ORIGINAL

Hopping Green & Sams

Attorneys and Counselors January 22, 2007

RECEIVED-FPSC 07 JAN 22 PM 2: 25 COMMISSION

BY HAND-DELIVERY

Blanca Bayó Director, Division of Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399

Re: Docket No. 060162-EI

Dear Ms. Bayó:

Enclosed for filing in the above referenced docket on behalf of Progress Energy Florida, Inc., are the original and fifteen (15) copies of the following:

- Pre-filed Direct Testimony of Thomas Lawery, along with Mr. Lawery's Exhibit No. ___ (TL-1), Exhibit No. ___ (TL-2), and Exhibit No. ___ (TL-3); and
- Revised Direct Testimony of Javier J. Portuondo, along with Mr. Portuondo's Exhibit No. ___ (JP-1) and Exhibit No. ___ (JP-2).

This testimony and exhibits should be substituted for the revised testimony and exhibits previously filed on July 13, 2006.

I also have included a diskette containing the testimony in Microsoft Word Format. By copy of this letter, copies of the documents listed above have been provided to all persons on the attached certificate of service.

CMP	1	ne testimony and attached ex	cipt and filing of the above by stamping the enclosed extra copies chibit and returning them to me. If you have any questions	
COM	cond	cerning this filing, please co	ntact me at 425-2359.	
CTR	(\	Thank you for your assi	stance in connection with this matter.	
GCL	1_		Very truly yours,	
OPC		RECEIVED & FILED	Gary V. Perko	
SCF SG/		FPSC-BUREAU OF RI	Carolyn S. Racople / CORDS Virginia C. Dailey	
SEC	cc: (Certificate of Service	Attorneys for Progress Energy Florida, Inc.	ΔŢ.
OTI			DOCOLUCIÓN DA	

850.224.8551 fax

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Progress Energy Florida, Inc.'s Pre-filed Direct Testimony of Thomas Lawery, and Revised Direct Testimony of Javier Portuondo in Docket No. 060162-EI have been furnished by hand-delivery (*) or regular U.S. mail to the following this Aday of January, 2007.

Lisa C. Bennett (*)
Martha Carter Brown (*)
Office of General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Joseph McGlothlin, Esq.
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Paul Lewis, Jr.
Progress Energy Florida, Inc.
106 East College Avenue, Suite 800
Tallahassee, FL 32301-7740

Virginia C. Daeleg Attorney



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060162-EI

In re: Amended Petition of Progress Energy Florida, Inc. to recover modular cooling tower costs.

DIRECT TESTIMONY OF THOMAS LAWERY

January 22, 2007

Q. Please state your name and business address.

A. My name is Thomas Lawery. My business address is 8202 West Venable
 Street, Crystal River, Florida 34429.

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Q. By whom are you employed and in what capacity?

A. I am employed by Progress Energy Florida, Inc. (PEF) as Manager of Regional Engineering.

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Q. What are your responsibilities in that position?

A. I provide engineering and technical support to the fossil power plants for PEF.
 This includes projects and troubleshooting for the Crystal River fossil plants,
 Anclote plant, Suwannee plant and Bartow plant.

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DOCUMENT NUMBER-DATE

- Q. Please describe your educational background and professional experience.
- A. I have a B.S. degree in Electrical Engineering from Florida State University and I am presently pursuing an MBA at the University of Tampa. I am a registered Professional Engineer in Florida with seventeen years experience in fossil power plant operation and design. I have been involved in financial and technical aspects of managing, evaluating and developing power generation assets.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support the Company's request for recovery of costs for installation and operation of modular cooling towers at PEF's Crystal River plant. Specifically, I will describe the modular cooling tower project, present cost estimates for the project, and describe how the Company will assess the effectiveness of the project.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring Exhibit No. __ (TL-1), which is a chart that shows cooling water inlet temperatures for the summer months in 2003 through 2005, and the associated de-rates that have been necessary to ensure compliance with the permit limit for the cooling water temperature discharged from PEF's Crystal River plant during the same time period. I am also sponsoring Exhibit No. __ (TL-2), which is the Florida Department of

Environmental Protection (FDEP) industrial wastewater permit for the Cyrstal River Plant. Finally, I am sponsoring Exhibit No. __ (TL-3), which is a chart that shows cooling water inlet temperatures and unit loads for the time period May 1, 2006 through July 31, 2006. It also includes the associated amount of de-rates that have been necessary to ensure compliance with the permit limit for the temperature of the cooling water discharged from PEF's Crystal River plant during the same time period.

Α.

Q. Please describe the modular cooling tower project.

The project involves the installation and operation of modular cooling towers in the summer months in order to minimize "de-rates" of Crystal River Units 1 and 2 (CR-1 and CR-2) necessary to comply with the permit limit on the temperature of cooling water discharges from the Crystal River plant. The project involves installation and operation of modular cooling towers in the summer months (mid-May through mid-September) in order to reduce the discharge canal temperature. This will enable PEF to reduce the number and extent of de-rates and thereby reduce replacement fuel and purchase power costs.

The specific type and capacity of modular units were selected based upon the results of a competitive bidding process. Based on physical limitations, environmental permitting considerations and projected temperature decreases, the Company has assumed a water flow capacity of approximately 180,000 gallons per minute for purposes of analysis. At this capacity, the rental towers would reduce hourly de-rates attributable to the thermal permit limit by approximately 330 MW.

Q. What is meant by the term "de-rate"?

A "de-rate" is a temporary reduction in the output of a generating unit.

Because CR-1 and CR-2 are base-load coal units, whenever those units are

de-rated PEF must replace the lost generation by using more expensive oil or

gas-fired units, or by purchasing higher-cost power on the open market.

Q. Why have de-rates been necessary to comply with the thermal permit limit?

A. At PEF's Crystal River plant, water is removed from the Gulf of Mexico and used to condense turbine exhaust steam to water. The Crystal River generating units share a common discharge canal that sends the cooling water back into the Gulf of Mexico. The FDEP industrial wastewater permit for the Crystal River plant, which is provided as Exhibit No. __ (TL-2) includes a limit on the temperature of cooling water discharges (i.e., 96.5° F 3-hour rolling average). This limit must always be met regardless of the temperature of the inlet waters from the Gulf of Mexico.

The primary strategy for complying with the thermal permit limit is the operation of permanent cooling towers. Plant operation and maintenance

personnel strive to maintain a 100% availability of the towers during months of peak usage. Once the cooling capacity of the towers is reached, the only other immediate option to ensure compliance with the thermal permit limit is to de-rate CR-1, CR-2 or both. Recently, de-rates necessary to ensure permit compliance have increased due to weather conditions beyond PEF's control that have increased the temperature of inlet waters for the CR-1 and CR-2 cooling systems. As shown in Exhibit No. __ (TL-2), inlet water temperatures and associated thermal de-rates were particularly severe in the summer of 2005.

Q. In general, what are the economic effects of de-rates due to the temperature permit limit?

A. As I previously noted, whenever the Crystal River units are de-rated, PEF must replace the lost generation by using more expensive oil or gas-fired units, or by purchasing higher-cost power on the open market. De-rates due to the thermal permit limit have occurred mostly during the hottest summer days during peak demand periods when fuel and purchase power costs are at a peak. In addition, if off system sales opportunities are available during the periods when CR-1 and/or CR-2 are de-rated, those opportunities and the associated customer benefits are lost.

Q. Has the Company explored the possibility of obtaining less stringent permit conditions?

A. Yes. Based on discussions with FDEP, however, the likelihood of obtaining less stringent permit conditions is negligible and would depend upon the results of lengthy and expensive scientific studies that may prove inconclusive.

Q. Has PEF explored other alternatives to the modular cooling towers?

Yes. The Company evaluated and compared several alternatives, including:

(a) installation of new permanent helper cooling towers; (b) installation of additional cells to the existing cooling towers; (c) enhancement of existing cooling tower fan performance to reduce recirculation and interference; and (d) installation of additional dilution pumps to dilute the temperature of the water in the discharge canal. Based on the relative efficiencies and costs of the various options, however, PEF determined that the modular cooling tower solution would be most cost-effective. Moreover, use of modular towers will enable the Company to assess whether the thermal de-rate problem is a temporary or cyclical phenomenon before costs are unnecessarily expended on a permanent solution. Unlike permanent towers, the modular towers can be easily mobilized and used at other locations if they are no longer needed at Crystal River at some point in the future.

Q. What is the status of the Modular Cooling Tower Project?

A. The Modular Cooling Towers were placed in service in June 2006, after the submittal of PEF's petition for cost recovery.

Q. How are you calculating the avoided summer de-rates?

We are using a model that looks at the actual measured hot water temperature in the canal and actual measured cool water temperature from the permanent helper cooling towers to predict what the POD temperature would have been without the modular cooling towers. This is hourly data from the Plant Information system for May 1 through July 31. For hours where a de-rate would have been required, the model calculates the amount of de-rate that would have been necessary in order to achieve the targeted POD temperature. The logic for the de-rate is to begin with Unit 1 and continue de-rates until the target POD temperature is achieved or the unit is de-rated to minimum load (120 MW). If more de-rates are required, the model then de-rates Unit 2 until either the target is achieved or the unit is de-rated to minimum load (120 MW).

Q. Have the Modular Cooling Towers been effective at reducing the number of summer de-rates?

A. Yes. The Modular Cooling Towers have successfully reduced the number of required de-rates for Crystal River Units 1 and 2. As illustrated in Exhibit No. _ (TL-3), PEF only had to de-rate once for thermal permit issues through the end of July 2006. The modular cooling towers are estimated to have reduced necessary de-rates by 23,955 MWhs.

Q. Can you quantify any 2006 fuel cost and net fuel cost savings attributable to this project?

A. The 2006 net fuel savings attributable to this project were calculated by using an industry standard unit commitment dispatch model. For each event where de-rates were avoided, two separate cases were modeled: one case with actual generation of CR-1 and CR-2, and another case with generation of CR-1 and/or CR-2 reduced to the extent of calculated avoided de-rates. The fuel cost differences between the cases were then calculated to arrive at the gross benefit of reduced fuel costs associated with avoided de-rates as a result of the modular cooling towers. Using this methodology, the calculation of gross benefits from avoided de-rates yields a total of \$4,033,020. The value of additional auxiliary loads to power the modular cooling towers is \$289,057. The net of the two numbers yields net savings of \$3,743,963.

Q. What are the projected costs of the temporary cooling tower project?

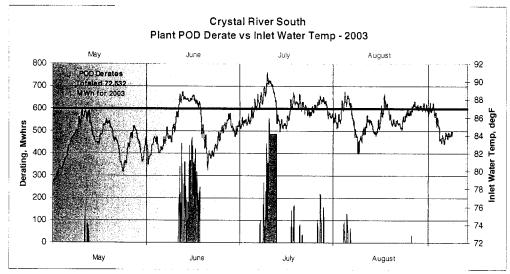
A. PEF incurred approximately \$516,000 capital costs and \$4.6 million in O&M costs for the project during 2006. The one-time capital expenses included installation of the modular cooling towers and ancillary equipment, such as power transformers, switchgear, and cable. In future years, PEF estimates project costs of approximately \$3 million to \$4 million annually. The annual expenditures are expected to include O&M expenses for unit mobilization and setup, rental fees, de-mobilization, and fill replacement.

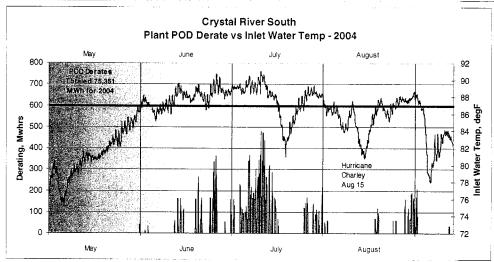
- Q. What steps is PEF taking to ensure that the costs of the modular temporary cooling tower project are reasonable and prudent?
- A. PEF conducted a competitive bidding process to ensure that costs were reasonable and prudent. As part of the bid evaluation process, PEF analyzed traditional leasing and lease-to-own options submitted by various bidders. After reviewing various proposals, PEF elected to go with a 5 year contract with Aggreko, LLC containing provisions allowing PEF to purchase the towers if it is determined that they are the appropriate long-term solution, or cancel the contract if it is determined this is not a long-term issue or that there is a better long-term solution based on further analysis. At this time PEF believes it is still premature to make a final determination as to the correct long-term solution.

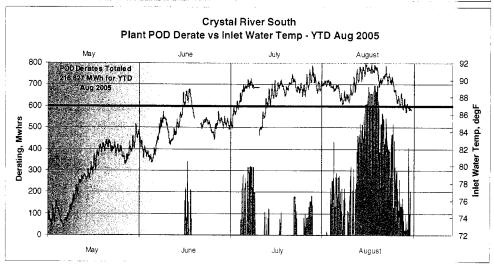
Q. Does this conclude your testimony?

A. Yes, it does.

Docket No. <u>060162-EI</u>
Progress Energy Florida
Witness: Thomas Lawery
Exhibit No. __ (TL-1)









Department of Environmental Protection

Docket No. <u>060162-EI</u>
Progress Energy Florida
Witness: Thomas Lawery
Exhibit No. __(TL-2)
Page 1 of 34

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

NOTICE OF PERMIT

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In the Matter of an Application for Permit by: Progress Energy Florida Crystal River Plant Units 1,2 and 3 15760 West Powerline Street Crystal River, FL34428

DEP File # FL0000159-009-IW1S/NR

Attention: Mr. Michael Olive

Enclosed is Permit FL0000159, issued under Section 403.0885, Florida Statutes, and DEP Chapter 62-620, Florida Administrative Code, authorizing wastewater discharge from the PEF Crystal River Units 1,2,&3, Citrus County to the Gulf of Mexico, a Class III marine water.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this notice is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mini Drev

Director

Division of Water Resource Management

2600 Blair Stone Road Tallahassee, FL 32399-2400 (850) 245-8336

"More Protection, Less Process"

Printed on recycled paper.

Docket No. 060162-EI Progress Energy Florida Witness: Thomas Lawery Exhibit No. __(TL-2) Page 2 of 34

Progress Energy Florida Crystal River Units 1, 2 and 3 Facility ID Number FL0000159

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on <u>05-05-05</u> to the listed persons.

[Clerk Stamp]

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 05-05-05 (Date)

Copies furnished to:

Chairman, Board of Citrus County Commissioners Michael Shrader, PEF Yanisa Angulo, P.E. DEP SWD Tampa Betsy Hewitt, DEP Tallahassee

SECOND AMENDMENT TO THE FACT SHEET

DATE: April 21, 2005

PERMIT NUMBER: FL0000159

PERMITTEE: Progress Energy Florida (PEF)

Crystal River Units 1,2,&3 Power Plant

The following minor corrections have been made to the proposed permit. None of these corrections alter any of the limitations for discharge to waters of the state.

1. Typographical Errors in the Proposed Permit: The Department and the Permittee noted several minor typographical errors which are not itemized below. The Department has corrected these errors, which were non-substantive and did not affect any permit limitations or monitoring requirements.

2. Permittee Comments

The Permittee requested the following minor corrections to the permit.

Condition I.A.9: The Permittee pointed out that that pH limitation for Internal Outfall I-0FE in the Draft and Proposed permits (6.5 to 8.5) was incorrect, and should be 6.0 to 9.0, which is the appropriate Technology Based Effluent Limitation (TBEL) pursuant to 40 CFR Part 423.12, and is consistent with the previous permit. The Department concurs, and corrected the limitation in the permit.

Condition I.E.14: The Permittee requested that the Department clarify the requirement regarding the Amertap condenser cleaning system at Unit 3, by stating in the condition that any substantive changes to the cleaning ball devices or retrieval system must be approved by the Department. This would enable the facility to make minor mechanical repairs that do not potentially impact discharge without requiring specific approval. The Department concurs and has revised the condition in the permit.

3. Department Comment

Condition I.E.17: The Department added this condition, which was erroneously omitted from the draft and proposed permits, and authorizes the continued use of biocides and chemical additives that were approved for use in the previous permit renewal and its revisions. The condition does not authorize the use of any new biocides or chemical additives.

STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:

PERMIT NUMBER: FL0000159 (Major)

PA FILE NUMBER: FL0000159-009 -IWIS/NR

Progress Energy Florida Crystal River Units 1, 2, and 3

ISSUANCE DATE: May 9, 2005

P.O. Box 14042

EXPIRATION DATE: May 8, 2010

St. Petersburg, FL 34428

RESPONSIBLE AUTHORITY:

Mr. Michael Olive Manager

FACILITY:

Progress Energy Florida Crystal River Plant Units 1,2 and 3 15760 West Powerline Street Crystal River, FL 34428 Citrus County

Latitude: 28° 58' 2" N Longitude: 82° 41' 49" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and applicable rules of the Florida Administrative Code (F.A.C.), and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System (NPDES). The Permittee is hereby authorized to operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Operation of an industrial wastewater treatment and disposal system to serve the referenced facility. The facility consists of two fossil fuel units (Units 1 and 2) and a nuclear fuel unit (Unit 3). These units have a combined maximum permitted daily discharge flow of 1,898 MGD and a total name plate rating of 1,854.8 MW. The facility discharge consists of once-through condenser cooling water, treated nuclear auxiliary cooling water, treated coal pile rainfall run off, intake screen washwater, and treated non-radioactive waste/radiation waste.

The radioactive component of the discharge is regulated by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act and not by the U.S. Environmental Protection Agency under the Clean Water Act.

WASTEWATER TREATMENT:

Wastewater treatment at the facility consists of the following: filtration and or other biocide treatment of oncethrough non-contact condenser cooling water (OTCW); neutralization, settling, filtration and/or oil/water separation for low volume wastes and metal cleaning wastes..

EFFLUENT DISPOSAL:

Surface Water Discharge:

An existing discharge of OTCW to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-011, located approximately at latitude 28° 57'30.8" N, longitude 82° 42' 00.7" W.

An existing discharge of OTCW to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-012, located approximately at latitude 28° 57'31.2" N. longitude 82° 42' 03.0" W.

DACKET 140- AAATAWATT

Progress Energy Florida Witness: Thomas Lawery

Exhibit No. __(TL-2)
Page 5 of 34

PERMITTEE: Progress Energy Florida Crystal River Units 1,2, and 3

P.O. Box 14042 St. Petersburg, FL 34428 PERMIT NUMBER: Issuance date:

FL0000159 May 9, 2005

Expiration date:

May 8, 2010

An existing discharge of OTCW to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-013, located approximately at latitude 28° 57'30.9" N, longitude 82° 41' 54.9" W.

An existing discharge of intake screen washwater to the site intake canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-091, located approximately at latitude 28° 57'24 " N, longitude 82°42 '0.4" W.

An existing discharge of intake screen washwater to the site intake canal thence to the Gulf of Mexico, a Class III marine water, via Outfall D-092, located approximately at latitude 28° 57'23.2 " N, longitude 82°42 '01.9" W.

An existing discharge of intake screen washwater to the site intake canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-093, located approximately at latitude 28° 57'21.6" N, longitude 82°41 '56.2" W.

An existing discharge from the ash pond to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-0C1, located approximately at latitude 28° 57'34.7 " N, longitude 82°42 '28.8" W.

An existing discharge from the wastewater pond system to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-0C2, located approximately at latitude 28° 57'31.0 " N, longitude 82°42 '32.4" W.

An existing discharge of Nuclear Services and Decay Heat Seawater System effluent to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-00F, located approximately at latitude 28° 57'31.2" N, longitude 82°41 '55.4" W.

An existing discharge of Coal Pile runoff (Units 1 and 2) to an adjacent salt marsh, a Class III marine water, via Outfall D-0H, located approximately at latitude 28° 57' 08.8 " N, longitude 82°42'12.7" W.

Existing discharges of OTCW from the Helper Cooling Tower system to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfalls D-071 and D-072, located approximately at latitudes 28° 57' 34.5 " N, longitude 82° 42 '32.0" W, and 28° 57'35.8 " N, longitude 82° 42 '48.5" W, respectively.

An existing discharge of intake screen washwater to the site discharge canal and thence to the Gulf of Mexico, a Class III marine water, via Outfall D-094, located approximately at latitude 28° 57'34.4 " N, longitude 82°42 '30.4" W.

Internal Discharges

An existing discharge from internal outfall I-FG Regeneration Waste Neutralization Tank to Outfall D-00F.

An existing discharge from internal outfall I-FE Laundry and Shower Sump Tank effluent to Outfall D-00F.

Stormwater Discharges

Existing discharges of stormwater from plant areas to the site intake and discharge canal and thence to the Gulf of Mexico via Outfalls D-100, D-200, D-300, D-400, D-500, and D-600.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions as set forth in Part I through Part VIII on pages 3 through 28 of this permit.

PERMITTEE: Progress Energy Florida Crystal River Units 1,2, and 3 P.O. Box 14042 PERMIT NUMBER: Issuance date:

FL0000159 May 9, 2005 Exhibit No. __(TL-2)
Page 6 of 34

P.O. Box 14042 St. Petersburg, FL 34428 Expiration date:

May 8, 2010

I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

During the period beginning on the issuance date and lasting through the expiration date of this permit, the
permittee is authorized to discharge once-through non-contact condenser cooling water (OTCW) from Outfalls
D-011, D012, D-013 to the site discharge canal thence the Gulf of Mexico. Such discharge shall be limited and
monitored by the permittee as specified below.

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Maximum	Daily Average	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Sec item I.A.3.	Report		Continuous	Pump logs 1,2	EFF-2
Chlorination Duration (MINUTES)	See item I.A.5.		****	2/Week	Pump logs	EFF-1A
		1				EFF-1C
Oxidants, Total	0.013	Report		2/Week	Multiple	EFF-1A
Residual (MG/L)					Grabs	EFF-1B
***						EFF-1C
Temperature (F), Water [Intake] (DEG.F)	Report	Report	**	Continuous	Recorder	INT-1
Temperature (F), Water [Discharge] (DEG.F) ⁴	96.5, See item. LA.4.	Report	-	Continuous	Recorder	EFF-3D
Temp. Diff. between Intake and Discharge (DEG.F)	Report	Report	***	Continuous	Recorder	INT 1, EFF 3D

2. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.1 and as described below:

Sample Point	Description of Monitoring Location
EFF-2	At combined circulating water pumps.
EFF-1A	Outlet corresponding to individual condenser for Unit 1
EFF-1B	Outlet corresponding to individual condenser for Unit 2
EFF-1C	Outlet corresponding to individual condenser for Unit 3

¹ Flow is monitored by pump logs and/or valve position (during flow reduction season),

² Monitoring and reporting values for temperature, pump status and/or valve position shall be recorded at ten minute intervals.

³ Limitations and monitoring requirements for total residual oxidants (TRO) and time of TRO discharge for outfalls D-011, D-012, and/or D-013 are applicable only at times when OTCW is being chlorinated

⁴ Thermal discharge from this facility is subject to the requirements of Rule 62-302.520(1), F.A.C.

Docket No. <u>060162-EI</u>
Progress Energy Florida
Witness: Thomas Lawery
Exhibit No. __(TL-2)

PERMITTEE: Progress Energy Florida Crystal River Units 1,2, and 3 P.O. Box 14042 St. Petersburg, FL 34428 PERMIT NUMBER: Issuance date:

FL0000159 May 9, 2005

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Expiration date:

May 8, 2010

Sample Point	Description of Monitoring Location
INT-1	Intake at Unit 1, See item ?
EFF-3D	At the bulkhead line which is near the down stream end of the site discharge canal .

- 3. Combined OTCW discharge from Units 1, 2 and 3 shall not exceed 1,897.9 MGD during the period May 1st through October 31st of each year, or 1,613.2 MGD during the remainder of the year.
- 4. The discharge temperature monitored at Sampling Point EFF-3D shall not exceed 96.5°F as a three hour rolling average.
- 5. Discharge of TRO from the condenser of each unit shall not exceed a maximum of 60 minutes in any calendar day, except as follows. TRO may be discharged from one or more individual condensers via outfalls D-011, D-012, D-013, provided that TRO discharge concentration is monitored continuously by recorder(s). Additionally, the maximum instantaneous TRO concentration at each outfall (D-011, D-012, or D-013) shall not exceed 0.01 mg/l.
- 6. Multiple grab samples shall consist of grab samples collected at the beginning of the period of chlorination discharge, and once every 15 minutes, thereafter. In addition, one grab sample shall be collected at the end of the period of chlorine discharge. The "period of chlorine discharge" refers to all chlorination conducted during a 24-hour period.
- 7. In the event of an equipment failure of the temperature monitor or recorder at INT-1, temperature shall be monitored by similar instrumentation at either INT-2 or INT-3, which are the intakes for Units 2 and 3, respectively. In such a situation, the Permittee shall maintain records of the change in monitoring location for the monitoring period.
- 8. Intake screen washwater may be discharged from Outfalls D-091, D-092, and D-093 without limitation or monitoring requirements.
- 9. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge laundry and shower wastewater from Internal Outfall I-0FE to outfall D-00F. Such discharge shall be limited and monitored by the permittee as specified below:

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report	Report		1/Per Batch	Calculation	EFF-4
Oil and Grease (MG/L)	15.0	20.0		1/Per Batch	Grab	EFF-4
Solids, Total Suspended (MG/L)	30.0	100.0	~~	l/Per Batch	Grab	EFF-4
pH (SU)	~-	9.0	6.0	1/Per Batch	Grab	EFF-4
Number of Batches	Report	Report	,, u <u>a</u>	Monthly	Log	EFP-4

Docket No. <u>060162-EI</u> Progress Energy Florida Witness: Thomas Lawery

PERMITTEE:
Progress Energy Florida
Crystal River Units 1,2, and 3
P.O. Box 14042
St. Petersburg, FL 34428

PERMIT NUMBER: Issuance date:

FL0000159 May 9, 2005

Exhibit No. __(TL-2)
Page 8 of 34

Expiration date:

May 8, 2010

10. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.9 and as described below:

Sample Point	Description of Monitoring Location
EFF-4	The sample port from the laundry and shower sump tank treatment system, but prior to mixing with any other waste stream.

- 11. The discharge of metal cleaning wastes through this outfall is not authorized.
- 12. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge process wastewater from Outfall D-0C1 Ash Pond and D-0C2-Wastewater Pond System discharges (Unit 1 and 2 combined) to the site discharge canal thence to the Gulf of Mexico. Such discharge shall be limited and monitored by the permittee as specified below:

	Discharge Limitations			Monitoring Requirements			
Parameters (units)	Daily Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point	
Flow (MGD)	Report	Report	_	Daily, when discharging	Calculation	EFF-5 EFF-6	
Oil and Grease (MG/L)	3884	5.0		Weekly	Grab	EFF-5 EFF-6	
Solids, Total Suspended (MG/L)	30.0	100.0	<u>—</u>	3/Week	Grab	EFF-6	
Arsenic, Total Recoverable (UG/L)	_:	50.0		Monthly	Grabi	EFF-6	
Cadmium, Total Recoverable (UG/L)		9.3	_	Monthly	Grab	EFF-5 EFF-6	
Chromium, Total Recoverable (UG/L)		50.0	***	Monthly	Grab	EFF-5 EFF-6	
Copper, Total Recoverable (UG/L)	·	3.7		Monthly	Greb	EFF-5 EFF-6	
Lead, Total Recoverable (UG/L)	· <u>-</u>	8.5		Monthly	Grab	EFF-5 EFF-6	
Iron, Total Recoverable (MG/L)		0.3	-	Monthly	Grab	EFF-5 EFF-6	
Mercury, Total Recoverable (UG/L)		0.025	\$4.00	Monthly	Grab	EFF-5 EFF-6	
Nickel, Total Recoverable (UG/L)		8.3		Monthly	Grab	EFF-5 EFF-6	
Selenium, Total Recoverable (UG/L)	-	71	***	Monthly	Grab	EFF-5	
PH Standard Units		Report	Report	Monthly ·	Grab	INT-1	

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
PH Standard Units		8.5	6.5	Monthly	Grab	EFF-6
Zinc, Total Recoverable (UG/L)		86.0	:-	Monthly	Grab	EFF-5

13. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.12 and as described below;

Sample Point	Description of Monitoring Location
INT-1	Intake at unit 1
EFF-5	Discharge from the ash pond prior to mixing with the receiving water.
EFF-6	Discharge from wastewater pond system prior to mixing with the receiving water.

- 14. Limitations and monitoring are required only when the ash pond is discharging via D-0C1 and/or the wastewater pond system is discharging via D-0C2.
- 15. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge process wastewater from Outfall D-00F- Nuclear Services and Decay Heat Seawater System effluent [includes discharges from outfall I-FE Laundry and Shower Sump Tank; (LSST) outfall I-FG -Secondary Drain Tank (SDT); effluent from the Evaporator Condensate Storage Tank (ECST); and effluent from the Condensate System (CD) to the site discharge canal and thence the Gulf of Mexico. Such discharges shall be limited and monitored by the permittee as specified below.

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Maximum	Daily Average	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report	Report	-	Hourly	Recorder or calculation	INT-7A
Oil and Grease (mg/l) (CD and ECST)	20	15		Weekly, when discharging	Grab	EFF-7B
Oil and Grease (mg/l) (CD and ECST)	5.0 ¹	-	***	Weekly, when discharging	Grab	EFF-7
Flow [ECST] (MGD)	Report	Report	4	Daily, when discharging	Recorder or Calculation	EFF-7B
Flow (CD System) (MGD)	Report	Report		Daily, when discharging	Recorder or Calculation	EFF-7B

¹ Monitoring requirements are only applicable if the discharge from I-FE and I-FG, the CD discharge or the ECST (following adequate mixing) exceeds the daily maximum limitation of 20.0 mg/l or a minimal dilution rate of 4 to 1 is not achieved as determined by the operator and recorded in logs maintained onsite for inspection by the Department.

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Maximum	Daily Average	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Solids, Total Suspended (CD and ECST) (MG/L)	100,0	30.0		Weekly, when discharging	Grab-	EFF-7B
Solids, Total Suspended (CD and ECST)[D-00F] (MG/L)	100.0 ²	30:0	-	Weekly, when discharging	Grab	EFF-7
Copper, Total Recoverable (UG/L)	3.7 ³	Report	***	Daily, when discharging	Grab	EFF-7
Iron, Total Recoverable (UG/L)	300.03	Report		Daily, when discharging	Grab	EFF-7
Total Iron, LBS/MG of Metal Cleaning Waste generated	Report	8.345 ^{3,4}		Daily, when discharging	Grab	EFF-7B
Total Copper, LBS/MG of Metal Cleaning Waste generated	Report	8.345 ^{3,4}		Daily, when discharging	Grab	EFF-7B
Hydrazine, MG/L		Report ⁵	V	Per Occurrence	Grah	EFF-7B
Hydrazine, MG/L		0.341 ^{5,6}	200	Daily, when discharging	Calculation	EFF-7
Hydroquinone, MG/L	at Patrick spanner	Report ⁵		Per Occurrence	Grab	EFF-7B
Hydroquinone, MG/L	ANY ARTHUR SINGLE COM	0.12 ^{5,6}		Daily, when discharging	Calculation	EFF-7
Total Ammonia (as N), MG/L		Report		Per Occurrence	Grab	EFF-7B
Total Ammonia (as N),	W ATT The National	0.047 ^{5,6}	*****	Daily, when discharging	Calculation	EFF-7

² Monitoring requirements only applicable if the discharge from I-FE and I-FG, the CD discharge or the ECST (following adequate mixing) exceeds the daily maximum limitation of 100.0 mg/l or a minimal dilution rate of 4 to 1 is not achieved as determined by the operator and recorded in logs maintained onsite for inspection by the Department.

Limitations and monitoring requirements for total iron of MCW, total copper of MCW, total recoverable copper and total recoverable iron are applicable only on any calendar day in which metal cleaning waste is discharged in the effluent from I-FG the Evaporator Condensate Storage Tank and/or the Condensate System.

⁴ Limitations apply to the effluents from outfall I-FG, ECST and the Condensate System.

⁵ Limitations apply to the ESCT, CD or I-FG discharge, containing steam generator lay up chemicals. One grab sample shall be taken from any batch potentially containing ≥1.0 mg/l of hydrazine, based on the operator's knowledge of the process. The measured concentrations of hydrazine, hydroquinone, ammonia and morpholine shall be reported monthly on the DMR.

The limitations apply at D-0F. Calculation shall be used to determine the concentration of hydroquinone, hydrazine, ammonia and morpholine at D-0F.

D-0F concentration (mg/l) = (measured concentration (mg/l)) (discharge flow)*

flow to D-0F

^{*} The calculation could apply to any batch which potentially contains >1.0 mg/l of hydrazine.

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Maximum	Daily Average	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Morpholine, MG/L		Report ⁵		Per Occurrence	Grab	EFF-7B
Morpholine, MG/L		1.785.6	WANTED	Daily, when discharging	Calculation	EFF-7
PH, Standard Units	Report	**	Report	Daily, when discharging	Grab	INT-7A
PH , Standard Units	8.5		6.5	Daily, when discharging	Grab	EFF-7
Spectrus CT1300, MG/L		See item 1.A.18				EFF-7
Spectrus CT 1300 (MG/L)	Report	Réport	Report	Mapplication	Grab	EFF-7
Whole Effluent Toxicity (ACUTE)			See item I.A.19) .		EFF-7

16. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.15 and as described below:

Sample Point	Description of Monitoring Location
INT-7A	Intake flow at the combined water intake pumps.
EFF-3D	At the bulkhead line which is near the down stream end of the site discharge canal.
EFF-7	Prior to mixing with site discharge canal.
EFF-7B	Prior to discharge to outfall D-00F

- 17. Monitoring for pH in the combined discharge (D-0F) is required only during periods when I-FG and/or CD is discharging. If no discharge from I-FG or CD occurs, sampling shall be during next discharge of I-FG and/or CD into the combined discharge at D-0F.
- 18. Spectrus CT1300 shall be used only in accordance with the following procedures:
 - a.) There will be an interval of at least 21 days between any two successive applications, unless more frequent applications are requested in writing and approved in writing by the Department within 14 days of receipt of the
 - b.) CT1300 may be applied at a rate not to exceed 4.5 mg/l through the Unit 3 service water system. No application period may exceed 18 hours, unless approved in writing by the Department.
 - c.) Progress Energy will record and retain the following information of each CT1300 treatment
 - 1. time of initiation and completion of treatment,
 - 2. mass and concentration of CT1300 during the test period, and
 - 3. results of toxicity testing, if applicable.
 - d.) When toxicity testing is required, PEF will submit the information specified in Condition I.A.16.d. above to the Department within fourteen days of receipt.

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19. The permittee shall initiate the series of tests described below beginning within 60 days of the issuance of the permit to evaluate whole effluent toxicity of the discharge from Outfall D-00F. All test species, procedures and quality assurance criteria used shall be in accordance with Methods for Measuring Acute Toxicity of Effluents to Freshwater and Marine Organisms, 5th ed. EPA-821-R-02-012, or the most current edition.

The control water and the effluent used will be adjusted to an appropriate salinity using artificial sea salts as described in EPA-821-R-02-012, Section 7.4.2., or the most current edition. The appropriate tests salinity shall be determined as follows:

When the salinity of the effluent is between 1 and 7 parts per thousand (ppt), the following salinity adjustment shall be used in the test of 100% effluent. For the Americamysis (Mvsidopsis) bahia bioassays, the effluent and the control (0% effluent) shall be adjusted to a salinity of 7±1 ppt for the 100% effluent test using artificial sea salts. No salinity adjustment shall be done for the Menidia beryllina bioassay test of the 100% effluent. When the salinity of the effluent is greater than 7 parts per thousand, no salinity adjustment shall be made and the test shall be run at the effluent's salinity for both species.

A standard reference toxicant quality assurance (QA) acute toxicity test shall be conducted concurrently or no greater than 30 days before the date of the "routine" test, with each species used in the toxicity tests. The results of all QA toxicity tests shall be submitted with the discharge monitoring report (DMR). Any deviation from the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use.

- a. (1) The permittee shall conduct 96-hour acute static renewal toxicity tests using the mysid shrimp,
 Americamysis (Mysidopsis) bahla, and the inland silverside, Menidia beryllina. All tests will be
 conducted on four separate grab samples collected at evenly-spaced (6-hr) intervals over a 24-hour
 period and used in four separate tests in order to catch any peaks of toxicity and to account for daily
 variations in effluent quality.
 - (2) If control mortality exceeds 10% for either species in any test, the test for that species (including the control) shall be repeated. A test will be considered valid only if control mortality does not exceed 10% for either species. If, in any separate grab sample test, 100% mortality occurs prior to the end of the test, and control mortality is less than 10% at that time, that test (including the control) shall be terminated with the conclusion that the sample demonstrates unacceptable acute toxicity.
- b. (1) The toxicity tests specified above shall be conducted once every two months until 6 valid bimonthly tests are completed. These tests are referred to as "routine" tests. Upon the completion of six valid tests which demonstrate that no unacceptable toxicity (as defined in d.1.) has been identified, the permittee may petition the Department for a reduction in monitoring frequency.
 - (2) Results from "routine" tests shall be reported according to EPA-821-R-02-012, Section 12, Report Preparation (or the most current edition), and shall be submitted to:

Florida Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8378

- (3) Results from "routine" tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
 - i. If greater than 50% mortality occurs in any of the four separate grab sample tests for the test species, "<100" (less than 100% effluent) should be entered on the DMR for that test species.
 - If 50% or less mortality occurs in all four separate grab sample tests for the test species, ">100" (greater than 100% effluent) should be entered on the DMR for that test species.

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iii. For each of the additional tests required, the calculated LC50 value should be entered on the DMR for that test species.

c. (1) All "routine" tests shall be conducted using a control (0% effluent) and one test concentration of 100% final effluent.

- (2) Mortalities of greater than 50% in any sample of 100% effluent in any "routine" test or an LC50 of less than 100% effluent in any additional definitive test will constitute a violation of these permit conditions and Rule 62-4.244(3)(a), F.A.C.
- d. (1) If unacceptable acute toxicity (greater than 20% mortality in any grab sample of 100% effluent) is determined in a "routine" test, the permittee shall conduct three additional tests on each species indicating acute toxicity. The first additional test will include four grab samples taken as described in a.1. and run as four separate definitive analyses. The second and third additional definitive tests will be run on a single grab sample collected on the day and time when the greatest toxicity was identified in the "routine" test. Results for each additional test will include the determination of LC50 values with 95% confidence limits.
 - (2) Each additional test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5% and 6.25% effluent and a control (0% effluent). The dilution series may be modified in the second and third test to more accurately identify the toxicity, such that at least two dilutions above and two dilutions below the target toxicity and a control (0% effluent) are run.
 - (3) For each additional test, the sample collection requirements and the test acceptability criteria specified in section a above must be met for the test to be considered valid. The first test shall begin within two weeks of the end of the "routine" tests, and shall be conducted weekly thereafter until three additional, valid tests are completed. The additional tests will be used to determine if the toxicity found in the "routine" test is still present,
 - (4) Results from additional tests, required due to unacceptable toxicity in the "routine" tests, shall be submitted in a single report prepared according to EPA-821-R-02-012, Section 12, or the most current edition and submitted within 45 days of completion of the third additional, valid test. If the additional tests demonstrate unacceptable toxicity, the permittee will meet with the Department within 30 days of the report submittal to identify corrective actions necessary to remedy the unacceptable toxicity.

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20. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge process wastewater from Internal Outfall I-0FG to Outfall D-00F Regeneration Waste Neutralization Tank. Such discharge shall be limited and monitored by the permittee as

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow, (MGD)	Report	Report		1/Batch	Calculated	EFF-8
Copper, Total Recoverable, lbs/MG		8.345 ¹	A.	1/Batch	Grab	EFF-8
Iron, Total Recoverable	-	8.345 ¹		1/Batch	Grab	EFF-8
Oil and Grease, (MG/L)	15.0	20.0	_	1/Batch	Grab	EFF-8
Total Suspended Solids, MG/L	30.0	100.0		1/Batch	Grab	EFF-8
PH, Standard Units	<u>-</u>	9.0	6.0	l/Batch	Grab	EFF-8

21. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.20 and as described below:

Sample Point	Description of Monitoring Location
EFF-8	At outfall I-FG prior to mixing with outfall D-00F

22. During the period beginning on the effective date of this permit and lasting through the expiration, the permittee is authorized to discharge stormwater from Outfall D-00H- Coal Pile Runoff (Units 1 and 2) to the marshy area (wetlands) west of the coal pile storage area. Such discharge shall be limited and monitored by the permittee as specified below:

Accession of the Control of the Cont	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)		Report		Daily, when discharging	Calculated	EFF-9
Solids, Total Suspended (MG/L)		50.0 See cond. 24		Daily, when discharging	Grab	EFF-9
Arsenic, Total Recoverable (UG/L)	-	50.		Daily, when discharging	Grab	EFF-9
Cadmium, Total Recoverable (UG/L)	æ	9.30		Daily, when discharging	Grab	EFF-9
Chromium, Total Recoverable (UG/L)	_	50.0		Daily, when discharging	Grab	EFF-9

¹ The limitation is applicable only when metal cleaning waste is discharged through outfall-I-0FG

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	Discharge Limitations			Monitori	ng Requirements	s
Parameters (units)	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Copper, Total Recoverable (UG/L)	**	3.7		Daily, when discharging	Grab	EFF-9
Iron, Total Recoverable (MG/L)	<u></u>	0.3	-	Daily, when discharging	Grab	EFF-9
Lead, Total Recoverable (UG/L)	***	8.5	-	Daily, when discharging	Grab	EFF-9
Mercury, Total Recoverable (UG/L)		0.025		Daily, when discharging	Grab	EFF-9
Nickel, Total Recoverable (UG/L)		8.30		Daily, when discharging	Grab	EFF-9
Selenium, Total Recoverable (UG/L)	M	71.0		Daily, when discharging	Grab	EFF-9
Zinc, Total Recoverable (UG/L)		86.0	,	Daily, when discharging	Grab	EFF-9
Vanadium, Total Recoverable (PPM)		Report		Daily, when discharging	Grab	EFF-9
PH (SU)		8.5	6.5	Daily, when discharging	Grab	INT-3B
PH (SU)		8.5	6.5	Daily, when discharging	Grab	EFF-9

23. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.22 and as described below:

Sample Point	Description of Monitoring Location
EFF-9	Point of discharge from the treatment system prior to entering wetlands area.
INT-3B	Intake at Unit 2

24. The treatment system (coal pile storage area) shall be capable of containing a 10 year, 24-hour (10Y 24H) rainfall event. The limitation for total suspended solids of 50 mg/l shall apply only to discharges resulting from rainfall less than a 10-year 24—hour rainfall event.

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25. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge once-through non-contact cooling water from Outfalls D-071 and D-072 Helper Cooling Tower to the site discharge canal and thence to the Gulf of Mexico. Such discharge shall be limited and monitored by the permittee as specified below:

	D	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Maximum	Daily Average	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point	
Intake Flow (MGD)	Report	Report	er in	Continuous	Pump logs	INT-10A	
Oxidants, Total Residual (MG/L)	0.011	Report	**	Continuous	Reconfer	EFF-10B	
TRO-Discharge Time (MIN/DAY)	60.0; see cond. 1.A.28.			Continuous	Recorder	EFF-10B	
pH (SU)	Report		Report	Quarterly	Grab	INT-10A	
PH (SU)	8.5	_	6.5	Quarterly	Grab	EFF-10B	

26. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.25 and as described below:

Sample Point	Description of Monitoring Location
INT-10A	Common Intake for all helper cooling tower intake pumps
EFF-10A	At Outfall D-071 from helper cooling towers 1 and 2 to the site discharge canal.
EFF-10B	At Outfall D-072 from helper cooling towers 3 and 4 to the site discharge canal.

- 27. Cooling towers shall be operated as necessary to ensure that the discharge temperature at Sampling Location EFF-3D does not exceed 96.5 F as a three-hour rolling average.
- 28. TRO may be discharged from either or both Outfalls D-071 and D-072 at the same time TRO is discharged from Outfalls D-011, D-012, and D-013, provided that TRO discharge from either D-071 or D-072 does not exceed a maximum instantaneous concentration of 0.01 mg/l.
- 29. Monitoring requirements are only applicable during periods of discharge.
- 30. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge intake screen wash waste water from Outfall D-094 to the site discharge canal thence the Gulf of Mexico without limitation or monitoring requirements.
- 31. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge stormwater from Outfalls D-100, D-200, D-300, D-400, and D-500 to the site discharge canal and thence to the Gulf of Mexico without limitation or monitoring requirements.
- 32. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge storm water from Outfall D-600 Plant Area to the site intake canal and thence to the Gulf of Mexico. Such discharge shall be limited and monitored by the permittee as specified below:

Limitations and monitoring requirements for TRO and time of TRO discharge for outfall D-071 and outfall D-072 are not applicable for any calendar day in which chilorine is not added.

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	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Daily Average	Dzily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	***	Report	_inc	Monthly, when discharging	Calculated	EFF-600
Total recoverable iron		Report		Monthly, when	Grab	EFF-600

33. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.32 and as described below:

Sample Point	Description of Monitoring Location	
EFF-600	Prior to discharge from Outfall D-600 to the intake canal.	

- 34. Stormwater from No. 2 Fuel Oil Tank Diked Petroleum Storage or Handling Area
 - a. Permittee is authorized to discharge stormwater from diked petroleum storage or handling areas, provided the following conditions are met:
 - b. Such discharges shall be limited and monitored by the permittee as specified below:
 - 1. The facility shall have a valid SPCC Plan pursuant to 40 CFR 112.
 - 2. In draining the diked area, a portable oil skimmer or similar device or absorbent material shall be used to remove oil and grease (as indicated by the presence of a sheen) immediately prior to draining.
 - 3. Monitoring records shall be maintained in the form of a log and shall contain the following information, as a minimum:
 - Date and time of discharge, a.)
 - b.) Estimated volume of discharge,
 - Initials of person making visual inspection and authorizing discharge, and C.)
 - d.) Observed conditions of storm water discharged.
 - 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of a visible oil sheen at any time.
- 35. As specified above, sampling for the storm water discharge shall be conducted once per discharge event.
- 36. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 37. The discharge shall not cause a visible sheen on the receiving water.

B. Underground Injection Control Systems

This section is not applicable to this facility.

C. Land Application Systems

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Progress Energy Florida

Crystal River Units 1,2, and 3

The land application system for this facility is regulated under separate Department Permit FLA0169690

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D. Other Methods of Disposal or Recycling

There shall be no discharge of industrial wastewater from this facility to ground or surface waters, except as authorized by this permit.

E. Other Limitations and Monitoring and Reporting Requirements

1. The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" dated June 21, 1996, is available from the Department on request. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or POLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:

The laboratory's reported MDL and POL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;

- b. The laboratory reported PQL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide a PQL, which is equal to or less than the applicable water quality criteria stated in 62-302 FAC; and
- c. If the PQLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated PQL shall be used.

Where the analytical results are below method detection or practical quantification limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. However, where necessary, the permittee may request approval for alternative methods or for alternative MDLs and PQLs for any approved analytical method, in accordance with the criteria of Rules 62-160.520 and 62-160.530, F.A.C.

- 2. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method in accordance with 40 CFR Part 136.
- 3. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Southwest District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

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Witness: Thomas Lawery
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REPORT Type On DMR	Monitoring Period	DMR Due Date
Monthly or Toxicity	First day of month - last day of month	28th day of following month
Quarterly	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	April 28 July 28 October 28 January 28
Semi Annual	January 1-June 30 July 1- December 31	July 28 January 28
Annual	January 1-December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge.

The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department at the address specified below:

Florida Department of Environmental Protection
Wastewater Compliance Evaluation Section, Mail Station 3550
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

4. Unless specified otherwise in this permit, all reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to the Southwest District Office at the address specified below:

Southwest District Office 3804 Cocomut Palm Drive. Tampa, Florida 33619-8378

Phone Number - (813) 744-6100

FAX Number - (813) 744-8198 (All FAX copies shall be followed by original copies.)

- 5. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C.
- 6. The permittee shall provide safe access points for obtaining representative samples which are required by this perm it.
- 7. If there is no discharge from the facility on a day scheduled for sampling, the sample shall be collected on the day of the next discharge
- 8. There shall be no discharge of polychlorinated biphenyl compounds.
- 9. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

A permit revision from the Department shall be required prior to the use of any biocide or chemical additive used in the cooling system or any other portion of the treatment system which may be toxic to aquatic life. The permit revision request shall include:

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a. Name and general composition of biocide or chemical

- b. Frequencies of use
- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA/600/4-90/027 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)

Expiration date:

- f. Product data sheet
- g. Product label

The Department shall review the above information to determine if a substantial or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department. Permit revisions shall be processed in accordance with the requirements of Chapter 62-620, F.A.C.

- 10. Discharge of any waste resulting from the combustion of toxic, hazardous, or metal cleaning wastes to any waste stream which ultimately discharges to waters of the State is prohibited, unless specifically authorized elsewhere in this permit.
- 11. Any bypass of the treatment facility which is not included in the monitoring specified in I.A, I.B, I.C, or I.D, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.
- 12. The Permittee shall continue compliance with the facility's Manatee Protection Plan approved by the Department on May 15, 2002.
- 13. -Combined Waste Streams

In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property attributable to each controlled waste source shall not exceed the specified limitation for that waste source (ref. 40 CFR Section 423.15(k);1974).

14. Condenser Maintenance Program

- a.) The permittee is authorized to use SIDTEC, a mechanical on-line condenser maintenance service program
- b.) The permittee is authorized to use the existing Amertap Condenser Cleaning System at Unit 3, or an equivalent system. However, any substantive change to the cleaning ball devices or ball retrieval system is subject to approval by the Department.
- 15. The permittee shall develop a Plan of Study (POS) for seagrass monitoring pursuant to the schedule in Item VI.2, including a proposed implementation schedule, for continued monitoring of seagrass recovery. The Department will review the evaluation plan and implementation schedule for revision, as needed
- 16. The Permittee shall develop an evaluation plan in accordance with Rule 62-302.520(1), F.A.C., pursuant to the schedule in item VI. 3, including a proposed implementation schedule, designed to determine any effects on biological communities from the heated water discharge to Crystal Bay. The plan shall address monitoring of submerged grasses, benthic macroinvertebrates, and other aquatic species as appropriate, and shall include reporting requirements. The evaluation plan shall incorporate existing data developed by the Permittee and available data other sources as well as any additional monitoring to be conducted by the Permittee, if necessary. The Department will review the evaluation plan and implementation schedule for revision, as needed.
- 17. The Permittee is authorized to use the following previously approved chemical additives and biocides: Spectrus CT-1300, Dianodic DN2140, Spectrus NX1103, Spectrus NX1100, and Foamtrol AF1440.

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II. Industrial Sludge Management Requirements

This section not applicable to this facility.

III. Ground Water Monitoring Requirements

This section is not applicable to this facility.

IV. Other Land Application Requirements

Land application requirements for this facility are regulated by separate Department permit FLA016960.

V. Operation and Maintenance Requirements

A. Operation of Treatment and Disposal Facilities

- The permittee shall ensure that the operation of this facility is as described in the application and supporting documents.
- 2. The operation of the pollution control facilities described in this permit shall be under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control.

B. Record keeping Requirements:

- 1. The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:
- a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
- b. Copies of all reports, other than those required in items a, and f. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;
- c. Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
- d. A copy of the current permit;
- e. A copy of any required record drawings;
- f. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date on the logs or schedule.

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VI. Schedules

1. A Best Management Practices Pollution Prevention (BMP3) Plan shall be prepared and implemented in accordance with Part VII of this permit and the following schedule:

	Action Item	Scheduled Completion Date
1	Continue Implementing Existing BMP3 Plan	Issuance Date of Permit

- 2. Within three months after issuance of this permit, the Permittee shall meet with the Department to discuss the content of a Plan of Study (POS) for a seagrass study in accordance with the requirements of Item I.E.15, and shall submit the POS within six months of issuance of this permit.
- 3. Within six months after issuance of this permit, the Permittee shall meet with the Department to discuss the content of a Plan of Study (POS) for biological monitoring in accordance with the requirements of Item I.E.16, and shall submit the POS within twelve months of issuance of this permit.
- 4. The permittee shall achieve compliance with the other conditions of this permit as follows:

Operational level attained

Issuance Date of permit

- 5. No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement
- 6. The permittee shall comply with the requirements of 40 CFR part 125.9(a)(1) and (2) no later than upon submittal of a timely application for permit renewal, submitted pursuant to the requirements of condition VII.C. of this permit.

VII. Other Specific Conditions

A. Specific Conditions Applicable to All Permits

- 1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Southwest District Office, are made a part hereof.
- 2. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
- 3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.

B. Specific Conditions Related to Construction

This section is not applicable to this facility.

C. Duty to Reapply

1. The permittee shall submit an application to renew this permit at least 180 days before the expiration date of this permit.

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- The permittee shall apply for renewal of this permit on the appropriate form listed in Rule 62-620.910, F.A.C., and in the manner established in Chapter 62-620, F.A.C., and the Department of Environmental Protection Guide to Wastewater Permitting including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.
- 3. An application filed in accordance with subsections 1. and 2. of this part shall be considered timely and sufficient. When an application for renewal of a permit is timely and sufficient, the existing permit shall not expire until the Department has taken final action on the application for renewal or until the last day for seeking judicial review of the agency order or a later date fixed by order of the reviewing court.
- 4. The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date.

D. Specific Conditions Related to Best Management Practices/Pollution Prevention Conditions

1. General Conditions

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Waste Minimization Opportunity Assessment Manual, EPA/625/7-88/003.

a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (6) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.
- (7) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.

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(8) "BMP3" means a Best Management Plan incorporating the requirements of 40 CFR § 122.44, Subpart K, plus pollution prevention techniques associated with a Waste Minimization Assessment.

(9) "Waste Minimization Assessment" means a systematic planned procedure with the objective of identifying ways to reduce or eliminate waste.

2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility which is the source of wastewater and storm water discharges covered by this permit. The plan shall be directed toward reducing those pollutants of concern which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities. The BMP3 plan shall contain the following components:

a. Signatory Authority & Management Responsibilities

The BMP3 plan shall be signed by the permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The BMP3 plan shall be reviewed by the plant environmental/engineering staff and plant manager. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of the BMP3 plan shall be signed and sealed by the professional(s) who prepared them.

A copy of the plan shall be retained at the facility and shall be made available to the Department upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the BMP3 plan.

b. BMP3 Plan Requirements

- (1) Name & description of facility, a map illustrating the location of the facility & adjacent receiving waters, and other maps, plot plans or drawings, as necessary;
- (2) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
- (3) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
- (4) A description of practices involving preventive maintenance, housekeeping, recordkeeping, inspections, and plant security; and

c. Waste Minimization Assessment

The permittee is encouraged but not required to conduct a waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loadings and chemical losses to all wastewater and/or storm water streams as described in Part VII.D.3 of this permit.

If the Permittee elects to develop and implement a WMA, information on plan components can be obtained from the Department's Industrial Wastewater website, or from:

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Florida Department of Environmental Protection Industrial Wastewater Section, Mail Station 3545 Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

(850) 245-8589 (850) 245-8669 -- Fax

d. Best Management Practices & Pollution Prevention Committee Recommended:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing the BMP3 plan and assisting the plant manager in its implementation, monitoring of success, and revision. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

e. Employee Training

Employee training programs shall inform personnel at all levels of responsibility of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, record keeping & reporting, spill prevention & response, as well as specific waste reduction practices to be employed. Training shall also disclose how individual employees may contribute suggestions concerning the BMP3 plan or suggestions regarding Pollution Prevention. The plan shall identify periodic dates for such training.

f. Plan Development & Implementation

The BMP3 plan shall be implemented upon the effective date of this permit, unless any later dates are specified in this permit. If a WMA is ongoing at the time of development or implementation it may be described in the plan. Any waste reduction practice which is recommended for implementation over a period of time may also be identified in the plan, including a schedule for its implementation.

- g. Submission of Plan Summary & Progress/Update Reports
 - (1) Plan Summary: Not later than 2 years after the effective date of the permit, a summary of the BMP3 plan shall be developed and maintained at the facility and made available to the Department upon request. The summary shall include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction practices being employed at the facility. The results of WMA studies, as well as scheduled WMA activities may be discussed.
 - (2) Progress/Update Reports: Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the Department upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices may be included.

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(3) A recommended timetable for the various plan requirements follows:

Timetable for BMP3 Plan:

ELEMENT

TIME FROM EFFECTIVE DATE OF THIS PERMIT

Complete WMA (if

6 months

appropriate)

Progress/Update Reports

3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

h. Plan Review & Modification

If following review by the Department, the BMP3 plan is determined insufficient, the permittee will be notified that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

E. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- 1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

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F. Reopener Clause

- The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.

- The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.
- The Department may develop a Total Maximum Daily Load (TMDL) during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.

VIII. General Conditions

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, F.S. Any permit noncompliance constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1), F.A.C.]
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2), F.A.C.]
- 3. As provided in Subsection 403.087(6), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringements of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3), F.A.C.]
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4), F.A.C.]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5), F.A.C.]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6), F.A.C.]

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7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7), F.A.C.]

- 8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8), F.A.C.]
- 9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit:
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

[62-620.610(9), F.A.C.]

- 10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, Florida Statutes, or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10), F.A.C.]
- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11), F.A.C.]
- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12), F.A.C.]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13), F.A.C.]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the Department approves the transfer. [62-620.610(14), F.A.C.]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15), F.A.C.]

Progress Energy Florida
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PERMITTEE: Progress Energy Florida Crystal River Units 1,2, and 3 P.O. Box 14042 St. Petersburg, FL 34428 PERMIT NUMBER: Issuance date:

FL0000159 May 9, 2005

Expiration date:

May 8, 2010

- 16. The permittee shall apply for a revision to the Department permit in accordance with Rule 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Wastewater Permitting at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16), F.A.C.]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance. [62-620.610(17), F.A.C.]
- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).
 - b. If the permittee monitors any contaminate more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - d. Any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health (DOH) under Chapter 64E-1, F.A.C., where such certification is required by Rule 62-160.300(4), F.A.C. The laboratory must be certified for any specific method and analyte combination that is used to comply with this permit. For domestic wastewater facilities, the on-site test procedures specified in Rule 62-160.300(4), F.A.C., shall be performed by a laboratory certified test for those parameters or under the direction of an operator certified under Chapter 62-602, F.A.C.
 - e. Fields activities including on-site tests and sample collection, whether performed by a laboratory or a certified operator, must follow the applicable procedures described in DEP-SOP-001/01 (January 2002). Alternate field procedures and laboratory methods may be used where they have been approved according to the requirements of Rules 62-160.220, 62-160.330, and 62-160.600, F.A.C. [62-620.610(18), F.A.C.]
- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19), F.A.C.]
- 20. The permittee shall report to the Department's Southwest District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

Progress Energy Florida
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FL0000159 May 9, 2005

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Expiration date:

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- (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
- (4) Any unauthorized discharge to surface or ground waters.
- b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of untreated or treated wastewater reported pursuant to subparagraph a.4 that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (j) Other persons or agencies contacted.
 - (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b(1) above, shall be provided to Department's Southwest District Office within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Southwest District Office shall waive the written report.

[62-620.610(20), F.A.C.]

- 21. The permittee shall report all instances of noncompliance not reported under Conditions VIII. 18 and 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Condition VIII. 20. of this permit. [62-620.610(21), F.A.C.]
- 22. Bypass Provisions.
 - a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (3) The permittee submitted notices as required under Condition VIII.22.b. of this permit.
 - b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Condition VIII.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

Docket No. <u>060162-EI</u>
Progress Energy Florida
Witness: Thomas Lawery
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PERMITTEE: Progress Energy Florida Crystal River Units 1,2, and 3 P.O. Box 14042 St. Petersburg, FL 34428 PERMIT NUMBER: FL0000159 Issuance date: May 9, 2005

1,14,7 7, 200

Expiration date: May 8, 2010

c. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Condition VIII.22 a. (1) through (3) of this permit.

d. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition VIII.22.a. through c. of this permit. [62-620.610(22), F.A. C.]

23. Upset Provisions

- a. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Condition VIII.20. of this permit, and
 - (4) The permittee complied with any remedial measures required under Condition VIII.5. of this permit.
- b. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- c. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review. [62-620.610(23), F.A.C.]

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Brooks

Director

Division of Water Resource Management

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(850) 245-8336



Department of Environmental Protection Environmental Services

Docket No. <u>060162-EI</u> Progress Energy Florida Witness: Thomas Lawery Exhibit No. (TL-2) Page 32 of 34

leb Bush Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

May 11, 2006

BY CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Michael Shrader Progress Energy Florida, Inc. 100 Central Avenue, MAC CX1B St. Petersburg, Florida 33701

RE:

Progress Energy

DEP File FL0000159-010-IWB/MR Crystal River Units 1, 2, and 3

Dear Mr. Shrader:

The Department has received Progress Energy's application dated April 28, 2006 for a minor revision of wastewater permit FL0000159. The minor revision requests the installation of 67 modular cooling towers at the Crystal River plant that will be used to augment the cooling capacity of the existing helper cooling towers.

The Department has determined that this activity qualifies as a minor modification of the operations at the Crystal River Plant pursuant to Rule 62-620.200(24), Florida Administrative Code (F.A.C.), and can be authorized by a minor permit revision pursuant to Rule 62-620.325(2), F.A.C. This letter and attachment constitute a minor revision to the referenced wastewater permit.

This letter and attachment shall be attached to Permit FL0000159. All other conditions of this permit shall remain in effect. If Florida Progress objects to this permit revision it may petition for an administrative hearing in accordance with the enclosed Notice of Rights. Although not required, Florida Progress may elect to provide publication of appropriate Public Notice of Rights language in a local newspaper. If so, please contact the Department for appropriate public notice language.

If a petition is filed, then this permit revision does not become effective. If you have any questions about this permit revision, please contact Allen Hubbard of the Industrial Wastewater Section at (850) 245-8592.

Sincerely,

Division of Water Resource Management

MAD/wfr/mh

cc: Bernie Cumbie, Progress Energy Yanisa Angulo - FDEP Tampa

Docket No. <u>060162-EI</u>
Progress Energy Florida
Witness: Thomas Lawery
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NOTICE OF RIGHTS

A person whose substantial interests are affected by this permit revision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 14 days of receipt of this Permit. A petitioner, other than the applicant, shall mail a copy of the petition to the applicant at the address indicated in the attached letter at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department case identification number and the county in which the subject matter or activity is located;
 - (b) A statement of how and when each petitioner received notice of the Department action:
 - (c) A statement of how each petitioner's substantial interests are affected by the Department action;
 - (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
 - (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Statement of Basis For Minor Permit Revision

Permit Number:

FL0000159

Application Date:

April 28, 2006

Application No: FL0000159-010-IWB/MR

Name and Address of Applicant:

Progress Energy Florida, Inc, 15760 West Powerline St. Crystal River, FL 34428 Crystal River Units 1, 2, and 3

The Department received a minor revision application dated April 28, 2006 for the installation of 67 modular cooling towers at the Crystal River plant that will be used to augment the cooling capacity of the existing helper cooling towers. The helper cooling towers are located adjacent to the plant discharge canal and are used to reduce the temperature of the discharge. The modular cooling towers were selected as a means of providing additional cooling capacity in order to meet discharge thermal limits without the need to de-rate power generating units.

The modular cooling towers will be located adjacent to the existing Helper Cooling Towers (HCT). Intake water will be supplied from the existing HCT inlet structure. New pumps located at the existing HCT inlet structure along with added flow from the existing pumps will provide an additional 140,000 gpm to the modular cooling towers. Water from the modular cooling towers will be discharged back to the discharge canal via the existing HCT discharge structures. Four existing pumps located at the HCT inlet structure provide a total flow of 687,000 gpm to the existing HCTs. The installation and operation of the new pumps and modular cooling towers will not have any effect on the intake cooling water flow rate to the plant and, therefore, will not have any effect on impingment and entrainment losses at the plant intake. The discharge flow rate at the end of the discharge canal will also not be changed as a result of the modular cooling tower installation and operation.

The expected canal temperature decrease will be 1.5 to 2.0 degrees F when all modular tower cells are operating. The modular cooling towers will be only be operated as needed normally during the summer months of the year.

	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1 060						
WOT AUX TOWET =	1,303					Totals	
		l Init	Loads (M	W۱	26,338	414	25,924
	Inlet	7	LOGGS (IVI	**/	Total Expected	717	Gross
	Temp.		i		-	Actual Derate	Avoided
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01-May-06 00:00:00	74.8	120	337	863	0	<u> </u>	Dorato (MVV)
01-May-06 01:00:00		122	228	863	0		0
01-May-06 02:00:00		120	263	863	0	0	0
01-May-06 03:00:00		121	137	863	0	ō	Ö
01-May-06 04:00:00		122	142	863	0		ō
01-May-06 05:00:00		156	183	862	0		Ō
01-May-06 06:00:00	73.7	278	255	862	0		0
01-May-06 07:00:00	73.3	281	375	862	0	0	0
01-May-06 08:00:00	73.2	309	465	863	0		0
01-May-06 09:00:00	73.5	281	436	867	0		0
01-May-06 10:00:00		284	417	866	0	0	0
01-May-06 11:00:00	73.3	283	458	864	0		0
01-May-06 12:00:00	73.4	330	463	863	0	0	0
01-May-06 13:00:00		306	508	865	0	0	0
01-May-06 14:00:00	73.7	373	508	865	0		
01-May-06 15:00:00		384	515	864	0		0
01-May-06 16:00:00		392	513	864	0		0
01-May-06 17:00:00		392	513	865	0		0
01-May-06 18:00:00		390	531	865	0		0
01-May-06 19:00:00		388	518	866			
01-May-06 20:00:00		392	518	866			
01-May-06 21:00:00 01-May-06 22:00:00		391	519	862	0		
01-May-06 23:00:00	74.6 74.4	359 207	513	862	0		
02-May-06 00:00:00	74.4	120	487 391	863 862			
02-May-06 01:00:00	74.2	132	193	862			
02-May-06 02:00:00	74.1	148	214	862		 	
02-May-06 03:00:00		121	141	862			
02-May-06 04:00:00		121	141	863			
02-May-06 05:00:00		129	211	863			
02-May-06 06:00:00		200	237	864			
02-May-06 07:00:00		177	348	864			
02-May-06 08:00:00	73.8	148	395	864			
02-May-06 09:00:00	73.8	140	421	864			
02-May-06 10:00:00	73.9	138	444	864			
02-May-06 11:00:00	73.9	120	413	863	<u> </u>		
02-May-06 12:00:00	74.1	165	444	864			
02-May-06 13:00:00	74.4	268	497	864	 	,	
02-May-06 14:00:00	74.7	309	507	864			
02-May-06 15:00:00		370	505	861	0		
02-May-06 16:00:00	75.2	382	510	864			
02-May-06 17:00:00		389	507	865			
02-May-06 18:00:00		381	515	864			
02-May-06 19:00:00		389	512	864	0		0
02-May-06 20:00:00		387	509	863	0	0	0
02-May-06 21:00:00		383	506	863	 		
02-May-06 22:00:00	74.6	386	505	862	0		

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						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR3	Towers (MW)	(MW)	Derate (MW
02-May-06 23:00:00	74.7	313	493	862	0	0	
03-May-06 00:00:00	74.6	187	390	861	0	0	
03-May-06 01:00:00	74.4	130	297	863	0	0	
03-May-06 02:00:00	74.4	135	160	863	0	0	
03-May-06 03:00:00	74.4	134	146	860			
03-May-06 04:00:00	74.4	138	173	862	0		
03-May-06 05:00:00	74.4	177	238	862	0		
03-May-06 06:00:00	74.5	202	278	862	0		7.
03-May-06 07:00:00	74.4	309	487	863			
03-May-06 08:00:00	74.3	258	474	863			
03-May-06 09:00:00	74.5	326	478	864			
03-May-06 10:00:00	74.6	355	507	864	0		
03-May-06 11:00:00	74.7	291	507	872	0		
03-May-06 12:00:00	74.8	323	505	865			
03-May-06 13:00:00	75.1	352	504	865			
03-May-06 14:00:00	75.5	354	508	863			
03-May-06 15:00:00	75.8	380	502	863			
03-May-06 16:00:00	76.3	382	506	864			
03-May-06 17:00:00	76.2	389	520	863			
03-May-06 18:00:00	76.1	390	504	863			
03-May-06 19:00:00	75.9	394	507	864			
03-May-06 20:00:00	76.1	337	511	862			
03-May-06 21:00:00	76.2	292	509	862	·		
03-May-06 22:00:00	76.0	245	488	862			
03-May-06 23:00:00	75.9	262	491	862			
04-May-06 00:00:00	75.8	230	444	862			
04-May-06 01:00:00	75.7	148	333	863			
04-May-06 02:00:00	75.6	120	229	864			
04-May-06 03:00:00	75.4	122	141	864			
04-May-06 04:00:00	75.3	140	142	865			
04-May-06 05:00:00	75.2	141	157	865			
04-May-06 06:00:00	75.5	194	263	865	 		
04-May-06 07:00:00	75.6	242	341	864			
04-May-06 08:00:00	75.6	286	390	865	<u> </u>		
04-May-06 09:00:00	75.5	320	447	862			
04-May-06 10:00:00	75.7	369	485	861	0		
04-May-06 11:00:00	75.8	341	455	859			
04-May-06 12:00:00	76.2	380	512	859			
04-May-06 13:00:00	76.4	383	513	861	0		
04-May-06 14:00:00	76.9	328	497	864			
04-May-06 15:00:00	77.4	382	509	862			
04-May-06 16:00:00	77.5	394	508	863			
04-May-06 17:00:00	77.4	389	507	864			
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							Page 3 of 4
	Expected	CR-1&2	2 Derate	s w/o Mo	odular Cooling To	<u>vers</u>	
	1 200						
MCT Aux Power =	1,969					Takala	
		1.111	1	144	20.000	Totals	05.004
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	Inlet]			Total Expected	Antural Devete	Gross
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Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
04-May-06 22:00:00	77.4	390	511	863	0	0	
04-May-06 23:00:00	77.4	367	492	862	0	0	(
05-May-06 00:00:00	77.3	285	393	862	0		
05-May-06 01:00:00	77.3	189	319	863	0		
05-May-06 02:00:00	77.2	144	317	861	0		
05-May-06 03:00:00	77.1	120	269	861	0		
05-May-06 04:00:00	77.0	120	158	862	0		
05-May-06 05:00:00		123	141	861	0		
05-May-06 06:00:00	77.1	196	257	862			
05-May-06 07:00:00		222	277	864			
05-May-06 08:00:00		212	180	863			
05-May-06 09:00:00		262	309	864		<u> </u>	
05-May-06 10:00:00		374	467	864			
05-May-06 11:00:00		359 372	477	864 863			
05-May-06 12:00:00		372	511	864			
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05-May-06 19:00:00		385	513				
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05-May-06 21:00:00		356	510				
05-May-06 22:00:00		327	505				
05-May-06 23:00:00		367	516				
06-May-06 00:00:00		286	516				
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06-May-06 03:00:00			353				
06-May-06 04:00:00		220	258				
06-May-06 05:00:00		221	222				
06-May-06 06:00:00		239	274				
06-May-06 07:00:00		226	253				
06-May-06 08:00:00		302	379				
06-May-06 09:00:00		314					
06-May-06 10:00:00		390					
06-May-06 11:00:00		306	471	862			
06-May-06 12:00:00		298	485	 			
06-May-06 13:00:00		391	511				
06-May-06 14:00:00		390	520				
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06-May-06 17:00:00		389	513				
06-May-06 18:00:00		392	513)
06-May-06 19:00:00		379					
06-May-06 20:00:00		379					

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							Page 4 of 47
	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
06-May-06 21:00:00		395	514	860	0	0	C
06-May-06 22:00:00		388	506	860	0	0	C
06-May-06 23:00:00		371	511	860	0	0	(
07-May-06 00:00:00		311	513	860	0	0	(
07-May-06 01:00:00	79.5	297	440	860	0	0	(
07-May-06 02:00:00	79.5	250	404	860	0	0	
07-May-06 03:00:00	79.7	174	348	860	0	0	
07-May-06 04:00:00	79.7	120	238	860	0	0	
07-May-06 05:00:00	79.6	144	263	860			
07-May-06 06:00:00	79.6	121	257	859			
07-May-06 07:00:00	79.5	123	291	859			(
07-May-06 08:00:00	79.5	201	355	860	0	0	(
07-May-06 09:00:00	79.4	319	442	863	0	0	(
07-May-06 10:00:00	79.5	359	463	862	0	0	(
07-May-06 11:00:00	79.5	359	462	862	0	0	(
07-May-06 12:00:00	79.7	380	510	860	0	0	
07-May-06 13:00:00	79.9	379	511	860			(
07-May-06 14:00:00	80.1	390	512	860	0	0	
07-May-06 15:00:00	80.3	382	512	861	0		
07-May-06 16:00:00	80.6	395	506	861	0		
07-May-06 17:00:00	80.9	386	506	860	0	0	4
07-May-06 18:00:00	80.9	387	509	861	0	0	
07-May-06 19:00:00	80.6	391	509	860	0	0	
07-May-06 20:00:00	80.8	385	510	860	0		
07-May-06 21:00:00	81.0	386	513	860	0		
07-May-06 22:00:00	80.6	364	514	860	C	0	
07-May-06 23:00:00		149	475	861	O		
08-May-06 00:00:00	80.8	133	396	860	O		
08-May-06 01:00:00	80.8	121	391	859	C		
08-May-06 02:00:00	80.9	121	255	859			
08-May-06 03:00:00	81.0	121	170	859			
08-May-06 04:00:00	80.9	121	139	859)C		
08-May-06 05:00:00	80.8	131	155	859			
08-May-06 06:00:00	80.9	221	272	858	C	C	
08-May-06 07:00:00		179	433	858			
08-May-06 08:00:00	80.8	221	507	858	C		
08-May-06 09:00:00	80.8	221	507	858	C) ()
08-May-06 10:00:00	80.8	222	508	857		C)
08-May-06 11:00:00		387	508	855	C	C)
08-May-06 12:00:00	80.8	389	510	858	0	C	
08-May-06 13:00:00	81.1	385	506	860	0	C	
08-May-06 14:00:00	 	392	510		0	0	
08-May-06 15:00:00		388	509				
08-May-06 16:00:00	+	387	509		<u> </u>)
08-May-06 17:00:00	 	390	508				
08-May-06 18:00:00		387	509				
08-May-06 19:00:00		393	511)

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	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	<u>vers</u>	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.		1		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
08-May-06 20:00:00	81.6	389	506	859	0	0	(
08-May-06 21:00:00	81.9	392	511	858	0	0	(
08-May-06 22:00:00		357	460	858	0	0	
08-May-06 23:00:00		293	418	858	0	0	(
09-May-06 00:00:00		310	404	857	0	0	(
09-May-06 01:00:00		283	375	857	0	0	(
09-May-06 02:00:00		223	330	858	0	0	
09-May-06 03:00:00		213	235	858		0	
09-May-06 04:00:00		183	219	857	0	0	(
09-May-06 05:00:00		175	234	855	0	0	
09-May-06 06:00:00		268	337	844	0	0	
09-May-06 07:00:00		304	477	856	0	0	
09-May-06 08:00:00		306	449	856	0		
09-May-06 09:00:00		295	465	857	0		
09-May-06 10:00:00		291	481	857	0		
09-May-06 11:00:00		306	502	855	0		
09-May-06 12:00:00		384	520	855	0		
09-May-06 13:00:00		386	495	855	0	 	
09-May-06 14:00:00		381	500	857	0		
09-May-06 15:00:00		393	499	857	0		
09-May-06 16:00:00	82.6	387	514	856	0	0	
09-May-06 17:00:00	82.6	387	502	856	0	0	
09-May-06 18:00:00	82.5	387	506	857	0	0	
09-May-06 19:00:00	82.6	386	508	856	0	0	C
09-May-06 20:00:00	82.6	388	513	859	0	0	C
09-May-06 21:00:00	82.7	393	497	857	0		
09-May-06 22:00:00	82.7	374	511	857	0		
09-May-06 23:00:00		313	505	856	0	0	
10-May-06 00:00:00		232	395	856	· · · · · · · · · · · · · · · · · · ·		
10-May-06 01:00:00		124	267	856			1 0
10-May-06 02:00:00		121	156	856			
10-May-06 03:00:00		122	140	857	0		
10-May-06 04:00:00		121	141	857	0		
10-May-06 05:00:00		125	167	859			
10-May-06 06:00:00		191	235	856			
10-May-06 07:00:00		211	217	854	 		
10-May-06 08:00:00		203	273	856			
10-May-06 09:00:00		319	338	858			
10-May-06 10:00:00		378	370	859			
10-May-06 11:00:00		387	395	860			
10-May-06 12:00:00		373	468	860			
10-May-06 13:00:00		389	506	860			1
10-May-06 14:00:00		389	508	860			† · · · · ·
10-May-06 15:00:00		391	506	859			1
10-May-06 16:00:00		386	511	859			†
10-May-06 17:00:00		384	514	859			
10-May-06 18:00:00		389	509	859			0
. 5 55 10.00.00			303	JJ3	, 0		, .

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	Evanatad	CD 100	Doroto		dular Caaling To		rage 0 01
	Expected	CH-102	Derates	S W/O IVIO	odular Cooling To	veis	
MCT Aux Dawar	1.000						
MCT Aux Power =	1,969					Totals	-
		1.1mi4	l anda /NA	\A/\	06.220	414	25.024
	Inlet	Unit	Loads (M	VV)	26,338	414	25,924 Gross
					Total Expected Derate w/o Modular	Actual Derate	Avoided
Data 9 Time	Temp.	CD 4	CD A	CD 0		(MW)	Derate (MW)
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)		Delate (WW)
10-May-06 19:00:00	82.8 82.7	389	512 516	859	0		
10-May-06 20:00:00		388 390	514	860 859		0	
10-May-06 21:00:00	82.6 82.5	387	512	859			
10-May-06 22:00:00 10-May-06 23:00:00	82.4	388	497	859			
11-May-06 00:00:00	82.8	336	438	860			
11-May-06 00:00:00 11-May-06 01:00:00	82.9	260	352	858			
11-May-06 02:00:00	83.0	215	289	857			}
11-May-06 02:00:00	82.9	142	188	858			<u> </u>
11-May-06 04:00:00		121	142	858			
11-May-06 05:00:00		131	152	858			
11-May-06 06:00:00		240	282	857	0		
11-May-06 07:00:00		285	351	858	· · · · · · · · · · · · · · · · · · ·		
11-May-06 08:00:00	·	289	364	860			
11-May-06 09:00:00		374	460	858			
11-May-06 10:00:00		374	509	856	 		
11-May-06 11:00:00		344	491	855			
11-May-06 12:00:00		345	491	856			
11-May-06 13:00:00		335	478	859	 		
11-May-06 14:00:00		283	427	859			
11-May-06 15:00:00		264	420	858			
11-May-06 16:00:00		374	508	858			
11-May-06 17:00:00		389	502	859			
11-May-06 18:00:00		383	503				
11-May-06 19:00:00		388	501	859			
11-May-06 20:00:00		385	511	861			
11-May-06 21:00:00		384	509) C	
11-May-06 22:00:00			513				
11-May-06 23:00:00		338	462				
12-May-06 00:00:00	-	350	479				
12-May-06 01:00:00		225	340				
12-May-06 02:00:00		121	139				
12-May-06 03:00:00		123	141	858			
12-May-06 04:00:00		119	140				
12-May-06 05:00:00		119	141	859) (
12-May-06 06:00:00		226	251	860)
12-May-06 07:00:00		275	293				
12-May-06 08:00:00		282	387				
12-May-06 09:00:00	+	352	484				
12-May-06 10:00:00		382	485				
12-May-06 11:00:00		316	418				
12-May-06 12:00:00		342	466				
12-May-06 13:00:00		389					
12-May-06 14:00:00		344	509				
12-May-06 15:00:00	 	389	508				
12-May-06 16:00:00		393			1		
12-May-06 17:00:00							

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	Expected	CR-1&2	2 Derates	s w/o M	odular Cooling To	wers_	
1407 1	4.000				· · · · · · · · · · · · · · · · · · ·		
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet	- [Total Expected		Gross
	Temp.					Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
12-May-06 18:00:00	80.2	379	508	840	0		0
12-May-06 19:00:00	80.0	382	511	861	0		0
12-May-06 20:00:00	79.8	348	508	860			C
12-May-06 21:00:00		320	466	860			<u>C</u>
12-May-06 22:00:00		243	348	862			0
12-May-06 23:00:00		123	349	868	1		C
13-May-06 00:00:00		122	347	862			C
13-May-06 01:00:00		120	244	861	0		0
13-May-06 02:00:00		120	139	862	0		C
13-May-06 03:00:00		120	155	860	L		O
13-May-06 04:00:00		121	155	862	0		
13-May-06 05:00:00		120	148	863			
13-May-06 06:00:00		120	153	861	0		
13-May-06 07:00:00		120	144	861	0		
13-May-06 08:00:00		116	258	862			
13-May-06 09:00:00		124	373	860	1		
13-May-06 10:00:00		231	490	808			
13-May-06 11:00:00		283	400	767			
13-May-06 12:00:00		385	484	774	<u> </u>		
13-May-06 13:00:00		334	434	773			
13-May-06 14:00:00 13-May-06 15:00:00		383 382	492	772			
13-May-06 16:00:00		381	516	771	4		
13-May-06 17:00:00		385	518	770			
13-May-06 17:00:00		387	510	769			
13-May-06 19:00:00		386	507	770			
13-May-06 19:00:00			512	770			
	 	385	510 510	770		 	
13-May-06 21:00:00 13-May-06 22:00:00		384 237	510 442	769 769			
13-May-06 23:00:00		299	442	783			
14-May-06 00:00:00		219		806			
14-May-06 01:00:00		131	384				1
14-May-06 02:00:00		122	338	830 847			
14-May-06 03:00:00		137	166				
14-May-06 04:00:00		137	159	858	<u> </u>	1	
14-May-06 05:00:00			197	862			
		146	189	863			
14-May-06 06:00:00 14-May-06 07:00:00		135 120	180	863			
			140	863			
14-May-06 08:00:00		222	248	863			
14-May-06 09:00:00		321	332	863			
14-May-06 10:00:00		286	374	862	<u> </u>		
14-May-06 11:00:00		299	401	861			
14-May-06 12:00:00		379	484	861			
14-May-06 13:00:00		382	487	854			
14-May-06 14:00:00		387	493	860			+
14-May-06 15:00:00		384	495	861			
14-May-06 16:00:00	79.1	384	513	862	0	0	0

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	Expected	I CR-1&2	2 Derates	s w/o Mo	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet	ł		-	Total Expected		Gross
	Temp.	1			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
14-May-06 17:00:00	78.9	383	514	868	0	0	
14-May-06 18:00:00	79.0	387	511	865	0	0	
14-May-06 19:00:00	78.7	382	515	863	0	0	
14-May-06 20:00:00	78.6	385	512	863	0	0	
14-May-06 21:00:00	78.5	385	508	863	0	0	
14-May-06 22:00:00	78.1	382	508	863	0	0	
14-May-06 23:00:00	78.4	248	368	862	0	0	
15-May-06 00:00:00	78.6	193	182	861	0	0	
15-May-06 01:00:00		119	140	860	0	0	
15-May-06 02:00:00	78.4	142	166	860	0	0	
15-May-06 03:00:00	78.4	120	141	861	0	0	
15-May-06 04:00:00		143	160	861	0	0	
15-May-06 05:00:00		186	204	860	0	0	
15-May-06 06:00:00		221	219	860	0	0	
15-May-06 07:00:00		305	291	860	0	0	
15-May-06 08:00:00		298	466	862	0	0	1
15-May-06 09:00:00		322	485	862	0	0	
15-May-06 10:00:00		370	498	863	\	Ō	
15-May-06 11:00:00		335	487	863		Ō	
15-May-06 12:00:00		376	507	863	0	Ō	
15-May-06 13:00:00		388	508	862	0	Ō	
15-May-06 14:00:00		386	514	860			
15-May-06 15:00:00		386	510	862			
15-May-06 16:00:00		388	516	860			
15-May-06 17:00:00		390	514	862			
15-May-06 18:00:00		385	507	861	0		
15-May-06 19:00:00		386	507	861	0		
15-May-06 20:00:00		385	509	861	0		
15-May-06 21:00:00		387	504	861	0		
15-May-06 22:00:00			505	860			
15-May-06 23:00:00		388	392	860			
16-May-06 00:00:00		375	256	860			
16-May-06 01:00:00		255	139	861	0		
16-May-06 02:00:00		181	166	862			
16-May-06 03:00:00		169	148	860	 		
16-May-06 04:00:00		158	157	859			
16-May-06 05:00:00		186	179	858			
16-May-06 06:00:00		243	272	861			
16-May-06 07:00:00		283	406	863			
16-May-06 08:00:00		243	492	859			
16-May-06 09:00:00		230	413	859 859	 		
16-May-06 10:00:00		262	405				
16-May-06 10:00:00		202	334	860 861			
16-May-06 12:00:00		120					
16-May-06 12:00:00			221	861			
16-May-06 13:00:00		135	231	861			
16-May-06 15:00:00		133	229	860			
10-141ay-00 13:00:00	78.3	127	334	859	1 0	0	(

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	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	wers .	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.	1			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
16-May-06 16:00:00	78.2	193	405	860	0		C
16-May-06 17:00:00	78.0	175	457	860	0		C
16-May-06 18:00:00	78.0	170	445	860	0		
16-May-06 19:00:00	78.1	185	463	861	0		
16-May-06 20:00:00		212	425	862	0		
16-May-06 21:00:00		259	451	862			
16-May-06 22:00:00		242	401	862			
16-May-06 23:00:00		265	270	860			
17-May-06 00:00:00		118	181	860			
17-May-06 01:00:00		120	142	861	0		
17-May-06 02:00:00		143	141	861	0		
17-May-06 03:00:00		129	139	861	0		
17-May-06 04:00:00		146	140	861	O		
17-May-06 05:00:00		131	141	863	 		
17-May-06 06:00:00		120	245	863			
17-May-06 07:00:00		249	389	863			
17-May-06 08:00:00		251	431	864			
17-May-06 09:00:00		222	470	864	 		
17-May-06 10:00:00		229	492	865			
17-May-06 11:00:00		220	512	864			
17-May-06 12:00:00		292	504	863			
17-May-06 13:00:00		364	509	862		C	
17-May-06 14:00:00		349	481	863	C	C) (
17-May-06 15:00:00		371	502	862	C	C	
17-May-06 16:00:00		379	507	862	C	C	
17-May-06 17:00:00		382	504	862	C	C) (
17-May-06 18:00:00		343	507	863	C) C) (
17-May-06 19:00:00		301	503	863	C) C) (
17-May-06 20:00:00		343	501	863	C	0	
17-May-06 21:00:00		381	506	863) () (
17-May-06 22:00:00	76.5	216	455	866		0) (
17-May-06 23:00:00		224	273	866) (
18-May-06 00:00:00		118	178	865	(0	
18-May-06 01:00:00		122	139	864	. (
18-May-06 02:00:00		122	181	864			
18-May-06 03:00:00		121	189	863) () (
18-May-06 04:00:00		122	181	863) () (
18-May-06 05:00:00		120	239) (
18-May-06 06:00:00		167	271				
18-May-06 07:00:00		167	414				
18-May-06 08:00:00		218	480) () (
18-May-06 09:00:00	 	302	470				
18-May-06 10:00:00		371	484				
18-May-06 11:00:00		259	382				
18-May-06 12:00:00		322	472			· · · · · · · · · · · · · · · · · · ·	
18-May-06 13:00:00		352	502				
18-May-06 14:00:00			513				

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							rage 10 01 4
	Expected	I CR-1&2	2 Derate:	s w/o Mo	odular Cooling To	<u>wers</u>	
NOTA	1.000						
MCT Aux Power =	1,969						
						Totals	
-		Unit	Loads (M	W)	26,338	414	25,924
	Inlet	ĺ			Total Expected		Gross
-	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
18-May-06 15:00:00	76.6	388	507	863	0	0	(
18-May-06 16:00:00		390	492	865	0	0	
18-May-06 17:00:00	77.2	389	503	865	1		
18-May-06 18:00:00		389	499	864			
18-May-06 19:00:00	77.1	389	508	863		0	
18-May-06 20:00:00	77.0	387	504	863		0	
18-May-06 21:00:00		388	511	862	0	0	
18-May-06 22:00:00	76.6	383	509	862	0	0	
18-May-06 23:00:00	76.7	352	416	861	0		
19-May-06 00:00:00		230	272	861	0		
19-May-06 01:00:00	76.4	123	199	863			
19-May-06 02:00:00	76.3	122	164	862			
19-May-06 03:00:00	76.1	122	190	860			(
19-May-06 04:00:00	76.1	121	171	859			
19-May-06 05:00:00	76.1	121	193	862			
19-May-06 06:00:00	76.2	137	231	863			
19-May-06 07:00:00		224	314	863			
19-May-06 08:00:00	76.0	258	384	864	1		
19-May-06 09:00:00	75.9	304	436	864			
19-May-06 10:00:00		371	514	863	L		
19-May-06 11:00:00		392	507	863	.1		
19-May-06 12:00:00		394	513	864			
19-May-06 13:00:00		394	500	864			
19-May-06 14:00:00	76.6	395	501	864			
19-May-06 15:00:00		392	503	864			
19-May-06 16:00:00		397	508	864			
19-May-06 17:00:00	77.4	394	507	864			
19-May-06 18:00:00		392		862			
19-May-06 19:00:00		296	494	863			
19-May-06 20:00:00 19-May-06 21:00:00		329 342	458	865			
19-May-06 22:00:00		284	464 377	861			
				862			
19-May-06 23:00:00	77.5 77.8	323	426	863			
20-May-06 00:00:00		249	336	861			
20-May-06 01:00:00		144	228	860			
20-May-06 02:00:00		134	154	861		+	
20-May-06 03:00:00		121	141	862	 		
20-May-06 04:00:00		121	139	861			
20-May-06 05:00:00		121	140	860			
20-May-06 06:00:00		138	158	860			
20-May-06 07:00:00		133	150	861			
20-May-06 08:00:00		231	251	861	· · · · · · · · · · · · · · · · · · ·		
20-May-06 09:00:00		305	322	863			
20-May-06 10:00:00		385	432	864			(
20-May-06 11:00:00		395	462	862			
20-May-06 12:00:00		389	505	861			
20-May-06 13:00:00	78.2	394	506	861	C	0) (

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	Expected	ICR-1&	2 Derate:	s w/o Mo	odular Cooling To	wers	
MOT A D	1 000						
MCT Aux Power =	1,969						
		1.11		14.1	00.000	Totals	0= 004
	Inlat	Uni	t Loads (M	W)	26,338	414	25,924
	Inlet	1			Total Expected	A stud Dansta	Gross
Date & Time	Temp.	CR 1	CD 0	CD a		Actual Derate	Avoided
20-May-06 14:00:00	(deg F) 78.6	390	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
20-May-06 15:00:00	78.8	390	506 493	864 863			
20-May-06 16:00:00	79.2	389	493	862			
20-May-06 17:00:00	79.5	389	508	861	0		
20-May-06 18:00:00	79.8	390	506	861	0	0	
20-May-06 19:00:00	79.7	387	501	860	0		
20-May-06 20:00:00	79.3	384	495	861	0	Ö	
20-May-06 21:00:00	79.6	380	493	862	0		
20-May-06 22:00:00	79.7	301	392	861	0		
20-May-06 23:00:00	79.8	342	475	860			
21-May-06 00:00:00		251	338	861	0		
21-May-06 01:00:00	79.8	165	237	859			
21-May-06 02:00:00	79.7	124	140	860	0	0	C
21-May-06 03:00:00	79.6	122	141	860	0	0	C
21-May-06 04:00:00	79.5	120	140	860	0	0	C
21-May-06 05:00:00	79.5	121	140	861	0	0	C
21-May-06 06:00:00	79.1	121	140	861	0	0	C
21-May-06 07:00:00	78.9	134	163	861	0	0	C
21-May-06 08:00:00	78.8	220	238	861	0		C
21-May-06 09:00:00	78.9	320	323	861	0		
21-May-06 10:00:00	79.3	365	441	860			
21-May-06 11:00:00	79.3	377	468	860			
21-May-06 12:00:00	79.7	388	504	860			
21-May-06 13:00:00	80.0	389	504	861	0		
21-May-06 14:00:00	80.3	385	503	861	0		
21-May-06 15:00:00	80.6	383	504	861			
21-May-06 16:00:00	80.8	383		861			
21-May-06 17:00:00 21-May-06 18:00:00	81.3 81.1	384 386	503	860			
21-May-06 19:00:00	80.9	382	503 502	861 860			
21-May-06 20:00:00	80.6	382	502	860			
21-May-06 21:00:00	80.5	388	504	861			
21-May-06 22:00:00	80.6	284	504	862			
21-May-06 23:00:00	80.8	262	431	861			
22-May-06 00:00:00	80.9	198	344	860			
22-May-06 01:00:00	80.9	120	173	859			
22-May-06 02:00:00	80.8	121	141	857			
22-May-06 03:00:00	80.8	121	141	857			
22-May-06 04:00:00	80.7	120	140	856			
22-May-06 05:00:00	80.7	144	167	861			
22-May-06 06:00:00	80.9	216	284	861	C		
22-May-06 07:00:00	80.8	222	381	862			
22-May-06 08:00:00	80.3	316	476	861			
22-May-06 09:00:00	80.1	383	503	861	C		
22-May-06 10:00:00	80.1	385	510	862			
22-May-06 11:00:00	80.1	315	505	860			
22-May-06 12:00:00	80.3	368	511	861			

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							Page 12 01 4
	Expected	CR-1&	2 Derate	s w/o Mo	odular Cooling To	we <u>rs</u>	
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
22-May-06 13:00:00	80.4	375	507	862	0	0	
22-May-06 14:00:00	80.6	372	499	862	0	0	(
22-May-06 15:00:00	80.7	382	503	862	0	0	(
22-May-06 16:00:00	80.9	383	496	861	0	0	(
22-May-06 17:00:00	81.3	391	500	860	0	0	(
22-May-06 18:00:00	81.2	383	506	861	0	0	(
22-May-06 19:00:00	81.0	363	508	859	0	0	(
22-May-06 20:00:00	80.9	384	505	860	0	0	(
22-May-06 21:00:00	80.8	364	505	861	0	0	(
22-May-06 22:00:00	80.7	311	502	860	0	0	(
22-May-06 23:00:00	80.5	282	368	860	0	0	
23-May-06 00:00:00	80.9	238	234	859	0	0	
23-May-06 01:00:00	81.1	294	295	859	0	0	
23-May-06 02:00:00	81.3	197	154	859	0	0	
23-May-06 03:00:00	81.2	120	225	859	0	0	
23-May-06 04:00:00	81.0	121	238	859	0	0	
23-May-06 05:00:00	81.1	130	272	859	0	0	
23-May-06 06:00:00	81.0	281	298	857	0	0	
23-May-06 07:00:00	81.0	347	303	858	0	0	
23-May-06 08:00:00	80.8	294	376	858	0	0	
23-May-06 09:00:00	80.7	387	409	859	0	0	
23-May-06 10:00:00	80.6	391	413	861	0	0	
23-May-06 11:00:00	80.6	369	417	860	0	0	
23-May-06 12:00:00	80.6	384	499	859	0	0	
23-May-06 13:00:00	80.5	389	512	860	0	0	
23-May-06 14:00:00	80.5	387	513	860	0	0	
23-May-06 15:00:00	80.5	389	514	859	0	0	
23-May-06 16:00:00	80.6	385	511	861	0	0	
23-May-06 17:00:00	80.7	388	510	860	0	0	C
23-May-06 18:00:00	80.7	391	507	860	0	0	
23-May-06 19:00:00	80.7	387	504	860	0	0	C
23-May-06 20:00:00	80.6	385	503	861	0	0	0
23-May-06 21:00:00	80.6	386	503	862	0	0	
23-May-06 22:00:00	80.5	383	506	862	0	0	
23-May-06 23:00:00	80.5	305	402	862	0	0	
24-May-06 00:00:00	80.4	210	374	861	0	0	
24-May-06 01:00:00	80.4	123	253	860	0	0	
24-May-06 02:00:00	80.3	132	153	860	0	ō	
24-May-06 03:00:00	80.3	122	141	860	0	Ō	
24-May-06 04:00:00	80.2	121	142	861	0	0	
24-May-06 05:00:00	80.1	152	171	861	0	Ö	
24-May-06 06:00:00	80.1	200	267	859	0	0	
24-May-06 07:00:00	80.0	198	362	861	0	ő	
24-May-06 08:00:00	79.9	228	447	864	0	Ö	
24-May-06 09:00:00	79.9	222	411	863	0	0	
24-May-06 10:00:00	80.1	283	421	861	0	0	
24-May-06 11:00:00	80.0	295	506	862	0	0	
			- 000	002			0

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	Expected	I CR-1&2	2 Derates	s w/o Mo	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
24-May-06 12:00:00	80.2	383	509	861	0	0	0
24-May-06 13:00:00	80.4	390	509	861	0	0	0
24-May-06 14:00:00	80.4	391	513	861	0		0
24-May-06 15:00:00		390	507	858	0		0
24-May-06 16:00:00	80.8	390	508	856	0		
24-May-06 17:00:00		389	506	860	0		
24-May-06 18:00:00		389	511	861	0		
24-May-06 19:00:00		390	514	860	0		
24-May-06 20:00:00		388	508	860			
24-May-06 21:00:00		382	511	860			<u> </u>
24-May-06 22:00:00		390	506	859			
24-May-06 23:00:00		255	511	860			
25-May-06 00:00:00		253	508	845			
25-May-06 01:00:00		159	389	861	0		
25-May-06 02:00:00		122	274	860			
25-May-06 03:00:00		122	139	859			
25-May-06 04:00:00		120	141	859			
25-May-06 05:00:00		122	141	858			
25-May-06 06:00:00		183	238	858			
25-May-06 07:00:00		266	347	858			
25-May-06 08:00:00		339	456	858			
25-May-06 09:00:00		367	501	860			
25-May-06 10:00:00		385	513	860			
25-May-06 11:00:00		388	512	861	C		
25-May-06 12:00:00		388	505	861	C		
25-May-06 13:00:00		392	516	861	<u> </u>		
25-May-06 14:00:00		379	510	860			
25-May-06 15:00:00		394 393	508 508	860 860			
25-May-06 16:00:00 25-May-06 17:00:00		393	508 507	860			
25-May-06 17:00:00 25-May-06 18:00:00		393	508	859			
25-May-06 19:00:00		389	503	858			
25-May-06 20:00:00		392	509	858			
25-May-06 21:00:00		392	509	876			
25-May-06 22:00:00		384	510	859			
25-May-06 23:00:00		308	510	860			0
26-May-06 00:00:00		302	294	859			
26-May-06 01:00:00		291	144	860			0
26-May-06 02:00:00		227	141	859			
26-May-06 03:00:00		150	141	858			0
26-May-06 04:00:00		124		857			
26-May-06 05:00:00		135	140 140	857 857			
26-May-06 05:00:00 26-May-06 06:00:00		292					
			140	857			
26-May-06 07:00:00		275	138	858			
26-May-06 08:00:00		393	141	859			0
26-May-06 09:00:00		388	152				0 0
26-May-06 10:00:00	83.0	386	428	840) (0ע

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Witness: Thomas Lawery
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							Page 14 of 4'
	Expected	CR-1&	2 Derate	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1,969						
						Totals	
	11.4	Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
Data 0 Time	Temp.	00.4	00.0		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
26-May-06 11:00:00		387	485	859	0	0	(
26-May-06 12:00:00		388	503	859	0		
26-May-06 13:00:00		379	507	859	0		
26-May-06 14:00:00		389	513	859	0		
26-May-06 15:00:00		388	508	859	0		
26-May-06 16:00:00		383	510	859	0		
26-May-06 17:00:00		384	503	858	0	·	
26-May-06 18:00:00		385	503	858	0		
26-May-06 19:00:00		335	449	858	0		(
26-May-06 20:00:00		335	449	857	0		
26-May-06 21:00:00		358	473	857	0		
26-May-06 22:00:00		358	475	858	0		
26-May-06 23:00:00	83.1	330	449	858	0		(
27-May-06 00:00:00	83.3	285	379	857	0		
27-May-06 01:00:00 27-May-06 02:00:00	83.6	244	349	855	0		
27-May-06 02:00:00 27-May-06 03:00:00	83.9	129	181	854	0		
27-May-06 03:00:00 27-May-06 04:00:00	83.9 84.0	149	201	854	0		
27-May-06 04:00:00		121 125	140	856	0		
27-May-06 05:00:00	83.8	135	146	858	0		
27-May-06 07:00:00		143	158 161	856	0		T
27-May-06 08:00:00		218	280	854 856	0		
27-May-06 09:00:00	83.7	263	336	858	0		
27-May-06 10:00:00	83.8	370	466	858	0		
27-May-06 11:00:00	83.9	382	484				
27-May-06 12:00:00	83.8	389		860	0		
27-May-06 13:00:00	83.8	391	505	856	0		
27-May-06 14:00:00	84.1	389	503 509	857	0		
27-May-06 15:00:00	84.2	392	511	857 857	0		
27-May-06 16:00:00	84.3	390	507	856	0		
27-May-06 17:00:00	84.5	387	504	856	0		
27-May-06 18:00:00	84.6	379	503	856	0		
27-May-06 19:00:00	84.7	379	507	856	0		
27-May-06 20:00:00	84.6	378	508	856	0	0	
27-May-06 21:00:00	84.3	378	509	856	0	0	
27-May-06 22:00:00	84.0	384	507	856			
27-May-06 23:00:00	83.9	331	507	857	0	0	
28-May-06 00:00:00	83.9	282	466	856	0		
28-May-06 01:00:00	84.1	226	379	855	0		
28-May-06 02:00:00	84.6	168	275	853	0	0	(
28-May-06 03:00:00	84.6	122	145	853	0	0	(
28-May-06 04:00:00	84.6	121	140				(
28-May-06 05:00:00	84.6	121	140	854	0	0	(
28-May-06 06:00:00	84.5	125	145	855	0		(
28-May-06 07:00:00	84.5	121		856	0		(
28-May-06 08:00:00	84.4	212	140 239	857	0	0	
28-May-06 09:00:00	84.3	323	372	856	0	0	C
	04.0	UZ3	3/2	856	0	0	ı (

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	,						Page 15 of
	Expected	CR-1&	2 Derate	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1 060				 		
WC1 Aux Power =	1,969					Totals	
		l Ini	t Loads (N	4\A/\	26,338	10tais 414	25.024
	Inlet	- 011	LOAGS (IV	144)	Total Expected	414	25,924 Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
28-May-06 10:00:00		312	519	856	0	+	Dorato (mivi
28-May-06 11:00:00		284	508	856	0	 	
28-May-06 12:00:00		382	515			 	
28-May-06 13:00:00		365	507	855			
28-May-06 14:00:00	85.2	379	511	855	<u> </u>		
28-May-06 15:00:00	85.2	376	506	855			
28-May-06 16:00:00	85.2	380	510	856			
28-May-06 17:00:00		391	508	856			
28-May-06 18:00:00		383	510		0	0	
28-May-06 19:00:00		388	508		0		
28-May-06 20:00:00		388	504		0		
28-May-06 21:00:00		385	506		0		
28-May-06 22:00:00		386	507	854	0		
28-May-06 23:00:00		344	470		0		
29-May-06 00:00:00		289	383	855	0		
29-May-06 01:00:00		225	292	854	0		
29-May-06 02:00:00		214	207	855	0		
29-May-06 03:00:00		132	145	855	0		
29-May-06 04:00:00		121	141	855	0		
29-May-06 05:00:00	84.8	121	141	855			
29-May-06 06:00:00	84.9	127	139	855			
29-May-06 07:00:00	84.9	121	139	856			
29-May-06 08:00:00 29-May-06 09:00:00	84.8 84.8	122 225	145	857	0		
29-May-06 09:00:00 29-May-06 10:00:00	84.8	370	393 471	858 856			
29-May-06 11:00:00	84.6	388	507	855			
29-May-06 12:00:00	84.7	385	498	856			
29-May-06 13:00:00	84.8	388	502	857	0	<u> </u>	
29-May-06 14:00:00		386	500				
29-May-06 15:00:00		390	506	856			
29-May-06 16:00:00		390	504	856			
29-May-06 17:00:00		388	507	857	0		
29-May-06 18:00:00		391	513	857	0		
29-May-06 19:00:00		389	508	854			
29-May-06 20:00:00		388	504	856	<u> </u>		-
29-May-06 21:00:00		391	511	856			
29-May-06 22:00:00		389	511	856	0		
29-May-06 23:00:00	84.6	388	507	856	0		
30-May-06 00:00:00	84.6	208	450	855	0		
30-May-06 01:00:00	84.5	121	321	855		0	
30-May-06 02:00:00	84.4	123	233	855	0	0	
30-May-06 03:00:00	84.2	122	157	855	0	Ö	
30-May-06 04:00:00	84.1	122	139	855	0	Ō	
30-May-06 05:00:00	84.1	122	141	855	0	ō	
30-May-06 06:00:00	84.0	167	194	856	0	Ō	
30-May-06 07:00:00	84.0	213	249	857	0	O	
30-May-06 08:00:00	84.0	232	300	856	0	0	

	Expected	CR-1&	2 Derate:	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1.060						
MICT AUX FOWER =	1,909					Totals	
		Unit	Loads (M	١٨/١	26,338	414	25,924
	Inlet	01111	LOAUS (IVI	()	Total Expected	714	Gross
	Temp.				· ·	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
30-May-06 09:00:00		332	444	855	1 Owers (IVIVV)	0	Derate (WW)
30-May-06 10:00:00		384	500	854	0	0	
30-May-06 11:00:00		384	509	855	0	0	
30-May-06 12:00:00		393	501	858	0	0	
30-May-06 13:00:00		390	502	857	0	0	
30-May-06 14:00:00		389	506	857	0		
30-May-06 15:00:00		390	504	857 857	0		
30-May-06 16:00:00		389	501	856			(
30-May-06 17:00:00		394	503	857	0		
30-May-06 17:00:00		391	503	856	0		(
30-May-06 19:00:00		395	504	856			
30-May-06 20:00:00		387	506	857	0		
30-May-06 21:00:00		389	505	856			
30-May-06 22:00:00		391	508	856			
30-May-06 23:00:00		285	405	855			
31-May-06 00:00:00		204	299	855			
31-May-06 01:00:00		202	301	856			
31-May-06 02:00:00		136	230	855			
31-May-06 03:00:00		120	144	855			
31-May-06 04:00:00		121	146	855			
31-May-06 05:00:00		121	146	855			
31-May-06 06:00:00		125	194	855	<u> </u>		
31-May-06 07:00:00		135	277	856			
31-May-06 08:00:00		225	362	858	<u> </u>		
31-May-06 09:00:00		322	474	857		<u> </u>	
31-May-06 10:00:00		314	494	856			
31-May-06 11:00:00		388	507	855			
31-May-06 12:00:00			501	855			
31-May-06 13:00:00		387	509	856			
31-May-06 14:00:00		386	502	856			
31-May-06 15:00:00		390	503	856			
31-May-06 16:00:00		390	513	853			
31-May-06 17:00:00		394	514	854			
31-May-06 18:00:00		395	504	856	+ ·		
31-May-06 19:00:00		391	507	857			
31-May-06 20:00:00		390	509	855			
31-May-06 21:00:00		388	497	857			
31-May-06 22:00:00		382	499	856			
31-May-06 23:00:00		259	358	857			
01-Jun-06 00:00:00		203	298	855	<u> </u>		
01-Jun-06 01:00:00	 _ _ _ _ _ _ _ 	200	299	856			
01-Jun-06 02:00:00		119	254	856			
01-Jun-06 03:00:00		122	207	855		<u> </u>	
01-Jun-06 04:00:00		121	138	855			
01-Jun-06 05:00:00		120			The state of the s		
01-Jun-06 06:00:00			141	856			
01-Jun-06 07:00:00		136	192	857			
01-34n-06 07:00:00	83.5	140	204	856	i) c	0	(

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							Page 17 of 4
	Expected	CR-1&2	2 Derate	s w/o Mo	odular Cooling To	wers	-
						_	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
01-Jun-06 08:00:00	83.4	199	261	857	0	0	Dorato (mit)
01-Jun-06 09:00:00	83.5	286	367	856	0	0	
01-Jun-06 10:00:00	83.6	296	491	855	0		
01-Jun-06 11:00:00	83.5	384	491	856	0		
01-Jun-06 12:00:00	83.5	376	503	857	0		
01-Jun-06 13:00:00	83.6	384	496	857	0		
01-Jun-06 14:00:00		382	500	858	0	<u> </u>	
01-Jun-06 15:00:00		384	492	857	0		
01-Jun-06 16:00:00		386	492	856	0		
01-Jun-06 17:00:00		386	492	856			
01-Jun-06 18:00:00		384	500	857	0		
01-Jun-06 19:00:00		384	499	857 857	0		
01-Jun-06 20:00:00		385	506				
01-Jun-06 21:00:00				857	0		
		384	503	857	0		
01-Jun-06 22:00:00		383	500	857	0		
01-Jun-06 23:00:00		266	400	857	0		
02-Jun-06 00:00:00		150	388	857	0		
02-Jun-06 01:00:00		120	325	856			
02-Jun-06 02:00:00		121	145	856			
02-Jun-06 03:00:00	83.7	121	141	857	0		
02-Jun-06 04:00:00	83.4	121	185	857	0		
02-Jun-06 05:00:00		122	164	857	0		
02-Jun-06 06:00:00		149	239	858			
02-Jun-06 07:00:00		188	281	857	0		
02-Jun-06 08:00:00	 	196	380	856			
02-Jun-06 09:00:00		275	492	855			
02-Jun-06 10:00:00		375	499	854			
02-Jun-06 11:00:00		384	500	856			
02-Jun-06 12:00:00		381	502	856	 		
02-Jun-06 13:00:00		383	503	857			
02-Jun-06 14:00:00		384	501	858	<u> </u>		
02-Jun-06 15:00:00	 	384	500	856			
02-Jun-06 16:00:00		384	498	857			
02-Jun-06 17:00:00		385	512	856			
02-Jun-06 18:00:00		385	499	856	0		
02-Jun-06 19:00:00	84.2	384	507	856	0	C	
02-Jun-06 20:00:00	84.3	384	506	856			
02-Jun-06 21:00:00		383	511	856			
02-Jun-06 22:00:00		383	503	856			
02-Jun-06 23:00:00		377	475	856			
03-Jun-06 00:00:00		379	480	856		· · · · · · · · · · · · · · · · · · ·	
03-Jun-06 01:00:00		315	430	856			
03-Jun-06 02:00:00		238	335	856			
03-Jun-06 03:00:00		167	215	855			
03-Jun-06 04:00:00		129	146	856			
03-Jun-06 05:00:00		129)
			141	855			
03-Jun-06 06:00:00	83.7	136	150	855	0	C	Д

	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	wers	Page 18 of
MCT Aux Power =	1,969						
				·		Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet		İ		Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
03-Jun-06 07:00:00	83.8	140	154	857	0		
03-Jun-06 08:00:00	83.8	220	246	855	0		C
03-Jun-06 09:00:00	84.0	319	354	854	0		
03-Jun-06 10:00:00	84.0	378	500	855	0	0	
03-Jun-06 11:00:00	84.2	382	504	855	0		(
03-Jun-06 12:00:00	84.4	390	504	855	0		(
03-Jun-06 13:00:00	84.4	384	504	856	0		(
03-Jun-06 14:00:00	84.4	389	503	857	0		(
03-Jun-06 15:00:00	84.2	388	510	857	0		(
03-Jun-06 16:00:00 03-Jun-06 17:00:00	84.3	387	513	856	0		
03-Jun-06 18:00:00	84.4 84.2	389 389	503	856 856			(
03-Jun-06 19:00:00	84.2	389	510 513	856	1		(
03-Jun-06 20:00:00	84.2	386	502	857 857	0		
03-Jun-06 21:00:00	84.3	389		857			(
03-Jun-06 22:00:00	84.2	390	504 510		0		(
03-Jun-06 23:00:00	84.0	349	396	855 856	\		(
04-Jun-06 00:00:00	83.9	361	457	857	0		. (
04-Jun-06 01:00:00	83.7	304	402	856	<u> </u>		(
04-Jun-06 02:00:00	83.7	243	337	856			(
04-Jun-06 03:00:00	83.6	210	216	857	0		(
04-Jun-06 04:00:00	83.7	178	190	857			(
04-Jun-06 05:00:00	83.6	144	158	856			(
04-Jun-06 06:00:00	83.1	157	175	856	 		
04-Jun-06 07:00:00	82.9	160	174	857	·		(
04-Jun-06 08:00:00	82.9	263	300	856			(
04-Jun-06 09:00:00	82.8	322	375	854			
04-Jun-06 10:00:00	83.0	356	481	857			
04-Jun-06 11:00:00	83.1	391	508	858	 		
04-Jun-06 12:00:00	83.4	387	502	859			
04-Jun-06 13:00:00	83.7	389	502	858			
04-Jun-06 14:00:00	84.1	383	505	857			
04-Jun-06 15:00:00	84.5	383	502	857			
04-Jun-06 16:00:00	84.7	384	504	856			
04-Jun-06 17:00:00	84.9	382	502	857			
04-Jun-06 18:00:00	85.0	382	507	857			
04-Jun-06 19:00:00	85.3	384	501	856			
04-Jun-06 20:00:00	85.1	386	509	855			
04-Jun-06 21:00:00	84.9	384	498	855			
04-Jun-06 22:00:00	84.7	381	505	856	 		
04-Jun-06 23:00:00	84.6	332	296	857			
05-Jun-06 00:00:00	84.5	306	255	856			
05-Jun-06 01:00:00	84.3	217	238	856		 	
05-Jun-06 02:00:00	84.1	125	220	855			
05-Jun-06 03:00:00	83.9	121	220				
05-Jun-06 04:00:00	83.7	121		855			
00-00H-00 04.00.00	03./	121	140 140	855 855			(

							. <u> </u>
	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	<u>wers</u>	
						-	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
05-Jun-06 06:00:00	83.4	238	245	856	0	0	
05-Jun-06 07:00:00	83.4	311	287	858	0	0	
05-Jun-06 08:00:00	83.4	380	320	858	0	0	
05-Jun-06 09:00:00	83.5	373	279	856	0	0	
05-Jun-06 10:00:00	83.5	382	253	855	0	0	
05-Jun-06 11:00:00	83.6	381	255	856	0	0	
05-Jun-06 12:00:00	83.8	379	307	857	0	0	
05-Jun-06 13:00:00	84.2	379	275	857	0		
05-Jun-06 14:00:00	 	379	361	857	0		
05-Jun-06 15:00:00	·	384	482	857	0		
05-Jun-06 16:00:00		385	500	856	0		
05-Jun-06 17:00:00	85.5	381	502	854	0		
05-Jun-06 18:00:00	85.1	386	490	856			
05-Jun-06 19:00:00	85.0	384	496	855	0		
05-Jun-06 20:00:00	85.1	388	506	855	0		
05-Jun-06 21:00:00	85.3	379	499	855			<u> </u>
05-Jun-06 22:00:00	85.2	385	500	855	0		
05-Jun-06 23:00:00	85.1	383	454	855	0		1
06-Jun-06 00:00:00	85.1	377	296	855	0		
06-Jun-06 01:00:00	84.8	292	281	855			
06-Jun-06 02:00:00	84.7	215	195	855			
06-Jun-06 03:00:00	84.6	156	141	855	<u> </u>		
06-Jun-06 04:00:00	84.4	122	142	853			
06-Jun-06 05:00:00	84.3	151	171	857	d		
06-Jun-06 06:00:00		208	232	856			
06-Jun-06 07:00:00		219	219	858			
06-Jun-06 08:00:00		290	290	859			
06-Jun-06 09:00:00		321	295	855			
06-Jun-06 10:00:00		392	297	851			
06-Jun-06 11:00:00		392	297	851			
06-Jun-06 12:00:00		390	295	856	<u> </u>		
06-Jun-06 13:00:00		394	301	855	 		
06-Jun-06 14:00:00		387	317	858			
06-Jun-06 15:00:00		390	454	858			
06-Jun-06 16:00:00		389	500	856			
06-Jun-06 17:00:00	 	391	500	855			
06-Jun-06 18:00:00		390	509	855			
06-Jun-06 19:00:00		390	496	857			
06-Jun-06 20:00:00		391	500	856			
06-Jun-06 21:00:00		388	508	854			
06-Jun-06 22:00:00	 	385	508	854 854			
	 	385					
06-Jun-06 23:00:00			502	855			
07-Jun-06 00:00:00		200	500	856			
07-Jun-06 01:00:00		203	448	857			
07-Jun-06 02:00:00			366	856			
07-Jun-06 03:00:00		126	312	855			
07-Jun-06 04:00:00	84.1	125	278	854	()

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Progress Energy Florida
Witness: Thomas Lawery
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	<u>⊏xpectec</u>	<u>I CR-1&</u> 2	<u> 2 Derate</u>	s w/o Mo	odular Cooling To	<u>wers</u>	
MOTA	1.000						
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
07-Jun-06 05:00:00	84.0	127	239	855	0		
07-Jun-06 06:00:00	83.9	127	231	854	0		
07-Jun-06 07:00:00	83.7	143	244	856	0		
07-Jun-06 08:00:00		237	400	857	0		
07-Jun-06 09:00:00		332	490	857	0		
07-Jun-06 10:00:00		379	493	858			
07-Jun-06 11:00:00		382	497	858			
07-Jun-06 12:00:00		381	495	857	0		
07-Jun-06 13:00:00		380	499	857	0		
07-Jun-06 14:00:00	<u> </u>	385	494	857	0		
07-Jun-06 15:00:00		381	498	857	0		
07-Jun-06 16:00:00		385	492	857	0		
07-Jun-06 17:00:00		387	495	857	0		
07-Jun-06 18:00:00		383	490	856			
07-Jun-06 19:00:00		379	494	858	 		
07-Jun-06 20:00:00		385	497	858			
07-Jun-06 21:00:00		382	496	856			
07-Jun-06 22:00:00		382	496	855			
07-Jun-06 23:00:00		315	494	854			
08-Jun-06 00:00:00		203	494	855	<u> </u>		
08-Jun-06 01:00:00		258	199	856			
08-Jun-06 02:00:00		293	201	855			
08-Jun-06 03:00:00		279	201	855			
08-Jun-06 04:00:00		268	200	855			
08-Jun-06 05:00:00		202	199	855			
08-Jun-06 06:00:00		226	200	857	C		
08-Jun-06 07:00:00	 	221	200	856			
08-Jun-06 08:00:00		298	200	857			<u> </u>
08-Jun-06 09:00:00		384	199	857	C		
08-Jun-06 10:00:00		388	200	857			
08-Jun-06 11:00:00	·	388	200	857			ļ
08-Jun-06 12:00:00		390	200	857			
08-Jun-06 13:00:00		389	199	857	C		
08-Jun-06 14:00:00		394	200	857			
08-Jun-06 15:00:00		384	200	856			
08-Jun-06 16:00:00		388	199	855			
08-Jun-06 17:00:00		389	200	855			
08-Jun-06 18:00:00		388	201	856			
08-Jun-06 19:00:00		388	198	858	<u> </u>		
08-Jun-06 20:00:00		389	199	859			
08-Jun-06 21:00:00		387	199	855			
08-Jun-06 22:00:00		389	199	856	C		
08-Jun-06 23:00:00	84.7	352	201	856	C	C	
09-Jun-06 00:00:00	84.7	199	201	857	C	C	
09-Jun-06 01:00:00	84.6	202	200	856	C) C	
09-Jun-06 02:00:00	84.4	203	200	855			
09-Jun-06 03:00:00		202	203	854			

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	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	wers	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet		ļ		Total Expected	_	Gross
	Temp.		ļ		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
09-Jun-06 04:00:00	84.4	121	139	856	0		(
09-Jun-06 05:00:00	84.3	121	142	858	0		(
09-Jun-06 06:00:00	84.2	204	207	857	0		(
09-Jun-06 07:00:00	84.1	202	200	856	0		(
09-Jun-06 08:00:00	84.2	202	201	856	0	0	(
09-Jun-06 09:00:00		202	200	857	0	0	
09-Jun-06 10:00:00	84.3	316	200	857	0	0	
09-Jun-06 11:00:00	84.4	383	198	854	0	0	
09-Jun-06 12:00:00		384	202	859	0		
09-Jun-06 13:00:00		383	199	857	0		
09-Jun-06 14:00:00	84.7	383	201	856	0	0	
09-Jun-06 15:00:00	85.0	383	. 199	857	0		
09-Jun-06 16:00:00	85.2	385	189	857	0		
09-Jun-06 17:00:00	85.7	384	195	856	0		
09-Jun-06 18:00:00	85.5	384	434	855	0	0	
09-Jun-06 19:00:00	85.6	383	498	855	0	0	
09-Jun-06 20:00:00	85.5	387	502	855	0	0	
09-Jun-06 21:00:00	85.4	384	502	855			
09-Jun-06 22:00:00	85.3	382	501	841	0		
09-Jun-06 23:00:00		385	498	854	0		
10-Jun-06 00:00:00	85.5	383	501	853			
10-Jun-06 01:00:00	85.4	353	442	852			
10-Jun-06 02:00:00	85.4	243	336	852			
10-Jun-06 03:00:00	85.4	174	209	852			
10-Jun-06 04:00:00	85.4	128	148	852			
10-Jun-06 05:00:00	85.2	130	150	853			
10-Jun-06 06:00:00	85.1	137	155	853			
10-Jun-06 07:00:00	85.0	131	148	853			
10-Jun-06 08:00:00	85.0	209	237	852	0	0	
10-Jun-06 09:00:00	85.1	306	299	853	0		
10-Jun-06 10:00:00	85.3	383	486	854			
10-Jun-06 11:00:00	85.3	387	496	855	0	0	
10-Jun-06 12:00:00	85.4	388	495	854	0	0	(
10-Jun-06 13:00:00	85.7	383	495	855	0	0	
10-Jun-06 14:00:00	85.8	388	493	856	C	0	(
10-Jun-06 15:00:00	85.9	392	494	855	0	0	
10-Jun-06 16:00:00		390	498	854	C		
10-Jun-06 17:00:00	86.0	389	495	854	0	0	
10-Jun-06 18:00:00		389	494	853	0	0	
10-Jun-06 19:00:00	86.5	390	488	852			
10-Jun-06 20:00:00	86.3	390	498	852			
10-Jun-06 21:00:00	86.2	390	496	853			
10-Jun-06 22:00:00		384	496	853			
10-Jun-06 23:00:00		389	497	853			
11-Jun-06 00:00:00		390	493	854			
11-Jun-06 01:00:00		289	388	854			
11-Jun-06 02:00:00		185	203				

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	Expected	ICR-1&2	2 Derate	<u>s w/o M</u>	odular Cooling To	wers	
MOT Ave Davies	1.000						
MCT Aux Power =	1,969						l
		1.11	1 (3 (3.4.0	20 200	Totals	1 05 00 4
	Inlat	Unit	Loads (M	W)	26,338	414	25,924
	inlet	1			Total Expected	A street Dansta	Gross
Data & Time	Temp.		CD C	00.0	Derate w/o Modular	Actual Derate	Avoided
Date & Time 11-Jun-06 03:00:00	(deg F) 86.7	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
11-Jun-06 04:00:00	86.7	120	173 139	852	0	0	
11-Jun-06 05:00:00	86.5	132	140	852 853	0	 	
11-Jun-06 06:00:00	86.4	121	110	853	0		
11-Jun-06 07:00:00	86.3	121	91	852	0		
11-Jun-06 08:00:00	86.2	240	0	852	0		
11-Jun-06 09:00:00	86.2	288	0	851	0		
11-Jun-06 10:00:00	86.3	376	0	851	0		
11-Jun-06 11:00:00	86.4	386	0	851	0		
11-Jun-06 12:00:00	86.3	393	0	853	0		
11-Jun-06 13:00:00	86.3	388	0	854	0		
11-Jun-06 14:00:00	86.7	384	0	854	0		
11-Jun-06 15:00:00	86.6	383	0	854	0		
11-Jun-06 16:00:00	86.1	387	0	854	0	0	
11-Jun-06 17:00:00	86.1	383	0	854	0	0	
11-Jun-06 18:00:00	86.0	384	0	854	0	0	
11-Jun-06 19:00:00	86.0	386	0	854	0	0	
11-Jun-06 20:00:00	85.9	383	0	854	0	0	
11-Jun-06 21:00:00	85.9	386	0	854	0	0	
11-Jun-06 22:00:00	85.8	248	0	855	0		
11-Jun-06 23:00:00	85.7	263	0	855	0		
12-Jun-06 00:00:00	85.7	198	0	853	0		
12-Jun-06 01:00:00	85.6	121	0	854	0		
12-Jun-06 02:00:00	85.4	122	0	854	0		
12-Jun-06 03:00:00	85.2	121	0	852	0		
12-Jun-06 04:00:00	85.4	122	0	852	0		
12-Jun-06 05:00:00	85.4	121	0	852			
12-Jun-06 06:00:00 12-Jun-06 07:00:00	85.4 85.5	137 218	0	852			·
12-Jun-06 08:00:00	85.5	344	0	853 852			
12-Jun-06 09:00:00	85.5	286	0	853			
12-Jun-06 10:00:00	85.8	333		853			
12-Jun-06 11:00:00	85.7	351	0	854			
12-Jun-06 12:00:00	85.4	333	0	855			
12-Jun-06 13:00:00	85.1	276	0	855			
12-Jun-06 14:00:00	84.9	225	0	854	0		
12-Jun-06 15:00:00	84.6	222	0	854			
12-Jun-06 16:00:00	84.3	237	0	854	0		
12-Jun-06 17:00:00	84.3	308	0	854	Ö		
12-Jun-06 18:00:00	84.2	304	0	856		 	
12-Jun-06 19:00:00	84.1	304	0	857	0		
12-Jun-06 20:00:00	84.0	269	0	856			
12-Jun-06 21:00:00	83.8	341	0	858			
12-Jun-06 22:00:00	83.5	282	0	857	0		
12-Jun-06 23:00:00	83.1	385	0	857	0		
13-Jun-06 00:00:00	83.0	328	0	857	0		<u>, </u>
13-Jun-06 01:00:00	82.8	242	0	856			

	Expected	CB-1&	2 Derates	s w/o Me	odular Cooling To	vers	
	<u> </u>	i Oit Ta	_ Dorato.	J 10/ O 1010	Sadial Cooling To	1010	
MCT Aux Power =	1,969						
, <u></u>						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet		1		Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MV
13-Jun-06 02:00:00		171	0	857	0	0	
13-Jun-06 03:00:00		126	0	859	0	0	
13-Jun-06 04:00:00		149	0	859	0	0	
13-Jun-06 05:00:00		260	0	858	0	0	
13-Jun-06 06:00:00		348	0	858	0		
13-Jun-06 07:00:00		337	0	857	0		
13-Jun-06 08:00:00		372	0	859	0		
13-Jun-06 09:00:00		374	0	860	0		
13-Jun-06 10:00:00		370	0	861	0	 	
13-Jun-06 11:00:00		367	0	861	0	0	
13-Jun-06 12:00:00		371	0	860	0	0	
13-Jun-06 13:00:00		373	0	860	0		
13-Jun-06 14:00:00		376	0	861	0		
13-Jun-06 15:00:00		378	0	861	0		
13-Jun-06 16:00:00		360	0	860	0		
13-Jun-06 17:00:00		375	0	862	0		
13-Jun-06 18:00:00	 	372	0	861	0		
13-Jun-06 19:00:00		372	0	862	0		
13-Jun-06 20:00:00		378	0	861	0		
13-Jun-06 21:00:00		375	0	861	0		
13-Jun-06 22:00:00		357	0	863			
13-Jun-06 23:00:00		359	0	862			
14-Jun-06 00:00:00		364	0	861	0		
14-Jun-06 01:00:00		364	0	861	0		
14-Jun-06 02:00:00		328	0	860			
14-Jun-06 03:00:00		306	0	860			
14-Jun-06 04:00:00		344	0	861	0	0	
14-Jun-06 05:00:00	 	337	0	861			
14-Jun-06 06:00:00		369	0	863			
14-Jun-06 07:00:00	 	361	0	862			
14-Jun-06 08:00:00		363	0	862			
14-Jun-06 09:00:00		362	0	862			
14-Jun-06 10:00:00		370	0	862			
14-Jun-06 11:00:00		370	0	862	<u> </u>		
14-Jun-06 12:00:00		327	0	862			
14-Jun-06 13:00:00		369	0	860			
14-Jun-06 14:00:00		367	. 0	861			
14-Jun-06 15:00:00		304	0	862			
14-Jun-06 16:00:00		304	0	862			
14-Jun-06 17:00:00		363	0	861			
14-Jun-06 18:00:00		361	0	861			
14-Jun-06 19:00:00		376	0	860			
14-Jun-06 20:00:00		386	0	860	0	0	
14-Jun-06 21:00:00	81.1	387	0	861	0	0	
14-Jun-06 22:00:00	81.2	362	0	859	0	0	
14-Jun-06 23:00:00		363	0	859			
15-Jun-06 00:00:00	80.5	357	0	859			

							Page 24 of
	Expected	CR-1&	2 Derate	s w/o Mo	odular Cooling To	wers	
	1 222						
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MV
15-Jun-06 01:00:00	80.7	356	0	860	0		
15-Jun-06 02:00:00		359	0	859	0		
15-Jun-06 03:00:00	81.4	338	0	858	0		
15-Jun-06 04:00:00		275	0	859	0		
15-Jun-06 05:00:00		223	0	858			
15-Jun-06 06:00:00		320	0	858			
15-Jun-06 07:00:00		285	0	859			
15-Jun-06 08:00:00		331	0	860			
15-Jun-06 09:00:00		358	0	861	0		
15-Jun-06 10:00:00		358	0	860			
15-Jun-06 11:00:00		353	0	862			
15-Jun-06 12:00:00		355	0	861	0		
15-Jun-06 13:00:00		361	0	861	0		
15-Jun-06 14:00:00		367	0	860			
15-Jun-06 15:00:00		368	0	860	0		
15-Jun-06 16:00:00		369	0	860	0		
15-Jun-06 17:00:00	82.6	358	32	860			
15-Jun-06 18:00:00		356	80	860	0		
15-Jun-06 19:00:00		359	230	860	0		
15-Jun-06 20:00:00		358	301	860	0		
15-Jun-06 21:00:00	82.8	360	363	859			
15-Jun-06 22:00:00		358	321	859	0		
15-Jun-06 23:00:00		356	336	860	0		
16-Jun-06 00:00:00		358	301	860			
16-Jun-06 01:00:00		363	379	859			
16-Jun-06 02:00:00		317	343	857	0		
16-Jun-06 03:00:00		201	204	858			
16-Jun-06 04:00:00		129	157	858			
16-Jun-06 05:00:00		121	142	856			
16-Jun-06 06:00:00		200	218	857			
16-Jun-06 07:00:00		225	253	857	1		
16-Jun-06 08:00:00		321	412	858			
16-Jun-06 09:00:00		338	463	858			
16-Jun-06 10:00:00		352	479	857			
16-Jun-06 11:00:00		358	483	858			
16-Jun-06 12:00:00		358	479	858			
16-Jun-06 13:00:00		362	371	858	0		
16-Jun-06 14:00:00	83.2	365	366	856	0		
16-Jun-06 15:00:00		364	368	854	0		
16-Jun-06 16:00:00		363	362	857	0	0	
16-Jun-06 17:00:00	84.0	364	370	857	0		
16-Jun-06 18:00:00	83.6	366	368	858	0	0	
16-Jun-06 19:00:00	83.7	365	377	859	0	0	
16-Jun-06 20:00:00	83.7	369	382	857	0		
16-Jun-06 21:00:00	83.6	369	375	857	0		
16-Jun-06 22:00:00	83.5	368	376	857			
16-Jun-06 23:00:00	83.2	369	375	858			

	_				·		Fage 25 01 4
	Expected	CR-1&2	2 Derates	s w/o Mo	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	· · · · · · · · · · · · · · · · · · ·
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.		İ		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
17-Jun-06 00:00:00	83.2	370	377	857	0	0	(
17-Jun-06 01:00:00	83.1	368	378	855	0	0	(
17-Jun-06 02:00:00	83.1	300	299	857	0	0	
17-Jun-06 03:00:00	83.1	207	289	857	0		
17-Jun-06 04:00:00	83.2	136	273	857	0		
17-Jun-06 05:00:00	83.1	136	142	842	0		
17-Jun-06 06:00:00	83.0	123	167	858	0	0	(
17-Jun-06 07:00:00	83.0	122	156	857	0	0	(
17-Jun-06 08:00:00	83.2	184	213	856	0		
17-Jun-06 09:00:00	83.2	261	291	856	0	0	(
17-Jun-06 10:00:00	83.2	351	304	857	0		
17-Jun-06 11:00:00	83.3	378	299	858	0		
17-Jun-06 12:00:00	83.4	379	300	858	0		
17-Jun-06 13:00:00	83.5	379	299	858	0		
17-Jun-06 14:00:00	83.4	375	298	859			
17-Jun-06 15:00:00	83.5	377	301	858	0		
17-Jun-06 16:00:00	83.6	376	299	858			
17-Jun-06 17:00:00	83.7	378	301	859			
17-Jun-06 18:00:00	83.5	376	299	859	<u> </u>		
17-Jun-06 19:00:00	83.6	380	300	859			
17-Jun-06 20:00:00	83.5	380	301	859	<u> </u>		
17-Jun-06 21:00:00	83.5	380	300	858			
17-Jun-06 22:00:00	83.3	371	296	858			
17-Jun-06 23:00:00	83.2	328	237	859			
18-Jun-06 00:00:00	83.1	259	227	856			
18-Jun-06 01:00:00	83.1	215	142	855			
18-Jun-06 02:00:00	83.1	121	142	855			
18-Jun-06 03:00:00	83.0	121	142	855	1		
18-Jun-06 04:00:00	83.0	121	142	855	 		
18-Jun-06 05:00:00		138	156	856			
18-Jun-06 06:00:00	82.7	129	147	856			
18-Jun-06 07:00:00	82.6	137	156	856			· · · · · · · ·
18-Jun-06 08:00:00	82.2	196	213	856			
18-Jun-06 09:00:00	82.3	280	264	857	0		
18-Jun-06 10:00:00	82.4	293	271	858			
18-Jun-06 11:00:00		319	314	858			
18-Jun-06 12:00:00		375	410	857			
18-Jun-06 13:00:00	82.7	375	467	858			
18-Jun-06 14:00:00	82.7	284	507	858			
18-Jun-06 15:00:00		324	506	859			
18-Jun-06 16:00:00	82.7	343	511	859			
18-Jun-06 17:00:00	82.8	362	502	858			
18-Jun-06 18:00:00	82.8	286	507	858) (
18-Jun-06 19:00:00	82.7	387	507	859	0		
18-Jun-06 20:00:00	82.8	380	505	858	0	C	
18-Jun-06 21:00:00	82.8	385	490	859	0	0	
18-Jun-06 22:00:00	82.7	310	394	856	0	C	

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							Page 26 of 47
	Expected	CR-1&	2 Derate	s w/o Me	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	
**************************************		Uni	t Loads (N	1W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
18-Jun-06 23:00:00	82.6	283	386	856		0	
19-Jun-06 00:00:00	82.5	209	378	856	0	0	
19-Jun-06 01:00:00	82.4	120	150	856	0	0	
19-Jun-06 02:00:00	82.4	123	0	856		0	
19-Jun-06 03:00:00	82.5	157	0	855	0	0	
19-Jun-06 04:00:00	82.4	197	0	855	0	0	
19-Jun-06 05:00:00	82.3	122	22	856	0	0	
19-Jun-06 06:00:00	82.0	178	47	857	0	0	
19-Jun-06 07:00:00	81.9	188	92	857	0	. 0	
19-Jun-06 08:00:00	81.8	285	140	860	0	0	
19-Jun-06 09:00:00	81.9	385	212	860	0	0	
19-Jun-06 10:00:00	81.9	386	256	861	0	0	
19-Jun-06 11:00:00	82.0	384	394	858	0	0	
19-Jun-06 12:00:00	82.3	387	492	859	0	0	
19-Jun-06 13:00:00	82.8	388	501	859	0	0	
19-Jun-06 14:00:00	82.9	383	499	859	0	0	
19-Jun-06 15:00:00	83.2	385	490	858		0	
19-Jun-06 16:00:00	83.6	385	491	857	0	0	
19-Jun-06 17:00:00	83.9	385	505	856	0	0	
19-Jun-06 18:00:00	84.5	383	501	856		0	
19-Jun-06 19:00:00	84.4	384	504	856	0	0	
19-Jun-06 20:00:00	84.3	386	504	856	0		
19-Jun-06 21:00:00	84.3	384	505	856	0		
19-Jun-06 22:00:00	83.9	381	502	856	0		
19-Jun-06 23:00:00	83.5	253	489	857	0		
20-Jun-06 00:00:00	83.3	220	433	856		0	
20-Jun-06 01:00:00	83.2	167	299	856			
20-Jun-06 02:00:00	83.2	126	152		· · · · · · · · · · · · · · · · · · ·		
20-Jun-06 03:00:00	83.1	134	166	856		0	
20-Jun-06 04:00:00	83.1	128	156	855			
20-Jun-06 05:00:00	83.1	120	234	855			
20-Jun-06 06:00:00	83.1	156	237	855	L		
20-Jun-06 07:00:00	83.2	121	319	855			
20-Jun-06 08:00:00	83.0	224	382	856	0	0	
20-Jun-06 09:00:00	83.1	304	499	856	0	0	
20-Jun-06 10:00:00	83.4	382	499	857	0	0	
20-Jun-06 11:00:00	83.9	372	500	857	0	0	
20-Jun-06 12:00:00	83.9	378	502	858	0	0	
20-Jun-06 13:00:00	84.1	380	500	857	0	0	
20-Jun-06 14:00:00	84.7	_378	500	856	0	0	
20-Jun-06 15:00:00	84.8	380	499	855	0	0	
20-Jun-06 16:00:00	85.1	378	498	855	0	0	
20-Jun-06 17:00:00	85.3	378	498	855	0	0	
20-Jun-06 18:00:00	85.6	382	499	854	0		
20-Jun-06 19:00:00	85.9	377	503	854			(
20-Jun-06 20:00:00	85.9	381	501	855			
20-Jun-06_21:00:00	86.1	378	503	855		0	(

			···				Page 2/ 01 4
	Expected	1 CR-1&	2 Derate	<u>s w/o Mo</u>	odular Cooling To	wers	
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	
20-Jun-06 22:00:00		378	498	855			Derate (MW
20-Jun-06 23:00:00		380	427		0	0	
21-Jun-06 00:00:00				855	0	0	
		378	380	856	0	0	
21-Jun-06 01:00:00		343	380	856	0	0	
21-Jun-06 02:00:00		249	225	854	0	0	
21-Jun-06 03:00:00		170	155	855	0	0	
21-Jun-06 04:00:00		127	153	855	0	0	
21-Jun-06 05:00:00		165	190	855	0	0	
21-Jun-06 06:00:00		221	239	856	0	0	
21-Jun-06 07:00:00	85.0	236	244	854	0	0	
21-Jun-06 08:00:00	85.0	358	374	855	0	0	
21-Jun-06 09:00:00	84.9	382	380	855	0	0	
21-Jun-06 10:00:00	85.1	383	380	853	0	0	
21-Jun-06 11:00:00	85.3	384	381	854	0	0	
21-Jun-06 12:00:00	85.4	380	382	855	0	0	
21-Jun-06 13:00:00	85.7	382	391	855	0	0	
21-Jun-06 14:00:00	85.8	383	385	855	0	Ō	
21-Jun-06 15:00:00	86.0	382	410	855	0	0	
21-Jun-06 16:00:00	86.4	382	496	855	0	ő	
21-Jun-06 17:00:00	86.8	383	507	853	0	0	
21-Jun-06 18:00:00	87.1	385	504	853	0	0	
21-Jun-06 19:00:00	87.1	382	507	853	0	0	
21-Jun-06 20:00:00	87.1	384	504	853	0	0	
21-Jun-06 21:00:00	87.0	382	504	865	0		
21-Jun-06 22:00:00	87.3	382	500			0	
21-Jun-06 23:00:00	87.2	261		852	0	0	
			499	852	0	0	
22-Jun-06 00:00:00	86.9	251	504	852	0	0	
22-Jun-06 01:00:00	86.8	254	508	852	0		
22-Jun-06 02:00:00	86.8	223	495	852	0	0	
22-Jun-06 03:00:00	86.7	121	369	853	0	0	
22-Jun-06 04:00:00	86.6	123	190	853	0	0	
22-Jun-06 05:00:00	86.6	133	161	851	0	0	
22-Jun-06 06:00:00	86.5	240	257	832	0	0	
22-Jun-06 07:00:00	86.5	252	326	852	0	0	
22-Jun-06 08:00:00	86.6	285	394	852	0	0	
22-Jun-06 09:00:00	86.5	376	488	853	0	0	
22-Jun-06 10:00:00	86.4	381	513	853	0	0	
22-Jun-06 11:00:00	86.6	386	504	854	0	0	
22-Jun-06 12:00:00	86.8	384	509	854	0	0	
22-Jun-06 13:00:00	86.8	385	509	853	0	0	(
22-Jun-06 14:00:00	86.9	383	523	852	0	0	
22-Jun-06 15:00:00	86.9	385	512				(
22-Jun-06 16:00:00	87.0	382		854	0	0	(
22-Jun-06 17:00:00			507	852	0	0	(
	87.3	386	509	852	0	0	(
22-Jun-06 18:00:00	87.4	383	508	852	0	0	
22-Jun-06 19:00:00	87.5	385	489	850	0	0	
22-Jun-06 20:00:00	87.6	385	512	851	0	0.	C

Progress Energy Florida
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	Evacated	CD 190	Dorotos	14/0 NA	dular Cooling To		age 28 01 47
	Expected	CH-1&Z	Derates	W/O IVIC	odular Cooling Tov	Vers	
MCT Aux Power =	1 969				· · · · · · · · · · · · · · · · · · ·		
WOT AUX TOWET =	1,000					Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet	T	1		Total Expected		Gross
	Temp.		1		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
22-Jun-06 21:00:00	87.8	377	503	852	0	0	C
22-Jun-06 22:00:00	87.8	377	507	851	0	0	C
22-Jun-06 23:00:00	87.9	254	498	848	0	0	(
23-Jun-06 00:00:00		230	508	849	0	0	(
23-Jun-06 01:00:00		229	502	851	0		(
23-Jun-06 02:00:00		226	452	850	0		(
23-Jun-06 03:00:00		227	251	851	0		
23-Jun-06 04:00:00		227	142	851	0		(
23-Jun-06 05:00:00		227	142	851	0		
23-Jun-06 06:00:00		227	168	852			
23-Jun-06 07:00:00		225	180	852			
23-Jun-06 08:00:00		333	263	850		0	
23-Jun-06 09:00:00		381	448	850		0	
23-Jun-06 10:00:00		384	505	853		0	
23-Jun-06 11:00:00		369	510	854		0)
23-Jun-06 12:00:00		384	505	853		2	
23-Jun-06 13:00:00		385	507	853		3 0	
23-Jun-06 14:00:00		381	512	847		L C	
23-Jun-06 15:00:00		385	510	852		C	5
23-Jun-06 16:00:00		385	510	852		(
23-Jun-06 17:00:00		388	501	851		2 (
23-Jun-06 18:00:00		386	497	851	44		
23-Jun-06 19:00:00		385	497	850	35		
23-Jun-06 20:00:00		383	500	849	26		2
23-Jun-06 21:00:00		363	501	850	16) 1
23-Jun-06 22:00:00		377	498	851			0
23-Jun-06 23:00:00		382	501	851			0
24-Jun-06 00:00:00		360	495	85) (0
24-Jun-06 01:00:00		337	449	850			0
24-Jun-06 02:00:00		202	308	850		0	0
24-Jun-06 03:00:00				850			0
24-Jun-06 04:00:00					9		0
24-Jun-06 05:00:00					3		0
24-Jun-06 06:00:00				85	2	0	0
24-Jun-06 07:00:00				85	2	0	0
24-Jun-06 08:00:00				85	2	0	0
24-Jun-06 09:00:00						0	0
24-Jun-06 10:00:0						0	0
24-Jun-06 11:00:0					1	0	0
24-Jun-06 12:00:0							0
24-Jun-06 13:00:0							0
24-Jun-06 14:00:0							0
24-Jun-06 15:00:0							0
24-Jun-06 16:00:0						· · · · · · · · · · · · · · · · · · ·	0
24-Jun-06 17:00:0							0
24-Jun-06 18:00:0							0 4
24-Jun-06 19:00:0							0 2

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	Evportor	1 CD 19	2 Doroto	2 m/2 M	adular Caalina Ta		Page 29 01 47
	Expedied	JUN-IA	z Derate	S W/O IVIO	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1.060			····			
IVICT AUX FOWEI =	1,509					T-1-I-	
			1 1 2 2 d 2 (147	00.000	Totals	05.004
	Inlet	Uni	t Loads (M	VV)	26,338	414	25,924
	Temp.				Total Expected	A short Dansta	Gross
Date & Time		CD 4	CD C	00.0	Derate w/o Modular	Actual Derate	Avoided
	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
24-Jun-06 20:00:00 24-Jun-06 21:00:00	87.3 87.4	353 378	507	851	8	0	8
24-Jun-06 22:00:00	87.4	364	508	851	0	0	9
24-Jun-06 23:00:00	87.2	321	504 482	851 851	0	0	C
25-Jun-06 00:00:00	87.2	284	381	851	0	0	
25-Jun-06 01:00:00	87.0	197	278	850	0	0	
25-Jun-06 02:00:00	86.9	120	226	850	0	0	
25-Jun-06 03:00:00	86.8	126	172	851	0	0	
25-Jun-06 04:00:00	86.7	123	142	851	0	0	
25-Jun-06 05:00:00	86.7	124	147	852	0	0	
25-Jun-06 06:00:00	86.7	136	159	850	0		
25-Jun-06 07:00:00	86.6	130	150	851	0	0	
25-Jun-06 08:00:00	86.6	219	223	852	0		
25-Jun-06 09:00:00	86.6	301	301	852	0		(
25-Jun-06 10:00:00	86.6	378	343	853	0	0	
25-Jun-06 11:00:00	86.6	382	509	853	0	0	
25-Jun-06 12:00:00	86.5	383	502	853	0	0	
25-Jun-06 13:00:00	86.4	379	503	853	0	0	0
25-Jun-06 14:00:00	86.3	387	506	853	0	0	0
25-Jun-06 15:00:00	86.5	385	511	853	0	0	0
25-Jun-06 16:00:00	86.4	384	501	854	0	0	0
25-Jun-06 17:00:00	86.5	370	510	848	0		
25-Jun-06 18:00:00	86.5	292	434	853	0		(
25-Jun-06 19:00:00	86.5	223	310	852	0	Ö	(
25-Jun-06 20:00:00	86.5	240	309	852	0	Ö	
25-Jun-06 21:00:00	86.4	263	328	852	0	Ö	
25-Jun-06 22:00:00	86.4	282	352	852	0	Ö	
25-Jun-06 23:00:00	86.4	292	373	850	0	0	
26-Jun-06 00:00:00	86.3	176	241	851	0	0	
26-Jun-06 01:00:00	86.2	120	140	852	0		
26-Jun-06 02:00:00	86.0	121	142	851	0	0	
26-Jun-06 03:00:00	85.9	123	146	853	0		
26-Jun-06 04:00:00	85.7	127	148	854	0		
26-Jun-06 05:00:00	85.7	138	159	853	0		
26-Jun-06 06:00:00	85.7	183	206	852	0	0	
26-Jun-06 07:00:00	85.7	191	209	853	0	0	
26-Jun-06 08:00:00	85.6	211	295	855	0	0	
26-Jun-06 09:00:00	85.7	260	390	868	0	0	0
26-Jun-06 10:00:00	85.7	288	433	852	0	Ö	0
26-Jun-06 11:00:00	85.7	374	489	852	0	ő	0
26-Jun-06 12:00:00	85.8	339	445	854	0	Ö	0
26-Jun-06 13:00:00	85.8	380	509	854	0	0	0
26-Jun-06 14:00:00	85.7	384	510	855	0	0	0
26-Jun-06 15:00:00	85.7	384	506	856		0	0
26-Jun-06 16:00:00	85.5	382	510	853	0	0	0
26-Jun-06 17:00:00	85.4	381	508	852	0	0	
26-Jun-06 18:00:00	85.5	320	511	855	0	0	0
20 0011 00 10.00.00	00.0	020	311	000		U	

	Evportod	CD 100	Doroto	/- NA	adulas Caalina Ta		Page 30 of 47
	Expected	CH- IA	z Derate:	S W/O IVI	odular Cooling To	wers	
MCT Aux Power =	1.969						
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
26-Jun-06 19:00:00	85.5	305	501	855	0	1	
26-Jun-06 20:00:00	85.6	232	352	854	0		
26-Jun-06 21:00:00	85.5	307	381	854	0		
26-Jun-06 22:00:00	85.5	295	361	851	0		
26-Jun-06 23:00:00	85.5	259	326	850	0	 	
27-Jun-06 00:00:00	85.6	232	263	851	0		
27-Jun-06 01:00:00	85.6	222	223	851	0		
27-Jun-06 02:00:00	85.3	187	191	853	0		
27-Jun-06 03:00:00	84.9	162	166	853	0	· · · · · · · · · · · · · · · · · · ·	
27-Jun-06 04:00:00	84.7	128	142	854	0	0	(
27-Jun-06 05:00:00	84.5	130	148	854	0	0	(
27-Jun-06 06:00:00	84.5	190	215	855	0	0	(
27-Jun-06 07:00:00	84.6	242	248	855	0	0	(
27-Jun-06 08:00:00	84.6	314	329	855	0	0	(
27-Jun-06 09:00:00	84.7	336	388	854	0	0	(
27-Jun-06 10:00:00	84.9	355	417	854	0	0	(
27-Jun-06 11:00:00	85.1	386	505	857	0	0	
27-Jun-06 12:00:00	85.4	389	509	855	0	0	
27-Jun-06 13:00:00	85.6	393	509	854	0		
27-Jun-06 14:00:00	85.8	382	459	853	0		
27-Jun-06 15:00:00	86.0	251	493	853	0		
27-Jun-06 16:00:00	86.0	242	496	854	0		
27-Jun-06 17:00:00	86.1	219	494	853	0		
27-Jun-06 18:00:00	86.1	202	494	853	0		1
27-Jun-06 19:00:00	86.0	208	501	853	0		
27-Jun-06 20:00:00	85.9	215	500	855	0		
27-Jun-06 21:00:00	85.8	241	498	854	0		
27-Jun-06 22:00:00	85.7	252	498	854		 	
27-Jun-06 23:00:00	85.6	253	505	853		<u> </u>	L
28-Jun-06 00:00:00	85.6	251	298	853			
28-Jun-06 01:00:00	85.7	126	200	852			
28-Jun-06 02:00:00	85.9	121	177	852	0		
28-Jun-06 03:00:00	86.0	120	138	851	0		
28-Jun-06 04:00:00	86.0	128	143	851	0		
28-Jun-06 05:00:00	86.0	130	139	853			
28-Jun-06 06:00:00	85.9	184	141	853			
28-Jun-06 07:00:00	86.0	231	151	853	0		
28-Jun-06 08:00:00	86.0	283	360	854	0		
28-Jun-06 09:00:00	86.0	351	496	853	0		
28-Jun-06 10:00:00	86.1	376	502	852	0		
28-Jun-06 11:00:00	86.1	383	503	853	0		
28-Jun-06 12:00:00	86.3	384	500	854	0		
28-Jun-06 13:00:00	86.7	384	501	853	0		
28-Jun-06 14:00:00	87.3	381	506	853	0		
28-Jun-06 15:00:00	87.0	382	505	853	0		
28-Jun-06 16:00:00	87.1	385	504	852	0	0	
28-Jun-06 17:00:00	87.2	381	505	855	0	0	

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					·		Page 31 of 47
	Expected	I CR-1&2	2 Derate:	<u>s w/o M</u>	odular Cooling To	wers	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				-	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
28-Jun-06 18:00:00	87.2	384	503	853	0	·	Doi ato (MIV)
28-Jun-06 19:00:00	87.1	385	501	851	0		
28-Jun-06 20:00:00	87.0	383	501	829	0		
28-Jun-06 21:00:00	86.2	383	504	867	0		
28-Jun-06 22:00:00	86.7	363	459	850	0		
28-Jun-06 23:00:00	86.5	328	405	851	0		
29-Jun-06 00:00:00	86.4	271	265	851	0		(
29-Jun-06 01:00:00	86.6	312	283	852	0		
29-Jun-06 02:00:00	86.7	314	283	851	0		
29-Jun-06 03:00:00	87.0	291	257	851			
29-Jun-06 04:00:00	87.2	157	223	848	0		(
29-Jun-06 05:00:00	87.4	195	247	849	0		
29-Jun-06 06:00:00	87.4	281					
	87.1		219	850	0		(
29-Jun-06 07:00:00		353	295	851	0		(
29-Jun-06 08:00:00	87.2	310	391	857	0		(
29-Jun-06 09:00:00	87.2	380	503	850	0	+	0
29-Jun-06 10:00:00	87.2	383	499	853	0		C
29-Jun-06 11:00:00	87.1	385	508	853	0		C
29-Jun-06 12:00:00	87.3	385	507	852	0		C
29-Jun-06 13:00:00	87.6	385	501	851	0		(
29-Jun-06 14:00:00	88.2	386	507	849	0		
29-Jun-06 15:00:00	88.6	386	505	849	0		C
29-Jun-06 16:00:00	88.3	388	498	849	4		4
29-Jun-06 17:00:00	88.4	389	509	848	19		
29-Jun-06 18:00:00	88.4	386	508	851	33		
29-Jun-06 19:00:00	88.0	387	506	851	17		
29-Jun-06 20:00:00	87.9	389	503	851	0	0	C
29-Jun-06 21:00:00	87.7	385	508	850			
29-Jun-06 22:00:00	87.7	386	506	850			
29-Jun-06 23:00:00	87.6	338	460	848			
30-Jun-06 00:00:00	87.7	319	289	850			
30-Jun-06 01:00:00	87.8	339	262	850			
30-Jun-06 02:00:00	87.6	382	219	852			
30-Jun-06 03:00:00	87.6	362	173	849			
30-Jun-06 04:00:00	87.7	194	171	849			C
30-Jun-06 05:00:00	87.9	204	178	850	0	0	C
30-Jun-06 06:00:00	88.0	227	148	850	0	0	C
30-Jun-06 07:00:00	88.0	263	142	849	0	0	C
30-Jun-06 08:00:00	88.0	280	294	849	0		
30-Jun-06 09:00:00	88.0	372	424	849	0		C
30-Jun-06 10:00:00	88.0	384	504	849			
30-Jun-06 11:00:00	88.0	383	506	849	21	0	
30-Jun-06 12:00:00	87.9	380	510	850	21		
30-Jun-06 13:00:00	88.1	381	497	850 850	22		
30-Jun-06 14:00:00	88.2	385	507	850	22		
30-Jun-06 15:00:00	88.3	384	505	850	23		
30-Jun-06 16:00:00	88.3	387	505				
30-3411-00 10.00.00	00.0	30/	505	849	23	0	23

F							Page 32 01 4/
	Expected	I CR-1&2	2 Derates	<u>s w/o Mo</u>	odular Cooling To	wer <u>s</u>	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet			••/-	Total Expected		Gross
	Temp.	ľ			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
30-Jun-06 17:00:00	88.2	386	508	849	23		
30-Jun-06 18:00:00	88.1	382	507	850	24		
30-Jun-06 19:00:00	88.1	383	497	850	14		
30-Jun-06 20:00:00	88.1	388	504	849	0		
30-Jun-06 21:00:00	88.0	382	512	848	0		
30-Jun-06 22:00:00	88.0	384	505	849			
30-Jun-06 23:00:00	87.9	317	508	850	0		
01-Jul-06 00:00:00	87.9	212	509	849	0		
01-Jul-06 01:00:00	87.8	210	378	849	0		
01-Jul-06 02:00:00 01-Jul-06 03:00:00	87.7 87.6	212	382	848	0		
		214	338	848	0		
01-Jul-06 04:00:00	87.3 87.3	211	344	848			
01-Jul-06 05:00:00		212	375	848			
01-Jul-06 06:00:00	87.3	214	387	850	0		
01-Jul-06 07:00:00	87.5	213	388	849			
01-Jul-06 08:00:00	87.5	279	483	848			
01-Jul-06 09:00:00	87.6	373	502	850			
01-Jul-06 10:00:00	87.6	381	501	850			
01-Jul-06 11:00:00	87.7	381	507	850			
01-Jul-06 12:00:00	87.7	384	507	850			
01-Jul-06 13:00:00	87.7	377	509	850			
01-Jul-06 14:00:00	87.7	383	504	851	0		
01-Jul-06 15:00:00	87.9	389	511	850			
01-Jul-06 16:00:00	87.9	387	500	849			
01-Jul-06 17:00:00	88.1	387	509	849			
01-Jul-06 18:00:00	87.8	390	508	849			
01-Jul-06 19:00:00	87.7	387	498	850		·	·
01-Jul-06 20:00:00	87.6	386	502	850			
01-Jul-06 21:00:00	87.6	386	500	850			
01-Jul-06 22:00:00	87.5	387	502	849			
01-Jul-06 23:00:00	87.4	388	504	851			
02-Jul-06 00:00:00	87.4	389	498	849			
02-Jul-06 01:00:00	87.3	390	503	847			
02-Jul-06 02:00:00	87.2	347	481	848			
02-Jul-06 03:00:00	87.1	355	487	850			
02-Jul-06 04:00:00	86.8	304	431	851			
02-Jul-06 05:00:00	86.7	279	407	850			
02-Jul-06 06:00:00	86.7	276	407	850			
02-Jul-06 07:00:00	86.9	222	341	851			
02-Jul-06 08:00:00	87.0	280	449	850			
02-Jul-06 09:00:00	86.9	338	474	849			
02-Jul-06 10:00:00	86.9	381	512	850	C	(
02-Jul-06 11:00:00	86.9	383	513	852			
02-Jul-06 12:00:00	86.9	385	517	853			
02-Jul-06 13:00:00	86.8	390	525	853			
02-Jul-06 14:00:00	86.9	390	523	853			
02-Jul-06 15:00:00	87.0	389	514	853			
02-001-00 10.00.00	07.0	309	314	000	1	<u> </u>	1

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Witness: Thomas Lawery
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	Expected	CR-1&	2 Derate	s w/o M	odular Cooling To	wers	Page 33 of
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
D	Temp.					Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
02-Jul-06 16:00:00	87.2	390	516	852	0		
02-Jul-06 17:00:00	87.4	388	518	852	0		
02-Jul-06 18:00:00	87.3	391	515	852	0		
02-Jul-06 19:00:00	87.2	389	511	852	0		
02-Jul-06 20:00:00	87.1	388	482	852	0		
02-Jul-06 21:00:00	87.0	384	489	852	0		
02-Jul-06 22:00:00	86.8	385	481	852	0		
02-Jul-06 23:00:00	86.9	298	398	850	0		
03-Jul-06 00:00:00	86.7	175	258	850	0		
03-Jul-06 01:00:00	86.6	132	167	851	0		
03-Jul-06 02:00:00	86.5	130	149	852	0		
03-Jul-06 03:00:00	86.5	139	158	851	0		
03-Jul-06 04:00:00	86.4	139	159	850	0		
03-Jul-06 05:00:00	86.3	148	171	850	0		
03-Jul-06 06:00:00	86.1	176	205	851	0		
03-Jul-06 07:00:00	86.1	123	143	852	0		
03-Jul-06 08:00:00	86.2	215	229	851	0		
03-Jul-06 09:00:00	86.3	289	358	850	0		
03-Jul-06 10:00:00	86.3	385	492	848	0		
03-Jul-06 11:00:00	86.5	388	509	848	0		
03-Jul-06 12:00:00 03-Jul-06 13:00:00	86.5 86.6	387 386	507	849	0		
03-Jul-06 14:00:00	86.7	388	506	850	0		
03-Jul-06 15:00:00	87.0	389	506	852	0		
03-Jul-06 16:00:00	87.5	388	511	853	0		
03-Jul-06 17:00:00	88.2	389	504 495	852	0		
03-Jul-06 18:00:00	88.1	390	501	852 851		4	
03-Jul-06 19:00:00	88.1	388	500	851	22		
03-Jul-06 20:00:00	87.8	385	509	647	45 54		
03-Jul-06 21:00:00	87.7	384	499	649	16		· · · · · · · · · · · · · · · · · · ·
03-Jul-06 22:00:00	87.6	387	504	646	0		
03-Jul-06 23:00:00	87.4	385	505	647	0		
04-Jul-06 00:00:00	87.5	355	460	648	0		
04-Jul-06 01:00:00	87.4	311	416	649			
04-Jul-06 02:00:00	87.3	236	357	648	0		
04-Jul-06 03:00:00	87.1	187	287	650	0		
04-Jul-06 04:00:00	87.2	148	251				
04-Jul-06 05:00:00	87.1	124		652	0		
04-Jul-06 06:00:00	87.1	136	228	652	0		
04-Jul-06 07:00:00			239	652	0		
04-Jul-06 08:00:00	86.9 86.8	120 211	222	652	0		
04-Jul-06 09:00:00	86.9		288	652	0		
		347	406	651	0		
04-Jul-06 10:00:00	87.0	387	494	652	0		
04-Jul-06 11:00:00	87.1	384	501	654	0		
04-Jul-06 12:00:00	87.3	384	501	651	0		
04-Jul-06 13:00:00	87.4	383	502	651	6		
04-Jul-06 14:00:00	87.7	383	501	651	20	0	

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	Expected	CR-1&	2 Derate	<u>s w/o M</u>	odular Cooling To	wers	
MCT Aux Power =	1,969						_
						Totals	
		Uni	Loads (M	W)	26,338	414	25,924
	Inlet		``		Total Expected		Gross
	Temp.	ļ			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
04-Jul-06 15:00:00	88.0	383	503	650		0	34
04-Jul-06 16:00:00	87.9	383	503	651	49	0	49
04-Jul-06 17:00:00	88.0	383	500	651	63	0	63
04-Jul-06 18:00:00	88.2	385	497	651	77	0	77
04-Jul-06 19:00:00	88.4	383	499	651	68	0	68
04-Jul-06 20:00:00	88.3	381	500	651	46	Ö	46
04-Jul-06 21:00:00	88.2	388	495	652		Ö	24
04-Jul-06 22:00:00	88.1	386	500	655		0	2
04-Jul-06 23:00:00	87.9	383	503	655		Ö	0
05-Jul-06 00:00:00	87.9	255	487	655			
05-Jul-06 01:00:00	87.9	122	391	655	<u> </u>		0
05-Jul-06 02:00:00	87.9	123	253	652			0
05-Jul-06 03:00:00	87.9	124	152	652			0
05-Jul-06 04:00:00	88.6	123	151	652			·
05-Jul-06 05:00:00	88.2	123	151	653			
05-Jul-06 06:00:00	88.2	124	168	654			
05-Jul-06 07:00:00	87.9	163	223	655			
05-Jul-06 08:00:00	87.8	282	358	656			
05-Jul-06 09:00:00	87.8	372	506	652	·		
05-Jul-06 10:00:00	87.8	388	449	652	1		
05-Jul-06 10:00:00	87.9	386	449				
05-Jul-06 11:00:00	87.7	386	498	652 657			
05-Jul-06 13:00:00			501		1 –		
05-Jul-06 14:00:00	87.7	385		701	<u> </u>		·
05-Jul-06 15:00:00	87.9	388	494	744	1		
05-Jul-06 16:00:00	88.0	389	501	750			
	88.2	389	498	765			
05-Jul-06 17:00:00	88.2	389	498	784			
05-Jul-06 18:00:00	88.3	389	503	803			
05-Jul-06 19:00:00	88.6	389	501	823			
05-Jul-06 20:00:00	88.6	387	507	843			
05-Jul-06 21:00:00	88.4	390	499	849			
05-Jul-06 22:00:00	88.3	390	495	850	 		
05-Jul-06 23:00:00	88.2	389	505	850			
06-Jul-06 00:00:00	88.2	300	503	849			
06-Jul-06 01:00:00	88.2	291	505	850			
06-Jul-06 02:00:00	88.2	287	460	849			
06-Jul-06 03:00:00	88.1	147	322	850			
06-Jul-06 04:00:00	88.1	118	144	851			
06-Jul-06 05:00:00	88.0	121	141	851	the same of the sa		
06-Jul-06 06:00:00	88.0	187	209	851	1		
06-Jul-06 07:00:00	87.8	252	314	852			
06-Jul-06 08:00:00	87.8	361	469	852	0	0	0
06-Jul-06 09:00:00	87.6	370	496	853	0	0	0
06-Jul-06 10:00:00	87.7	371	499	852	0	0	
06-Jul-06 11:00:00	87.5	375	498	853			
06-Jul-06 12:00:00	87.5	392	45	852			
06-Jul-06 13:00:00	87.9	390	0	851			

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	_	<u> </u>					rage 35 01 47
	<u> </u>	<u>CR-1&</u> 2	2 Derates	s w/o Mo	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.					Actual Derate	Avoided
Date & Time	(deg F)	CR1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
06-Jul-06 14:00:00	87.9	385	0	852	0		(
06-Jul-06 15:00:00	88.0	385	ō	850	0	0	
06-Jul-06 16:00:00		385	0	851	0	0	
06-Jul-06 17:00:00		382	0	850	0	0	
06-Jul-06 18:00:00		383	0	852	0		
06-Jul-06 19:00:00	88.1	374	0	851	0		
06-Jul-06 20:00:00		383	0	852	0		
06-Jul-06 21:00:00	87.7	378	1	853	0		
					1		
06-Jul-06 22:00:00	87.4	249	0	854	0		
06-Jul-06 23:00:00	87.3	359	0	852	0		
07-Jul-06 00:00:00		302	0	851	0		
07-Jul-06 01:00:00	87.3	302	0	852	0		
07-Jul-06 02:00:00	87.7	195	0	852			
07-Jul-06 03:00:00	87.7	124	0	852			
07-Jul-06 04:00:00	87.8	131	0	852	0		
07-Jul-06 05:00:00		132	0	852	0		The second secon
07-Jul-06 06:00:00	87.9	241	0	852	0		
07-Jul-06 07:00:00		281	0	852	0		
07-Jul-06 08:00:00		346	0	852			·
07-Jul-06 09:00:00		320	0	854			
07-Jul-06 10:00:00	87.8	359	0	855			
07-Jul-06 11:00:00	87.2	366	0	855			
07-Jul-06 12:00:00	86.8	366	0	854			
07-Jul-06 13:00:00	86.9	367	0	854			
07-Jul-06 14:00:00	87.2	368	0	854			
07-Jul-06 15:00:00	87.2	301	0	852			
07-Jul-06 16:00:00	87.3	354	0	852			
07-Jul-06 17:00:00		354	0	852			
07-Jul-06 18:00:00		354	0	852	<u> </u>		
07-Jul-06 19:00:00	86.9	351	0	851	L		
07-Jul-06 20:00:00	86.7	352	0	851	0		
07-Jul-06 21:00:00	86.6	353	0	851	0	C	
07-Jul-06 22:00:00	86.0	354	0	851			
07-Jul-06 23:00:00		300	0	852			
08-Jul-06 00:00:00	 	287	1	852			
08-Jul-06 01:00:00		200	0	853		· 	
08-Jul-06 02:00:00		128	Ō	853			
08-Jul-06 03:00:00		126	0	853			
08-Jul-06 04:00:00		131	0	853			
08-Jul-06 05:00:00		141	0	853			
08-Jul-06 06:00:00		178	0	852			
08-Jul-06 07:00:00		207		852			
			0				
08-Jul-06 08:00:00		277	0	851			
08-Jul-06 09:00:00		355	0	850			
08-Jul-06 10:00:00		363	0	854			
08-Jul-06 11:00:00		359	0	856	· · · · · · · · · · · · · · · · · · ·		
08-Jul-06 12:00:00	85.5	365	0	857	0	C)

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							Page 36 of 4'
	Expected	CR-1&2	2 Derate	s w/o Mo	odular Cooling To	wers	
MOTA	1.000		-				
MCT Aux Power =	1,969						
						Totals	
	1	Unit	Loads (M	W)	26,338	414	25,924
	Inlet	}		!	Total Expected	. .	Gross
D	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
08-Jul-06 13:00:00	85.7	363	· 0	856	0	0	
08-Jul-06 14:00:00	85.8	303	0	854	0	0	
08-Jul-06 15:00:00	85.8	232	0	854	0	0	
08-Jul-06 16:00:00	85.7	354	0	853	0	0	
08-Jul-06 17:00:00	85.7	353	0	853	0	0	
08-Jul-06 18:00:00 08-Jul-06 19:00:00	85.7 85.7	353 326	0	854	0	0	
08-Jul-06 20:00:00	85.7	351	0	854	0	0	
08-Jul-06 21:00:00	85.7	291	0	854	0	0	
08-Jul-06 22:00:00	85.9	281	0 0	854 854	0	. 0	
08-Jul-06 23:00:00	86.0	323	0	854 854	0	0	
09-Jul-06 00:00:00	86.0	216	0	854 854	0)
09-Jul-06 01:00:00	85.9	171	0	854 854	0		
09-Jul-06 02:00:00	85.8	122	0	853		0	
09-Jul-06 03:00:00	85.7	122	0	853	0	0	
09-Jul-06 04:00:00	85.5	129	0	853	0	0	
09-Jul-06 05:00:00	85.4	137	0	852	0	0	
09-Jul-06 06:00:00	85.4	142	0	852	0	0	
09-Jul-06 07:00:00	85.3	145	0	853		0	
09-Jul-06 08:00:00	85.3	253	0	853	0	0	
09-Jul-06 09:00:00	85.3	282	0	855	0	0	
09-Jul-06 10:00:00	85.2	264	0	855	0		
09-Jul-06 11:00:00	85.1	343	27	854	0		
09-Jul-06 12:00:00	85.0	365	60	855	0		
09-Jui-06 13:00:00	85.0	362	114	856	0	0	
09-Jul-06 14:00:00	85.1	374	167	856	0		
09-Jul-06 15:00:00	85.2	384	263	855	0		
09-Jul-06 16:00:00	85.4	387	346	855			
09-Jul-06 17:00:00	85.7	384	399	854	0		
09-Jul-06 18:00:00	85.8	386	403	854	0	0	
09-Jul-06 19:00:00	85.9	385	411	856	0	0	
09-Jul-06 20:00:00	85.6	386	414	854	0	0	
09-Jul-06 21:00:00	85.6	388	510	853	0	0	
09-Jul-06 22:00:00	85.9	385	506	853	0	0	
09-Jul-06 23:00:00	85.9	222	509	852		0	
10-Jul-06 00:00:00	85.9	165	466	853		0	
10-Jul-06 01:00:00	85.8	121	365	853		0	
10-Jul-06 02:00:00	85.8	126	289	853			
10-Jul-06 03:00:00	85.7	126	240	852	0	0	
10-Jul-06 04:00:00	85.7	123	195	852	0	0	
10-Jul-06 05:00:00	85.5	133	205	853	0	0	
10-Jul-06 06:00:00	85.5	197	267	853	0	0	
10-Jul-06 07:00:00	85.4	219	351	854	0	0	
10-Jul-06 08:00:00	85.4	318	420	855	0	0	
10-Jul-06 09:00:00	85.4	360	484	856	0	0	
10-Jul-06 10:00:00	85.3	386	476	856		0	
10-Jul-06 11:00:00	85.4	386	507	856			

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Witness: Thomas Lawery
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			00 10					Page 37 of
		Expected	I CR-1&2	2 Derate:	<u>s w/o M</u>	odular Cooling To	wers	
	107.4							
	MCT Aux Power =	1,969						
							Totals	
			Unit	Loads (M	W)	26,338	414	25,924
		Inlet				Total Expected		Gross
		Temp.		1		Derate w/o Modular	Actual Derate	Avoided
	Date & Time	(deg F)	CR 1	CR 2	_CR 3	Towers (MW)	(MW)	Derate (MW
1	0-Jul-06 12:00:00	85.3	384	506	854	0	0	
1	0-Jul-06 13:00:00	85.2	380	505	857	0	0	
1	0-Jul-06 14:00:00	85.3	382	508	858	0	0	
1	0-Jul-06 15:00:00	85.4	384	507	857	0	0	
1	0-Jul-06 16:00:00	85.5	386	506	854	0	0	
1	0-Jul-06 17:00:00	85.6	385	512	854	0	0	
1	0-Jul-06 18:00:00	85.6	382	512	854	0	Ö	
1	0-Jul-06 19:00:00	85.6	383	505	855	0	0	
1	0-Jul-06 20:00:00	85.6	385	511	855	0	ő	
1	0-Jul-06 21:00:00	85.6	382	512	855	0	ō	
1	0-Jul-06 22:00:00	85.5	382	511	855	0		
1	0-Jul-06 23:00:00	85.6	383	361	853	0	0	
1	1-Jul-06 00:00:00	85.8	384	368	853	0	0	
1	1-Jul-06 01:00:00	86.0	317	379	855	0	0	
1	1-Jul-06 02:00:00	86.0	255	332	853	0	0	
1	1-Jul-06 03:00:00	85.9	199	256	852	0	0	
1	1-Jul-06 04:00:00	86.1	166	230	853	0	0	
1	1-Jul-06 05:00:00	85.9	197	240	848	0	0	
1	1-Jul-06 06:00:00	86.0	281	345	852	0	0	
1	1-Jul-06 07:00:00	86.0	244	342	853	0	0	
1	1-Jul-06 08:00:00	85.9	315	383	854	0	0	
	1-Jul-06 09:00:00	85.8	358	358	854	0	0	
_	1-Jul-06 10:00:00	85.9	374	481	854	0	0	
	1-Jul-06 11:00:00	85.9	387	507	856	0	0	
	1-Jul-06 12:00:00	85.9	386	518	856	0	0	
	1-Jul-06 13:00:00	86.0	389	520	855	0	0	
	1-Jul-06 14:00:00	86.2	391	514	855	0	0	(
1	1-Jul-06 15:00:00	86.4	386	513	854	0	0	
1	1-Jul-06 16:00:00	86.5	386	512	854	0	0	
1	1-Jul-06 17:00:00	86.5	390	508	854	0	0	
1	1-Jul-06 18:00:00	86.2	390	514	855	0	0	(
1	1-Jul-06 19:00:00	86.1	389	514	855	0	0	(
	1-Jul-06 20:00:00	86.0	389	512	855	0	0	(
_	1-Jul-06 21:00:00	85.9	390	512	855	0	0	(
	1-Jul-06 22:00:00	86.0	391	515	854	0	0	(
	1-Jul-06 23:00:00	86.1	242	476	852	0	0	(
	2-Jul-06 00:00:00	86.1	222	386	852	0	0	(
	2-Jul-06 01:00:00	86.0	124	200	856	0	0	(
1	2-Jul-06 02:00:00	86.0	126	143	859	0	0	(
1	2-Jul-06 03:00:00	86.0	126	143	856	0	0	(
	2-Jul-06 04:00:00	86.0	126	149	853	0	0	(
_ 1	2-Jul-06 05:00:00	85.8	126	169	851	0	0	
	2-Jul-06 06:00:00	85.8	154	231	853	0	Ö	
	2-Jul-06 07:00:00	85.6	189	324	853	0	Ö	
	2-Jul-06 08:00:00	86.0	314	380	853	0	0	(
	2-Jul-06 09:00:00	86.0	386	493	853	0	0	
		85.9	388	513	853	0	0	

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Witness: Thomas Lawery
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							Page 38 of
	Expected	CR-1&2	2 Derate:	s w/o Mo	odular Cooling To	wers	
							_
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.	1			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
12-Jul-06 11:00:00	86.0	388	512	853	0	 	
12-Jul-06 12:00:00	86.0	387	508	853	0	0	
12-Jul-06 13:00:00	86.1	389	508	854	0		
12-Jul-06 14:00:00	86.1	389	512	854	0		
12-Jul-06 15:00:00	86.2	388	512	854	0		
12-Jul-06 16:00:00		385	509	854	0		
12-Jul-06 17:00:00	86.0	389	504	855	0		
12-Jul-06 18:00:00	85.8	381	513	855	0		
12-Jul-06 19:00:00		385	509	855			
12-Jul-06 20:00:00	85.9	386	510	845	0		
12-Jul-06 21:00:00	85.7	378	496	855			
12-Jul-06 22:00:00	85.8	313	480	853			
12-Jul-06 23:00:00	85.8	378	485	854			
13-Jul-06 00:00:00	85.8	373	353	852	0		
13-Jul-06 01:00:00	85.8	260	231	851	0		
13-Jul-06 02:00:00	85.6	255	140	852			
13-Jul-06 03:00:00		217	142	854	0		
13-Jul-06 04:00:00	85.5	167	143	854	0		
13-Jul-06 05:00:00		175	151	854	0		
13-Jul-06 06:00:00	85.4	256	243	853			
13-Jul-06 07:00:00	85.4	221	223	853		·	<u> </u>
13-Jul-06 08:00:00	85.3	224	225	853		<u>,, </u>	
13-Jul-06 09:00:00	85.5	356	383	853			
13-Jul-06 10:00:00	85.4	294	415	854			
13-Jul-06 11:00:00		379	486	853			
13-Jul-06 12:00:00		384	492	<u>855</u>			
13-Jul-06 13:00:00	85.8	384	519	855			
13-Jul-06 14:00:00 13-Jul-06 15:00:00		384	514	855			
13-Jul-06 16:00:00		385	508	852			
		385	429	848			
13-Jul-06 17:00:00 13-Jul-06 18:00:00		385	494	854			
13-Jul-06 19:00:00		384	509	854			
		382	513	855			
13-Jul-06 20:00:00		384	488	856			
13-Jul-06 21:00:00		379	488	854			
13-Jul-06 22:00:00		362	465	854			
13-Jul-06 23:00:00		297	399	853			
14-Jul-06 00:00:00		279	224	853			
14-Jul-06 01:00:00		170	142	852			
14-Jul-06 02:00:00	84.6	130	144	851	0		
14-Jul-06 03:00:00	84.3	136	160	852			
14-Jul-06 04:00:00	84.3	127	151	851	0		
14-Jul-06 05:00:00	84.3	130	152	852			
14-Jul-06 06:00:00	84.6	150	172	852			
14-Jul-06 07:00:00	84.8	218	235	852			
14-Jul-06 08:00:00	85.9	317	322	852			
14-Jul-06 09:00:00	85.8	359	396	852	0	0	

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Witness: Thomas Lawery
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	Expected	CR-1&2	2 Derate:	s w/o Mo	odular Cooling To		Page 39 01 4/
MCT Aux Power =	1,969						
						Totals	
		Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.		1		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
14-Jul-06 10:00:00	86.0	380	487	854	0	0	
14-Jul-06 11:00:00	86.0	388	517	854	0	0	
14-Jul-06 12:00:00	86.1	387	509	854	0	0	
14-Jul-06 13:00:00	86.1	388	508	853	0	0	
14-Jul-06 14:00:00	86.4	388	508	854	0	0	
14-Jul-06 15:00:00		389	513	854	0	Ó	
14-Jul-06 16:00:00	86.6	390	508	853	0	0	
14-Jul-06 17:00:00		391	514	854	0		
14-Jul-06 18:00:00	86.4	388	510	855	0		
14-Jul-06 19:00:00	86.2	391	508	855	0		
14-Jul-06 20:00:00	86.3	388	515	855	0		
14-Jul-06 21:00:00	86.4	390	512	853	0	0	
14-Jul-06 22:00:00	86.3	390	516	853	0	0	
14-Jul-06 23:00:00	86.2	388	506	854	0	0	
15-Jul-06 00:00:00	86.1	389	511	854	0	0	
15-Jul-06 01:00:00	86.2	388	512	854	0	0	
15-Jul-06 02:00:00	86.3	388	517	853	0	0	
15-Jul-06 03:00:00	86.3	283	398	853	0	0	
15-Jul-06 04:00:00	86.3	219	218	853	0	0	
15-Jul-06 05:00:00	86.4	145	143	852	0	0	
15-Jul-06 06:00:00	86.5	145	141	851	0	0	
15-Jul-06 07:00:00	86.5	123	139	851	0	0	
15-Jul-06 08:00:00	86.5	231	242	851	0	ō	
15-Jul-06 09:00:00	86.6	322	362	852	0		
15-Jul-06 10:00:00	86.6	368	487	853	0		
15-Jul-06 11:00:00	86.7	382	497	854	0		
15-Jul-06 12:00:00	86.8	388	506	853			
15-Jul-06 13:00:00	87.1	388	514	852	0		
15-Jul-06 14:00:00	87.4	389	511	851	0		
15-Jul-06 15:00:00		387	513	852			4
15-Jul-06 16:00:00		388	514	852			
15-Jul-06 17:00:00		387	517	852			1
15-Jul-06 18:00:00		387	516	852			
15-Jul-06 19:00:00		388	514	851	0		
15-Jul-06 20:00:00		387	516	852	0		
15-Jul-06 21:00:00		387	512	852			
15-Jul-06 22:00:00	87.2	388	515	851	0		
15-Jul-06 23:00:00	87.0	391	514	850			
16-Jul-06 00:00:00	87.0	388	515	852			
16-Jul-06 01:00:00	86.9	388	489	851	0		
16-Jul-06 02:00:00	86.9	298	430	850			
16-Jul-06 03:00:00	86.9	173	150	851	0		
16-Jul-06 04:00:00	86.9	120	140	851			
16-Jul-06 05:00:00	87.2	129			0		
			147	852	0		
16-Jul-06 06:00:00	87.3	123	143	854	0		<u> </u>
16-Jul-06 07:00:00	87.4	120	143	854			
16-Jul-06 08:00:00	87.6	218	237	849	0	0	<u> </u>

		05.400					Page 40 01 4
	Expected	CR-1&2	<u> Derates</u>	s w/o Mo	odular Cooling To	<u>wers</u>	
							
MCT Aux Power =	1,969						
						Totals	
	\	Unit	Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
16-Jul-06 09:00:00	87.7	261	374	849	0	0	0
16-Jul-06 10:00:00	87.8	361	470	850	0	0	0
16-Jul-06 11:00:00	87.8	384	520	851	12	0	12
16-Jul-06 12:00:00	87.9	383	509	847	23	0	23
16-Jul-06 13:00:00	88.1	383	510	850	34	Ō	34
16-Jul-06 14:00:00	88.4	384	509	849	45	0	45
16-Jul-06 15:00:00	88.7	382	512	849	56	Ō	56
16-Jul-06 16:00:00	89.5	384	508	848	67	Ö	67
16-Jul-06 17:00:00	89.4	384	508	848		Ō	
16-Jul-06 18:00:00	89.2	382	512	848	89		
16-Jul-06 19:00:00	88.6	384	506	848	80		
16-Jul-06 20:00:00	88.8	383	512	848			·
16-Jul-06 21:00:00	88.7	382	507	862	0		
16-Jul-06 22:00:00	88.5	386	508	850	0		
16-Jul-06 23:00:00	88.2	296	508	849	0		
17-Jul-06 00:00:00	87.9	228	429	848			
17-Jul-06 01:00:00	87.8	210	369	847	0		
17-Jul-06 02:00:00	87.7	181	325	848			
17-Jul-06 02:00:00	87.7	128	237	849			
17-Jul-06 03:00:00	87.7	147	185	849			
17-Jul-06 04:00:00	87.7	196	237	847			
17-Jul-06 06:00:00	87.6	254	328	847	0		
17-Jul-06 07:00:00	87.6	220	251	848			
17-Jul-06 08:00:00	87.7	235	243	849	<u> </u>		
		324		849			
17-Jul-06 09:00:00	87.8	312	484 487	850			
17-Jul-06 10:00:00 17-Jul-06 11:00:00	87.8	312		851			
17-Jul-06 12:00:00	87.9 87.9	312	512 508	851			
17-Jul-06 13:00:00	87.9	312	512	851			
17-Jul-06 14:00:00	87.9	312	510	851			
17-Jul-06 15:00:00	88.0	346	513	849			
17-Jul-06 16:00:00	88.2	386	510	850			
17-Jul-06 17:00:00		372	519	850			
17-Jul-06 18:00:00	88.8	381	516	851			
17-Jul-06 19:00:00	88.5	384	513	851			
17-Jul-06 20:00:00	88.5	383	515	849			
17-Jul-06 21:00:00	88.2	385	511	851			
17-Jul-06 22:00:00	88.1	361	517	850			
17-Jul-06 23:00:00	88.0	375	397	850			
18-Jul-06 00:00:00	88.0	289	490				
18-Jul-06 01:00:00	87.8	180	404				
18-Jul-06 02:00:00	87.8	139	386	848			
18-Jul-06 03:00:00	87.7	120	219	847	C		
18-Jul-06 04:00:00	87.8	119	213	847) (
18-Jul-06 05:00:00		121	217	847			
18-Jul-06 06:00:00		126	286	848			
18-Jul-06 07:00:00		146	276				

	r						1 age 41 01 4
	Expected	I CR-1&	2 Derate:	s w/o Mo	odular Cooling To	wers	·
	1 000						
MCT Aux Power =	1,969						
		إبيا				Totals	
		Uni	l Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
18-Jul-06 08:00:00	87.3	125	231	850	0		
18-Jul-06 09:00:00	87.5	237	411	849	0	0	
18-Jul-06 10:00:00	87.6	367	488	850	0	0	
18-Jul-06 11:00:00	87.7	378	501	851	0	0	
18-Jul-06 12:00:00	87.8	387	500	852	0	0	-
18-Jul-06 13:00:00	87.8	385	504	852	19	0	
18-Jul-06 14:00:00	88.1	382	505	852	50		
18-Jul-06 15:00:00	88.3	391	504	850	81	0	
18-Jul-06 16:00:00	88.7	391	513	849		0	1
18-Jul-06 17:00:00	89.2	382	507	848	142		
18-Jul-06 18:00:00	89.3	384	512	848	173		1
18-Jul-06 19:00:00	89.5	383	509	848	159		
18-Jul-06 20:00:00	89.7	384	504	847	125	0	1.
18-Jul-06 21:00:00	89.4	382	514	847	96	0	
18-Jul-06 22:00:00	89.2	325	513	847	70	0	
18-Jul-06 23:00:00	88.9	380	419	848	47	0	
19-Jul-06 00:00:00	88.8	344	364	845	0	0	
19-Jul-06 01:00:00	88.8	355	288	844	0	0	
19-Jul-06 02:00:00	88.7	284	139	844	0	0	
19-Jul-06 03:00:00	88.6	190	141	844	0	0	
19-Jul-06 04:00:00	88.5	122	141	847	0	0	
19-Jul-06 05:00:00	88.6	131	151	846	0		
19-Jul-06 06:00:00	88.6	167	189	846	0	0	
19-Jul-06 07:00:00	88.5	152	207	847	0	0	
19-Jul-06 08:00:00	88.5	122	282	848	0	0	
19-Jul-06 09:00:00	88.4	305	413	848	0	0	
19-Jul-06 10:00:00	88.6	383	491	848	25		
19-Jul-06 11:00:00	88.7	389	504	848	90		
19-Jul-06 12:00:00	88.9	389	508	847	115	0	1
19-Jul-06 13:00:00	88.9	389	501	848	139	0	1
19-Jul-06 14:00:00	89.0	391	501	848	164		
19-Jul-06 15:00:00	89.1	389	504	847	189	0	1
19-Jul-06 16:00:00	89.4	383	503	847	213	0	2
19-Jul-06 17:00:00	89.8	387	498	846	238		
19-Jul-06 18:00:00	90.1	388	503	844	263	0	2
19-Jul-06 19:00:00	89.8	384	506	844	247	0	2
19-Jul-06 20:00:00	90.3	382	520	845	219	0	2
19-Jul-06 21:00:00	90.2	385	502	845	192	0	1
19-Jul-06 22:00:00	90.1	383	504	845	167	0	1
19-Jul-06 23:00:00	90.1	384	444	844	136		
20-Jul-06 00:00:00	90.0	373	381	824	48		
20-Jul-06 01:00:00	89.9	280	283	845	0		
20-Jul-06 02:00:00	89.8	137	139	844	0		
20-Jul-06 03:00:00	89.8	131	147	844	0		
20-Jul-06 04:00:00	89.7	122	143	843	0		
20-Jul-06 05:00:00	89.7	127	146	843	0		
20-Jul-06 06:00:00	89.5	153	169	845	0		

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	Expected	CR-1&2	2 Derate	s w/o M	odular Cooling To	wers	
MCT Aux Power =	1 060			· ·- ·· · · · · · · · · · · · · · · · ·			
WOT AUX FOWER =	1,303					Totals	l
		Unit	Loads (M	IW)	26,338	414	25,924
	inlet				Total Expected		Gross
	Temp.	ľ			Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
20-Jul-06 07:00:00	89.5	123	148	845	0	0	
20-Jul-06 08:00:00	89.4	134	229	845	0		
20-Jul-06 09:00:00	89.3	291	382	843	0	0	
20-Jul-06 10:00:00	89.2	384	496	843	26		
20-Jul-06 11:00:00	89.3	388	504	844	173		
20-Jul-06 12:00:00	89.6	387	502	845	183		
20-Jul-06 13:00:00	89.9	386	505	846			
20-Jul-06 14:00:00	90.1	386	506	848			
20-Jul-06 15:00:00	90.3	388	506	846	<u> </u>		
20-Jul-06 16:00:00	90.6	388	506	844		0	
20-Jul-06 17:00:00	90.5	340	492	843		104	
20-Jul-06 18:00:00	90.7	333	452	843	251	104	
20-Jul-06 19:00:00	90.6	364	495	844	268		
20-Jul-06 20:00:00	90.7	361 377	484	845	255	·	
20-Jul-06 21:00:00 20-Jul-06 22:00:00	90.5 90.5	377	508 506	844 844	235 215		
20-Jul-06 23:00:00	90.3	376	509	842	195		
21-Jul-06 00:00:00	90.2	378	512	844	176		
21-Jul-06 01:00:00	90.3	296	403	842	138		
21-Jul-06 02:00:00	90.1	214	212	842	0		
21-Jul-06 03:00:00	90.0	121	142	844	0		
21-Jul-06 04:00:00	89.8	121	141	844	0		
21-Jul-06 05:00:00	89.8	121	143	845	0		
21-Jul-06 06:00:00	89.7	168	194	844	0		
21-Jul-06 07:00:00	89.6	221	191	844	0		
21-Jul-06 08:00:00	89.5	366	352	847	0	0	
21-Jul-06 09:00:00	89.4	387	429	847	60	0	6
21-Jul-06 10:00:00	89.3	387	512	846	154		
21-Jul-06 11:00:00	89.2	388	501	847	172	<u> </u>	
21-Jul-06 12:00:00	89.1	388	504	848			
21-Jul-06 13:00:00	89.3	388	502	848			
21-Jul-06 14:00:00	89.4	387	502	848			
21-Jul-06 15:00:00	89.6	388	510	848			
21-Jul-06 16:00:00	89.8	387	507	845			
21-Jul-06 17:00:00	89.9	389	500	847	246		
21-Jul-06 18:00:00	89.9	391	503	848			
21-Jul-06 19:00:00	90.1	384	503	847	238		
21-Jul-06 20:00:00	90.2	387	502	846	215		
21-Jul-06 21:00:00	90.0	387	506	847	192		
21-Jul-06 22:00:00	90.0	388	502	846	174		
21-Jul-06 23:00:00	89.8	385	505	846	163		
22-Jul-06 00:00:00	89.7	388	510	845			
22-Jul-06 01:00:00	89.6	314	338	846	79		
22-Jul-06 02:00:00	89.6	218	246	843			
22-Jul-06 03:00:00	89.4	131	200	845	0		
22-Jul-06 04:00:00	89.4	130	201	845	0		
22-Jul-06 05:00:00	89.3	125	200	845	0	0	1

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	Expected	CR-1&	2 Derate	s w/o Mo	odular Cooling To	<u>wers</u>	
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (M	W)	26,338	414	25,924
	Inlet				Total Expected		Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
22-Jul-06 06:00:00	89.2	176	200	844	0	0	((((((((((((((((((((
22-Jul-06 07:00:00	89.2	125	201	844	0	0	
22-Jul-06 08:00:00	89.2	222	223	845	0	0	
22-Jul-06 09:00:00	89.2	330	381	846		0	
22-Jul-06 10:00:00	89.1	327	427	847	89	0	
22-Jul-06 11:00:00	89.0	383	511	850	100		
22-Jul-06 12:00:00	88.9	384	503	848	112		
22-Jul-06 13:00:00	88.8	387	503	849	124		
22-Jul-06 14:00:00	88.9	386	504	848	136		
22-Jul-06 15:00:00	89.0	384	508	851	148		
22-Jul-06 16:00:00	89.3	384	505	850	160		
22-Jul-06 17:00:00	89.4	385	498	850	172		
22-Jul-06 18:00:00	89.4	387	511	850 850	172		
22-Jul-06 19:00:00	89.5	386					
22-Jul-06 20:00:00	89.6		510	849	170		
22-Jul-06 21:00:00		386	500	848			
	89.8	385	504	847	157		
22-Jul-06 22:00:00	90.0	386	512	847	172		
22-Jul-06 23:00:00	89.8	386	505	848			
23-Jul-06 00:00:00	89.7	351	487	846			
23-Jul-06 01:00:00	89.6	220	297	846		0	
23-Jul-06 02:00:00	89.4	159	302	846			
23-Jul-06 03:00:00	89.4	137	201	844	0		
23-Jul-06 04:00:00	89.5	129	200	846			
23-Jul-06 05:00:00	89.4	170	201	845			
23-Jul-06 06:00:00	89.3	191	200	846			
23-Jul-06 07:00:00	89.2	164	200	847	0		
23-Jul-06 08:00:00	89.1	241	248	848			
23-Jul-06 09:00:00	89.2	375	425	849			
23-Jul-06 10:00:00	89.1	383	501	847	117		
23-Jul-06 11:00:00	89.0	384	503	848		The second secon	
23-Jul-06 12:00:00	89.0	383	501	849		0	
23-Jul-06 13:00:00	89.0	385	501	850			
23-Jul-06 14:00:00	89.0	386	505	850			
23-Jul-06 15:00:00	89.2	386	500	849			
23-Jul-06 16:00:00	89.4	386	502	847	189		
23-Jul-06 17:00:00	89.5	386	502	848			
23-Jul-06 18:00:00	89.5	385	502	848	187		
23-Jul-06 19:00:00	89.5	386	499	847	155	0	155
23-Jul-06 20:00:00	89.2	385	503	848	123	0	123
23-Jui-06 21:00:00	89.1	386	503	835	102	0	102
23-Jul-06 22:00:00	89.0	369	464	845	84	0	84
23-Jul-06 23:00:00	88.9	370	479	847	33	0	
24-Jul-06 00:00:00	88.9	374	316	848			
24-Jul-06 01:00:00	88.7	330	229	847		 	
24-Jul-06 02:00:00	88.5	195	231	847	0		
24-Jul-06 03:00:00	88.4	180	230	848			
24-Jul-06 04:00:00	88.5	168	230	847			

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	Expected	d CR-1&	2 Derate	s w/o M	odular Cooling To	wers	
107.4							
MCT Aux Power =	1,969						
						Totals	
		Uni	t Loads (N	1W)	26,338	414	25,924
	Inlet				Total Expected		Gross
Data & Time	Temp.		_		Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW
24-Jul-06 05:00:00	88.3	145	231	847	0	0	(
24-Jul-06 06:00:00	88.3	174	231	846	0	0	
24-Jul-06 07:00:00	88.3	120	240	847	0	0	
24-Jul-06 08:00:00	88.4	203	405	847	0	0	(
24-Jul-06 09:00:00	88.5	201	505	847	0	0	(
24-Jul-06 10:00:00	88.4	202	505	847	0	0	
24-Jul-06 11:00:00	88.3	339	494	850	0	0	
24-Jul-06 12:00:00	88.3	384	509	851	15	0	15
24-Jul-06 13:00:00	88.3	382	504	851	35	0	35
24-Jul-06 14:00:00	88.5	382	508	850	54	0	54
24-Jul-06 15:00:00	88.5	383	504	852	73	0	73
24-Jul-06 16:00:00	88.6	383	508	852	92	0	92
24-Jul-06 17:00:00	88.8	381	501	850	112	0	112
24-Jul-06 18:00:00	88.9	384	513	849	131	0	131
24-Jul-06 19:00:00	88.9	382	505	849	131	0	131
24-Jul-06 20:00:00	88.9	386	503	848	94	0	94
24-Jul-06 21:00:00 24-Jul-06 22:00:00	88.8	383	507	848	56	0	56
24-Jul-06 23:00:00	88.8	383	364	848	23	0	23
25-Jul-06 00:00:00	89.1 89.2	313	218	848	0	0	
25-Jul-06 01:00:00	89.2	285	222	848	0	0	C
25-Jul-06 02:00:00	89.0	322 279	217	849	0	0	C
25-Jul-06 03:00:00	88.9	208	206	848	0	0	
25-Jul-06 04:00:00	88.9	142	200	848	0	0	C
25-Jul-06 05:00:00	88.9	131	200	848	0	0	0
25-Jul-06 06:00:00	88.7	227	197	848	0	0	0
25-Jul-06 07:00:00	88.4	285	278	848	0	0	0
25-Jul-06 08:00:00	88.2	374		849	0	0	0
25-Jul-06 09:00:00	88.3	382	365 436	849	0	0	0
25-Jul-06 10:00:00	88.3	386	506	849	0	0	0
25-Jul-06 11:00:00	88.3	384	506		14	0	14
25-Jul-06 12:00:00	88.3	382	508	849 849	67	0	67
25-Jul-06 13:00:00	88.6	387	514	849	90	0	90
25-Jul-06 14:00:00	88.8	384	512	850	105 121	0	105
25-Jul-06 15:00:00	88.9	385	511	850	121	0	121
25-Jul-06 16:00:00	89.2	387	513	852	152	0	137
25-Jul-06 17:00:00	89.2	386	508	848	168	0	152
25-Jul-06 18:00:00	89.3	387	514	848	183	0	168
25-Jul-06 19:00:00	89.4	385	502	847		0	183
25-Jul-06 20:00:00	89.3	386	502	847	199	0	199
25-Jul-06 21:00:00	89.1	386	510	848	168	0	168
25-Jul-06 22:00:00	88.9	382	512	848	127	0	127
25-Jul-06 23:00:00	88.7	361	512	848	87	0	87
26-Jul-06 00:00:00	88.7	223	511	848	54	0	54
26-Jul-06 01:00:00	88.8	218	513	848	15	0	15
26-Jul-06 02:00:00	88.9	125	518	848	15	0	15
26-Jul-06 03:00:00	88.9	122	509	848	15	0	15
	- 55.5	122	209	040	7	0	7

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	Expected	I CR-1&	2 Derate	s w/o M	odular Cooling To	<u>wers</u>	
MOT A. W. Dawer	1.000						
MCT Aux Power =	1,969					Totala	
		Uni	t Loads (M	1).4/)	26,338	Totals 414	0E 004
	Inlet	UIII	LOAUS (IV	144)	Total Expected	414	25,924 Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
26-Jul-06 04:00:00	89.0	120	512	848	0		Derate (WW
26-Jul-06 05:00:00	89.1	120	510	847	0		
26-Jul-06 06:00:00	89.0	179	490	848	0	the second of th	
26-Jul-06 07:00:00	88.9	196	379	849	0	0	
26-Jul-06 08:00:00	88.8	213	458	850	57	Ö	
26-Jul-06 09:00:00	88.8	204	474	849	76	0	
26-Jul-06 10:00:00	88.8	211	520	850	97	0	
26-Jul-06 11:00:00	88.9	211	511	851	121	0	
26-Jul-06 12:00:00	88.9	385	422	851	0		
26-Jul-06 13:00:00	88.9	387	516	851	64	Ö	
26-Jul-06 14:00:00	89.1	384	516	850	58	Ö	
26-Jul-06 15:00:00	89.4	389	511	849	185		
26-Jul-06 16:00:00	89.4	387	514	849	184		184
26-Jul-06 17:00:00	89.5	388	517	848	183	0	18:
26-Jul-06 18:00:00	89.5	388	525	847	182		
26-Jul-06 19:00:00	89.6	386	516	848	181	0	
26-Jul-06 20:00:00	89.5	385	505	848	180	ō	
26-Jul-06 21:00:00	89.3	385	506	848	179	0	
26-Jul-06 22:00:00	89.2	385	514	849	178	ō	178
26-Jul-06 23:00:00	89.0	283	404	850	84	o	
27-Jul-06 00:00:00	88.9	205	403	850	0	ō	
27-Jul-06 01:00:00	89.0	201	251	849	0	0	
27-Jul-06 02:00:00	89.1	200	250	848	0	0	
27-Jul-06 03:00:00	89.2	142	250	848	0	0	
27-Jul-06 04:00:00	89.2	160	253	847	0	0	
27-Jul-06 05:00:00	89.3	155	247	846	0	0	
27-Jul-06 06:00:00	89.2	237	248	847	0	0	
27-Jul-06 07:00:00	89.1	280	364	848	0	0	
27-Jul-06 08:00:00	89.1	383	398	849	0	0	
27-Jul-06 09:00:00	89.2	383	399	849	26	0	2
27-Jul-06 10:00:00	89.1	384	408	849	47	0	4
27-Jul-06 11:00:00	89.0	384	398	849	67	0	6
27-Jul-06 12:00:00	89.2	385	407	850	88	0	88
27-Jul-06 13:00:00	89.5	382	481	851	108	0	10
27-Jul-06 14:00:00	89.3	382	502	852	129	0	12
27-Jul-06 15:00:00	89.4	382	502	846	149	0	14
27-Jul-06 16:00:00	89.3	383	502	850	170	0	170
27-Jul-06 17:00:00	89.3	380	503	849	164	0	164
27-Jul-06 18:00:00	89.4	385	502	848	150	0	150
27-Jul-06 19:00:00	89.4	383	504	847	137	0	13
27-Jul-06 20:00:00	89.5	382	506	847	123	0	123
27-Jul-06 21:00:00	89.3	382	503	847	110	0	110
27-Jul-06 22:00:00	89.2	383	505	846	96	0	90
27-Jul-06 23:00:00	89.0	237	501	847	75	0	7!
28-Jul-06 00:00:00	89.0	209	295	848	0	Ö	,
28-Jul-06 01:00:00	89.0	137	200	848	0	0	
28-Jul-06 02:00:00	88.9	134	199	848	0	Ō	

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	Turn a stand	100 40	~ ~				Page 46 of 47
	Expected	1 CH-1&	2 Derate	<u>s w/o M</u>	odular Cooling To	<u>wers</u>	
MCT Aux Power -	1.000						
MCT Aux Power =	1,969					L	
						Totals	
	11-1-1	Uni	t Loads (M	W)	26,338	414	25,924
Ì	Inlet				Total Expected	}	Gross
	Temp.				Derate w/o Modular	Actual Derate	Avoided
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)
28-Jul-06 03:00:00	88.8	120	200	852	0	0	
28-Jul-06 04:00:00	88.8	121	202	852	0		
28-Jul-06 05:00:00	88.9	126	201	848	0	0	
28-Jul-06 06:00:00	88.9	223	199	848	0		
28-Jul-06 07:00:00	88.9	246	232	848	0		(
28-Jul-06 08:00:00	89.0	222	215	848	0		(
28-Jul-06 09:00:00	89.0	315	256	848	0		(
28-Jul-06 10:00:00	89.1	310	260	848	0		(
28-Jul-06 11:00:00	89.1	311	260	849	0		(
28-Jul-06 12:00:00	89.3	313	258	849	0	0	(
28-Jul-06 13:00:00	89.5	310	261	848	13		13
28-Jul-06 14:00:00	89.5	311	262	848	28	0	28
28-Jul-06 15:00:00	89.7	355	259	848	43	0	43
28-Jul-06 16:00:00	89.5	384	259	848	57	. 0	57
28-Jul-06 17:00:00	89.5	387	259	848	66		66
28-Jul-06 18:00:00	89.4	385	262	848	68	0	68
28-Jul-06 19:00:00	89.4	387	258	841	71	0	71
28-Jul-06 20:00:00	89.2	384	257	826	74	0	74
28-Jul-06 21:00:00	89.2	384	259	849	77	0	77
28-Jul-06 22:00:00	89.1	384	260	848	79	0	79
28-Jul-06 23:00:00	89.1	386	260	849	82	0	82
29-Jul-06 00:00:00	89.0	389	262	849	85	0	85
29-Jul-06 01:00:00	89.1	361	259	849	45	0	45
29-Jul-06 02:00:00 29-Jul-06 03:00:00	88.8	221	260	848	0	0	0
29-Jul-06 04:00:00	88.8	146	258	847	0	0	0
29-Jul-06 05:00:00	88.7 88.8	124	259	847	0	0	0
29-Jul-06 06:00:00	89.0	120	258	847	0	0	0
29-Jul-06 07:00:00	89.1	154	261	847	0	0	
29-Jul-06 08:00:00	89.0	154 225	258	846	0	0	
29-Jul-06 09:00:00	89.0	302	260	847	0	0	C
29-Jul-06 10:00:00	89.1	376	260	849	35	0	35
29-Jul-06 11:00:00	89.1	388	260	850	53	0	53
29-Jul-06 12:00:00	89.1	388	260 258	850	59	0	59
29-Jul-06 13:00:00	89.2			851	66	0	66
29-Jul-06 14:00:00	89.5	388 387	259	850	72	0	72
29-Jul-06 15:00:00	89.7	387	261	851	78	0	78
29-Jul-06 16:00:00	89.7	385	260	850	85	0	85
29-Jul-06 17:00:00	89.6	384	260	850	91	0	91
29-Jul-06 18:00:00	89.6	388	260	849	98	0	98
29-Jul-06 19:00:00	89.6	388	260	848	98	0	98
29-Jul-06 20:00:00	89.5		260	848	96	0	96
29-Jul-06 21:00:00		388	260	848	94	0	94
	89.4	390	261	848	92	0	92
29-Jul-06 22:00:00	89.3	386	260	845	90	0	90
29-Jul-06 23:00:00	89.2	387	260	851	88	0	88
30-Jul-06 00:00:00	89.1	387	262	850	86	0	86
30-Jul-06 01:00:00	89.1	383	261	849	84	0	84

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							Page 47/ 01 4				
	Expected	Expected CR-1&2 Derates w/o Modular Cooling Towers									
MCT Aux Power =	1,969										
14101 71021 01101 -	1,000					Totals					
		Linit	t Loads (M	(///)	26,338	414	25,924				
	Inlet	0,,,,	LOGGO (IV	,	Total Expected	717	Gross				
	Temp.	1			Derate w/o Modular	Actual Derate	Avoided				
Date & Time	(deg F)	CR 1	CR 2	CR 3	Towers (MW)	(MW)	Derate (MW)				
30-Jul-06 02:00:00	89.1	287	262	848		0					
30-Jul-06 03:00:00	88.7	198	259	848							
30-Jul-06 04:00:00	88.6	118	260	848	1						
30-Jul-06 05:00:00	89.0	125	262	848							
30-Jul-06 06:00:00	89.0	138	260	848	l ·						
30-Jul-06 07:00:00	89.0	136	261	847							
30-Jul-06 08:00:00	89.1	235	259	847	0	0	C				
30-Jul-06 09:00:00	89.2	365	259	847	0	0					
30-Jul-06 10:00:00	89.2	384	260	846	24	. 0	24				
30-Jul-06 11:00:00	89.4	383	261	845	65	0					
30-Jul-06 12:00:00	89.5	383	259	849	67	0	67				
30-Jul-06 13:00:00	89.6	382	260	850	80						
30-Jul-06 14:00:00	89.8	383	258	849	81	0					
30-Jul-06 15:00:00	90.1	381	228	848	115	0	115				
30-Jul-06 16:00:00	90.3	381	359	848	150						
30-Jul-06 17:00:00	90.0	385	462	849	146						
30-Jul-06 18:00:00	89.7	382	471	850							
30-Jul-06 19:00:00	89.7	382	474	851	140	<u> </u>					
30-Jul-06 20:00:00	89.4	380	477	851	136						
30-Jul-06 21:00:00	89.3	384	476	851	133						
30-Jul-06 22:00:00	89.2	383	481	851	129						
30-Jul-06 23:00:00	89.1	374	479	851	126						
31-Jul-06 00:00:00	89.0	223	471	850	122	0	122				