysts and investors. FPL Group management believes that adjusted earnings provide a more meaningful representation of FPL Group's fundamental earnings power, but it does not represent a substitute for net income, the most comparable GAAP financial measure.

FPL GROUP

Reconciliation of Adjusted Earnings to GAAP Net Income

(Three Months Ended December 31, 2008)

(millions, except per share amounts)	Florida Power & Light	NextEra Energy Resources	Corporate & Other	FPL Group, Inc.
Net Income (Loss)	$ 151	$ 265	$ (8)	$ 408
Adjustments, net of income taxes:				
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(94)		(94)
Other than temporary impairment losses - net		47		47
Adjusted Earnings (Loss)	**$ 151**	**$ 218**	**$ (8)**	**$ 361**
Earnings (Loss) Per Share (assuming dilution)	**$ 0.38**	**$ 0.66**	**$ (0.03)**	**$ 1.01**
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(0.23)		(0.23)
Other than temporary impairment losses - net		0.12		0.12
Adjusted Earnings (Loss) Per Share	**$ 0.38**	**$ 0.55**	**$ (0.03)**	**$ 0.90**

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FPL GROUP

Reconciliation of Adjusted Earnings to GAAP Net Income

(Full Year Ended December 31, 2009)

(millions, except per share amounts)	Florida Power & Light	NextEra Energy Resources	Corporate & Other	FPL Group, Inc.
Net Income (Loss)	$ 831	$ 849	$ (65)	$ 1,615
Adjustments, net of income taxes:				
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		20		20
Other than temporary impairment losses - net		13		13
Adjusted Earnings (Loss)	**$ 831**	**$ 882**	**$ (65)**	**$ 1,648**
Earnings (Loss) Per Share (assuming dilution)	**$ 2.04**	**$ 2.08**	**$ (0.15)**	**$ 3.97**
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		0.05		0.05
Other than temporary impairment losses - net		0.03		0.03
Adjusted Earnings (Loss) Per Share	**$ 2.04**	**$ 2.16**	**$ (0.15)**	**$ 4.05**

Adjusted earnings, as defined by FPL Group, represents net income before the mark-to-market effects of non-qualifying hedges and net OTTI on certain investments. FPL Group's management uses adjusted earnings internally for financial planning, for analysis of performance, for reporting of results to the Board of Directors and as input in determining whether certain performance targets are met for performance-based compensation under the company's employee incentive compensation plan. FPL Group also uses earnings expressed in this fashion when communicating its earnings outlook to analysts and investors. FPL Group management believes that adjusted earnings provide a more meaningful representation of FPL Group's fundamental earnings power, but it does not represent a substitute for net income, the most comparable GAAP financial measure.

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Reconciliation of Adjusted Earnings to GAAP Net Income

(Full Year Ended December 31, 2008)

(millions, except per share amounts)	Florida Power & Light	NextEra Energy Resources	Corporate & Other	FPL Group, Inc.
Net Income (Loss)	$ 789	$ 915	$ (65)	$ 1,639
Adjustments, net of income taxes:				
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(170)		(170)
Other than temporary impairment losses - net		76		76
Adjusted Earnings (Loss)	**$ 789**	**$ 821**	**$ (65)**	**$ 1,545**
Earnings (Loss) Per Share (assuming dilution)	**$ 1.96**	**$ 2.27**	**$ (0.16)**	**$ 4.07**
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges		(0.42)		(0.42)
Other than temporary impairment losses - net		0.19		0.19
Adjusted Earnings (Loss) Per Share	**$ 1.96**	**$ 2.04**	**$ (0.16)**	**$ 3.84**

Adjusted earnings, as defined by FPL Group, represents net income before the mark-to-market effects of non-qualifying hedges and net OTTI on certain investments. FPL Group's management uses adjusted earnings internally for financial planning, for analysis of performance, for reporting of results to the Board of Directors and as input in determining whether certain performance targets are met for performance-based compensation under the company's employee incentive compensation plan. FPL Group also uses earnings expressed in this fashion when communicating its earnings outlook to analysts and investors. FPL Group management believes that adjusted earnings provide a more meaningful representation of FPL Group's fundamental earnings power, but it does not represent a substitute for net income, the most comparable GAAP financial measure.

FPL GROUP

Reconciliation of GAAP ROE to Adjusted ROE

(Year Ended December 31, 2009)

(millions, except percentage amounts)		
FPL Group, Inc.		
Net Income (Loss)	$	1,615
Net unrealized mark-to-market (gains) losses associated with non-qualifying hedges (NQH)		20
Other than temporary impairment losses (OTTI) - net		13
Adjusted Earnings	$	1,648
Average Common Shareholder's Equity:		
Per Book	$	12,327
Less:		
Accumulated Other Comprehensive Income (loss)		94
Cumulative NQH Income (loss)		81
Cumulative OTTI Income (loss) - net		(102)
Adjusted	$	12,254
GAAP Return on Equity [1]		**13.1%**
Adjusted Return on Equity [2]		**13.5%**

[1] Net income divided by five quarter average common shareholder's equity per books

[2] Adjusted earnings divided by five quarter average common shareholder's equity adjusted for the five quarter average of Accumulated Other Comprehensive Income and the cumulative effect of NQH and OTTI

Adjusted earnings, as defined by FPL Group, represents net income before the mark-to-market effects of non-qualifying hedges and net OTTI on certain investments. FPL Group's management uses adjusted earnings internally for financial planning, for analysis of performance, for reporting of results to the Board of Directors and as input in determining whether certain performance targets are met for performance-based compensation under the company's employee incentive compensation plan. FPL Group also uses earnings expressed in this fashion when communicating its earnings outlook to analysts and investors. FPL Group management believes that adjusted earnings provide a more meaningful representation of FPL Group's fundamental earnings power, but it does not represent a substitute for net income, the most comparable GAAP financial measure.

FPL GROUP

Cautionary Statements And Risk Factors That May Affect Future Results

In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 (Reform Act), FPL Group, Inc. (FPL Group) and Florida Power & Light Company (FPL) are hereby providing cautionary statements identifying important factors that could cause FPL Group's or FPL's actual results to differ materially from those projected in forward-looking statements (as such term is defined in the Reform Act) made by or on behalf of FPL Group and FPL in this presentation, on their respective websites, in response to questions or otherwise. Any statements that express, or involve discussions as to adjusted earnings or other expectations, beliefs, plans, objectives, assumptions, future events or performance, climate change strategy or growth strategies (often, but not always, through the use of words or phrases such as will, will likely result, are expected to, will continue, is anticipated, aim, believe, could, should, would, estimated, may, plan, potential, projection, target, outlook, predict and intend or words of similar meaning) are not statements of historical facts and may be forward-looking. Forward-looking statements involve estimates, assumptions and uncertainties. Accordingly, any such statements are qualified in their entirety by reference to, and are accompanied by, the following important factors (in addition to any assumptions and other factors referred to specifically in connection with such forward-looking statements) that could cause FPL Group's or FPL's actual results to differ materially from those contained or implied in forward-looking statements made by or on behalf of FPL Group and FPL.

Any forward-looking statement speaks only as of the date on which such statement is made, and FPL Group and FPL undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date on which such statement is made, unless otherwise required by law. New factors emerge from time to time and it is not possible for management to predict all of such factors, nor can it assess the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained or implied in any forward-looking statement.

The following are some important factors that could have a significant impact on FPL Group's and FPL's operations and financial results, and could cause FPL Group's and FPL's actual results or outcomes to differ materially from those discussed or implied in the forward-looking statements:

FPL Group and FPL are subject to complex laws and regulations and to changes in laws and regulations as well as changing governmental policies and regulatory actions. FPL holds franchise agreements with local municipalities and counties, and must renegotiate expiring agreements. These factors may have a negative impact on the business and results of operations of FPL Group and FPL.

- FPL Group and FPL are subject to complex laws and regulations, and to changes in laws or regulations, with respect to, among other things, allowed rates of return, industry and rate structure, operation of nuclear power facilities, construction and operation of generation facilities, construction and operation of transmission and distribution facilities, acquisition, disposal, depreciation and amortization of assets and facilities, recovery of fuel and purchased power costs, decommissioning costs, return on common equity and equity ratio limits, transmission reliability and present or prospective wholesale and retail competition. This substantial and complex framework exposes FPL Group and FPL to increased compliance costs and potentially significant monetary penalties for non-compliance. The Florida Public Service Commission (FPSC) has the authority to disallow recovery by FPL of any and all costs that it considers excessive or imprudently incurred. The regulatory process generally restricts FPL's ability to grow earnings and does not provide any assurance as to achievement of earnings levels.
- FPL Group and FPL also are subject to extensive federal, state and local environmental statutes, rules and regulations, as well as the effect of changes in or additions to applicable statutes, rules and regulations that relate to, or in the future may relate to, for example, air quality, water quality, climate change, greenhouse gas emissions, carbon dioxide emissions, waste management, marine and wildlife mortality, natural resources, health, safety and renewable portfolio standards that could, among other things, restrict or limit the output of certain facilities or the use of certain fuels required for the production of electricity and/or require additional pollution control equipment and otherwise increase costs. There are significant capital, operating and other costs associated with compliance with these environmental statutes, rules and regulations, and those costs could be even more significant in the future.
- FPL Group and FPL operate in a changing market environment influenced by various legislative and regulatory initiatives regarding regulation, deregulation or restructuring of the energy industry, including, for example, deregulation or restructuring of the production and sale of electricity, as well as increased focus on renewable and clean energy sources and reduction of carbon emissions. FPL Group and its subsidiaries will need to adapt to these changes and may face increasing costs and competitive pressure in doing so.
- FPL Group's and FPL's results of operations could be affected by FPL's ability to negotiate or renegotiate franchise agreements with municipalities and counties in Florida.

(continued...)

FPL GROUP

Cautionary Statements And Risk Factors That May Affect Future Results (continued)

The operation and maintenance of power generation, transmission and distribution facilities involve significant risks that could adversely affect the results of operations and financial condition of FPL Group and FPL.

- The operation and maintenance of power generation, transmission and distribution facilities involve many risks, including, for example, start up risks, breakdown or failure of equipment, transmission and distribution lines or pipelines, the inability to properly manage or mitigate known equipment defects throughout FPL Group's and FPL's generation fleets and transmission and distribution systems, use of new or unproven technology, the dependence on a specific fuel source, failures in the supply or transportation of fuel, the impact of unusual or adverse weather conditions (including natural disasters such as hurricanes, floods and droughts), and performance below expected or contracted levels of output or efficiency. This could result in lost revenues and/or increased expenses, including, for example, lost revenues due to prolonged outages and increased expenses due to monetary penalties or fines, replacement equipment costs or an obligation to purchase or generate replacement power at potentially higher prices to meet contractual obligations. Insurance, warranties or performance guarantees may not cover any or all of the lost revenues or increased expenses. Breakdown or failure of an operating facility of NextEra Energy Resources may, for example, prevent the facility from performing under applicable power sales agreements which, in certain situations, could result in termination of the agreement or subject NextEra Energy Resources to incurring a liability for liquidated damages.

The operation and maintenance of nuclear facilities involves inherent risks, including environmental, health, regulatory, terrorism and financial risks, that could result in fines or the closure of nuclear units owned by FPL or NextEra Energy Resources, and which may present potential exposures in excess of insurance coverage.

- FPL and NextEra Energy Resources own, or hold undivided interests in, nuclear generation facilities in four states. These nuclear facilities are subject to environmental, health and financial risks such as on-site storage of spent nuclear fuel, the ability to dispose of spent nuclear fuel, the ability to maintain adequate reserves for decommissioning, potential liabilities arising out of the operation of these facilities, and the threat of a possible terrorist attack. Although FPL and NextEra Energy Resources maintain decommissioning trusts and external insurance coverage to minimize the financial exposure to these risks, it is possible that the cost of decommissioning the facilities could exceed the amount available in the decommissioning trusts, and that liability and property damages could exceed the amount of insurance coverage.
- The U.S. Nuclear Regulatory Commission (NRC) has broad authority to impose licensing and safety-related requirements for the construction and operation and maintenance of nuclear generation facilities. In the event of non-compliance, the NRC has the authority to impose fines or shut down a unit, or both, depending upon its assessment of the severity of the situation, until compliance is achieved. NRC orders or new regulations related to increased security measures and any future safety requirements promulgated by the NRC could require FPL and NextEra Energy Resources to incur substantial operating and capital expenditures at their nuclear plants. In addition, if a serious nuclear incident were to occur at an FPL or NextEra Energy Resources plant, it could result in substantial costs. A major incident at a nuclear facility anywhere in the world could cause the NRC to limit or prohibit the operation or licensing of any domestic nuclear unit.
- In addition, potential terrorist threats and increased public scrutiny of utilities could result in increased nuclear licensing or compliance costs which are difficult or impossible to predict.

The construction of, and capital improvements to, power generation and transmission facilities involve substantial risks. Should construction or capital improvement efforts be unsuccessful or delayed, the results of operations and financial condition of FPL Group and FPL could be adversely affected.

- The ability of FPL Group and FPL to complete construction of, and capital improvement projects for, their power generation and transmission facilities on schedule and within budget are contingent upon many variables that could delay completion, increase costs or otherwise adversely affect operational and financial results, including, for example, limitations related to transmission interconnection issues, escalating costs for materials and labor and environmental compliance, delays with respect to permits and other approvals, and disputes involving third parties, and are subject to substantial risks. Should any such efforts be unsuccessful or delayed, FPL Group and FPL could be subject to additional costs, termination payments under committed contracts, loss of tax credits and/or the write-off of their investment in the project or improvement.

The use of derivative contracts by FPL Group and FPL in the normal course of business could result in financial losses or the payment of margin cash collateral that adversely impact the results of operations or cash flows of FPL Group and FPL.

- FPL Group and FPL use derivative instruments, such as swaps, options, futures and forwards, some of which are traded in the over-the-counter markets or on exchanges, to manage their commodity and financial market risks, and for FPL Group to engage in trading and marketing activities. FPL Group could recognize financial losses as a result of volatility in the market values of these derivative instruments, or if a counterparty fails to perform or make payments under these derivative instruments and could suffer a reduction in operating cash flows as a result of the requirement to post margin cash collateral. In the absence of actively quoted market prices and pricing information from external sources, the valuation of these derivative instruments involves management's judgment or use of estimates. As a result, changes in the underlying assumptions or use of alternative valuation methods could affect the reported fair value of these derivative instruments. In addition, FPL's use of such instruments could be subject to prudence challenges and, if found imprudent, cost recovery could be disallowed by the FPSC.
- FPL Group provides full energy and capacity requirement services, which include load-following services and various ancillary services, primarily to distribution utilities to satisfy all or a portion of such utilities' power supply obligations to their customers. The supply costs for these transactions may be affected by a number of factors, such as weather conditions, fluctuating prices for energy and ancillary services, and the ability of the distribution utilities' customers to elect to receive service from competing suppliers, which could negatively affect FPL Group's results of operations from these transactions.

(...continued...)

FPL GROUP

Cautionary Statements And Risk Factors That May Affect Future Results (continued)

FPL Group's competitive energy business is subject to risks, many of which are beyond the control of FPL Group, including, but not limited to, the efficient development and operation of generating assets, the successful and timely completion of project restructuring activities, the price and supply of fuel and equipment, transmission constraints, competition from other generators, including those using new sources of generation, excess generation capacity and demand for power, that may reduce the revenues and adversely impact the results of operations and financial condition of FPL Group.

- There are various risks associated with FPL Group's competitive energy business. In addition to risks discussed elsewhere, risk factors specifically affecting NextEra Energy Resources' success in competitive wholesale markets include, for example, the ability to efficiently develop and operate generating assets, the successful and timely completion of project restructuring activities, maintenance of the qualifying facility status of certain projects, the price and supply of fuel (including transportation) and equipment, transmission constraints, the ability to utilize production tax credits, competition from other and new sources of generation, excess generation capacity and shifting demand for power. There can be significant volatility in market prices for fuel, electricity and renewable and other energy commodities, and there are other financial, counterparty and market risks that are beyond the control of NextEra Energy Resources. NextEra Energy Resources' inability or failure to effectively hedge its assets or positions against changes in commodity prices, interest rates, counterparty credit risk or other risk measures could significantly impair FPL Group's future financial results. In keeping with industry trends, a portion of NextEra Energy Resources' power generation facilities operate wholly or partially without long-term power purchase agreements. As a result, power from these facilities is sold on the spot market or on a short-term contractual basis, which may increase the volatility of FPL Group's financial results. In addition, NextEra Energy Resources' business depends upon power transmission and natural gas transportation facilities owned and operated by others; if transmission or transportation is disrupted or capacity is inadequate or unavailable, NextEra Energy Resources' ability to sell and deliver its wholesale power or natural gas may be limited.

FPL Group's ability to successfully identify, complete and integrate acquisitions is subject to significant risks, including, but not limited to, the effect of increased competition for acquisitions resulting from the consolidation of the power industry.

- FPL Group is likely to encounter significant competition for acquisition opportunities that may become available as a result of the consolidation of the power industry in general. In addition, FPL Group may be unable to identify attractive acquisition opportunities at favorable prices and to complete and integrate them successfully and in a timely manner.

FPL Group and FPL participate in markets that are often subject to uncertain economic conditions, which makes it difficult to estimate growth, future income and expenditures.

- FPL Group and FPL participate in markets that are susceptible to uncertain economic conditions, which complicate estimates of revenue growth. Because components of budgeting and forecasting are dependent upon estimates of revenue growth in the markets FPL Group and FPL serve, the uncertainty makes estimates of future income and expenditures more difficult. As a result, FPL Group and FPL may make significant investments and expenditures but never realize the anticipated benefits, which could adversely affect results of operations. The future direction of the overall economy also may have a significant effect on the overall performance and financial condition of FPL Group and FPL.

Customer growth and customer usage in FPL's service area affect FPL Group's and FPL's results of operations.

- FPL Group's and FPL's results of operations are affected by the growth in customer accounts in FPL's service area and by customer usage. Customer growth can be affected by population growth. Customer growth and customer usage can be affected by economic factors in Florida and elsewhere, including, for example, job and income growth, housing starts and new home prices. Customer growth and customer usage directly influence the demand for electricity and the need for additional power generation and power delivery facilities at FPL.

Weather affects FPL Group's and FPL's results of operations, as can the impact of severe weather. Weather conditions directly influence the demand for electricity and natural gas, affect the price of energy commodities, and can affect the production of electricity at power generating facilities.

- FPL Group's and FPL's results of operations are affected by changes in the weather. Weather conditions directly influence the demand for electricity and natural gas, affect the price of energy commodities, and can affect the production of electricity at power generating facilities, including, but not limited to, wind, solar and hydro-powered facilities. FPL Group's and FPL's results of operations can be affected by the impact of severe weather which can be destructive, causing outages and/or property damage, may affect fuel supply, and could require additional costs to be incurred. At FPL, recovery of these costs is subject to FPSC approval.

Adverse capital and credit market conditions may adversely affect FPL Group's and FPL's ability to meet liquidity needs, access capital and operate and grow their businesses, and increase the cost of capital. Disruptions, uncertainty or volatility in the financial markets can also adversely impact the results of operations and financial condition of FPL Group and FPL, as well as exert downward pressure on the market price of FPL Group's common stock.

- Having access to the credit and capital markets, at a reasonable cost, is necessary for FPL Group and FPL to fund their operations, including their capital requirements. Those markets have provided FPL Group and FPL with the liquidity to operate and grow their businesses that is not otherwise provided from operating cash flows. Disruptions, uncertainty or volatility in those markets can increase FPL Group's and FPL's cost of capital. If FPL Group and FPL are unable to access the credit and capital markets on terms that are reasonable, they may have to delay raising capital, issue shorter-term securities and/or bear an unfavorable cost of capital, which, in turn, could adversely impact their ability to grow their businesses, decrease earnings, significantly reduce financial flexibility and/or limit FPL Group's ability to sustain its current common stock dividend level.

- The market price and trading volume of FPL Group's common stock could be subject to significant fluctuations due to, among other things, general stock market conditions and changes in market sentiment regarding FPL Group and its subsidiaries' operations, business, growth prospects and financing strategies.

(...continued...)

FPL GROUP

Cautionary Statements And Risk Factors That May Affect Future Results (continued)

FPL Group's, FPL Group Capital's and FPL's inability to maintain their current credit ratings may adversely affect FPL Group's and FPL's liquidity, limit the ability of FPL Group and FPL to grow their businesses, and would likely increase interest costs.

- FPL Group and FPL rely on access to capital and credit markets as significant sources of liquidity for capital requirements not satisfied by operating cash flows. The inability of FPL Group, FPL Group Capital and FPL to maintain their current credit ratings could affect their ability to raise capital or obtain credit on favorable terms, which, in turn, could impact FPL Group's and FPL's ability to grow their businesses and would likely increase their interest costs.

FPL Group and FPL are subject to credit and performance risk from third parties under supply and service contracts.

- FPL Group and FPL rely on contracts with vendors for the supply of equipment, materials, fuel and other goods and services required for the construction and operation of, and for capital improvements to, their facilities, as well as for business operations. If vendors fail to fulfill their contractual obligations, FPL Group and FPL may need to make arrangements with other suppliers, which could result in higher costs, untimely completion of power generation facilities and other projects, and/or a disruption to their operations.

FPL Group and FPL are subject to costs and other potentially adverse effects of legal and regulatory proceedings, as well as regulatory compliance and changes in or additions to applicable tax laws, rates or policies, rates of inflation, accounting standards, securities laws, corporate governance requirements and labor and employment laws.

- FPL Group and FPL are subject to costs and other potentially adverse effects of legal and regulatory proceedings, settlements, investigations and claims, as well as regulatory compliance and the effect of new, or changes in, tax laws, rates or policies, rates of inflation, accounting standards, securities laws, corporate governance requirements and labor and employment laws.
- FPL and NextEra Energy Resources, as owners and operators of bulk power transmission systems and/or critical assets within various regions throughout the United States, are subject to mandatory reliability standards promulgated by the North American Electric Reliability Corporation and enforced by the Federal Energy Regulatory Commission. These standards, which previously were being applied on a voluntary basis, became mandatory in June 2007. Noncompliance with these mandatory reliability standards could result in sanctions, including substantial monetary penalties, which likely would not be recoverable from customers.

Threats of terrorism and catastrophic events that could result from terrorism, cyber attacks, or individuals and/or groups attempting to disrupt FPL Group's and FPL's business may impact the operations of FPL Group and FPL in unpredictable ways.

- FPL Group and FPL are subject to direct and indirect effects of terrorist threats and activities, as well as cyber attacks and disruptive activities of individuals and/or groups. Infrastructure facilities and systems, including, for example, generation, transmission and distribution facilities, physical assets and information systems, in general, have been identified as potential targets. The effects of these threats and activities include, but are not limited to, the inability to generate, purchase or transmit power, the delay in development and construction of new generating facilities, the risk of a significant slowdown in growth or a decline in the U.S. economy, delay in economic recovery in the United States, and the increased cost and adequacy of security and insurance.

The ability of FPL Group and FPL to obtain insurance and the terms of any available insurance coverage could be adversely affected by international, national, state or local events and company-specific events.

- FPL Group's and FPL's ability to obtain insurance, and the cost of and coverage provided by such insurance, could be adversely affected by international, national, state or local events as well as company-specific events.

FPL Group and FPL are subject to employee workforce factors that could adversely affect the businesses and financial condition of FPL Group and FPL.

- FPL Group and FPL are subject to employee workforce factors, including, for example, loss or retirement of key executives, availability of qualified personnel, inflationary pressures on payroll and benefits costs and collective bargaining agreements with union employees and work stoppage that could adversely affect the businesses and financial condition of FPL Group and FPL.

The risks described herein are not the only risks facing FPL Group and FPL. Additional risks and uncertainties also may materially adversely affect FPL Group's or FPL's business, financial condition and/or future operating results.

EXHIBIT NO. _____

DOCKET NO.: 090505-EI

WITNESS: D. E. DISMUKES

PARTY: OFFICE OF PUBLIC COUNSEL

DOCUMENT: EXCERPT FROM DOCKET NO. U-20647, ORDER NO. U-20647, LOUISIANA PUBLIC SERVICE COMMISSION, JULY 27, 1994.

PROFFERED BY: FLORIDA POWER & LIGHT COMPANY

FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 090505-EI **EXHIBIT** 39
COMPANY Florida Power & Light
WITNESS Excerpt from Louisiana PSC Decision
DATE 03/18/10

Re: Gulf States Utilities Company

Docket No. U-20647

Order No. U-20647

Louisiana Public Service Commission

July 27, 1994

GE. Instead of investigating to see whether GE had failed to use the correct fittings in the remaining control valves, GSU simply replaced only the two incorrect O-rings on the then leaking valve and restarted the system. Knowing that all of the O-rings had been replaced by GE, and finding that both connections on the leaking valve contained incorrect O-rings, GSU should have been alerted that GE may have failed to install the correct O-rings in the other valves. Using two maintenance teams, the fittings could have all been replaced in the space of approximately three hours. [Tr. 5/25/94 (Mr. Derbonne) at 67-68]. The original outage might have been extended slightly, but the 56-hour outage of June 29, 1989 would have been avoided entirely.

The only testimony presented by GSU in opposition to the disallowances was that of Mr. Donald Derbonne. At the time of the outages, Mr. Derbonne was the Assistant Plant Manager, Maintenance. Mr. Derbonne offered his opinions and assumptions about the manner in which GE personnel installed the wrong O-rings and why GSU personnel did not investigate and cure the problem during the June 24, 1989 outage. However, Mr. Derbonne lacked firsthand knowledge, contradicted GSU's contemporaneous records, contradicted admissions in the Texas PUC proceeding by Mr. Philip Graham, the former River Bend plant manager, and at times contradicted his own sworn testimony.

Mr. Derbonne also opined that the failure to identify and install the correct O-ring was the ***62** result of 'human error,' not 'imprudence.' Mr. Derbonne essentially suggested that because GE installed 'Ultra-seal' O-rings in some of the valves, they must have been trying to do the right thing and GE and GSU should be excused for the loss. [*See* Derbonne Rej. Test. at 3]. Conversely though, Mr. Derbonne contends that GSU's documentation was adequate to inform GE as to the correct fittings, that the specifications were available, and that GE should have been able to follow the plans and specifications. [Tr. 5/24/94 (Mr. Derbonne) at 129]. Mr. Derbonne resolved this apparent contradiction by reading negligence/or carelessness out of his definition of imprudence. His standard for imprudence requires 'some conscious knowledge that you're doing something wrong.' [Tr. 5/24/94 (Mr. Derbonne) at 117]. This standard, also proposed by Mr. Louiselle, is inappropriate for judging the utility's conduct. [*See* § IV (A)].

5. Explosion of 'B' Preferred Transformer

In March of 1989, the 'A' Preferred Transformer ('A transformer') was taken out of service when tests indicated that low-side or through-faults had damaged the transformer. A new transformer was obtained while the original 'A' transformer was taken off-site, and repaired. In May, 1989, during RFO-2, through-faults occurred on the 'B' Preferred Transformer ('B transformer'). On May 29, 1989, the 'B' transformer exploded when it suffered its third fault in 28 days, resulting in a 16 day outage while a replacement was located and installed. Mr. Kollen recommended disallowing GSU's recovery of the incremental fuel/power costs associated with this 16 day outage. [Kollen Dir. Test. at 13-16]. The Commission will adopt Special Counsel's recommendation that **Gulf States** Utilities be denied one-half the incremental cost of replacement energy for the 16 day outage because GSU failed to take steps that would have prevented the explosion of the 'B' Preferred Transformer or to plan for a reserve to promptly replace the 'B' transformer when it failed.

The River Bend plant used the 'A' transformer and the 'B' transformer to provide power during start-ups of the nuclear plant. Neither of the transformers were used in day-to-day plant operations. [Tr. 5/24/94 (Mr. Derbonne) at 86]. The 'A' and 'B' transformers each receive 230 kv's of electricity from an off-site power source. Each of the transformers downstep the 230 kv to 13.8 kv and run the power on a bus to serve multiple pieces of equipment. [*Id.* at 84-85; *see also* LPSC Staff Exh. 4]. GSU attempted to keep the loads on both transformers fairly equal. [*Id.*] The 'A' and 'B' transformers were physically identical; they had the same size and capacity and carried the same electrical loads. [*Id.* at 84]. Although the auxiliary boiler was generally connected to the 'A' transformer, the load and service provided by the 'A' and 'B' transformers was not substantially different. [*Id.* at 85].

River Bend does not maintain on-site expertise in the maintenance of large transformers like the 'A' and 'B' transformers. The system engineers supervise basic preventive maintenance and smaller repair items. [*Id.* at 99]. When more substantial problems arose, GSU personnel in Beaumont or outside contractors analyzed the problems. [Tr. 5/24/94 (Mr. Derbonne) at 81-84].

In 1985, River Bend experienced problems with the 'A' transformer. [*Id.* at 87]. In a report dated September 20, 1985, W. J. Penner opined that the cause for the failure in 1985 was attributed to a number of low side faults on the system. [LPSC Staff Exh. 5]. Mr. Penner was one of the GSU specialists in Beaumont who evaluated problems with the large transformers. [Tr. 5/24/94 (Mr. Derbonne) at 84]. In March of 1989, the 'A' transformer again failed. After testing, GSU concluded that the damage was so extreme that the 'A' transformer was removed from service and a replacement transformer was ordered. [*Id.* at p. 89]. There is no evidence that the 'B' transformer was tested when the 'A' transformer was removed from service. [*Id.*]. Westinghouse Electric Corporation prepared a failure report on the 'A' transformer and attributed the cause to 'through-fault conditions.' [LPSC Staff Exhibit 6 at last page; Tr. 5/24/94 (Mr. Derbonne) at 93-94]. Mr. Penner evaluated the situation in an April 7, 1989 memo and similarly attributed the failure of the ***63** transformer to repeated through-faults. [LPSC Staff Exhibit 7; Tr. 5/24/94 (Mr. Derbonne) at 94-95].

On May 2, 1989, during RFO-2, and again on May 23, 1989, through-faults occurred on the 'B' transformer. On each occasion, the safety systems were tripped and the power shut down. Oil samples were taken and tested after each of these trips. A doble test performed by GSU after the May 2, 1989 trip was negative. The doble test is intended to determine if there is degradation of key components in the transformer that could cause a system failure. GSU elected not to perform a doble test after the May 23, 1989 trip. [Tr. 5/24/94 (Mr. Derbonne) at 90-93]. On May 29, the 'B' transformer again suffered a through-fault and exploded, literally blowing the top off the transformer. [*Id.* at 93].

A subsequent 'failure analysis' conducted by United Engineers and Constructors at the request of GSU, determined that the failure of the transformer resulted from 'through-faults or by use in feeding the auxiliary boiler.' [LPSC Staff Exhibit 8]. Similarly, GSU's Mr. Penner also opined that the explosion was caused by through-faults on the 'B' transformer. [LPSC Staff Exhibit 9].

The Texas PUC found imprudence of GSU in connection with the 'B' transformer explosion. Mr. Kollen similarly testified GSU was imprudent in failing to prevent the explosion following the repeated through-faults on the system. [Kollen Dir. Test. at 13-15; Kollen Surreb. Test. at 20-23].

In response to Mr. Kollen's testimony, GSU presented the testimony of Mr. Derbonne. Mr. Derbonne's testimony fails to meet GSU's burden of establishing prudence. GSU did not consider Mr. Derbonne an expert in the area of transformer troubleshooting and analysis. Oddly enough, neither Mr. Penner nor the systems engineers who did supervise the transformer testing and repairs were called by GSU. In addition, Mr. Derbonne offered no testimony on the reasonableness of the delays.

Mr. Derbonne acknowledged that neither he nor his department had involvement in analyzing the transformer problems in either 1985 or 1989. [Tr. 5/24/94 (Mr. Derbonne) at 82-83]. If any work other than general preventative maintenance was required on the transformers, GSU would rely upon experts outside the River Bend staff to analyze the problems. [*Id.* at 82-85]. Systems engineers had the primary responsibilities for the transformers on a day-to-day basis, but even those individuals did not report to Mr. Derbonne or his department. [*Id.* at 83-84].

When the 'A' transformer suffered problems in 1985, Mr. Penner was involved in the analysis of the problems. Mr. Derbonne was not asked to provide information regarding the possible causes for the problems. When Mr. Penner issued his memorandum in 1985, the information was furnished to the River Bend manager of quality assurance but neither distributed to nor discussed with Mr. Derbonne because it was outside his area of responsibility. [LPSC Staff Exhibit 5; Tr. 5/24/94 (Mr. Derbonne) at 87-89].

Similarly, when the 'A' transformer failed in 1989, Westinghouse performed a failure analysis and Mr. Penner again performed an analysis of causation and distributed a copy to the River Bend systems engineers. No copy was furnished to Mr. Derbonne. [LPSC Staff Exhs. 6 & 7; Tr. 5/24/94 (Mr. Derbonne) at 93-95]. Again, when the 'B' transformer suffered faults on May 2 and May 23, 1989, Mr. Derbonne's department was not asked to evaluate the faults.

Gulf States has failed to even address the reasonableness of the delays in resolving the problems and the resulting outage. The 'A' and 'B' transformers were used during start-ups. Other transformers serviced the busses during regular day to day operations. In March, 1989; the 'A' transformer was removed from service when testing showed damage to the 'A' transformer. The RFO-2 Outage History Report indicates that the 'A' transformer was sent off site for repair on April 1, 1989, but it was not until April 26, 1989 that orders were issued for the purchase of a spare transformer and for the installation of the replacement transformer. [Kollen Dir. Test., Ex. (LK-2) at 2 of 19]. The replacement/spare transformer was not installed and energized for testing until May 31, 1989, two days *after* the 'B' Preferred Transformer exploded, and two months after the 'A' transformer was first removed. Had GSU maintained ***64** a spare transformer, or had it acted more promptly to replace the 'A' transformer so that the 'A' transformer would have been available as a spare for the 'B' transformer, the outage would have been much shorter.

Gulf States' imprudent failure to respond quickly to the failure of the 'A' transformer or provide for the failure of the 'B' transformer unduly extended the outage for the 'B' transformer failure. Since there is no evidence establishing exactly how long the outage would have taken with adequate planning, the Commission disallows one-half the amount recommended by Mr. Kollen.

The conclusion in the Texas proceeding, coupled with Mr. Kollen's analysis, indicate that **Gulf States** should have anticipated a problem with the 'B' transformer after the failure of the 'A' transformer and the faults on the 'B' transformer. **Gulf States** failed to carry its burden of showing that it adequately planned for and anticipated potential problems with the 'B' transformer. The company did test the transformer, however, and assertedly determined that the transformer was in good condition. This action partially refutes the conclusion that **Gulf States** should have replaced the 'B' transformer immediately, especially since doing so would have caused an outage.

A better analysis should focus on the company's failure to develop adequate contingency plans for replacing the 'B' transformer after experiencing the failure of the 'A' transformer and the faults on the 'B' transformer. The company experienced undue delays in replacing the 'A' transformer. It had no backup equipment to replace the 'B' transformer when it failed. As a result, the outage took longer than necessary.

The Commission finds that **Gulf States**' imprudence caused one-half the delay resulting from the 'B' transformer explosion. This ruling adequately balances the competing considerations on this issue.

C. Impact of River Bend Outages.

[15][16] In opposing any disallowance for River Bend outages, **Gulf States** argued in its rebuttal testimony that the outages actually caused customers to be better off. According to Mr. Louiselle, because of the impact of the Commission's rate base exclusion plan for the portion of River Bend that was disallowed as imprudent, customers save money - at least in the short run - when imprudent conduct shuts down the unit. Therefore, **Gulf States** argues, imprudent outages should not lead to disallowances. [Louiselle Reb. Test. at 6-9].

Mr. Kollen calculated the cost of the outages based on the difference between River Bend's fuel cost and the cost of alternate generation. [Kollen Dir. Test. of at 10-19]. He initially made no separation of the 'regulated' and 'deregulated' portions of the River Bend plant. [*Id.*]. After considering **Gulf States**' arguments relating to the impact of the rate base exclusion plan, Mr. Kollen argued that the company should be penalized for only the added costs associated with the regulated portion of the unit after the plan went into effect. [Kollen Surreb. Test. at 7-11]. He disagreed that the added costs for imprudent conduct relating to the regulated plant should be offset by 'savings' in the payments required under the rate base exclusion plan. [*Id.*].

The rate base exclusion plan initially was proposed by the Commission as a potential settlement of litigation over the prudence disallowance. Order No. U-17282-D. **Gulf States** rejected the proposal, but the plan was imposed by the Nineteenth Judicial District Court in a decision that otherwise approved the Commission's prudence disallowance. The Commission complied with the district court's

decision in Order U-17282-H, issued in March, 1990, but also appealed. The Louisiana Supreme Court subsequently overruled the district court's decision, holding that only the Commission had jurisdiction to determine in the first instance whether the plan should be adopted. ***Gulf States** Utilities Co. v. Louisiana Public Service Com'n*, 578 So. 2d 71, 97-101 (La. 1991). The Commission subsequently adopted a modified version of the plan. Order No. U-17282-K (La.P.S.C. February 12, 1992).

A common characteristic of the plans adopted in Order No. U-17282-H and Order No. U-17282-K is the provision that **Gulf States** may sell electricity from the deregulated asset ***65** to the regulated entity at a price of 4.6 cents per kilowatt hour ('kwh') if it is unable to sell the electricity at a higher price elsewhere. In effect, the ratepayers provide a guaranteed market for the output of the deregulated plant. The 4.6 cents per kwh charge is collected by the company through the fuel clause.

In theory, Mr. Louiselle's observation is correct that the combined effect of the 4.6 cents per kwh charge for electricity from the deregulated asset and the approximately one cent per kwh cost of fuel for the regulated portion of River Bend produced an average cost of electricity higher than the cost of fuel from alternate sources. The 'merged' fuel clause recovery for electricity from River Bend was about 2.6 cents per kwh, while the cost of fuel from alternate sources was about 1.8 cents per kwh. Thus, on a total fuel clause basis, customers did save money as the result of the company's imprudence. Nevertheless, Mr. Louiselle's approach improperly mixes the regulated and deregulated output of the unit.

The rate base exclusion plan is designed to accomplish the exclusion of the imprudent portion of River Bend from regulation, while permitting the company to realize some revenues for the asset and avoid a complete write-off of its investment. The plant was adopted as an accommodation to the company to ameliorate the impact of the River Bend disallowance. **Gulf States** is supposed to bear the risk, with respect to the deregulated asset, of events that prevent the generation of electricity. Under the sharing provisions adopted in Order No. U-17282-K, **Gulf States** has the option of selling electricity from the deregulated asset to any purchaser and keeping most of the proceeds. It also may sell the asset and retain most of the proceeds. The sharing percentages are subject to reconsideration by the Commission, but only after notice and a hearing. Order No. U-17282-K. If **Gulf States** fails to supply electricity at 4.6 cents per kwh as the result of an outage, even if the alternate cost of electricity is higher, it arguably would not be subject to an imprudence penalty.

Given the circumstances, counting fuel clause 'savings' for the rate base exclusion plan that result from an outage would not be appropriate. First, the deregulated asset is supposed to be separate from the portion of the unit that is considered in regulation. If the 'savings' from not running the deregulated asset should be considered now as an offset to higher costs caused in the regulated sector from imprudence, then in the future, when alternate costs are higher than the guaranteed payments, **Gulf States** should be subject to penalties when its imprudence reduces the amount of electricity available from the deregulated asset. It is doubtful that the company would agree to this application of a prudence standard to the deregulated asset, and the plan does not provide for it. Thus, adopting Mr. Louiselle's argument would serve the interests of the company in a one-sided way.

Second, mixing the excluded portion of River Bend with the regulated asset may send incorrect economic signals to the company. Mr. Louiselle's argument strongly suggests that the best thing to do with River Bend is to shut it down. Yet Mr. Louiselle also argues that it would be improper to conclude that River Bend should be shut down, because there would be long term costs of a shutdown not considered in his analysis. [Tr. 5/25/94 (Mr. Louiselle) at 111]. Until the Commission determines that River Bend is an uneconomic asset, it should apply regulatory principles that promote the use of the unit.

Third, the proposal of Mr. Louiselle is inconsistent with the method **Gulf States** previously used to calculate damages for a River Bend outage. In September, 1993, the company voluntarily agreed to make a refund for a River Bend outage, and calculated the amount based only on the higher costs attributable to the loss of electricity from the regulated portion of the unit. [Tr. 5/24/94 (Mr. Beekman) at 76]. This approach is consistent with that used by Mr. Kollen.

Fourth, three of the outages in this case occurred before the rate base exclusion plan was adopted.