BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 090505-EI

REVIEW OF REPLACEMENT FUEL COSTS ASSOCIATED WITH THE FEBRUARY 26, 2008 OUTAGE ON FLORIDA POWER & LIGHT'S ELECTRICAL SYSTEM.

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VOLUME 3

Pages 283 through 506

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PROCEEDINGS:	HEARING
COMMISSIONERS PARTICIPATING:	CHAIRMAN NANCY ARGENZIANO (via phone) COMMISSIONER LISA POLAK EDGAR COMMISSIONER NATHAN A. SKOP COMMISSIONER DAVID E. KLEMENT COMMISSIONER BEN A. "STEVE" STEVENS III
DATE:	Thursday, March 18, 2010
TIME:	Commenced at 9:30 a.m. Concluded at 12:35 p.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	LINDA BOLES, RPR, CRR JANE FAUROT, RPR Official FPSC Reporters 850-413-6734/850-413-6732
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
11	DED-1	302	399
12	DED-2	302	399
13	DED-3	302	399
14	DED-4	302	399
15	DED-5	302	399
16	DED-6	302	399
17	DED-7	302	399
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20	DED-10	302	399
21	DED-11	302	399
22	DED-12	302	399
23	GJY-10	441	460
24	GJY-11	441	460
25	GJY-12	441	460
39		359	400

P R O C E E D I N G S

(Transcript follows in sequence from Volume 2.)

COMMISSIONER SKOP: Good morning. I'd like to reconvene this hearing. And I believe Chairman Argenziano is joining us by phone. Can you hear us, Chairman Argenziano?

CHAIRMAN ARGENZIANO: Yes, I can. Thank you. Good morning.

COMMISSIONER SKOP: I hope you're feeling better.

Where we left off, Commissioners, yesterday, we had finished with the direct testimony of Dr. Avera, and I believe that leaves us one additional witness, Witness Keith. I think Commissioner Stevens had some additional questions that may require recalling a panel of witnesses, so we'll take it from there.

And just for planning purposes, I'm hopeful that we can break for lunch from 12:00 to 1:00 and conclude the hearing in a reasonable time in early afternoon. So with that, Mr. Butler, you're recognized to call your next witness.

MR. BUTLER: Thank you. Commissioner Skop, before we introduce Mr. Keith, I was going to make a brief statement about kind of the division between

Dr. Avera and Mr. Yupp on this question of the eight-hour system average calculation. It sounds like you may be envisioning a panel of them, in which case it will be moot. If you are going to do the panel, I won't bother you with the division of labor. If you are not planning on the panel but asking them separately, I'd like to make just a brief statement about the division between the two.

COMMISSIONER SKOP: You're recognized for the statement, and I'll yield to my colleagues as to whether they want to have a panel to ask their questions. But you're recognized.

MR. BUTLER: Thank you. Let me just briefly describe what, you know, how we intend that Dr. Avera's and Mr. Yupp's testimony divide that subject up.

Dr. Avera addresses questions about the policy rationale for FPL's use of system average rather than nuclear avoided cost. He can also address the rationale for limiting the calculation to the period following the Flagami transmission event when the transmission disturbance had significantly impacted FPL's ability to operate its generating system to meet customer load.

Mr. Yupp addresses questions about why eight hours is the proper measure of how long it took for FPL's generating system to stabilize operationally after

the Flagami transmission event, and he also addresses how FPL performed the system average calculation for those eight hours to derive a replacement power cost of of $2,024,035. Hopefully that distinction will help. And of course if the Commission's preference is to have a panel of the two, we'll certainly accommodate that.

Thank you.

COMMISSIONER SKOP: Thank you, Mr. Butler. And then also just one additional housekeeping matter. Yesterday you extended the professional courtesy I believe to Ms. Bradley from the AG to ask additional questions of Mr. Stall when he comes back on rebuttal, so hopefully we can take care of that. I know Ms. Bradley is going to be joining us a little bit late today. So with that, if you could call your next witness.

MR. BUTLER: Thank you.

MR. ROSS: FPL calls Terry Keith. Mr. Keith is in the witness chair. He was sworn yesterday.

COMMISSIONER SKOP: Very well.

TERRY J. KEITH

was called as a witness on behalf of Florida Power & Light Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. ROSS:

Q. Would you please state your name and business address?

A. Terry J. Keith, 9250 West Flagler Street, Miami, Florida 33174.

Q. Mr. Keith, have you prepared and caused to be filed direct testimony in this proceeding totaling five pages?

A. Yes, I did.

Q. Do you have any changes or corrections to your direct testimony?

A. One correction. On Page 1, Line 5, it now reads January 13th, 2009. It should be January 13th, 2010.

Q. Mr. Keith, if I asked you the questions contained in your direct testimony as you just corrected it, would your answers be the same?

A. Yes, it would.

MR. ROSS: Mr. Chairman, I request that the direct testimony of Mr. Keith as corrected be entered into the record as if read.

COMMISSIONER SKOP: The prefiled testimony of the witness will be entered into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 090505-EI

January 13, ~~2009~~ 2010

Q. Please state your name and address.

A. My name is Terry J. Keith and my business address is 9250 West Flagler Street, Miami, Florida 33174.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL) as Director, Cost Recovery Clauses in the Regulatory Affairs Department.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present to the Commission viable options for refunding customers the replacement power costs resulting from the Flagami Transmission Event on February 26, 2008.

Q. What does FPL believe would be the most appropriate method to refund customers the replacement power costs associated with the Flagami Transmission Event?

A. FPL believes that it would be most efficient and consistent with fuel cost recovery ("FCR") precedent to reflect this refund in the 2010 net true-up, where it would serve to reduce the 2011 FCR factors for all customers.

Q. What method would FPL recommend if the Commission prefers that FPL make a one-time credit to customers for these replacement power

costs?

A. If the Commission prefers that FPL make a one-time credit, then that credit should be issued to FPL's customers of record during the first billing cycle beginning 60 days after the Commission decides the credit amount. The credit for each customer should be based on the customer's consumption which is billed in that billing cycle. This is the most efficient means to implement a one-time credit and has been utilized by the Commission recently in Docket No. 080001-EI (Turkey Point Unit 3 pressurizer piping incident) and Docket No. 090001-EI (2009 net true-up over-recovery).

In the case of a one-time credit based on the customers' current consumption, FPL is able to modify the programs developed for the refund of replacement power costs associated with the Turkey Point Unit 3 pressurizer piping incident, which reduces the cost to implement this type of credit to $70,000 and requires 60 days of implementation time. By contrast, the original cost to implement the refund of the Turkey Point Unit 3 pressurizer piping incident was $220,000 and required three months to implement.

Q. Didn't the Commission express reservations about the current consumption method in the case of the one-time credit associated with the 2009 net true-up over-recovery?

A. Yes. However, the situation in this case is significantly different. Unlike the one-time refund of the $365 million 2009 net true-up over-recovery, this refund is based on a significantly smaller dollar amount and was incurred over a very short period of time; not 12 months as was the case with the

refund of the 2009 net true-up over-recovery.

Q. Does FPL believe that it would be appropriate to implement the one-time credit based on 12 months of consumption?

A. No. FPL does not believe that there is any practical or equitable reason why the one-time credit contemplated in this proceeding needs to be calculated based on 12 months of consumption. This approach is more costly and would delay the implementation of the credit due to the amount of time required to perform the necessary computer coding and integration testing.

Q. Please describe the efforts required to implement a one-time credit to customers.

A. First, one has to recognize that FPL's Customer Information and Billing systems contain a massive amount of data and the integrity of these systems must be maintained at all times to ensure that customer bills are accurate. Thus, exception transactions, such as one-time credits, generally require ad-hoc programming and significant testing. Due to the age of our current Customer Information and Billing systems, even a minor change requires full integration testing based on approximately 1,000 different billing scenarios. This testing requires approximately six weeks to execute. Because the systems are processing so many transactions daily, there are very limited windows of time within the day to perform additional programming and testing. This has the effect of stretching out the overall period of time that is required to implement any type of change to these systems. In addition, previously planned enhancements or changes must be scheduled independently of each other because of time constraints and increased

difficulty in programming and testing more than one change simultaneously.

Q. Please explain why implementing a one-time credit based on 12 months of historical consumption would further complicate the refund process.

A. Calculating 12 months of consumption is not the same as reading 12 rows of data and then adding them together. The data contained in the Customer Information and Billing systems database captures all exceptions that have occurred to customer accounts. One example of an exception is where an account has been rerouted and more than 12 billing records are rendered in a one-year period. Another example is where an account was recently connected and less than 12 billing records are rendered in a one-year period.

Each type of exception must be identified and a determination must be made as to whether to include or exclude the impact of the exception in the credit calculation. Therefore, to ensure that the consumption data for each customer for each of the 12 months is accurate, all potential billing exceptions must be identified and logic must be developed to address every potential exception. This requires additional coding, new programs and significant processing time to make historical 12-month consumption calculations for each customer. 225,000 billing records must be processed an additional 12 times each day (2.7 million additional calculations daily) in order to aggregate historical billing consumption.

Q. How much time and cost would be required to implement a one-time credit based on 12 months of consumption?

A. The complexities I just described would cause the implementation to take approximately three months, at an estimated cost of $120,000.

Q. If the Commission were to direct that the one-time credit be based on 12 months of historical consumption, how should that method be applied?

A. The refund would need to be made in the August 2010 billing cycle, at the earliest. The credit calculation would be based on each customer's consumption for 12 consecutive billing periods ending with the July 2010 billing cycle. Only customers of record in the August 2010 billing cycle would receive the refund.

Q. Will the total amount of money to be refunded to customers differ depending on the credit methodology approved by the Commission?

A. No. The total amount of money refunded to customers will be the same regardless of whether the Commission reflects the credit in the 2010 net true-up or requires a one-time credit to customers.

Q. Does this conclude your testimony?

A. Yes, it does.

BY MR. ROSS:

Q. Mr. Keith, have you prepared a summary of your direct testimony?

A. Yes.

Q. Would you please provide that summary to the Commission?

A. Sure. Good morning, Commissioners. My testimony encourages you to consider the long-standing fuel adjustment clause process which allows for fluctuations in costs, including refunds, to flow through the true-up mechanisms without the need for a one-time refund. This process has served customers and utilities fairly over the years without prejudice, it limits changes to customer bills and it's very efficient.

On the other hand, if you decide in this case a one-time refund to customers is more appropriate, in order to implement the refund as soon as possible, I recommend that the refund should be issued to customers of record during the first billing cycle beginning 60 days after the credit amount is determined. This concludes my summary. Thank you.

MR. ROSS: We tender the witness for cross-examination.

COMMISSIONER SKOP: Thank you, Mr. Ross.

Mr. McGlothlin, you're recognized for cross-examination.

MR. McGLOTHLIN: OPC has no questions for this witness.

COMMISSIONER SKOP: Excuse me? I'm sorry.

MR. McGLOTHLIN: No questions.

COMMISSIONER SKOP: All right. Thank you.

Ms. Kaufman, you're recognized.

MS. KAUFMAN: Thank, you, Commissioner. Good morning.

CROSS EXAMINATION

BY MS. KAUFMAN:

Q. Mr. Keith, I just have one question for you. You would agree with me, wouldn't you, that if the Commission requires a one-time refund within 60 days after the issuance of the order, that the customers would receive whatever amount the Commission deems appropriate more quickly than if that amount is rolled into the fuel adjustment proceedings?

A. Yes. I would agree.

MS. KAUFMAN: Thank you.

COMMISSIONER SKOP: Thank you, Ms. Kaufman.

And, again, I don't know if the AG will be joining us, so we'll go out of sequence. Staff, any questions for the witness?

MR. YOUNG: No questions.

COMMISSIONER SKOP: Okay. Commissioners?

COMMISSIONER STEVENS: Just one.

COMMISSIONER SKOP: Commissioner Stevens, you're recognized.

COMMISSIONER STEVENS: On Page 2 of the testimony on Line 6 you state that "This is the most efficient means to implement a one-time credit." What's the fairest means?

THE WITNESS: Commissioner, I think either way that you would do the one-time credit there's the potential for, the unintended potential for some, one customer to benefit versus another customer. So I'm not sure that there's necessarily a fairness issue, and that's why I result to what's the quickest way to get the money back to the customer if you want to do a one-time credit.

COMMISSIONER STEVENS: Do you know how many customers this will be credited to, how many accounts?

THE WITNESS: Approximately 4.5 million accounts.

COMMISSIONER STEVENS: So it would be all of, all of FPL accounts?

THE WITNESS: Yes, sir.

COMMISSIONER STEVENS: All of the customers

were affected by this outage?

THE WITNESS: No. That's not quite the way the fuel adjustment clause works.

COMMISSIONER STEVENS: So we look at it through the fuel adjustment because all the customers were affected by that cost.

THE WITNESS: Right. That's correct.

COMMISSIONER STEVENS: Okay. Thank you.

THE WITNESS: What -- okay.

COMMISSIONER SKOP: Thank you, Commissioner. Any additional questions from the bench? Hearing none, Mr. Ross, you're recognized for redirect.

MR. ROSS: No redirect.

COMMISSIONER SKOP: Thank you. And I believe we have no exhibits for this witness.

MR. ROSS: That's correct.

COMMISSIONER SKOP: So, Mr. Keith, you're free to step down and we'll see you for rebuttal.

THE WITNESS: Thank you.

COMMISSIONER SKOP: All right. I think that brings us to the close of FPL's witnesses' direct testimony. And I think, Commissioner Stevens, at your discretion, I think you had additional questions yesterday. And if you'd like to recall one or more witnesses, you're free to do so at this time.

MR. BUTLER: Commissioner Skop, I'm sorry. I just, I would offer that we certainly, if it's more efficient, can have Commissioner Stevens ask the questions of those witnesses on rebuttal or recall them now, whichever is your preference.

COMMISSIONER SKOP: Okay.

COMMISSIONER STEVENS: Rebuttal is fine.

COMMISSIONER SKOP: Okay. I'll defer to that. Any additional questions from the bench?

Okay. Hearing none, Public Counsel, you're recognized to call your witness.

MR. BECK: Thank you, Commissioner. The citizens call Dr. David Dismukes.

COMMISSIONER SKOP: And, Dr. Dismukes, have you been sworn previously?

THE WITNESS: Yes, sir.

COMMISSIONER SKOP: All right. Thank you.

DAVID E. DISMUKES

was called as a witness on behalf of the Citizens of the State of Florida and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BECK:

Q. Dr. Dismukes, would you please state your full name.

A. David E. Dismukes.

Q. By whom are you employed?

A. I'm an independent consultant.

Q. And have you prepared direct testimony in this case consisting of 40 pages?

A. Yes, sir, I have.

Q. And do you have an errata sheet to your testimony?

A. Yes, sir.

Q. If I were to ask you the same questions that are contained in your testimony with the changes noted in the errata sheet, would your answers be the same?

A. Yes, sir, they would be.

MR. BECK: I would ask that Dr. Dismukes' testimony be inserted into the record as though read.

COMMISSIONER SKOP: The prefiled testimony of the witness will be entered into the record as though read.

BY MR. BECK:

Q. And, Dr. Dismukes, you also have 12 exhibits accompanying your testimony, do you not?

A. Yes, sir, I do.

Q. And those have been marked -- or you have them in your testimony as DED-1 through 12?

A. Yes, sir.

MR. BECK: And, Commissioners, those have been marked as Exhibits 11 through 22 in the staff's Comprehensive Exhibit List for identification.

(Exhibits 11 through 22 marked for identification.)

DIRECT TESTIMONY

OF

DAVID E. DISMUKES, PH.D.

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 090505-EI

I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is David E. Dismukes. My business address is 5800 One Perkins Place Drive, Suite 5-F, Baton Rouge, Louisiana, 70808.

Q. WOULD YOU PLEASE STATE YOUR OCCUPATION AND CURRENT PLACE OF EMPLOYMENT?

A. I am a Consulting Economist with the Acadian Consulting Group ("ACG"), a research and consulting firm that specializes in the analysis of regulatory, economic, financial, accounting, statistical, and public policy issues associated with regulated and energy industries. ACG is a Louisiana-registered partnership, formed in 1995, and is located in Baton Rouge, Louisiana with additional staff in Los Angeles, California, and Fallon, Nevada.

Q. DO YOU HOLD ANY ACADEMIC POSITIONS?

A. Yes. I am also a full Professor, Associate Executive Director, and Director of Policy Analysis at the Center for Energy Studies, Louisiana State University. I also hold an appointment as an Adjunct Professor in the E.J. Ourso College of Business

Administration (Department of Economics) and I am a full member of the graduate research faculty at LSU.

Q. HAVE YOU PREPARED ANY ATTACHMENTS TO YOUR TESTIMONY OUTLINING YOUR QUALIFICATIONS IN ENERGY AND REGULATED INDUSTRIES?

A. Yes. Exhibit DED-1 to my testimony provides my academic vita that includes a full listing of my publications, grant research, presentations, and pre-filed expert witness testimony, expert reports, expert legislative testimony, and affidavits.

Q. HAVE YOU PREPARED ANY EXHIBITS TO SUPPORT YOUR TESTIMONY?

A. Yes. OPC Exhibits DED-2 through DED-11 were prepared for that purpose.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been retained by the Florida Office of Public Counsel ("OPC") on the behalf of the Citizens of the State of Florida ("Citizens") to provide an expert opinion on the net replacement power cost ("net RPC") estimate proposed by Florida Power & Light Company ("FPL" or "the Company"). The Company has offered this net RPC estimate in order to credit ratepayers for the loss of load event in Florida on February 26, 2008, referred to as the "Florida Blackout" by the Federal Energy Regulatory Commission ("FERC").[1] My expert testimony: (1) offers an opinion on the merits of FPL's proposal; (2) provides a series of alternative net RPC credit calculations including an alternative RPC recommendation for the Commission's consideration;

[1] Federal Energy Regulatory Commission, Docket No. IN08-5-000, Order No. 129, FERC Stats. & Regs. 61,016 (October 8, 2009). *Order Approving Stipulation and Consent Agreement*, at paragraph 1.

and (3) rebuts many of the Company's policy rationales for proposing a significantly reduced net RPC credit to FPL's ratepayers.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. My testimony is organized into the following sections:

- Section II: Summary of Recommendations
- Section III: Background on the Florida Blackout
- Section IV: Overview of the Company's Proposals
- Section V: Alternative RPC Calculation and Recommendation
- Section VI: FPL's Proposals Are Not Consistent with Sound Economic Principles and Regulatory Practices
- Section VII: Conclusions and Recommendations

II. SUMMARY OF RECOMMENDATIONS

Q. WHAT ARE YOUR GENERAL RECOMMENDATIONS REGARDING THE COMPANY'S PROPOSED RPC?

A. I recommend the Commission reject the Company's proposed net RPC credit and accept the $15,974,055 credit I have offered in my direct testimony. The Company's proposal does not reflect the true replacement cost of energy associated with the transmission-created outages of February 2008 and simply represents a transfer of wealth from ratepayers to the Company and its shareholders. The Commission should also reject the policy arguments offered by the Company as support for its proposed RPC credit. Having ratepayers subsidize FPL's replacement costs would have little to no effect on any decision to invest in new nuclear, solar, wind, and energy efficiency resources given other issues that are (1) beyond the scope of this

proceeding and (2) overwhelmingly more significant than the net RPC credit due to ratepayers from the February 2008 outages. Accepting the Company's net RPC proposal places the Commission in the position of setting a policy precedent that would significantly deviate from sound economic principles and traditional regulatory practices.

III. BACKGROUND ON THE FLORIDA BLACKOUT

Q. WOULD YOU BRIEFLY EXPLAIN YOUR UNDERSTANDING OF THE FLORIDA BLACKOUT?

A. Yes. On February 26, 2008, portions of the lower two-thirds of the Bulk Electric System ("BES") in peninsular Florida experienced a loss of electrical service. The event led to the loss of 22 transmission lines, 4,300 megawatts ("MWs") of generation capacity, and 3,750 MW of customer load. According to the FERC, approximately 596,000 FPL customer accounts and 354,000 non-FPL customer accounts were out of service.[2]

Q. WAS THIS EVENT INVESTIGATED BY REGIONAL AND NATIONAL RELIABILITY ADMINISTRATORS?

A. Yes, it is my understanding that this outage was investigated by the Florida Reliability Coordinating Counsel ("FRCC"), a not-for-profit company incorporated in Florida that serves as the "Regional Entity" responsible for, among other things, proposing and enforcing "Reliability Standards" within its region (peninsular

[2] Federal Energy Regulatory Commission, Docket No. IN08-5-000, Order No. 129, FERC Stats. & Regs. 61,016 (October 8, 2009). *Order Approving Stipulation and Consent Agreement*, Stipulation and Consent Agreement at paragraph 2.

Florida).[3] The outage was also investigated by the North American Electric Reliability Corporation ("NERC"), a reliability organization responsible for the development and enforcement of national reliability standards as required by Section 215 of the Federal Power Act ("FPA").[4]

Q. WAS THIS EVENT ALSO INVESTIGATED BY THE FERC?

A. Yes, on March 19, 2008, FERC authorized the Office of Enforcement to conduct an investigation of the outage. According to the FERC Stipulation Order, both the FERC Enforcement Division and the NERC alleged that FPL violated Reliability Standards across a number of different reliability areas.[5] The FERC Stipulation, which provides a more detailed background concerning the blackout, is attached as Exhibit DED-2.

Q. DID THE FERC STIPULATION ADDRESS THE NET REPLACEMENT POWER COSTS RELATED TO THE BLACKOUT?

A. No.

Q. WHAT ARE THE ORIGINS OF THIS DOCKET BEFORE THE FLORIDA COMMISSION?

A. Issues regarding a potential ratepayer refund for the net RPC associated with the February 2008 outage were originally raised in the Company's 2009 fuel and

[3] See https://www.frcc.com/default.aspx

[4] Federal Energy Regulatory Commission, Docket No. RR06-1-000, *Order Certifying North American Electric Reliability Corporation as the Electric Reliability Organization and Ordering Compliance Filing.* Issued July 20, 2006.

[5] Federal Energy Regulatory Commission, Docket No. IN08-5-000, Order No. 129, FERC Stats. & Regs. 61,016 (October 8, 2009). *Order Approving Stipulation and Consent Agreement*, Stipulation and Consent Agreement at paragraph 22.

purchased power cost recovery proceeding (Docket No. 090001-EI). The Company and OPC agreed to defer the issue to the 2010 fuel and purchased power cost recovery proceeding. However, on October 30, 2009, the Prehearing Officer in Docket No. 090001-EI directed the RPC issue to be "spun-out and addressed in a separate proceeding as early as practicable in [the] 2010 calendar year."[6] This docket was established on November 9, 2009 to satisfy the requirements of the Prehearing Officer's Order.[7]

Q. WOULD YOU PLEASE EXPLAIN THE STIPULATION APPROVED BY THE COMMISSION IN THIS PROCEEDING?

A. On December 16, 2009, FPL filed a Proposed Resolution of Issues ("PRI" or "Resolution"). The PRI was also signed by the OPC and the Attorney General. The PRI sought Commission approval of a resolution agreeing that FPL should bear the cost of replacement power attributable to the outage. The Commission approved this Resolution on January 26, 2010.[8] A copy of the resolution has been provided as Exhibit DED-3.

Q. WHAT, IN YOUR OPINION, IS THE PURPOSE OF THE CURRENT PROCEEDING?

A. Two primary purposes of this proceeding are: (1) to determine the appropriate measure of the net RPC credit, and (2) to determine the appropriate method to credit

[6] In re: Fuel and purchased power; cost recovery clause with generating performance incentive factor; Docket No. 090001-EI; Order No. PSC-09-0723-PHO-EI; Florida Public Service Commission; October 30, 2009, Issued.

[7] Memorandum from Division of Regulatory Analysis; Division of Economic Regulation; and Office of the General Counsel to Office of Commission Clerk (Cole). Re: Docket No. 090505-EI; Agenda: 1/26/10 – Regular Agenda – Decision on Stipulation Prior to Hearing – Interested Persons May Participate. January 13, 2010. See http://www.psc.state.fl.us/library/filings/10/00313-10/00313-10.pdf

[8] Florida Public Service Commission, Docket 090505-EI, Vote Sheet, January 26, 2010. See http://www.psc.state.fl.us/library/filings/10/00592-10/00592-10.pdf

customers for the replacement power costs associated with the February 2008 outages.

IV. OVERVIEW OF THE COMPANY'S PROPOSALS

Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S RPC PROPOSAL?

A. The Company has estimated and recommended a RPC credit of $2,024,035.[9] This proposed net RPC ratepayer credit represents the amount FPL believes is appropriate to credit to its ratepayers for the Florida Blackout.

Q. IS THE NET RPC CREDIT BASED UPON THE TRUE REPLACEMENT COST?

A. No, and even the Company appears to recognizes that its methodology is not based on the true cost of replacing the nuclear power generation that was tripped as a result of the outage.[10] Instead, the Company has discounted its net RPC credit by using a modified system average generation cost instead of the avoided cost of nuclear generation displaced by the February 2008 outages. This simple fact alone should stand as an immediate basis for rejecting the Company's proposal. Its net RPC credit is not based upon the true replacement cost of power and, from a policy analysis perspective, does not reflect the prudently-avoided nuclear power costs.

Q. ON WHAT BASIS DOES THE COMPANY JUSTIFY ITS RPC CREDIT PROPOSAL?

[9] In Re: Review of replacement fuel costs associated with the February 26, 2008 outage on Florida Power & Light's electrical system. Florida Public Service Commission; Docket No. 090505-EI; Florida Power & Light Company's Petition to Approve Appropriate Amount of Credit to Customer Bills; January 13, 2010.

[10] Testimony of Gerard J. Yupp, 5:9-14.

A. The Company's justifications for its RPC credit are based upon two policy arguments: (1) that assessing the RPC credit on the true avoided cost of the outage (nuclear generation) would be "unfair;"[11] and (2) that assessing the RPC credit on the true cost of avoided power would create disincentives for future resource development.[12] Both arguments are entirely without merit from the perspective of what the Company refers to as "sound economic principles" as well as traditional "regulatory policy."[13] The later portions of my testimony will discuss the economic and policy shortcomings of the Company's proposal. Initially, I discuss the mechanics of the Company's net RPC calculation and how that calculation can be corrected in order to apply an appropriate net RPC credit to FPL's ratepayers.

Q. CAN YOU PLEASE EXPLAIN HOW AN APPROPRIATE NET RPC COST CREDIT SHOULD BE DEVELOPED BEFORE DISCUSSING THE COMPANY'S METHODOLOGY?

A. Yes and I have also outlined the various steps needed to undertake this calculation in Exhibit DED-4. Assume a hypothetical nuclear power plant, with a capacity rating of 1,000 megawatts ("MW"), a variable fuel cost of $5 per megwatthour ("MWh"), and an outage that lasts for 100 hours. The energy production lost from this outage is simply the product of the capacity and the hours, leading to a total lost generation amount of 100,000 MWhs. Assume that 100 percent of this lost energy is purchased from the wholesale power market at a cost of $100/MWh. The total cost of the outage is $10,000,000. However, the nuclear unit avoided its own fuel costs by being out for 100 hours. The variable fuel cost avoided from this outage is the lost

[11] Testimony of William E. Avera, 4:15-17.
[12] ibid.
[13] Testimony of William E. Avera, 4:11-15.

generation (100,000 MWhs) times the variable fuel costs of $5/MWh resulting in a total avoided fuel cost of $500,000. The net replacement cost is the total replacement cost (wholesale power purchases of $10,000,000) less the costs avoided by the outage ($500,000). Thus, in this example, net replacement costs are $9,500,000.

Q. NOW, CAN YOU PLEASE EXPLAIN THE MECHANICS OF THE COMPANY'S NET RPC CREDIT?

A. Yes. The Company limits its calculations to an eight-hour period, even though the Turkey Point 3 and Turkey Point 4 nuclear units were out of service for a longer period. Turkey Point Unit 3 was offline for 158 hours, and Turkey point Unit 4 was offline for 107 hours. The Company calculates net RPC using two components. The first component estimates the "replacement fuel that was required to off-set the loss of generation that occurred as a result of the event."[14] This calculation is based on the increased cost associated with running four different peaking units for an eight-hour period during the outage and does not account for the increased cost of other generating resources. The second component of the RPC calculation sums the off-system power purchases that the Company executed in the eight-hour period immediately following the event.[15]

Q. CAN YOU EXPLAIN IN GREATER DETAIL HOW THE COMPANY ESTIMATED THE TOTAL PEAK GENERATION COSTS ASSOCIATED WITH THE OUTAGE?

[14] Testimony of Gerard J. Yupp, 2:6-7.
[15] Testimony of Gerard J. Yupp, 2:8-9.

A. The Company utilized generation, heat rate, and fuel use information from its February 2008 A4 Schedule to estimate the unit-specific costs of generating electricity from four peaking units over an eight-hour period. The estimated peak production costs are simply the sum of each peaking units' fuel cost over the period in question. The Company estimates total peaking generation costs of $1,992,270, or $174.30/MWh. A breakdown of this calculation has been provided in Exhibit DED-5.

Q. HOW WERE THE PURCHASED POWER COSTS CALCULATED?

A. FPL reports that it made 5,214 MWhs of off-system purchases during the outage. The total cost of this purchased power was $885,935.19 or $169.91/MWh.[16]

Q. DID THE COMPANY ADJUST THESE COSTS IN ANY WAY?

A. Yes. As I noted in my earlier hypothetical example, total replacement costs associated with an outage are typically adjusted to account for the costs that were avoided as a result of generation outage. Avoided costs should be the variable nuclear fuel costs that are not incurred since the nuclear plant in question did not generate electricity. The Company's approach differs from my earlier hypothetical since it reduces total replacement costs by an adjusted version of its own system average generation costs during what it defines as the relevant time period of the outage. However, as I noted in my introductory comments, this calculation is not based upon the true avoided (or non-incurred) cost of nuclear generation, but on an adjusted system average cost. The use of this adjusted system average costs reduces the overall credit due to ratepayers since the system average (which includes more

[16] Testimony of Gerard J. Yupp, Exhibit GJY-9.

expensive natural gas and oil fuel costs) is higher than the average fuel costs for nuclear power.

Q. HOW CAN AN ADJUSTED SYSTEM AVERAGE COST RESULT IN A LOWER RPC CREDIT THAN THE USE OF AVERAGE NUCLEAR FUEL COSTS?

A. Assume, for simplicity, a total replacement cost of $100/MWh. Now also assume a system average fuel cost of $50/MWh and an average nuclear fuel cost of $5/MWh. Assume we are replacing one MWh. Then the net total replacement cost under the traditional approach would be $95 ($100/MWh - $5/MWh times 1 MWh). Under the Company's approach, the net total replacement cost in this hypothetical would be $50 ($100/MWh - $50/MWh times 1 MWh). By using the adjusted system average cost, rather than the true cost of generation avoided (nuclear), the Company's approach significantly reduces the credit due to ratepayers.

Q. PLEASE EXPLAIN HOW THE NET PEAKING PRODUCTION COSTS WERE ESTIMATED.

A. The average peaking RPC rate was estimated to be $174.30/MWh. The Company subtracted its adjusted system average cost of $51.32/MWh from the average peaking RPC rate, rather than the average nuclear fuel cost of $4.4/MWh to arrive at a net RPC rate of $122.98/MWh. The net peak RPC rate was multiplied by the lost generation associated with the Company's recommended outage duration period (11,430 MWhs) to arrive at a total net peaking RPC of $1,405,682. As I noted earlier, the Company uses an adjusted system average fuel cost ($51.32/MWh) as

opposed to the average nuclear fuel cost of $4.5/MWh. This step significantly reduces the RPC credit due to FPL's ratepayers.

Q. HOW WERE OFF-SYSTEM REPLACEMENT PURCHASES ADJUSTED?

A. The Company simply takes the average purchased power RPC rate of $169.91/MWh and subtracts the adjusted system average rate ($51.32) to arrive at a net average purchased power RPC rate of $118.59. This, multiplied by the total off-system purchase energy (5,214 MWh), leads to a total net purchased power RPC of $618,353. Again, the Company subtracts an unnecessarily high adjusted system average cost rate ($51.32/MWh) as opposed to the average nuclear fuel cost rate of $4.4/MWh, in order to determine the net replacement cost associated with purchased power.

Q. HAVE YOU PREPARED A SCHEMATIC THAT HELPS ILLUSTRATE HOW THESE CALCULATIONS WORK?

A. Yes, Exhibit DED-6 provides a graphical illustration of how the Company's replacement cost estimation approach works. The vertical axis on this chart represents the average costs ($/MWh), while the horizontal axis represents total generation and purchased power (or system supply). The line labeled "a" is the Company's estimated adjusted system average cost ($51.32/MWh). If the outage had not occurred, the Company estimates that it could have generated 6,701,778 MWhs of electricity at an average cost of $51.32/MWh. This, however, did not occur, and the outage put the Company in the position of having to (a) increase its own generation and (b) purchase power from the wholesale market. The Company's estimated net purchased power costs are represented by the shaded area labeled "C" and the net

peaking costs are estimated by the shaded area "D." The Company's net replacement cost estimate is the sum of the area "C" and "D."

Q. CAN YOU EXPLAIN THE SHADED AREA LABELED "C" IN GREATER DETAIL?

A. Yes. This area represents the net cost associated with purchased power requirements created by the outage. Under the Company's approach, the net cost is estimated as the difference between the per-unit cost of purchased power ($169.91/MWh) and the adjusted system average unit cost of ($51.32/MWh) multiplied by the power purchased (5,214 MWh). The total amount results in the Company's net purchased power RPC estimate of $618,353.

Q. CAN YOU EXPLAIN THE SHADED AREA LABELED "D" IN GREATER DETAIL?

A. Yes. This area represents the Company's estimated net peak power replacement costs. These costs are estimated, under the Company's methodology, by taking the difference between the peak generation unit costs ($174.30/MWh) and the adjusted system average cost ($51.32/MWh) and multiplying that difference by the peak generation amount (11,430 MWh) associated with the Company's recommended outage duration of 8 hours. The total net peak power replacement costs estimated using the Company's methodology is $1,405,682.

Q. DOES THIS ILLUSTRATION HIGHLIGHT ANY SHORTCOMINGS IN THE COMPANY'S RPC METHODOLOGY?

A. Yes. The Company RPC misses an entire class of increased costs incurred by ratepayers as a result of the outage: the increased system average cost created by the outage. This shortcoming has been highlighted graphically in greater detail in Exhibit DED-6. The shaded area represented as "B" represents the net increase in non-peaking fuel costs that were created by the outage. Net non-peaking generation costs, can be estimated using an approach similar to that offered by the Company, as the difference between outage-related system average cost ($77.55/MWh) and the adjusted system average with nuclear generation of ($51.32/MWh). This difference, in turn, is multiplied by the non-nuclear replacement generation level (107,311 MWhs) to arrive at a total net non-nuclear replacement cost estimate of $2,814,768. This represents an important conceptual difference in how replacement costs are estimated since the Company incurred additional increased generation costs associated with the outage that go beyond the use of its peaking generators.

Q. ARE THERE ANY DEFICIENCIES WITH THE COMPANY'S RPC METHODOLOGY?

A. Yes. As noted earlier, the Company's approach suffers from two significant conceptual flaws. First, the Company has based its RPC on an outage duration that does not fully represent the total cost imposed on ratepayers by the Florida Blackout. Second, the Company is using an adjusted system average cost that effectively deflates the full refund amount due to ratepayers. The Company justifies both flaws on policy positions that are entirely inconsistent with what it refers to as "sound economic principles" and "regulatory practices." I will discuss these policy inconsistencies in later sections of my testimony. The subsequent section of my testimony, however, provides a number of alternative net RPC calculations, and a

recommended net RPC credit of $15,977,050 that more appropriately reflects (1) the true outage duration of the Turkey Point nuclear units and (2) the fuel costs avoided by those units' outage.

V. ALTERNATIVE RPC CALCULATION AND RECOMMENDATION

Q. HAVE YOU PREPARED ANY ALTERNATIVE RPC CALCULATIONS?

A. Yes, I have prepared two different net RPC calculations that correct (1) the Company's inappropriate outage duration and associated replacement generation levels and (2) the actual costs that were avoided as a result of the outage. I am providing these calculations in a cumulative fashion so that the Commission can see the results from the incremental changes in the Company's assumptions. My primary recommendation, however, is that the Commission adopt my second set of calculations as the basis for the net RPC credit.

Q. LET'S DISCUSS THE FIRST SET OF CALCULATIONS. CAN YOU PLEASE EXPLAIN WHY THE COMPANY'S PROPOSED OUTAGE DURATION AND CORRESPONDING REPLACEMENT GENERATION IS INAPPROPRIATE?

A. The Company offers a number of reasons to justify its recommendation that only an eight hour outage duration period should be used to calculate a net RPC credit. These arguments have very little merit, and all fail to address the simple empirical fact that the Turkey Point units were out of service by the transmission outage for a period spanning 158 hours and 107 hours, respectively, not eight.[17] Any replacement cost

[17] Turkey Point Unit 3 was offline for a total of 158 hours and Turkey Point Unit 4 was offline for a total of 107 hours (Testimony of J.A. Stall, 7:6-7).

estimate needs to be based upon the actual hours upon which these nuclear units were off-line. If not for the transmission outage, Turkey Point Units 3 and 4 are likely to not have been abruptly taken off-line during February and early March 2008.[18]

Q. CAN YOU EXPLAIN HOW YOUR FIRST ALTERNATIVE RPC CALCULATION CORRECTS FOR THE DEFICIENCY IN THE COMPANY'S OUTAGE AND REPLACEMENT GENERATION ESTIMATES?

A. Yes. The first step in my alternative net RPC calculation was to separate the total outage duration period into peak replacement generation and non-peak replacement generation components. The total peak replacement generation component was constrained to the eight hours identified by the Company. The total non-peak replacement generation component comprised the balance of the replacement generation which spanned a period across two months including February and March of 2008. Total February non-peak replacement generation is estimated to be 107,311 MWhs and total March non-peak replacement generation is estimated to be 71,270 MWhs. These calculations, and their corresponding amounts, are provided in Exhibit DED-7.

Q. PLEASE EXPLAIN HOW PEAK REPLACEMENT GENERATION COSTS WERE ESTIMATED UNDER YOUR FIRST ALTERNATIVE RPC CALCULATION.

[18] Turkey Point Unit 4 was scheduled to be out of service for refueling from March 30, 2008 until May 4, 2008. No planned outages were scheduled for Turkey Point Unit 3. See In Re: Levelized Fuel Cost Recovery and Capacity Cost Recovery, Projections January 2008 through December 2008, Florida Public Service Commission, Docket No. 070001-EI, Testimony of Gerard J. Yupp, September 4, 2007.

A. Since peak replacement generation was constrained to an eight-hour period, my alternative total replacement cost estimate is the same as that proposed by the Company and is provided on the first page of Exhibit DED-7.

Q. WHAT SYSTEM AVERAGE COSTS DID YOU UTILIZE IN YOUR FIRST ALTERNATIVE RPC CALCULATIONS?

A. The methodology for estimating these costs is similar to those recommended by the Company; however, it is based upon two months of data (February and March, 2008) rather than one.

Q. HOW DID YOU ESTIMATE NET PEAK REPLACEMENT COSTS?

A. Net peak generation replacement costs were first calculated as the difference between total peak average generation costs ($174.30/MWh) and adjusted system average costs ($51.32/MWh). This difference was then multiplied by a peak generation amount of 11,430 MWhs to arrive at a total net peak replacement cost of $1,389,446 which is provided on the first page of Exhibit DED-7.

Q. HOW DID YOU ESTIMATE TOTAL NON-PEAK REPLACEMENT GENERATION COSTS?

A. These costs were estimated by multiplying the Company's monthly adjusted system average costs ($/MWh) by its corresponding replacement generation amounts. Total non-peak replacement costs for February 2008 are estimated to be $8,322,465 and total non-peak replacement costs for March 2008 are estimated at $5,695,529. These estimates are provided on the second page of Exhibit DED-7.

Q. HOW DID YOU ESTIMATE NET NON-PEAK REPLACEMENT COSTS?

A. Net non-peak generation replacement costs were estimated for both February and March, 2008. The February non-peak replacement generation costs were estimated as the difference between the average cost without solid fuel generation ($77.55/MWh) and the Company's adjusted system average cost ($51.32/MWh). This amount was then multiplied by the February non-peak replacement generation amount (107,311 MWh) to arrive at a total net February non-peak generation replacement cost. A similar calculation was conducted for the outages associated with March 2008. The estimated total net non-peak replacement generation costs of $4,383,296 is provided at the bottom of page 2 of Exhibit DED-7.

Q. DID YOU ESTIMATE NET PURCHASED POWER COSTS?

A Yes, but under my first approach, these costs do not differ from those recommended by the Company.

Q. WHAT ARE THE TOTAL NET REPLACEMENT COSTS ONCE THE COMPANY'S TOTAL OUTAGE DURATION AND GENERATION LEVELS ARE CORRECTED?

A. The last page of Exhibit DED-7 provides an estimate of the total net replacement costs for the actual outage period under the Company's adjusted system average cost approach. The total net replacement costs are $6,384,707 and are based upon the sum of (a) net peak replacement costs of $1,389,446; (b) net non-peak replacement generation costs of $4,383,296; and (c) net purchased power costs of $611,965.

Q. DO YOU BELIEVE THIS IS AN APPROPRIATE REPLACEMENT COST CREDIT FOR RATEPAYERS?

A. No, because the calculations included in Exhibit DED-7 are still based upon the Company's inappropriate use of an adjusted average system. The more appropriate estimate should be based upon the true cost avoided by the outage, which are the Turkey Point-specific fuel costs. The use of an adjusted system average cost, combined with a much shorter outage period, simply reduces the overall net RPC credit due to ratepayers.

Q. HAVE YOU PREPARED A SECOND SET OF CALCULATIONS THAT CORRECTS FOR THE COMPANY'S INAPPROPRIATE USE OF AN ADJUSTED SYSTEM AVERAGE COST?

A. Yes, Exhibit DED-8 provides those estimates and is the approach I recommend the Commission adopt in estimating the net RPC credit for FPL's ratepayers. The approach utilized in these estimates is similar to my prior discussion since it includes a corrected outage duration period and replacement generation levels. The only significant difference between my recommended approach, and those discussed earlier, is that Turkey Point-specific fuel cost (roughly $4.5/MWh) have been used to estimate net replacement cost impacts, not the adjusted system average. Turkey Point-specific costs are the appropriate avoided costs to utilize in developing a replacement cost estimate since the Company was avoiding nuclear fuel costs, not adjusted system average costs, during the course of the Blackout. Making this correction yields a total net replacement cost estimate of $15,974,055 and is the sum of (a) net peak replacement generation costs of $1,938,577; (b) net non-peak

replacement generation costs of $13,173,954; and (c) net purchased power replacement costs of $861,525.

Q. ARE YOUR ESTIMATES SIMILAR TO ANY CALCULATIONS PREPARED BY THE COMPANY IN DEVELOPING ITS OWN REPLACEMENT COST ESTIMATES?

A. Yes and I have provided a copy of these estimates in Exhibit DED-9. An important difference in the calculations included in these estimates, and those provided in the Company's Application and Direct Testimony, is that the "fuel costs not incurred" as a result of the outage are based upon the Turkey Point 3 and 4 fuel costs and not a modified system average cost that includes nuclear power generation. This is a more appropriate method to calculate the replacement costs associated with the February 2008 outage and consistent with the recommended calculations I discussed above.

Q. WHAT IS YOUR RECOMMENDED REPLACEMENT COST CREDIT?

A. I recommend that the Commission direct the Company to credit its ratepayers an amount of $15,974,055, as well as interest on this amount as allowed under Rule 25-6.109(4), Florida Administrative Code.

VI. FPL'S PROPOSALS ARE NOT CONSISTENT WITH SOUND ECONOMIC PRINCIPLES AND REGULATORY PRACTICES

Q. CAN YOU PLEASE EXPLAIN THE COMPANY'S POSITION THAT IT'S RECOMMENDATIONS ARE BASED UPON SOUND ECONOMIC PRINCIPLES?

A. No, because while the Company has made this assertion in a number of places in its filing,[19] it has failed to identify the specific economic principles that support its recommendations, how the various aspects of its proposals are consistent with those principles, nor any economic literature that is remotely supportive of its proposed net RPC credit. There are no sound economic principles nor good regulatory policies that would support the Company's proposal to transfer close to $14 million in consumer wealth to itself and its shareholders.

Q. ARE THERE ANY SOUND ECONOMIC PRINCIPLES OR THEORIES THAT WOULD REFUTE THE COMPANY'S PROPOSALS?

A. Yes. In particular, the Company's proposals are entirely inconsistent with the efficiency principles of setting prices at levels that reflect the true opportunity cost of making a decision. The Company's proposals are also entirely inconsistent with the efficiency principles of general equilibrium theory and the role of moral hazard in reducing societal welfare.

Q. LET'S TALK ABOUT THE FIRST ECONOMIC PRINCIPLE YOU DISCUSS. CAN YOU EXPLAIN HOW THE COMPANY'S PROPOSALS WILL RESULT IN AN ECONOMIC INEFFICIENCY?

A. Markets are said to be efficient when the price of a particular good or service is equal to the marginal cost of producing that good or service. Opportunity costs underlie this basic definition of marginal costs since they define what is given up in order to produce the next increment of a good or service. Market inefficiencies are said to arise when prices depart from the marginal (opportunity) costs. The Company's

[19] See Testimony of William E. Avera, 4:11-15 and 4:22-23.

proposal would effectively set prices (or a refund) at levels that do not match the true opportunity costs of power generation forgone by the February 2008 outages. The source of this inefficiency is twofold since the Company's proposal departs from an efficient outcome in both the "rate" used to estimate the refund amount, and the "level" of the forgone output used to estimate the refund.

Q. WHAT DO YOU MEAN BY THE "RATE" AT WHICH THE COMPANY IS PROPOSING TO ESTABLISH A REPLACEMENT COST REFUND?

A. The "rate," in this discussion, can be generalized as the replacement cost rate used to establish a refund amount. Rather than examining the actual replacement cost against the actual generation costs that were avoided (nuclear generation), the Company is proposing to evaluate those costs against an adjusted system average cost. In other words, the Company uses an average cost, to establish a refund that should be based upon marginal costs. This is inefficient since marginal and average costs differ, and differ significantly from one another: roughly $51/MWh on an average cost basis versus $5/MWh on a marginal cost basis. As a result, the Company's proposal fails a primary efficiency standard posited in basic economics that ties the marginal rate of technical substitution to marginal costs.[20]

Q. WHAT DO YOU MEAN BY THE "LEVEL" ON WHICH THE COMPANY HAS SET ITS REFUND?

A. The Company's proposals are also based upon an incorrect level of output that was avoided as a consequence of the outage. The Company proposes to reduce its overall

[20] While ratepayers tend to be billed an average monthly fuel rate (and cost), this rate will be biased upwards under an inappropriately set RPC credit.

refund amount to the energy avoided with only an eight-hour period, not the full outage period of 158 hours for Turkey Point Unit 3 and 107 hours for Turkey Point Unit 4.[21]

Q. HOW DOES THIS NOTION OF OPPORTUNITY COSTS RELATE TO POWER GENERATION AND THE LEVEL AT WHICH AN APPROPRIATE RPC CREDIT SHOULD BE SET?

A. Opportunity costs are defined as the next best option that is forgone by undertaking a particular activity. In the case of power generation, utilities can generate electricity through either nuclear or fossil fuel based resources. When utilities generate electricity with nuclear power they are forgoing the opportunity to generate that same electricity with another technological option like fossil fuel. Likewise, when a nuclear unit is unexpectedly taken off-line, fossil fuel generation has to increase in order to replace the forgone nuclear power. The regulatory process attempts to set rates that reflect those trade-offs. Inefficiencies are said to arise to the extent that prices are not set in a fashion that reflect the relative costs of producing from the two generation technologies (i.e., nuclear, fossil). If the regulatory goal associated with an outage is to make ratepayers whole for the outage, relative prices will need to be balanced, through a refund (transfer), in order to maintain non-outage consumption levels. If the refund is too low, relative prices will increase, and consumption will have to fall relative to non-outage levels, and ratepayers will be worse off. Alternatively, if the refund is too high, consumption will increase relative to non-outage levels, and ratepayers will be made more than whole.

[21] Testimony of J.A. Stall, 7:6-7

Q. WHAT ARE THE ECONOMIC IMPLICATIONS OF THE COMPANY'S PROPOSAL?

A. The Company's proposal would set the refund level at a level too low to make ratepayers whole for the outage related costs since, as I noted earlier, the proposed refund does not reflect the true marginal cost of the outage. The effective prices paid by ratepayers (actual rates less the refund) are likely to be higher resulting in a reduced level of consumption and lower consumer welfare. The Company's proposal would effectively transfer wealth away from customers and to shareholders. Such an outcome is not only inequitable, it is simply inefficient, and entirely inconsistent with "sound economic principles."

Q. LET'S TALK ABOUT THE SECOND ECONOMIC PRINCIPLE YOU MENTIONED EARLIER. WHAT IS MORAL HAZARD?

A. Moral hazard is said to occur in instances where an economic agent facing a certain degree of risk behaves differently when it is insulated from that risk than it would if the risk were not insured.[22] Moral hazard is, in effect, the behavioral difference that results from the presence or introduction of insurance. Moral hazard results in a "market failure" or inefficiency because the agent receiving the insurance does not have to bear the full responsibility for its actions. As Bonbright, et.al. notes:

> A moral hazard is involved when someone other than the purchaser pays for the purchase and hence the purchaser acts, unconstrained by ethics or other institutions, as if there is no resource cost on society from his or her purchases. In other words, moral hazard increases the risk of an event turning out favorably because there may be positive rewards or at least insufficient penalties for opportunistic behavior.[23]

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[22] W. Nicholson. *Intermediate Microeconomics and Its Applications*. 5th Edition. (1990) Chicago: Dryden Press, 695.

[23] J. Bonbright, A. Danielsen, and D. Kamerschen. (1988) *Principles of Public Utility Rates*. Arlington, VA: Public Utility Reports, 138.

Q. ARE THERE ANY RECENT EXAMPLES OF MORAL HAZARD PROBLEMS ARISING IN PUBLIC POLICY?

A. Yes. One good example is the recent banking and financial crisis that led to policies bailing out banks and other financial institutions that were considered "too big to fail." Many financial institutions were given billions of dollars in bail-outs and other forms of financial support to buttress their financial positions devastated by past risky lending actions. Some analysts have argued that these policy actions have done nothing to correct the underlying problem leading to the 2009 financial crisis and in fact, in the long run, may have exacerbated these problems since in the future, banks may use this policy precedent as support for future rescue actions from continued risky practices.[24]

Q. HOW DOES MORAL HAZARD RELATE TO THE COMPANY'S PROPOSAL?

A. The Company's proposals, if adopted, could lead to an opportunity for moral hazard, because it would establish a regulatory precedent that clearly reduces the opportunity cost of outcomes the regulatory process seeks to avoid. If regulated utilities know that the economic consequences of these negative outcomes are not valued at their true costs, it will reduce incentives to avoid actions leading to those negative outcomes. The Company proposes that the Commission reduce the overall refund due to ratepayers in order to avoid creating a potential disincentive to future nuclear, solar, wind, and energy efficiency resource development. Even if the Commission

[24] Wilson, L. and Wu, Y. Common (stock) Sense About Risk-Shifting and Bank Bailouts. *Financial Markets and Portfolio Management*, Forthcoming; Hakenes, H. and Schnabel, I. Banks Without Parachutes: Competitive Effects of Government Bail-Out Policies. *Journal of Financial Stability.* May 21, 2009; and Helwege, J. Financial Firm Bankruptcy and Systemic Risk. *Journal of International Financial Markets, Institutions & Money.* November 14, 2009.

accepted the Company's arguments, it runs the very clear risk of avoiding one type of disincentive by creating another. The efficient policy choice, in this instance, would be to adopt policies that eliminate disincentives for operating known and existing assets over a policy that may reduce the disincentive of an unknown, speculative, and yet to be identified resource investment in the future. Therefore, the Commission should reject the Company's proposals and set an RPC refund at the true value of February 2008 outages.

VII. RPC CREDIT AND GENERATION INCENTIVES

Q. WOULD YOU PLEASE EXPLAIN THE COMPANY'S ASSERTIONS REGARDING POWER COST RECOVERY AND GENERATION INCENTIVES?

A. Yes. The Company's RPC refund proposal is justified, in part, on the faulty and one-sided premise that "FPL recovers power costs without profit"[25] and "100 percent of the benefits of the low nuclear fuel costs (units) are passed along to FPL's customers."[26] According to the Company, it would be "unfair" to credit ratepayers for the full cost of the outage since ratepayers have received all of the benefits of nuclear power.[27] This assertion biases and mischaracterizes how nuclear power costs, as well as other generation-related costs, are recovered from ratepayers.

Q. CAN YOU PLEASE EXPLAIN HOW THE COMPANY'S ASSERTION MISCHARACTERIZES GENERATION COST RECOVERY?

[25] Testimony of William E. Avera, 4:13.
[26] Testimony of William E. Avera, 5:6-7.
[27] Testimony of William E. Avera, 4:15-23 and 5:1-2.

A. Yes. Power generation facilities are developed, and eventually run, with a variety of inputs that includes capital, labor, materials, and fuel. Prior to the energy crisis of the 1970s, many states required utilities to recover all of their costs of generation (capital, labor, materials, and fuel) through base rates. The energy crises of the 1970s, and its corresponding increase in fossil fuel prices, led many regulatory commissions to change their cost recovery practices by adopting Fuel Adjustment Clauses ("FACs"). This process bifurcated the generation cost recovery process into two parts with variable fuel-related expenses being recovered through the FAC, and the remaining costs (capital, labor and other operating costs) to be recovered in base rates. Thus, low fuel cost/high capital cost assets, like nuclear power, tend to have their low fuel costs recovered through FACs while their relatively higher capital costs are paid through base rates. So whatever gains are made from lower FACs tend to be offset by higher base rates, and vice versa.

Q. DO FPL'S RATEPAYERS MAKE CONTRIBUTIONS IN THEIR BASE RATES TO THESE LOW FUEL COST RESOURCES?

A. Yes, and as shown in Exhibit DED-10, FPL's customers pay (on average, total customers) a considerable amount in base rates relative to other peer utilities. So it is difficult to suggest that FPL's customers do not also make sizable contributions for these low fuel cost (and higher capital cost) assets. While it is true that fuel expenses generally do not earn an allowed rate of return: they typically never did prior to the advent of FACs. The capital investments included in base rates, however, have, and still do have, the opportunity to earn an allowed rate of return. This allowed rate of return is the benefit a utility and its shareholders attain for having invested in generation to serve ratepayers. Thus, to assert, or to suggest, that ratepayers have

received all of the benefits from nuclear power, without clearly recognizing the obvious benefits received by the utility and its shareholders through ratepayer contributions in base rates, is biased and one-sided at best.

Q. HOW LARGE ARE THESE POTENTIAL BENEFITS?

A. For the past 37 years, the Company has had the opportunity to earn a significant return on, and a significant return of, its Turkey Point nuclear investments. Assuming a 10 percent allowed return, the Company has earned as an estimated return on, and estimated return of, the Turkey Point units of $4.7 billion. This pales in comparison to an appropriately constructed RPC credit of approximately $15.9 million, and still fails to consider the ongoing future returns the Company and its shareholders will receive as long as the units remain operational.

Q. ARE FUEL ADJUSTMENT CLAUSES DEVELOPED TO PROVIDE GUARANTEED COST RECOVERY?

A. No, and establishing an appropriately-determined RPC does not deprive FPL recovery of its prudently-incurred fuel costs and would not constitute a change in the policy balance underlying most FACs. This policy balance insulates utilities from fuel cost volatility by creating a frequent fuel cost collection and true-up process. This is a significant benefit to utilities in today's markets that can see natural gas prices swing from as high as $13/MMBtu to as low as $3/MMBtu in a matter of less than one year. In return, utilities are allowed to recover prudently-incurred fuel costs. FACs are not a one-sided process with all benefits going to ratepayers and none for utilities and its shareholders. If there are any asymmetries in the process, then they are likely levied against ratepayers since the applied and academic literature on FACs

have recognized many of their deficiencies.[28] A recent report on cost trackers by the National Regulatory Research Institute ("NRRI"), for instance, notes:

> Cost trackers, in various ways, can result in higher utility costs. First, they mitigate the positive effects of regulatory lag on a utility's costs. Regulatory lag refers to the time gap between when a utility undergoes a change in cost or sales levels, and when the utility can reflect these changes in new rates. Economic theory predicts that the longer the regulatory lag, the more incentive a utility has to control its costs. The reason is that when a utility incurs costs, the longer it has to wait to recover those costs, the lower its earnings are in the interim. The utility, consequently, would have an incentive to minimize additional costs. Commissions rely on regulatory lag as an important tool for motivating utilities to act efficiently. As economist and regulator Alfred Kahn once remarked:
>
> > Freezing rates for the period of the lag imposes penalties for inefficiency, excessive conservatism, and wrong guesses, and offers rewards for their opposites; companies can for a time keep the higher profits they reap from a superior performance and have to suffer the losses from a poor one.
>
> Rational utility management, as a general rule, would exert minimal effort in controlling costs if it has no effect on the utility's profits. This condition occurs when a utility is able to pass through (with little or no regulatory scrutiny) higher costs to customers with minimal consequences on sales. Cost containment constitutes a real cost to management. Without any expected benefits, management would exert minimum effort on cost containment. The difficult problem for the regulator is to detect when management is lax. Regulators should concern themselves with this problem: lax management translates into higher cost of service and, if undetected, higher rates to the utility's customers. Regulators should closely monitor and scrutinize costs like those subject to cost trackers that utilities have little incentive to control.[29]

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[28] The recent NRRI report cited in the subsequent sentence outlines the theoretical and empirical studies that provide evidence of the incentive problems associated with FACs. *See*, for example, David P. Baron and Raymond R. DeBondt, "Fuel Adjustment Mechanisms and Economic Efficiency," *Journal of Industrial Economics*, Vol. 27 (1979): 243-69; David P. Baron and Raymond R. DeBondt, "On the Design of Regulatory Price Adjustment Mechanisms," *Journal of Economic Theory*, Vol. 24 (1981): 70-94; David L. Kaserman and Richard C. Tepel, "The Impact of the Automatic Adjustment Clause on Fuel Purchase and Utilization Practices in the U.S. Electric Utility Industry," *Southern Economics Journal*, Vol. 48 (1982): 687-700; and Frank A. Scott, Jr., "The Effect of a Fuel Adjustment Clause on a Regulated Firm's Selection of Inputs," *The Energy Journal*, Vol. 6 (1985): 117-126. The first two studies applied a general model to show that FACs tend to cause a utility to overuse fuel relative to other inputs, pay more for fuel prices, and choose non-optimal, fuel-intensive generation technologies. The third study provided empirical support for this prediction. The fourth study showed that some types of FACs cause biasness in fuel use and that FACs in general weaken the incentive of a utility to search for lower-priced fuel. It provided empirical evidence that electric utilities with an FAC pay higher fuel prices than utilities without an FAC. See footnote 29 for additional detail and source.

[29] K. Costello. "How Should Regulators View Cost Trackers?" Washington, DC: National Regulatory Research Institute: 4, footnotes excluded.

Q. WOULD YOUR PROPOSAL CONSTITUTE ANYTHING ASYMETRICAL ABOUT NUCLEAR POWER COST RECOVERY?

A. No, and again, such assertions are biased and fail to recognize the big picture on nuclear power plant cost recovery and its long and storied history. Throughout the 1980s and 1990s, for instance, many utilities that developed, or cancelled nuclear power plants, received significant investment disallowances because of numerous and varied prudence-related issues driving cost and schedule overruns. A summary of these investment disallowances, as well as each unit's cost and schedule overruns, is provided in Exhibit DED-11. FPL however, is not reported to have received an investment disallowance for its Turkey Point units. This point has not been highlighted to raise questions about the prudence of FPL's historic nuclear investments, but it has been provided to show that FPL and its shareholders have already received considerable cost recovery benefits that other utilities did not receive during a comparable time period. Thus, to suggest, or at least imply, that assessing an appropriately calculated net RPC credit to ratepayers would somehow be unfair fails to recognize the significant policy support that nuclear power has already been afforded, and continues to be afforded, in Florida.

Q. IS YOUR RECOMMENDATION COMPARABLE TO A NUCLEAR POWER PLANT INVESTMENT DISALLOWANCE?

A. No, and any assertions offered by the Company that adopting an appropriately-determined RPC credit somehow represents a nuclear disallowance, or is a vote "against" nuclear power, is simply a distraction from the true issues. An appropriately-determined RPC credit, based upon the true opportunity cost of replacement power, will not disallow one dollar of nuclear capital or fuel costs. The

calculation is simply based upon the total generation costs of replacement power (which in this case is a series of natural gas/oil generation assets and purchased power resources) less the generation that was off-line (or avoided) as a consequence of the outage: which was nuclear power. This calculation does not require the disallowance of one dollar of nuclear power cost (capital nor fuel) and as such, cannot in any way be interpreted as a vote against nuclear energy.

Q. REGARDLESS, DO YOU AGREE WITH THE COMPANY'S ASSERTION THAT PROPER REGULATORY ACTIONS CAN CREATE DISINCENTIVES TO NUCLEAR GENERATION DEVELOPMENT?

A. No, and the Company's position is not supported by any evidence or studies that would suggest otherwise. In fact, the recent academic literature on this subject would prove otherwise. Several years ago, research was published in the *Rand Journal of Economics*, that tested the hypothesis that capital disallowances discouraged regulated firms from making future capital investments. The article, using a variety of different empirical specifications, rejected the hypothesis that investment disallowances were "opportunistic," and discouraged efficient capital investment. The article specifically found that:

> The empirical results do not support the proposition that there was a violation of the "regulatory compact" as a result of the cost disallowances of the 1980s. Regulators may have become more stringent in their treatment of nuclear power operations, but they may simply have been responding to lax cost control by operators of nuclear plants with highly dispersed ownership structures. There is no evidence of a shift in treatment of customer plant owners (who did not operate the plant) or of utilities building conventional generating facilities. Most utilities apparently viewed the disallowances as

indicative of bad management by the affected firms and saw no reason to change their own investment practices.[30]

Q. DID THIS ARTICLE TEST ANY OTHER INTERESTING QUESTIONS ABOUT REGULATED FIRM INVESTMENT DECISIONS?

A. Yes, the aforementioned research also examined the impact of the Duff and Phelps investment analysts' regulatory climate rating to test whether utilities regulated by commissions considered "less favorable" by Wall Street tend to have lower overall investment rates than those regulated by Commissions considered "more favorable." Since the ratings range from the best at a level of 1, and the worst at a level of 6, the empirical hypothesis assumed a negative relationship between investment and rating. The empirical results, however, found the exact opposite relationship: that investment actually increased the "less favorable" a Commission is rated from an investor perspective. The empirical result, however, was statistically insignificant, indicating that, at best, it was impossible to discern any relationship between investor ratings of regulatory commissions and the investment practices of their utilities.

Q. DOES FLORIDA HAVE ANY ATTRACTIVE POLICIES SUPPORTING NUCLEAR POWER PLANT DEVELOPMENT?

A. Yes. Florida has one of the most attractive set of cost recovery rules and regulations for nuclear power plant development in the U.S. These rules (PSC Rule 25-6.0423 Nuclear or Integrated Gasification Combined Cycle Power Plant Cost Recovery) are based upon authorizing legislation included in F.S. 366.93. While many states have legislation and/or rules that are comparable, few provide the full panoply of cost and

[30] T. Lyons and J. Mayo (2005). "Regulatory Opportunism an Investment Behavior: Evidence from the U.S. Electric Utility Industry." *Rand Journal of Economics*. 36, 3: 642.

development assurances that are included in the Florida process. A comparison of these rules and legislation has been provided in Exhibit DED-12. The combination of Florida's legislation and administrative cost recovery rules provides a high degree of cost assurance on capital cost recovery even in the event a project cancellation. This form of capital securitization, as well as the allowance for cash earnings on construction work in progress ("CWIP"), is far more important in nuclear project development than unknown issues about future replacement costs on new reactors that generally have no operating history. The cash earnings on CWIP for instance can be as large as $1 billion for a typical nuclear power plant, which is far larger than the $15.9 million net RPC.

Q. IS THERE ANY RELATIONSHIP BETWEEN THE PROPOSED RPC CREDIT IN THIS PROCEEDING AND NUCLEAR PLANT DEVELOPMENT COST RECOVERY?

A. No, since the promotion of nuclear power and the determination of an appropriately-determined RPC are unrelated, and any attempt to try to tie them together is simply an attempt to confuse and obfuscate the issue. The issue before the Commission is one of determining the appropriate value for replacement cost of power for generation resources that were knocked off-line by the February 2008 outage. The Commission, and the Florida Legislature, have clearly defined a strong and supportive policy for nuclear power plant development and that policy, and the rules and regulations underlying that policy, have not changed, and are not being proposed to be changed as a consequence of the February 2008 outage. In fact, pursuing consistent regulatory policy by setting a net RPC credit on the true opportunity cost of the outage is

actually more consistent with Florida's big picture nuclear public policy goals than what the Company is proposing.

Q. CAN YOU PLEASE EXPLAIN WHY CONSISTENCY IS MORE IMPORTANT TO NUCLEAR AND RENEWABLE POWER COST RECOVERY THAN SETTING POLICY IN A ONE-TIME OPPORTUNISTIC FASHION?

A. The real challenge in the development of high capital cost power generation assets such as nuclear, solar, and offshore wind, tends to rest more with policy consistency, than in creating set-asides, tax credits, or in this case, the shareholder subsidies. In fact, in some instances, these policies can create as much harm as they do good. Consider that many states have aggressive renewable portfolio standards ("RPS"), have strong positive statements and policies supporting renewable energy, and in many cases, generous rebate programs. Yet many of these states are falling short of their RPS goals over investors concerns about the longevity of these renewable support mechanisms. If high capital cost assets are not "securitized," through some form of contract or other binding long term agreement, markets will have only two means of reacting: (1) the risk premium included in the projects will have to rise to higher levels, meaning higher costs for ratepayers or (2) under-investment in the resource.

Q. HOW DOES THIS RELATE TO FLORIDA'S NUCLEAR POWER POLICY, INCENTIVES FOR NEW GENERATION, AND THE ISSUES IN THIS PROCEEDING?

A. Florida's legislation, rules, and regulations provide the effective "securitization" that provide long term assurances on capital cost recovery for nuclear power, and to some extent renewables. The true issue for incentivizing high capital cost asset development is the recovery of their capital costs. So, to argue that a decision associated with a $14 million net RPC credit somehow creates a disincentive for the development of a $6 billion or more nuclear asset, is challenged. An appropriately determined net RPC credit will not deny the Company one dollar in capital cost recovery of its nuclear assets, so it should not, by definition, create a disincentive in developing new nuclear assets.

Q. HOW WOULD THE REPLACEMENT COSTS OF NUCLEAR POWER BE HANDLED IN COMPETITIVE MARKETS?

A. The full value of that replacement cost would typically be borne by the nuclear power plant operator and its shareholders.[31] In fact, FPL Group recently reported lower earnings of $0.17 to $0.21 per share as a consequence of nuclear outages and replacement cost purchases, associated with the Seabrook nuclear unit it owns and operates in New Hampshire.[32]

Q. WOULD YOU PLEASE EXPLAIN THE COMPANY'S ASSERTIONS REGARDING AN APPROPRIATELY-DETERMINED RPC CREDIT AND DISINCENTIVES FOR RENEWABLES?

[31] This assumes replacement costs are not defined in any contracts or regulations approving the transfer of the nuclear plant.

[32] The reduction in earnings is also attributed to lower than expected wind resources. See Reuters, Update 1-FPL cuts adjusted 2009 earnings forecast, December 22, 2009.

A. Yes, the Company also argues that an appropriately-developed RPC will create a disincentive for solar and wind energy development.[33] The Company specifically argues that if the Commission sets an appropriately-determined RPC credit it will reduce FPL's incentive to invest in solar or wind. The Company's argument, however, is incorrect and fails to recognize a number of other factors associated with renewable energy development that far exceed the very limited range of issues open for debate in this proceeding that include:

- The basic economics of renewable power generation.
- Policy mechanisms and alternatives open to the Commission in supporting renewable power.
- The perverse incentives that would be created by accepting the company's proposals in this proceeding that could lead to (a) inefficient renewable energy development and (b) underinvestment in distributed resources like renewable energy.

Q. HOW DO BASIC ECONOMICS INFLUENCE RENEWABLE ENERGY INVESTMENT DECISIONS?

A. Many renewable power generation investments require subsidies and support mechanisms that include investment tax credits, production tax credits, grants/subsidies/rebates, renewable energy credit ("REC") revenue streams, and/or some type of contracted long-term fixed revenue stream that (generally) supports the difference between the levelized cost of the renewable asset in question and its next best alternative, which tends to be natural gas-fired combined cycle generation. The levelized cost of solar energy (photovoltaic) is approximately $370/MWh while the

[33] Testimony of William E. Avera, 4:11-15.

levelized cost of natural gas combined cycle power generation is roughly $60/MWh, assuming $5.00 per million Btu ("MMBtu") priced natural gas. Put another way, the capital cost premium of replacing the Turkey Point nuclear units with comparably-sized solar power is potentially a $6.2 billion issue: a number that dwarfs the $14 million at issue in this proceeding. Thus, the single biggest hurdle in developing solar energy (and other renewables) is overcoming this capital cost premium, not the Commission's decision in a relatively limited RPC credit proceeding.

Q. WOULDN'T AN UNFAVORABLE DECISION IN THIS PROCEEDING CREATE A DISINCENTIVE FOR FPL TO PRESENT A SOLAR ENERGY PROPOSAL BEFORE THE COMMISSION GIVEN THESE ALREADY SIGNIFICANT ECONOMIC HURDLES?

A. Not necessarily since, as I noted earlier, the overwhelming policy question associated with promoting solar energy (and other non-economic renewable resources) is the state's willingness to support renewable assets which is simply (a) not at issue in this proceeding and (b) will not be resolved by the outcome of this proceeding. Regardless, renewable energy development in the U.S. is supported through mandate, not discretion. These mandates vary from a variety of publicly-supported tax credits, rebates from societal benefit funds, dedicated ear marks and grant set-asides, and most importantly, renewable portfolio standards ("RPS"). If federal RPS legislation passes, like the provisions included in the pending Waxman-Markey bill, a national RPS will become the law of the land, and from a policy perspective, FPL will be required to either abide by the standards set in that bill, or make alternative compliance payments ("ACPs").

Q. SUPPOSE THE COMMISSION DID DECIDE IT WANTED TO SIGNIFICANTLY EXPAND ITS PROMOTION OF RENEWABLE ENERGY, COULD THE OUTCOME OF THIS PROCEEDING SET ANY NEGATIVE PRECEDENTS FOR FUTURE RENEWABLE DEVELOPMENT?

A. Yes, there may be some implications based upon the precedent set by the Commission in this proceeding. Consider, as a hypothetical, a situation where a solar energy developer contracts with FPL to provide firm power. Now assume that, for whatever reason, the solar developer was only able to deliver half of its contracted generation. If the Commission were to establish the precedent the Company recommends in this proceeding, the solar developer in this example, who did not deliver the required amounts energy, could easily make the argument that FPL should continue to pay for the full contracted amount, in the spirit of "promoting a low-fuel cost resource." This request could be based on the Commission's precedent established in this proceeding which uses the FAC process to support nuclear and renewable development. While, solar energy developers generally do not make firm power sales commitments to utilities, some other renewable generation resources with interruptible fuel sources can, and accepting the policy rationales offered by the Company in this proceeding invites future similar requests. In summary, using the FAC process to subsidize resource preferences is simply a bad idea.

Q. CAN YOU EXPLAIN THE OTHER PERVERSE OUTCOMES THAT COULD ARISE SHOULD THE COMMISSION ACCEPT THE COMPANY'S PROPOSAL?

A. One perverse outcome that could arise from accepting the Company's proposal in this proceeding is the creation of a disincentive to invest in distributed resources like

solar, wind, and other technologies. These disincentives could arise if the full economic consequences of supporting reliability are diminished. One commonly recognized benefit of distributed energy resources ("DER") are the localized reliability benefits these resources can provide at the distribution level. If those values are not appropriately valued, but discounted from the true cost of reliability-related events, it can lead to: (1) a sub-optimal level of DER investment; (2) a sub-optimal level of other complementary reliability investment compliments; and/or (3) a sub-optimal level of reliability. Thus, assessing an appropriate RPC-credit can actually lead to greater policy support for DER and enhanced reliability, not less.

VIII. CONCLUSIONS AND RECOMMENDATIONS

Q. WHAT ARE YOUR GENERAL RECOMMENDATIONS REGARDING THE COMPANY'S PROPOSED RPC?

A. I recommend the Commission reject the Company's proposed RPC credit and accept the $15,974,055 credit I have offered in my direct testimony. The Company's proposal does not reflect the actual replacement cost of energy associated with the transmission-created outages of February 2008, and simply represents a transfer of wealth from ratepayers to the Company and its shareholders. The Commission should also reject the policy arguments offered by the Company as support for its proposed RPC credit. Having ratepayers subsidize FPL's replacement costs would have little to no effect on any decision to invest in new nuclear, solar, wind, and energy efficiency resources given other issues that are (1) beyond the scope of this proceeding and (2) overwhelmingly more significant than the RPC credit due to ratepayers from the February 2008 outages. Accepting the Company's RPC proposal places the Commission in the position of setting a policy precedent that would

significantly deviate from sound economic principles and traditional regulatory practices.

Q. DOES THIS CONCLUDE YOUR TESTIMONY FILED ON FEBRUARY 10, 2010?

A. Yes.

Errata to Direct Testimony of David E. Dismukes

page 4, line 13:	"and 3,750 MW of customer load" should be "and 3,650 MW of customer load".
page 12, line 1:	"average nuclear fuel cost of $4.5/MWh" should be "average nuclear fuel cost of $4.4/MWh".
page 15, line 1:	"recommended net RPC credit of $15,977,050" should be "recommended net RPC credit of $15,974,055".
page 17, lines 13-14:	"adjusted system average costs ($51.32/MWh)" should be "adjusted system average costs ($52.55/MWh)".
page 18, line 5:	"adjusted system average cost ($51.32/MWh)" should be "adjusted system average cost ($52.55/MWh)".

BY MR. BECK:

Q. Have you prepared a summary of your testimony?

A. Yes, sir, I have.

Q. Would you please provide it?

A. Yes, sir.

Good morning, Commissioners. The purpose of my testimony is to address one of the two issues you heard about at the beginning of the proceeding, which is the estimation and calculation of the replacement cost credit that is due to FPL's ratepayers from the February outage. And I think it's important to draw that out early and to make that, that differentiation. This isn't a prudence recommendation. This isn't a disallowance. This is an appropriately determined credit that will go back to FP&L's customers as a consequence of those February outages.

Now as you've, you've discerned probably from the testimony yesterday and having read the testimony of the company's witnesses, there's a significant difference in the calculations of those credits. The company is proposing roughly about $2 million. My estimate is somewhere around $15.9 million, $16 million.

The difference in that has to do with two primary reasons. One is the duration of the outage period that you're looking at for the replacement cost

credit. The second has to do with the avoided fuel that you're looking at to assess and determine what that credit is.

The company, as you've heard from yesterday, would like you to make a decision based on a system average cost in determining that credit. My recommendation is that you would do it as you traditionally would do it, and that is looking at the avoided fuel cost for the unit that was out, which would be the nuclear fuel cost.

Now the company's defense for this is really, it's not that big a difference, I think as you heard yesterday from some of the cross-examination and some of the questions about the numbers. I mean, the numbers kind of fall out in very similar fashions. There's not a lot of disagreement in terms of what the purchased power amount is. There's not a lot of disagreement in terms of what the peaking units were for the eight hours. There's not a lot of disagreement in terms of how to determine what that system average cost is. There's not a lot of differences in terms of figuring out what the avoided nuclear fuel cost is. It's really an issue of how you put those things together to determine the replacement cost credit.

The company would like to use a system average

for determining that credit based on two primary defenses: One is a fairness issue and the other is on what it believes to be sound economic and regulatory principles. And my testimony addresses both of those issues I think at length. I think the better half of my prefiled testimony addresses both those issues in detail.

I mean, clearly on its face the issue of fairness certainly is questionable. I mean, to have an estimate that's $16 million and to offer to pay only $2 million of that I think certainly challenges a fairness and equity issue. I mean, 50/50 may have some grounds to that, maybe 75/25 may have some grounds to fairness. But to, to suggest that you're only going to make a credit payment of about 12.5 percent is certainly not along the lines of being fair, particularly to FP&L's ratepayers.

If you look at sound economics and regulatory policy, I don't think either of, any of the company's suggestions would match up with either of those. If you think about this from a, from an economics perspective and just from an efficiency perspective and you consider the fact that, that customers have paid more than normal in a prior period because of the outage, their consumption has been reduced as a consequence of that

and they've lost consumer welfare for that. And what your job is to do in the second period is to provide a credit that makes them whole for that amount.

Now if my consumption has been reduced in this period and I don't get the full benefit for it in the second period, there's a loss in consumer welfare there and there's a cost to society. And there's no efficiency gain there and there's nothing consistent with economic principles by doing something like that.

The second thing and a more contemporaneous idea in economic principles would be this idea that I talk about in my testimony in terms of moral hazard. And moral hazard fits into the area of risk and uncertainty and information economics, and it's one upon which a lot of performance-based regulatory principles are based. And if you go in -- and the basic fundamental principles behind this are that if you provide insurance to a party, they will behave differently with that insurance than without that insurance. And you may have some familiarity with this with the banking crisis recently, the too big to fail issues where some have argued that going in and providing the bailouts to big banks further stimulates the types of risky activities that they got themselves in trouble with to begin with.

So if you think about this from a regulatory perspective, do you want to provide insurance to a company for outages and costs that they will not incur because of those outages and to encourage that type -- or to reduce the cost of those types of outages on a forward-going basis and what are the regulatory implications associated with that?

The other thing in terms of regulatory policy, you heard some discussion yesterday about the fuel adjustment clause, and I think a grossly mischaracterized representation of how that process works to suggest the fact that, that, that it's all benefits for ratepayers and no benefits to the company.

I think anybody that's familiar with natural gas prices and the movement that they've had since 2005 knows that there's benefits associated with fuel adjustment clauses. It insulates the utilities from the risk of bearing those costs and those shifts in commodity, in commodity prices that they use for the fuel that they pass through to their ratepayers. So there is a very significant benefit to the company by having that fuel adjustment clause in place, and it's certainly not one-sided.

In addition, ratepayers pay for those lower cost fuel assets through their base rates and they

provide the company a return on and of that investment. You can't look at the fuel clause and the fuel rates alone without thinking about its corresponding cost in base rates as well. So there is a, there is a price that's paid for those lower cost fuel assets, and those are through your base rates. And there's certainly benefits for the company associated with having that as well.

The other big issue that the company has raised is that this would provide disincentives associated with developing nuclear and renewable fuels. When you think about nuclear power plants, they are very capital intensive assets. A small replacement credit cost of $16 million relative to an eight plus billion dollar investment is a small amount. In my opinion and my experience, I have never heard replacement cost issues come up as an issue associated with making generation planning decisions, particularly with regards to nuclear power plants.

When you think about renewable power, you have the same types of issues. I've never heard replacement power come up as an issue associated with these assets as well. And for most of these assets, they have a number of other economic attributes that create challenges from a regulatory perspective that go well

beyond the issues that are in this proceeding today. And a lot of that has to do with how you're going to make up that uneconomic differential between traditional assets and a renewable asset. So that's the first hurdle that would ever have to be crossed if you're talking about investments in renewable energy.

That concludes my summary, and I'd be happy to answer any questions, Mr. Chairman.

MR. BECK: Dr. Dismukes is tendered for cross-examination.

COMMISSIONER SKOP: Thank you, Mr. Beck.

FPL is recognized for cross-examination.

MR. BUTLER: Thank you, Mr. Chairman.

CROSS EXAMINATION

BY MR. BUTLER:

Q. Good morning, Dr. Dismukes.

A. Good morning.

Q. I'll start by asking you a few questions about your background. Are you trained as a nuclear engineer?

A. No, sir.

Q. I'm sorry. I didn't hear you.

A. No, sir.

Q. No, sir? Okay. And have you ever worked at a nuclear power plant?

A. No, sir.

Q. Okay. You don't hold any licenses from the Nuclear Regulatory Commission to operate a nuclear power plant, do you?

A. No, sir.

Q. Okay. And have you ever been responsible for managing the operation of a nuclear power plant?

A. No, sir.

Q. Okay. Did you speak to any of FPL's plant operators regarding the, either the nuclear units coming down following the Flagami transmission event or work done to bring those units back online after the event?

A. No, sir.

Q. Okay. And I believe you have not visited FPL's Turkey Point nuclear power plant; is that right?

A. That is correct.

Q. Okay. You also haven't visited FPL's Flagami transmission substation?

A. No, sir.

Q. Excuse me. In connection with your deposition I asked you to bring copies of any testimony you filed or previously provided that addresses the manner of calculating a utility's replacement power or replacement fuel cost. And am I correct that you have no documents responsive to that request?

A. That's correct.

Q. And are you making any claim in your testimony that the Turkey Point nuclear units were operated imprudently?

A. No, sir. And I don't think that's the issue in this case. It's really determining what the replacement cost credit should be to ratepayers. It's not a prudence investigation and my recommendation is not based upon a disallowance.

Q. Based on the information you have received, understanding your just answer -- the answer you just gave, do you have any reason to believe that the Turkey Point nuclear units could have been safely returned to service more rapidly than they were following the Flagami transmission event?

A. I do not. And, again, the purpose of my testimony isn't to recommend a prudence disallowance to the Commission.

Q. Okay. Understood. I'm just wanting to establish for the record and for the benefit of the Commissioners kind of the parameters of what you are and aren't asserting.

Do you have personally any information to base an objection to FPL's decision that it would repair the Turkey Point Unit 3 rod position indicator system during the outage that was initiated by the Flagami

transmission event?

A. I do not have a position. And, again, the purpose of my testimony wasn't to go in and micromanage what the, what the company did during those outages. It was to determine what the appropriate replacement cost credit should be for ratepayers.

Q. In connection with your deposition, I also asked you to bring copies of any orders or opinions in which a regulatory body has concluded that a utility is responsible for replacement power costs associated with the full duration of a power plant outage without regard to whether imprudence on the part of the utility caused the entire outage. Do you remember that?

A. Yes, sir, I do.

Q. Am I correct that you are aware of no such documents?

A. That is correct.

Q. Excuse me. Are you aware of any cases where the Florida Public Service Commission has disallowed replacement power costs for an outage at a power plant when there has been no finding of imprudence with respect to the operation or maintenance of that power plant?

A. I'm not aware of any orders.

Q. I would ask you the same question with respect

to utility regulatory commissions in other states. Are you aware of any case where a utility regulatory commission in another state has disallowed replacement power costs for an outage at a power plant when there has been no finding of imprudence with respect to the operation or maintenance of that plant?

A. I'm not aware of any orders.

Q. Okay. The NRRI article that you cite in your testimony states on Page 3 that, and I quote, regulators are legally bound to allow costs -- or, I'm sorry, allow utilities the opportunity to recover prudently incurred costs. Prudent costs reflect utility management that makes rational and well-informed decisions, end quote. Am I correct that you agree with that statement?

A. I do. But the purpose of my testimony isn't to offer a prudence disallowance. It's to offer a replacement cost credit.

Q. Are you familiar with the Commission's, this Commission's order Number 23232?

A. I don't have the numbers memorized, so can you help me and let me know what that is about?

Q. I see Ms. Bennett is about to do what I had hoped she would, which is to pass out copies of it. Thank you, Ms. Bennett.

COMMISSIONER SKOP: Mr. Butler, are we going

to be marking this as Exhibit Number --

MR. BUTLER: It is an order of this Commission. I don't feel a need to mark it as an exhibit, if others don't. I think it's readily accessible.

COMMISSIONER SKOP: Okay. Very well. Thank you.

BY MR. BUTLER:

Q. Now having the order before you, seeing that, seeing what it says, are you familiar with this order that involved a, an outage of Turkey Point nuclear units in 1989?

A. Yes, sir, I'm familiar with it.

Q. Okay. Excuse me. Would you agree that in Order 23232 the Commission directed FPL to refund to customers replacement power costs associated with Turkey Point Unit 3 being offline for the period March 21 to 31, 1989?

A. It's my understanding there was a disallowance associated with the operation of the plant.

Q. You're not familiar with the time period of the disallowance or of the nuclear plants, the sort of total duration of the outage that was in question?

A. I know that it was for part of the period that the plant was out, but not the entire period.

Q. Well, would you accept, subject to check, that Turkey Point Unit 3 did not actually return to service until June 24, 1989?

A. I can agree to that, subject to check.

Q. Actually, let me do this. It's probably better. If you'll turn to Page 4. If you'll look at the paragraph that somebody has helpfully marked with a line down the right side. So that's good. It helps. Thank you, Ms. Bennett. There is a reference to Unit 3 returning to service on June 24, 1989. Do you see that?

A. I do.

Q. Okay. So would you agree that in this case the Commission limited the refund that it required FPL to make to customers to a period of three days out of a nearly two-month long outage?

A. I can agree to that, subject to check.

Q. And are you aware that the Commission gave as a reason for limiting the refund to that three-day period that, quote, even though management was responsible for the outage, replacement fuel costs were prudently incurred commencing April 1?

A. I can agree to that, subject to check. That's my understanding.

Q. Okay. So would you agree that in that order at least the Commission parsed the outage, disallowed

replacement power costs with respect to a period of time, three days, in which it found that the company was responsible for the replacement power costs because it had not acted prudently, but then did not disallow fuel costs for the period thereafter, from April 1 through June 24, 1989?

A. Yes, sir, I agree. But the circumstances in this proceeding are different than those. I mean, that was a prudence investigation associated with the operation of the plant. This is an investigation associated with determining the replacement cost credit that goes to ratepayers and how that credit will be assessed to those ratepayers.

Q. And as I believe you said earlier, your testimony is the same irrespective of any finding with respect to prudence; is that right?

A. My testimony is not based on an imprudence finding and it's not recommending a disallowance. It's recommending an appropriately determined replacement cost credit to ratepayers.

Q. Are you also familiar with the Commission's Order Number PSC-09-0024-FOF-EI, which I'm going to refer to that as Order 0024 for simplicity?

A. Yes, sir.

MR. BUTLER: Okay. And, Ms. Bennett, do you

have a copy of --

THE WITNESS: I have a copy, Mr. Butler.

BY MR. BUTLER:

Q. Do you have a copy of it?

A. Yeah. Go ahead.

Q. Okay. Thank you.

And this is the order that dealt with what's been referred to yesterday as the drilled hole incident; is that right?

A. That is correct.

Q. Would you agree that in Order 0024 the Commission required FPL to refund replacement power costs associated with a five-day extension of a planned refueling outage due to what I'll, what we're calling the drilled hole incident?

A. Yes, sir.

Q. So, conversely, would you agree that Order 0024 did not allow -- disallow any of the outage time prior to the five-day extension?

A. That's my understanding.

Q. Okay. Are you aware of any decisions of this Commission requiring FPL to refund replacement power costs other than Order 23232? I'm sorry. I put one too many numbers in there, I think. Order 23232 and Order 0024.

A. I'm not aware of any.

Q. Okay. Are you familiar with the Louisiana and Texas order, orders for which Public Counsel has asked this Commission to take official notice?

A. Yes, sir.

MR. BUTLER: Okay. Mr. Chairman, I have an excerpt from the Louisiana order that I think it probably would be useful to identify as an exhibit just for clarification.

COMMISSIONER SKOP: Very well. I think the exhibit number will be 39. And a short title, please.

MR. BUTLER: Short title is Excerpt from Louisiana PSC Decision.

COMMISSIONER SKOP: Thank you.

(Exhibit 39 marked for identification.)

BY MR. BUTLER:

Q. Dr. Dismukes, before focusing on the excerpt that I handed you, I'd like to ask you just more generally, based on your familiarity with the, excuse me, these orders, is it your understanding that both orders arose out of the same series of outages at the River Bend nuclear power plant operated by Gulf States Utilities?

A. Yes, sir.

Q. Two separate regulatory jurisdictions in which

power was provided in both jurisdictions, so they had decisions based on the same outage; correct?

A. Yes, sir. That's correct.

Q. Okay. Do you know if any of the River Bend outages that are the subject of those two orders was the result of an off-site transmission disturbance?

A. It's my understanding the transmission-created outage was onsite.

Q. All right. Okay. That's a good segue to the excerpt that I had provided you. If you would look in what's been marked as Exhibit 39 and focus on what's marked at the top as Page 26 of 33.

A. Okay.

Q. And this describes the explosion of a B preferred transformer. Do you see that?

A. Yes.

Q. And is that the event you were just referring to as an onsite transmission disturbance?

A. Yes, sir.

Q. Okay. I think you already said this, but just let me clarify or confirm. You would agree that the B preferred transformer was located on the River Bend power plant site; correct?

A. Yes, sir. That's correct.

Q. Okay. Is it your understanding that the

B preferred transformer was not used in day-to-day operations of the River Bend power plant, but rather had a specific role in providing startup power to the plant?

A. That's my understanding, that it's used for plant use.

Q. Okay. So would you agree that the B preferred transformer served a specialized function that was directly tied to operation of the River Bend plant?

A. That's my understanding, but I don't know with certainty if that is the case.

Q. Okay.

A. I mean, it may, it may have additional purposes there for the area around the town. I don't know. I think the order would suggest that's the case. I'm not trying to be argumentative, but I just don't know.

Q. Would you agree that in evaluating consequences of the B preferred transformer explosion, the Louisiana PSC did not disallow replacement power costs for the full time that the River Bend plant was offline following the explosion, but rather disallowed replacement power costs for half of the outage duration?

A. I would agree it was some, some portion of the outage period. Again, I think this differs from the proceeding that we're engaged in today, which is to look

at a replacement cost credit. It's not a prudence investigation. It wasn't my understanding from the company's testimony that its $2 million recommendation was a finding of imprudence on its behalf.

Q. Would you agree that it was very broadly characterized or summarized FPL's testimony that FPL is seeking to achieve or strike a fairness balance in the allocation of the replacement power costs between customers and the utility, shareholders?

A. I would agree that that's the, that's the goal of the company's recommendation, but that has nothing to do with prudence.

Q. Would you turn to Page 28 of 33 in the Louisiana PSC order.

A. Okay.

Q. I'd like to ask you about the paragraph, the short paragraph that is immediately above Topic C, impact of River Bend outages, where it starts, "The Commission finds that Gulf States' imprudence." Do you see that?

A. Yes, sir.

Q. Excuse me. I'd like you to read the last sentence of that paragraph, the second sentence.

(Pause.)

I'm sorry. I meant to read aloud.

A. Oh, okay. "The Commission finds that Gulf States' imprudence caused one-half the delay resulting from the B transformer explosion. This ruling adequately balances the competing considerations in this issue." Where the competing considerations, as I understand it, were the differences of opinion on what was prudent and what was imprudent associated with the transformer outage.

Q. Thank you.

Your testimony has some discussion about pricing signals sent to customers. I want to ask you just a few questions about the subject of realtime pricing. Excuse me. We covered this in your deposition. I'm trying to summarize this to not take a lot of time.

Is it your understanding that under the Florida fuel adjustment clause, the fuel factors for what I'll call year three reflect projected fuel cost for year three, and estimated/actual true-up of fuel cost for year two, and a final true-up of fuel cost for year one?

A. That's correct.

Q. Okay. And isn't it also correct that the fuel factors under the Florida fuel adjustment clause are uniform or levelized over the year in which they apply?

A. That's correct.

Q. And so wouldn't you agree that the fuel factors under the Florida fuel adjustment clause are substantially removed from the concept of realtime pricing for fuel at any particular point in time within the year when the factors are applied?

A. That's correct. I don't think they're designed to be a realtime pricing signal.

Q. Okay. I'd like to turn to the subject briefly of, excuse me, incentives and disincentives created by fuel adjustment mechanisms and their application.

Would you agree that a utility regulatory commission's decision on what types of costs it will allow to be recovered through a fuel adjustment clause will influence utility decisions?

A. What do you mean by utility decisions? That's pretty broad.

Q. The utility's management decisions in how it's going to operate, you know, build and operate its system.

A. I'm not aware of how fuel adjustment clause decisions impact generation planning decisions. I'm not aware of anything of that nature.

Q. Would you turn to -- do you have a copy of your deposition available?

A. I do.

Q. Would you turn to Page 28 in the transcript of it? If you'll look on Line 12 in the deposition, I asked you the question, "If a regulatory commission has a particular approach to determining whether fuel costs that are subject to a cost tracker are going to be disallowed, will the way that the Commission decides whether or not costs will be disallowed, is that something that could be an incentive or a disincentive to the utility's decision?" And you answered, "I would stand by my prior answer. I mean, to the extent that the utility commission defines the rules by which the fuel cost to recover in a tracker is going to influence utility decisions." Do you see that?

A. I do.

Q. Do you disagree with the answer that you gave at your deposition?

A. I don't see that that has anything to do with generation planning decisions. Can you help me where, where we discussed that in the prior parts of those questions? Because I think that was the nature of the question you asked me earlier.

Q. When you answered the question, because I was using your words, "influence utility decisions," in the deposition, how were you using the term?

A. Well, I think if you go up to Line 4 and 5, we were talking about trackers from a general perspective and I was referring to that answer, and I said that regulatory parameters define how cost trackers will work and influence utility decisions.

I think if you go to the prior page, we had similar discussions and we were talking mostly about fuel and how utilities would make expenditures relative to fuel. I don't think we were discussing anything about how utilities would make generation planning decisions, and that was the premise of the question that you asked me earlier.

Q. So when you answered this question in your deposition, in spite of the context of this case, you didn't understand your answer about utility decisions to include decisions with respect to operation and construction of power plants and fuel that are consumed in them?

A. Mr. Butler, you asked me earlier about generation planning decisions. And I answered the questions in this deposition and I'm answering the questions now as you ask them to me, and they had nothing to do with generation planning.

Q. Okay. So what did you have in mind when you were referring to influence or being an incentive or a

disincentive to the utility's decisions? I mean those are your words. Those decisions --

A. Those are my words.

Q. I'm sorry.

A. We were talking about decisions associated with fuel expenditures.

MR. BUTLER: Excuse me. Mr. Chairman, I had not completed my question.

COMMISSIONER SKOP: Okay. Mr. Butler, you can complete your question. And I'd ask the parties to relax and we'll get to the bottom of this. You're getting a little testy there.

MR. BUTLER: Thank you.

BY MR. BUTLER:

Q. Dr. Dismukes, you know, your words are that, excuse me, you know, the Commission defines the rules by which fuel cost to recover in a tracker is going to influence utility decisions. I'm just asking you what did you mean by "utility decisions" when you used the term in your deposition?

A. In how it purchased and procured fuel.

Q. Nothing about how it would actually consume the fuel then?

A. Excuse me? I didn't hear that.

Q. I said nothing about how it would actually

consume the fuel then?

A. Well, you purchase fuel to consume it.

Q. Okay. I'd ask you -- now I'd like to change, switch subjects about, still in the area of incentives and disincentives, and ask you to compare a utility's risk of disallowance for a replacement power cost between a nuclear unit and a combined cycle unit. Would you agree that in general it takes longer to bring a nuclear unit back online after an unplanned outage than is the case for a combined cycle unit?

A. Yes, sir. That's the case.

Q. Would you also agree that in general the net replacement power cost, meaning the difference between the cost for replacement power on a unit that is offline and the avoided cost of fuel not consumed for the offline unit, is higher for a nuclear unit than for a combined cycle unit?

A. Yes, sir. On a fuel cost basis that would be the case.

Q. Would you agree that both of these factors, the longer time to return a nuclear unit to service after an unplanned outage and the higher net replacement power cost for a nuclear unit, are added vulnerabilities that a utility has to accept if it decides to build nuclear units?

A. Yes, sir.

Q. Now I'd like to ask you a, to consider a hypothetical. Suppose that a utility is deciding whether to build a nuclear unit or a combined cycle unit. It's in a regulatory jurisdiction where the utility will be allowed to recover the capital costs for either type of unit. But if the unit goes offline for any reason, there's a 50/50 chance that the utility won't be able to recover the net replacement power costs for that unit, recognizing in advance this is a pretty abstract hypothetical.

In that hypothetical situation, would you agree that the utility's incentive would be to build a combined cycle unit so that the amount of net replacement power costs that are at risk would be lower?

A. I think the utility would have an obligation to develop in a regulatory environment the resource that provided the least cost net present value revenue requirement.

Q. Okay. Would you agree that a business, any business including a utility that's looking at a calculus of what the revenue requirements for various options might be needs to take into account the risks associated with the various options?

A. Yes, sir.

Q. Are you aware of any experts who have taken the view that high net replacement power costs attributable to low fuel cost generation does not affect investor perception of risk associated with a utility's future investments in that type of generation?

A. Can you start with that, the beginning part of that question? Am I aware of experts that have argued that position?

Q. I'm sorry. I'll reread it.

Are you aware of any experts who have taken the view that high net replacement power costs attributable to low fuel cost generation does not affect investor perception of risk associated with a utility's future investments in that type of generation?

A. I haven't done a survey of expert witness positions to be able to tell you.

Q. Okay. Are you aware of any financial rating agencies that have taken that same view?

A. Again, I haven't done any surveys. I can't answer that question.

Q. Would your answer be the same with respect to financial analysts?

A. Yes, sir.

Q. And would your answer be the same with respect to equity investors in electric utilities?

A. Yes, sir.

Q. Okay. Would you agree that fuel adjustment clauses which allow utilities to pass through their actual fuel costs to reduce the risk to the utility of underrecovering fuel costs -- I'm sorry. Let me start over again. Strike that.

Would you agree that fuel adjustment clauses which allow utilities to pass through their actual fuel costs reduce the risk to the utility of underrecovering fuel costs in the event that fuel costs turn out to be higher than expected?

A. Yes, sir.

Q. Would you also agree that such a fuel cost isolates the utility from any potential benefits of recovering more than its actual cost if fuel costs turn out to be lower than expected?

A. Utilities do not gain from fuel adjustment clauses generally. In some instances, fuel clauses have performance incentives embedded in them associated with fuel use or generator performance like the PSC has here, or they may have a provision where they can share the gains on off-system sales like the Commission does here in Florida. So there are some opportunities for gain, for gains in those, in those clauses.

Q. But subject to those two fairly narrow

exceptions, would you agree generally that if a utility's fuel costs in Florida go down, it returns the benefit of that in the sense of charging the lower actual fuel costs to customers?

A. I would agree that when fuel costs go down, the utility is expected to pass those along to its ratepayers.

Q. Okay. Now in contrast, isn't it true that if a company owns a nuclear unit and sells its output on a merchant basis at market prices, the company would be able to profit from those sales any time that the low nuclear fuel cost is below the market price at which it sells?

A. Can you ask that again? That was -- I didn't get the first part of that.

Q. Sorry. Yeah. Certainly. Isn't it true that if a company owns a nuclear unit and sells its output on a merchant basis at market prices, the company would be able to profit from those sales any time that the low nuclear fuel cost is below the market price at which it sells?

A. Merchant plants tend to make a gain when their internal costs are less than the market clearing price.

Q. And would you agree that fuel costs for nuclear plants have been well below the marginal power

cost for most, excuse me, for most power markets over the last several years?

A. Yes, sir. That's the case.

Q. Does a regulated utility that provides its nuclear generated power to retail customers under a pass-through fuel clause have a comparable opportunity to profit from the difference between the low nuclear fuel cost and the higher marginal power cost?

A. Only to the extent they make an off-system sale and are allowed to share gains in that.

Q. Let me ask you a couple of questions about your testimony on moral hazard.

A. Yes, sir.

Q. Are you aware of any instance in which FPL acted irresponsibly with respect to taking Turkey Point Units 3 and 4 offline following the Flagami transmission event?

A. No, sir. And the purpose of my testimony wasn't to do a prudence evaluation of the company's operation during the outage. It was to estimate a replacement cost credit.

Q. Do you agree that the Nuclear Regulatory Commission has a wide range of authority to ensure that nuclear operations are safe and well managed at utilities such as FPL?

A. Yes, sir. That's my understanding.

Q. Okay. Do you also agree that the North American Reliability -- I have this as Council. I heard the other day corporation. I'm not sure what the C stands for, but whichever.

A. I think it's, I think they changed it to corporation.

Q. Changed it to corporation? Okay. I -- thank you.

So do you also agree that the North American Reliability Corporation has substantial authority to ensure that transmission systems such as FPL's are operated safely and reliably?

A. Yes, sir. I agree.

Q. Your testimony discusses at Page 25 the recent banking and financial crisis leading to large bailouts. You used this as an example of moral hazard.

Are you suggesting any comparison between FPL's operation of its nuclear units and the management of the banks and financial institutions that led to that crisis?

A. No, sir. It was provided as an example of moral hazard.

Q. Similarly, are you suggesting in your testimony on moral hazard that FPL would cut corners or

not operate its system as reliably and effectively if the Commission were to adopt FPL's approach to calculating replacement power costs for the Flagami transmission event?

A. No, sir, that's not my testimony.

Q. Okay.

COMMISSIONER SKOP: Mr. Butler, can you hold on for one second, too? It looks like we may have lost our telephone link. And if Chris is available.

MR. BUTLER: It was a propitious moment for a break. Let me ask this. I am going to ask Dr. Dismukes a couple of questions about Interrogatory Number 42, and that is on the CD as Page 318, Bates Number 318 at the bottom and 319. I have extra copies of the interrogatory and can distribute it, if anybody needs it.

COMMISSIONER SKOP: Okay. Are you suggesting we need a few minute break to get to that interrogatory? All right. Why don't we take a five-minute break and we'll reconvene at -- man, my eyesight is getting bad. Let's reconvene at 10:25.

(Recess taken.)

COMMISSIONER SKOP: Okay. At this point we will go back on the record. Mr. Butler, you're recognized for additional questioning.

MR. BUTLER: Thank you, Commissioner Skop.

BY MR. BUTLER:

Q. Doctor Dismukes, I am going to ask you a few questions about FPL's answer to Staff Interrogatory 42. And just for the record, I will note that this is part of Staff's Stipulated Exhibit 31, is that right? I'm sorry, it would be the response to -- yes, the stipulated Exhibit 27, and it is Bates numbered as 319 -- I'm sorry, 318 and 319 at the bottom. But I handed you a paper copy of the same interrogatory and answer just for the sake of convenience.

Are you familiar with this interrogatory response?

A. Yes, sir, generally.

Q. And is it your understanding that this response reflects FPL's calculation of replacement power costs under four different outage duration scenarios using the production costing simulation approach?

A. Yes, sir.

Q. And the fourth scenario designated as D, as in dog, excuse me, represents outage time of 158 hours for Unit 3 and 107 hours for Unit 4, correct?

A. Yes, sir.

Q. And that corresponds to the outage duration that the Office of Public Counsel is asking this

Commission to have FPL be responsible for, is that correct?

A. That is correct.

Q. And the calculation of the dollar amount for the replacement power costs under that -- or in that scenario under this production cost simulation modeling is $14,557,536, correct?

A. Yes, sir.

Q. Do you agree, Doctor Dismukes, that the production cost simulation approach that is reflected in Interrogatory 42 is appropriate for the Commission to use in determining the dollar amount of replacement power costs under the scenarios that are identified in Interrogatory 42?

A. I think it is one method that the Commission could consider. The problem with this method is that it's only -- the ability to replicate it and to test its accuracy rests with the company and the company only. There is no way I can go in and actually go in and test whether or not this model creates the outputs that it says it does under these particular scenarios. So I am generally familiar with production cost models. I don't have any objection to the premise of using them, but there is no way of verifying this number for anybody outside of Florida Power and Light.

Q. Do you know if you or the Office of Public Counsel asked for the opportunity to review the model and verify its results?

A. I don't believe that anybody asked for this from Public Counsel. I'm not aware of that.

Q. And you didn't personally, is that correct?

A. There is no way I could run it. I don't own the software. I think it is several hundred thousand dollars to use this kind of software, and I don't have the resources to purchase that kind of multi-area dispatching software.

Q. Did you ask to participate with FPL in using its copy of the software to replicate the results?

A. No, I didn't. I mean, what would I have done with it? It was well past the testimony filing date. We got this on a Friday, as I recall, very late. I don't remember what the circumstances were in the process. It was pretty late in the game when we got this.

Q. Okay.

A. In fact, I think the discovery date time had already passed, but I'm not certain about that.

Q. Let me ask you about the -- well, in any event, you would agree that -- subject to the objections or concerns that you just expressed -- that the approach

of calculating replacement power costs using production costing simulation would be an appropriate approach to use in this proceeding, is that correct?

A. Dispatch modeling can be an appropriate approach. Some commissions have used it. The problem with dispatch modeling in my experience has been what I talked about earlier in that it is very difficult for other parties, including Commission staffs, to verify the accuracy of those models because they don't have access or the resources to the software to be able to execute them.

Q. Let me ask you about the four scenarios that are reflected here, or some of those scenarios. Focusing to start with on Scenario D, I believe you confirmed are earlier that this is representative of the full outage duration for both Turkey Point Unit 3 and Turkey Point Unit 4, correct?

A. Yes, sir, that's my understanding.

Q. And are you aware of any decisions of the Florida Public Service Commission in which it has disallowed the full outage duration for outages at power plants without a finding that all of that outage duration was a result of imprudence?

A. I'm not aware of any, and my recommendation in this proceeding is not for a prudence disallowance, it

is for replacement cost credit.

Q. So whether or not FPL were found to be imprudent with respect to any of the hours of operation for Turkey Point Unit 3 or Turkey Point Unit 4, your recommendation would be the same, which is that the outage duration used for the replacement power cost calculation would be as shown in Subpart D here, 158 hours for Unit 3 and 107 hours for Unit 4, correct?

A. Yes, sir, that's correct. But for the transmission outage, those units would not have been out of service. They weren't scheduled to be out of service and, therefore, the opportunity costs of the outage associated with the full duration and the avoided nuclear costs associated with those resources.

Q. Am I correct that in your summary you stated that a 50/50 split of replacement power costs between FPL's customers and its shareholders would, in your mind, be fairer than FPL's $2 million replacement power cost refund proposal?

A. I think that my summary said that it would have some semblance of equity or fairness. There wasn't even an attempt -- the point I was trying to make was there wasn't an attempt to even try to equitably and fairly distribute those costs. It wasn't to suggest or make a recommendation that they should be split on a

50/50 basis.

Q. You would agree that that would represent a -- reflect a balance of interests between customers and shareholders, wouldn't you?

A. Mathematically, 50/50 would be an equal split and a balance, yes.

MR. BUTLER: Commissioner Skop, indulge me for just a moment. I need to confirm what additional questions I have.

COMMISSIONER SKOP: Very well.

(Pause.)

MR. BUTLER: No further questions.

Thank you, Doctor Dismukes.

THE WITNESS: You're welcome.

COMMISSIONER SKOP: Thank you, Mr. Butler. Staff is recognized.

MS. BENNETT: Thank you.

CROSS EXAMINATION

BY MS. BENNETT:

Q. Doctor Dismukes, my name is Lisa Bennett, I'm an attorney with the Public Service Commission staff. I just have a few questions for you.

I kind of get the understanding from your testimony, and I think from Doctor Avera's testimony that this is basically a policy decision for the

Commission. Do you agree?

A. Yes, ma'am, I would.

Q. Is this a case of first impression for the Commission, meaning that they have never had something like this before them before to decide?

A. Yes, ma'am. Based on my understanding it would certainly be that way.

Q. And as I understand from your testimony, you have given us several reasons not to agree with FPL's recommendation on policy, and that's correct in your testimony; correct?

A. Yes, ma'am.

Q. But in your opening statement you talked about there might be a 50/50 split. Are there any times when from a policy standpoint the Commission should shift the risk to the consumers of the product?

A. There may be. I don't know that I have got a listing of situations where that may or may not occur.

Q. That was my next question. Are you aware of any of those situations?

A. Yes. I mean, there have been instances where those types of decisions have been made in the history of utility regulation. I just don't have a list right now and can tell you which ones would be appropriate or which ones have an analogue to what's going on in this

particular proceeding.

Q. Well, let me back up. I talked about 50/50. Are there times when a portion of the risk should be shifted to the consumer of the product? And when I'm talking the product, I'm talking about electric service.

A. There may be. I can't say specifically what those may be.

Q. Could this be considered a factual case and not a policy driven case, in your mind?

A. What do you mean by that?

Q. Let's back up and say instead of a policy decision, would the Commission -- is there any reason for the Commission to make this as a factual decision instead of a policy decision?

A. Well, I think it could. I mean, the facts are you have a fixed period for outages, you have a fixed series of costs that you can determine what the replacement costs are, and you can come up with a fixed number. So from those set of facts you can render a decision. And I'm making that from a policy perspective and an economist perspective. I don't know from a legal perspective if that's allowable or not, so I would caveat that answer.

Q. In making a policy decision, I'm going back to the policy, is this an unusual event? Will the

Commission see this type of policy often?

A. I don't know that it's an unusual event in the sense that a Commission has to make a decision on replacement costs. I think the circumstances -- the technical circumstances around it make it a unique event, but the actual regulatory decision part of assessing a replacement cost is not an unusual event.

Q. And I think I'm going specifically to this event, a transmission-related event. Is that unique to the Commission decision-making to require replacement power costs based on a transmission-related event outage?

A. For the Florida Commission?

Q. Yes.

A. Yes, ma'am.

Q. What about for other commissions?

A. I believe that there have been some other decisions in that area. But, again, many of those have revolved around findings of prudence, prudence investigations.

Q. Okay. I want you to turn to that 1990 order, 23232, for the next couple of questions.

A. Okay.

Q. And I think we have heard that the Commission only required FPL to refund for three days of an outage

that extended well over a month, is that correct? Is that your understanding of that case?

A. Yes, ma'am.

Q. And the Commission found that in this docket -- I'm sorry, in this docket OPC is asking that the Commission require FPL to refund for the full time that the power was out at the nuclear plants, correct?

A. Yes, ma'am.

Q. Would you explain why the Commission should treat this docket differently than the 1980 order?

A. Well, I think it's based on the premise of this whole proceeding. And under the proposed resolution of issues in this case, Florida Power and Light agreed to assume the responsibility for the event. And I don't recall looking in that stipulation that there were any conditions on that. Part of the event, half of the event, one quarter of the event, they said that they would assume responsibility for the event. Therefore, the entire outage time associated with the event and the opportunity costs associated with the event is the basis upon which the replacement cost credits should be assessed.

MS. BENNETT: No further questions.

COMMISSIONER SKOP: Thank you.

Questions from the bench. Commissioner

Stevens, you're recognized.

COMMISSIONER STEVENS: Thank you, Mr. Chair.

Doctor Dismukes, do you know what time of day this outage occurred?

THE WITNESS: I do not recall. I think it was in the afternoon.

COMMISSIONER STEVENS: In your experience, have you ever seen a penalty imposed on a utility company in the amount of $25 million?

THE WITNESS: In looking at the penalties -- no, sir. In looking at the penalties that have been assessed by the Federal Energy Regulatory Commission under the new provisions after the Energy Policy Act of 2005, they have got a list on their home page and you can look at those, and that $25 million agreement is far and away higher than anything that's listed on that page.

COMMISSIONER STEVENS: Okay. On the first page of the -- or second under DED-2, which is the stipulation and consent agreement on Page 7 of 21 of Exhibit DED-2, Roman Numeral II, Number 2, a lot of customers were affected. Do we know how many of these customers were commercial enterprises?

THE WITNESS: I do not know. I think the way they are approximated would be proportional to the share

of commercial customers that FPL serves.

COMMISSIONER STEVENS: And all we're looking at in this process is a replacement cost credit, is that correct?

THE WITNESS: Yes, sir. A credit back to ratepayers for the replacement cost of the outage.

COMMISSIONER STEVENS: So we haven't looked at anything having to do with the economic impact to any of the customers of FPL.

THE WITNESS: No, sir, not at all. And to clarify, I mean, again, looking back, I think it's important in making the decision and looking at the context of this case to look at that proposed resolution of issues, and that resolution of issues clearly articulates that Florida Power and Light is going to assume full responsibility for this outage. They are not going to admit imprudence, and I would interpret liability, either, and those issues are off the table here. What is the appropriate replacement costs? So we haven't even gotten into those issues.

COMMISSIONER STEVENS: Okay. Yesterday, during Doctor Avera's testimony, I had asked about the calculation of where the eight hours came from, and his testimony says it's subjective, and Mr. Yupp had worked on that, and Mr. Butler had commented to that this

morning. Are any of your calculations based on subjective numbers?

THE WITNESS: No, sir. They are all based on numbers the company has filed.

COMMISSIONER STEVENS: Thank you, Mr. Chairman.

COMMISSIONER SKOP: Thank you, Commissioner Stevens.

Additional questions from the bench. Seeing none, I have a few. Good morning, Doctor Dismukes. How are you doing?

THE WITNESS: Good morning. Good.

COMMISSIONER SKOP: I just wanted to start by -- again, this is a different function for me. I have to spend a lot of time looking at what's going on instead of looking at the fine print here. But on Page 9 of your prefiled testimony, you discussed the company's net replacement purchase -- replacement power cost credit. And you discussed that methodology alluding to an eight-hour period that was used in the company's calculation versus your contention that the nuclear units were off-line for 158 hours and 107 hours respectively. I guess -- and then going on to, I'm sorry, Page 15, where you discuss your alternate replacement power cost calculation or recommendations,

did your analysis account for the FPL assertion that the Turkey Point 3 nuclear generating unit could not be returned to service until the control rod indicator repair was complete pursuant to an agreement with the Nuclear Regulatory Commission?

THE WITNESS: No, sir.

COMMISSIONER SKOP: Okay. So that is not factored into your calculation?

THE WITNESS: No, sir. If you look at those issues trying to go in and separate and piece-part -- well, for starters, I didn't think it was relevant, because, again, going back to the stipulation, the issue is assuming the responsibility for the outage and the units were out but for the outage.

However, following up on that, going in and piece-parting out all these individual pieces and saying this one was a day, and this one is two days, and this one was three days gets back to, I think, some of the questions that Commissioner Stevens has about the subjectivity of how much of that was created by the replacement rod indicator, how much of this was the steam generator problem, how much of this was the general confusion of having two million customers out and transmission lines down all over the state, and people running into each other. You know, how much of

that do you account for in this, and where do you make those fine differentiations. When you do that, you start getting into a lot of subjectivity.

COMMISSIONER SKOP: And I just would recognize that this, in terms of the testimony from both sides, seems to be a more challenging policy question than the hole drilling incident that the Commission dealt with previously. That's why I'm trying to take the time to better understand the position of the parties.

Mr. Butler had asked you a series of questions related to a hypothetical where if there were an outage and there is a 50/50 chance that the company is going to have to basically be held accountable for that outage, and asked you to elaborate upon that a little bit. In asking that question, I didn't fully hear the company provide the standard for what caused the outage at the plants, and I was wondering, you know, if certain instances, whether it be human error that is alluded to in the Gulf States case, or, you know, a willful act, or negligence, or gross negligence, should that, in your opinion, come into the determination on who should be assessed the cost of replacement power, whether it be the consumers or whether it be the company?

THE WITNESS: Well, not in this situation because the company has already agreed to assume the

responsibility for it. So, I mean --

COMMISSIONER SKOP: But the amount is in question. And, again, it seems to be, you know, obviously there was a cause of the event and the outage, but the amount of the hours of the outage, I guess, is a material fact in dispute between the parties. So I'm trying to gain an understanding from your perspective as to, you know, what should be looked at. I guess the company has proposed an eight-hour period for when the transmission grid was back to a point of equilibrium where customers were being served and things were normal.

But also I think the company has mentioned that typically when you have a reactor shutdown, it's typically about 48 hours to bring those reactors back into service and get them back on-line. Whereas, in your analysis you used the -- and correct me if I'm wrong -- the 158 and 107 hours respectively, I think, to make that calculation on the nuclear. So I'm trying to gain a better perspective, assuming that the proximate cause of the Turkey Point 3 and 4 turbine generator trips and reactor plant shutdown was related to, you know, an active employee at a substation for the sake of discussion, what is the appropriate benchmark? Is it the 48 hours that the plants would be normally returned

to come on-line, or is it the extreme example that I think that you are referencing in your analysis, or did you consider variations of that within your documentation that you provided?

THE WITNESS: Well, I don't know that you can get into those issues because based on the stipulation the company said that it would assume the full responsibility for the outage, and we didn't piece-part that. And so now if you were to go down that road, you would have to start getting into an analysis of the prudence of various operations and whether or not they should or should not have occurred.

Should the replacement rod indicator problem have occurred? What about the steam generator issue? Which one was prudent, which one was not prudent? We waived all of those prudence issues off the table, as I understood it, in this particular proceeding. And so the starting point for my analysis was not going in and looking at the prudence of individual actions, because I didn't think they were relevant based on the facts and the issues in this case. Calculate the replacement costs and figure out who pays for it, and that is really the premise. So if that is the starting point, that's how you would calculate it.

COMMISSIONER SKOP: Okay. And I respect that,

and I know you take the case as you find it. There was a stipulation between the parties, you know, where prudency was, I believe, I don't have the agreement, but I think FPL contended that their actions would not be deemed imprudent. I don't have the exact words, but, you know, obviously there's a difference. If you support your calculation, the numbers is higher, but I believe, unless I am wrong, that those calculations are based on the entire time period that both nuclear units were out of service irrespective of any intervening events or any preexisting agreements that would require that unit to stay down by the NRC the next time the plant came down.

THE WITNESS: That's right, but for the outage they were out.

COMMISSIONER SKOP: Okay. And then if I could ask you to turn to your Exhibit DED-2, please. And this is just to touch upon a question that Commissioner Stevens asked. I assume that you have read the FERC order approving the stipulation and consent agreement, is that correct?

THE WITNESS: Yes, sir.

COMMISSIONER SKOP: Subject to check with respect to the $5 million that may be spent on BES reliability enhancement measures, subject to check,

would you agree that the FERC order has no express requirements to make that investment in Florida to the extent that FPL may have other transmission facilities outside the state?

THE WITNESS: Subject to check, yes, I believe that is the case. I don't recall anything in here being explicit to Florida.

COMMISSIONER SKOP: Okay. And I'm sure FERC did not intend that, but, again, the language in Paragraph 2 suggests that 5 million may be spent as part of the settlement agreement on BES reliability enhancement. Would you also agree, subject to check, that neither the FRCC or the Florida Public Service Commission has any say in where those improvements may go to the extent that the improvements are subject to approval by FERC Commission staff and NERC staff approval?

THE WITNESS: Based on my understanding from a policy analyst perspective, that is the case. Yes, sir, you're right. The FRCC nor the Florida Public Service Commission would have any say-so in that.

COMMISSIONER SKOP: Okay. And I'm not suggesting anything, I just know it is not expressly stated. That may be the implied intent that it would be made in Florida. I would expect it to be for the

benefit of FPL's ratepayers, but if staff could follow up on this. It is not germane to this proceeding, but it would be good to get some insight into what improvements regarding the BES reliability enhancements that FPL intends to make and if, in fact, those -- which I expect they would -- would be made in Florida. So, as a side issue for follow-up. But I think that is all the additional questions I have.

Commissioner Klement, you're recognized.

COMMISSIONER KLEMENT: Thank you.

Doctor Dismukes, I want to follow up on Commissioner Skop's -- a couple of his questions. It has to do with the rod replacement and the additional time down. You said you did not consider that in making your recommendation. My question is why?

THE WITNESS: Again, as I indicated to the Hearing Officer, the issue in this case was to determine an appropriate replacement cost associated with the outage. But for the outage, these units would not have been down. They weren't scheduled to be down. And so all the other factors, while interesting and important, have no bearing on the calculation for the replacement costs.

COMMISSIONER KLEMENT: Okay. Thank you. That's all.

COMMISSIONER SKOP: Thank you, Commissioner.

Mr. Beck, you're recognized for redirect if there is no further questions from the bench.

MR. BECK: Thank you, Commissioner.

REDIRECT EXAMINATION

BY MR. BECK

Q. Doctor Dismukes, do you recall the hypothetical that Mr. Butler gave you about the company decision whether to build a gas turbine or a nuclear plant?

A. Yes, sir.

Q. In that hypothetical, would it make a difference whether the company would receive different regulatory treatment for recovery of costs on a gas turbine versus a nuclear plant?

A. Yes, sir, it would.

Q. Do you know whether Florida gives special regulatory treatment to construction of nuclear plants?

A. Yes, sir, they do. They provide a number of positive cost-recovery provisions associated with preconstruction dollars, as well as cash earnings on construction work in progress, or CWIP.

Q. You have been asked some questions about the settlement agreement, the proposed resolution of issues in this case?

A. Yes, sir.

Q. In that Florida Power and Light did not admit imprudence, is that right?

A. That's my understanding, yes, sir.

Q. They simply said that they would be responsible for -- I'm paraphrasing it, the replacement costs, is that right?

A. Yes, sir.

Q. Had they not had the agreement, would there have been an issue of imprudence in the case?

A. I think had the agreement not existed those would have been areas that the parties would have had to explore is the prudence of the outage and the duration of the outage and the various components contributing to that.

Q. But the imprudence would have focused on the Flagami event, not the bringing back of the unit, or bringing back the nuclear power units, is that right?

A. Yes, sir.

Q. You were asked some questions about the production cost model interrogatory response by the company?

A. Yes, sir.

Q. Did the company refer to that in either their direct or rebuttal testimony?

A. No, sir, they did not.

Q. It fact, it came in after their testimony was filed, was it not?

A. Yes, sir.

Q. Was it minutes before the deposition staff scheduled of their witness -- of FPL Witness Yupp?

A. As I recall that was the case, yes, sir.

Q. Finally, I want to make clear, you are not recommending a 50/50 split of the replacement power costs between the company and customers, are you?

A. No, sir, I am not. I was just trying to make a reference to issues associated with fairness and equity and just the fact that this was so far out of line with what you would normally see in some kind of split that it doesn't connote in any way any type of fairness.

Q. If the Commission were to do some sort of split, would the necessary consequence of that be that customers would pick up some of the extra costs that were incurred as part of the outage?

A. Yes, sir, they would.

MR. BECK: Thank you. That's all I have.

COMMISSIONER SKOP: Thank you, Mr. Beck.

Ms. Bradley and to Ms. Kaufman, again, the Commission tries to limit friendly cross, but I do want

to ask if you had questions for the witness, and we'll go back and allow cross-examination or redirect as appropriate if you have questions at this point.

MS. BRADLEY: Not at this time. Thank you.

COMMISSIONER SKOP: Thank you. Ms. Kaufman.

MS. KAUFMAN: I do not.

Thank you, Commissioner.

COMMISSIONER SKOP: Great. Thank you. It worked out as I expected.

Okay. All right. So that takes us to exhibits. And, Mr. Beck, you're recognized.

MR. BECK: Yes, Commissioner. We would move in Exhibits 11 through 22.

COMMISSIONER SKOP: Okay. Any objection to the admission of Exhibits 11 through 22 into the record?

MR. BUTLER: No objection.

COMMISSIONER SKOP: All right. Hearing none, those are entered into the record.

(Exhibit Numbers 11 through 22 admitted into the record.)

COMMISSIONER SKOP: And, Mr. Butler, I believe you have Exhibit 39. Do you wish to move to enter that at this time?

MR. BUTLER: Yes. Thank you, Commissioner.

I would move the admission of Exhibit 39 into

the record.

COMMISSIONER SKOP: Any objection? Hearing none, Exhibit 39 will be entered into the record.

(Exhibit Number 39 admitted into the record.)

COMMISSIONER SKOP: Okay. I believe that brings us to rebuttal testimony from FPL, and Mr. Stall is the next witness.

So, Mr. Butler, you're recognized.

MR. BUTLER: Thank you.

While Mr. Stall is taking the stand, I feel the need just to comment very briefly on the proposed resolution of issues that Doctor Dismukes had referred to. And it speaks for itself, but certainly FPL's understanding of it is that the whole issue of how to calculate replacement power costs, the proper measure of it, et cetera, fully left open for the parties to take different positions, and the resolution specifically says that, that all parties to this PRI and staff may each take any position that it wishes concerning the proper measure of replacement power costs, if any, that FPL should refund to customers as a result of the Flagami Transmission Event. And I just wanted to clarify, that's our understanding and the basis on which we have presented testimony in this proceeding.

COMMISSIONER SKOP: Thank you for that.

And, again, I think that the Commission based on the record evidence will give the appropriate weight to the respective witness testimony as it deems appropriate.

MR. BUTLER: Thank you.

COMMISSIONER SKOP: You're recognized.

MR. ROSS: Mr. Stall was sworn yesterday.

J. A. STALL

was called as a witness on behalf of Florida Power & Light Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. ROSS:

Q. Good morning, Mr. Stall.

A. Good morning.

Q. Have you prepared rebuttal testimony totaling five pages to be filed in this proceeding?

A. I have.

Q. And did you cause an errata to your rebuttal testimony to be filed on March 2nd, 2010?

A. Yes.

Q. Do you have any other changes or corrections to your rebuttal testimony?

A. No.

Q. If I asked you the questions contained in that

corrected rebuttal testimony today, would your answers be the same?

A. Yes.

MR. ROSS: Mr. Chairman, I request that the rebuttal testimony of Mr. Stall as amended by the errata be entered into the record as if read.

COMMISSIONER SKOP: The rebuttal testimony as amended by the errata sheet of the witness will be entered into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF J.A. STALL

DOCKET NO. 090505-EI

February 24, 2010

Q. Please state your name and address.

A. My name is J.A. (Art) Stall. My business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Did you previously submit direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is twofold. First, I address claims made in the direct testimony of Office of Public Counsel witness Dismukes regarding the opportunity for a "moral hazard" if FPL's proposals in this docket are adopted. Specifically, my testimony demonstrates that Dr. Dismukes's assertions regarding a "moral hazard" with respect to the operations of FPL's nuclear power plants are not valid. Second, I address the position implicit in Dr. Dismukes's replacement power cost (RPC) calculation that the full duration of the outages at Turkey Point Units 3 and 4 that were initiated by the Flagami Transmission Event are attributable to that event and thus should be used to measure the RPC that FPL refunds to customers. My testimony demonstrates that a conservative measure of the outage time resulting from the Flagami Transmission Event is 48 hours for each unit, and

that the remaining outage time was the result of unrelated and unavoidable events that do not reflect any inappropriate or imprudent actions on FPL's part.

Q. What is your response to Dr. Dismukes's assertion by adopting FPL's proposals in this docket, a "moral hazard" will be created and FPL will be incented to perform less efficiently if it can recover its replacement power costs for the unplanned outages resulting from the Flagami Transmission Event?

A. With respect to FPL's nuclear operations, this assertion is flat wrong.

In every refueling outage at FPL's nuclear units, our employees are driven to complete outages as safely and as quickly as possible. The planning of schedules and work scope for planned outages are developed beginning at the end of the previous outage. The scope of each outage is carefully defined and refined. Every outage activity is planned down to the minute. Our Nuclear Division has an entire, separate organization that has only one responsibility – the safe and efficient performance of outages. Our employees continuously critique our refueling outage performance, and lessons learned are implemented across our nuclear fleet in future refueling outages to further improve outage performance. FPL uses a series of indicators to measure nuclear plant performance; outage performance is among these key indicators.

Q. Would FPL change its aggressive approach to performing refueling outages safely and quickly if this Commission adopts FPL's system-

average approach to determining replacement power costs for the Flagami Transmission Event?

A. No. FPL's approach results from a strong and long-standing culture of striving for excellence in nuclear operations, in order to operate the nuclear units safely and make the benefits of their low fuel costs available to customers as much of the time as possible. The specifics of how the Commission would determine replacement power costs are not a factor in how FPL approaches nuclear operations.

Q. Would the U.S. Nuclear Regulatory Commission (NRC) permit refueling outages to be performed in an unsafe manner?

A. No. I have been dealing directly with the NRC for more than 30 years. FPL's nuclear plants are authorized to operate pursuant to licenses granted by the NRC. FPL operates its nuclear plants pursuant to a complex set of requirements set forth in the NRC operating licenses and in applicable NRC rules, regulations, and orders. The NRC has virtually unlimited authority to take actions necessary to ensure protection of the public health and safety. Thus, even if a licensee were inclined to allow its performance to lag in response to a "moral hazard" (which is certainly not the case for FPL), this intrusive regulatory regime would make it impossible for the licensee to do so without a significant regulatory response from the NRC.

If the NRC were to have concerns regarding the performance of FPL's nuclear power plants, it has a wide range of compliance tools and enforcement mechanisms to compel compliance with NRC regulatory

requirements. Moreover, the NRC can exert significant leverage through licensing activities at other plants in FPL's fleet.

In light of the NRC regulatory regime and the business construct around outage performance at FPL and in the nuclear industry, the suggestion that FPL's approach to planned refueling and maintenance outages and unplanned outages would be changed based on a decision by the Commission in this docket is absurd.

Dr. Dismukes's assertions regarding a theoretical "moral hazard" fail to recognize these irrefutable facts as applied to nuclear plant operations.

Q. **What is the typical time required for restart of a nuclear unit from an unplanned shutdown?**

A. Typically, a nuclear unit can be restarted from an unplanned shutdown within 48 hours.

Q. **What is the appropriate measure of the outage time that each Turkey Point nuclear unit would have been offline following the Flagami Transmission Event, in the absence of any complications or emergent work?**

A. An appropriate measure of the outage time that each Turkey Point nuclear unit would have been offline following the Flagami Transmission Event is 48 hours. Assuming no complications or emergent work, a nuclear unit can typically be restarted 48 hours after an unscheduled plant shutdown.

Q. **Was FPL prudent in conducting the outages following the initial 48 hours after both Turkey Point units were shut down as a result of the Flagami Transmission Event?**

A. Yes. The Unit 3 outage, including the repair of the Rod Position Indicator (RPI) system, was prudently planned in advance and was well executed. The RPI work was planned and staged, parts were procured, and work packages were created assuming an unscheduled repair opportunity would arise. These prudent planning activities resulted in a well-conducted repair and plant restart. While the restart of Unit 4 was delayed by an automatic turbine shutdown and a manual reactor shutdown, such activities are not unusual. The outage time beyond the 48 hour time frame was not the result of inappropriate or imprudent actions on FPL's part.

Q. Does this conclude your rebuttal testimony?

A. Yes.

ERRATA SHEET

( ) DIRECT TESTIMONY, OR (X) REBUTTAL TESTIMONY (PLEASE MARK ONE WITH "X")
WITNESS: J. A. Stall

PAGE #	LINE #	CHANGE
5	9	Add "an automatic turbine shutdown and" after While the restart of Unit 4 was delayed by

BY MR. ROSS:

Q. Mr. Stall, have you prepared a summary of your rebuttal testimony?

A. I have.

Q. Would you please provide that summary to the Commission?

A. Yes, I will.

Good morning, Commissioners. My rebuttal testimony refutes the Office of Public Counsel Witness Dismukes' assertions regarding the opportunity for a moral hazard with regard to the operation of FPL's nuclear power plants if FPL's proposals in this docket are adopted.

In every refueling outage at FPL's nuclear units, our employees are driven to complete outages as safely and quickly as possible. We have an entire separate organization that has only one responsibility, the safe and efficient performance of our outages. Our employees continuously critique our outage performance, and lessons learned are implemented across our entire fleet to improve outage performance.

Furthermore, FPL operates its nuclear power plants pursuant to a complex set of Nuclear Regulatory Commission requirements. Even if a licensee were inclined to allow its performance to lag in response to

a moral hazard, it would be impossible to do so without a significant regulatory response from the NRC. Doctor Dismukes' assertions regarding a theoretical moral hazard fail to recognize these facts.

I also address the position implicit in Doctor Dismukes' replacement power cost calculation that the full duration of the outages at Turkey Point Units 3 and 4 following the Flagami Transmission Event resulted from that event and thus should be used to measure replacement power costs. A conservative measure of the outage time resulting from the Flagami Transmission Event is 48 hours for each unit, since a nuclear unit will typically be restarted from an unplanned shutdown within 48 hours. None of the outage time at Turkey Point Units 3 or 4 beyond the 48-hour time frame was the result of any inappropriate or imprudent actions on FPL's part.

This concludes my summary.

MR. ROSS: We tender the witness for cross.

COMMISSIONER SKOP: Thank you, Mr. Ross. Mr. Beck, you're recognized.

MR. BECK: No questions, Commissioner.

COMMISSIONER SKOP: All right. Thank you.

Ms. Bradley. And I know that from yesterday Mr. Butler had extended a professional courtesy to allow

you to ask questions regarding Mr. Stall's Direct Testimony. So, you're recognized.

MS. BRADLEY: Thank you. I appreciate it.

CROSS EXAMINATION

BY MS. BRADLEY:

Q. Mr. Stall, I understand Mr. Yupp prepared this response to Interrogatory Number 42 that has different hours and all on it. Are you familiar with that?

A. I'll have to see if I have that particular one in my book. No. Could I have a copy, please? No, I have not seen this particular interrogatory before this moment in time.

Q. Well, let me ask you this: Mr. Yupp gave a -- for some of the questions, an outage time for Turkey Point 3 of 158 hours. Is that your understanding?

A. That is correct.

Q. And that is the total time that your customers were paying for replacement fuel costs?

A. Well, I can't attest to whether it was the total time that the customers were paying for replacement fuel costs. However, I can attest to that being the duration of the outage for Turkey Point Unit 3.

Q. Could the replacement fuel costs have extended beyond 158 hours?

A. I am the wrong person to answer that question. My function is solely in regard to operation and maintenance of the nuclear power plants. I have no roles or responsibility with regard to the calculation of replacement power costs.

Q. Who would be responsible for that?

A. Witness Yupp.

Q. Okay. And for Turkey Point 4, the total outage time was 170 -- 107 hours?

A. 107 hours, that is correct.

Q. Okay. And during that period of time the nuclear plants were unavailable for usage?

A. That is correct.

Q. Now, in Page -- it looks like 1 of your rebuttal testimony, down on my copy somewhere around Line 21 and 22, do you see where I'm talking about?

A. I do.

Q. Okay. On my copy you seem to be saying that customer -- I mean, that Florida Power and Light should refund to customers events or time that's attributable to the event, correct?

A. Let me make sure I'm following exactly where you are.

Q. Okay. I'm down at the bottom where it is talking about, second, I address the position implicit

in Doctor Dismukes' replacement power cost calculation that the full outages -- duration of outages at Turkey Point Units 3 and 4 that were initiated by this Flagami -- I'm probably pronouncing that wrong -- transmission event are attributable to the event and thus should be used to measure the RPC that FPL refunds to customers.

A. Yes, I can speak to the basis for the statement in there that the full duration of the outages of Turkey Point Unit 3 and 4 should not be used as a basis or input for the calculation with regard to total replacement power costs. He would have done the calculation, so if we would like to talk about discrete events during those outages and whether or not they were prudent, then I'm the witness for that.

Q. Let me ask you this. Do you feel like events that are -- or things that are related or attributable to the event should be paid for by or should be the responsibility of Florida Power and Light?

A. I think that the company has accepted responsibility for the event. However, I think that the parsing or the discussion with regard to how many of the hours that the units were out of service, or unavailable as you indicated, is a more complex discussion that needs to be discussed in light of other circumstances

around those outages.

For example, on Unit 3, the requirement that we had to do the rod position indication repair. As I stated yesterday to give an example of why I think that the entire duration of these outages is inappropriate for calculating the replacement power costs, let me use that again as an example. We had an obligation to the Nuclear Regulatory --

MS. BRADLEY: Mr. Chairman, I hate to interrupt, but I asked him a very limited brief, and he has gone way beyond that and off into other areas, and I would ask that I be allowed to go ahead with my questions.

COMMISSIONER SKOP: Ms. Bradley, if you could restate the question. I ask the witness to answer it and then elaborate, and then you can move on to your next question.

MS. BRADLEY: I had asked him if he agreed that things that were attributable to the Flagami Transmission Event should be the responsibility of Florida Power and Light, and he said, you know, and then kept going.

COMMISSIONER SKOP: Okay. Mr. Stall, if you could answer yes or no and then explain your answer to the question that would be appreciated.

THE WITNESS: I think -- I thought I had answered that several times already, including yesterday. I believe that the items that are directly attributable to the Flagami event we accept responsibility for at Turkey Point. However, that does not encompass the entire duration of the outages of Units 3 and 4, and if you would like an explanation I could provide one.

MS. BRADLEY: No. I would like to go on to my next questions, since your attorney has gone into your position a number of times.

BY MS. BRADLEY:

Q. Were you involved at all in the stipulation and consent agreement with FERC?

A. No, I was not.

Q. Have you read about it or been briefed on it?

A. No, I have not.

Q. You don't have any knowledge of that?

A. Beyond what was in the general press, that is the extent of my knowledge of that agreement.

Q. Who of the witnesses here were familiar with that and were involved with that and could be questioned about it?

A. I'm not certain that there is any particular witness here who has the detailed knowledge of that

particular settlement agreement.

Q. Did you have sufficient knowledge to know whether that was approved by your company?

A. Yes.

Q. And it was approved by Mr. Olivera?

A. I'm not certain who the signatory authority was on the document.

Q. But it was approved by the company?

A. That is correct.

Q. And so anything in there would be as the agreement states, correct?

A. I believe the agreement stands on its own merits.

MS. BRADLEY: All right. No further questions.

COMMISSIONER SKOP: Thank you, Ms. Bradley. Ms. Kaufman, you're recognized.

MS. KAUFMAN: Thank you, Commissioner.

CROSS EXAMINATION

BY MS. KAUFMAN:

Q. Good morning, again, Mr. Stall.

A. Good morning.

Q. I want to look at that same sentence that Ms. Bradley was asking you about on Page 1. And I really just have one question, and that is that if the Flagami

Transmission Event had not occurred on February 26th, 2008, the Turkey Point units would not have gone down at that time and you would not have engaged in any of the activities that you have told us about these pass two days, is that correct?

A. That's correct.

MS. KAUFMAN: Thank you.

COMMISSIONER SKOP: Thank you, Ms. Kaufman. Staff.

MR. YOUNG: Thank you, sir.

CROSS EXAMINATION

BY MR. YOUNG:

Q. Good morning, Mr. Stall. How are you?

A. Good morning, Mr. Young.

Q. I just have some brief questions. Some concerns of the errata sheet that you filed with your testimony. And that errata sheet, it relates to the outage of the automatic turbine shutdown at Turkey Point 4, correct? Turkey Point Unit 4, correct?

A. Let me make sure that I'm on the same document as you. Are you referring to the reverse power relay trip, Mr. Young?

Q. Yes, sir.

A. Yes.

Q. Can you please discuss the shutdown as relates

to the -- and that's one of the two shutdowns, correct?

A. That is correct. And yesterday we -- the other shutdown being the steam generator, level control shutdown that we discussed at length yesterday.

Q. Okay. Can you please discuss the shutdown, the automatic turbine shutdown that's unrelated to the water level in the steam generator?

A. Yes, I would be pleased to do that. We had -- as we were beginning the start-up sequence of Turkey Point Unit 4, we experienced what's called a reverse power relay trip as we synced the generator to the line. Within 7 milliseconds, which is 7/1000ths of a second of closing the output breaker, we had a reverse power trip.

We had no actual physical reverse power condition that occurred, so we initiated a work order and trouble-shooting, and our relay engineers went out into the plant to diagnose the failure. We sent the relay to a laboratory, our laboratory, and our laboratory technicians determined that a set of mechanical contacts in that relay had failed closed.

So let me back up and sort of talk about how that protection scheme works and what we discovered from that event. That relay is a dual function relay, if you will. It is divided into two parts. One part of it, the upper half has a set of mechanical contacts in it

that are normally open and would close on a reverse power condition. The lower half has a timer in it that, in this particular case, is set for 30 seconds.

The way the protection scheme is designed for this particular relay is that in order to have a reverse power trip of the turbine, two events must occur. A, the mechanical contacts must be closed for 30 seconds for the contact to make up the timer. And, B, the output breaker must be closed, otherwise you wouldn't have this reverse power trip.

Initially, when we did our condition report, there was some thought that the vibration from the dual unit trip caused these contacts to go closed and caused this condition to occur. We talked about that in my deposition, and, frankly, I was troubled by that because it did not make sense to me personally for several reasons. One is that we have the identical relay in service on Unit 3, and we did not have a similar event occur on Unit 3. And this is some news that I think Mr. Young is probably hearing for the first time today, as well.

So I asked our engineers to provide me with the computer printout from our sequence of events recorder for that trip, and I took that home last weekend and looked at it over the weekend. And what I

learned and what I saw, which was new information, was that within 32 milliseconds of the dual unit trip, which is 32/1000ths of a second, which is instantaneously for all practical purposes, we did, in fact, have a reverse power condition occur and a turbine trip from that. So those mechanical contacts actually closed at that point in time. That produced a generator lockout condition.

Subsequent to the trip, before they were restarting the unit, they went to reset that lockout condition and it would have reset except the contacts were still in the failed condition. So what ended up happening in this particular case is that when they began the restart sequence that culminated in the turbine trip, and they, what we call, flashed a field, began to apply voltage to the generator, that timer restated again because those contacts were closed, and in 30 seconds that timer timed out, and that relay sealed in, if you will.

So now they went -- and there would be no alarm in the control room for that condition, because there wasn't a reverse power trip demanded because the output breaker hadn't been closed yet. Then they went to close the output breaker, and here is where it was obvious. Within 7 milliseconds that output breaker tripped on reverse power. So I think that now we fully

understand the sequence of events that that relay actually failed independent of the vibration from the Flagami trip, and it would have failed at the next opportunity when we had a shutdown, as well. So I think that hopefully that explains the sequence of events around that. And that whole evolution took about eight hours to replace and test that relay.

Q. Okay. Thank you for that.

Now, let me ask you, were you aware of the plant needing to be shutdown because of this kind of issue while the plant was in Mode 1, Model 1 generation? Mode 1 generation -- operation, excuse me?

A. Well, let me clarify that. I think I know what you are asking me. In this particular case, although the plant was in Mode 1, the plant was less than 10 percent power, and there is what is called a P10 inner-lock associated with the reactor that says that if power is less than 10 percent, if the turbine trips the reactor will not trip. So the turbine tripped, but the reactor stayed critical.

That particular event was not reportable to the Nuclear Regulatory Commission because it is not an actuation of a safety system. So there was no requirement for notification of the Chief Nuclear Officer, myself in this particular case. So I became

aware of this on or about March 1st when we went back a second time and looked at the entire sequence of that outage and discovered that that event was in there.

Q. Now, I think -- let me see if I understand this. Is it your position or the company's position that the repair -- looking at the -- moving to the RPI repair, is it the company's position that the repair or the RPI -- because of the repair of the RPI system, thus that's the cutoff between what the ratepayers must bear and what the company must be responsible for?

A. Well, I think I'd like to answer that question in two parts if it is okay with you. I'd like to address Unit 3 and the RPI. In that I think it is a clear cut case of the RPI should be excluded from this.

Q. And that's because you had to -- because of the NRC order that you had to repair, correct?

A. Because we had to do that repair. And had we done that repair in October, it would have taken longer. Took an opportunity to go to the Nuclear Regulatory Commission to preserve nuclear generation for our customers. And to penalize us now for doing the right thing for the customers, I think, would send a very chilling signal to us.

Q. Okay. But as you alluded to in your Direct Testimony, FPL didn't have any planned outages to do the

repair, correct?

A. That's correct.

Q. Okay. And is it based -- the company's position, is that based because partly on the Commission's decision, and I think Mr. Butler alluded to Doctor Dismukes in Order Number 23232, which the Commission stated that the company should only be responsible for three days, three days outage in that case?

A. I can't speak to that. I think that as far as I'm concerned it's based on common sense, that we would have had to do that repair. We did the right thing for the customers in October by avoiding it. It would have taken much longer to do it in October. We wouldn't have been having a discussion around it today had it been done in October. And to penalize the company for doing the right thing, I think, is sending a horrible signal.

MR. YOUNG: No further questions.

COMMISSIONER SKOP: Thank you, Mr. Young.

Commissioners, questions from the bench? Commissioner Klement, you're recognized.

COMMISSIONER KLEMENT: Thank you.

Can I just follow up on that, your last statement to say why would it have taken longer if you had waited until October and the plant shutdown?

THE WITNESS: Mr. Commissioner, perhaps I wasn't clear. It was in October of 2007 when we were ascending in power from a refueling outage that this problem first revealed itself to us, and we knew that we were quite vulnerable. If another one would have failed, we would have been into a forced shutdown. At that point in time we had to make a decision on whether to continue with power ascension and operate or shut the reactor back down and go to fix this.

So we knew that if we were to shut the reactor back down and go fix it at that point in time that it would have taken a very long time to do because we didn't have the parts, we didn't have the work order, we hadn't done any advance planning or testing to localize the nature of the problem. So the engineers developed an alternative methodology that we went to the NRC and, frankly, spent some regulatory margin to get their approval to allow us to continue to operate because it was the right thing for the customers to do that.

Along came the Flagami event, and we were now obligated to do it, and we did it in much less time than it would have been in October. And to be penalized for doing the right thing for the customers is just, I think, the wrong signal.

COMMISSIONER KLEMENT: Well, perhaps I should

have refreshed my memory, but I was thinking I was remembering from yesterday that there was a scheduled shutdown for the fall of 2008. That is the October I thought I was referring to. No?

THE WITNESS: No, the next refueling outage would have been 18 months from October of 2007, which would have been March of 2009.

COMMISSIONER KLEMENT: March of 2009.

THE WITNESS: Now, what we talked about yesterday, just to clarify perhaps the record on that, is that we did have a forced outage in June of 2008. However, the reactor was maintained in what we call Mode 2, which was a critical state while we did some balancing on an exciter turbine bearing. And what I was suggesting yesterday, and absolutely what we would have done, had we not had the Flagami event, we would not have kept the reactor in Mode 2 at that time. We would have shut the reactor down and done that repair at that point in time because it's not a comfortable spot to be in not have the operators with their full attendant instrumentation. And our policy is generally to give them every opportunity to have everything available.

COMMISSIONER KLEMENT: And how do you respond to Doctor Dismukes' earlier statement that it didn't -- it is almost irrelevant that in the consideration of the

cost of replacement fuel that you chose to do it -- that you did do it during this unplanned outage?

THE WITNESS: Well, if I understood Doctor Dismukes' testimony properly, I don't think he was rendering an opinion necessarily on whether or not the outages were -- the right things were done in the outages. As a matter of fact, I think he generally agreed that, you know, we handled those outages prudently. So he was given a set of numbers to do a bookend calculation on, which he simply did, and he wasn't necessarily rendering an opinion on the merits of whether or not in this case, for example, the rod position indication repair was the right thing to do or not the right thing to do because he didn't have visibility into that.

COMMISSIONER KLEMENT: And just to be clear, FPL asserts that they had no choice from a NRC regulatory point of view whether to replace that rod then or wait until your 2009 shutdown, planned shutdown?

THE WITNESS: No. We had a legal commitment in writing that obligated us to perform that repair at the next shutdown, which in this particular case was the February 26th shutdown.

COMMISSIONER KLEMENT: Okay. Thank you. That's all, Mr. Chairman.

COMMISSIONER SKOP: Thank you, Commissioner.

Any additional questions? Commissioner Stevens, you're recognized.

COMMISSIONER STEVENS: Thank you, Mr. Chairman.

Mr. Stall, you stated that you're in charge of the operation and maintenance of the nuclear plants as the Vice-President of Nuclear Transition, is that correct?

THE WITNESS: I was in charge of -- directly responsible for the operation and maintenance until January 1st of 2009, when I moved into this role of transition and my successor was named.

COMMISSIONER STEVENS: Okay. Was this event preventable?

THE WITNESS: Which particular event are we talking about now, the RPI event?

COMMISSIONER STEVENS: Yes.

THE WITNESS: No, I don't believe it was preventable.

COMMISSIONER STEVENS: Will it happen again?

THE WITNESS: I have no reason to believe it would happen again. But, you know, these plants are extremely complex units. There are hundreds of thousands of parts and components in them, so I could

never say never.

COMMISSIONER STEVENS: When you were in charge of the operation and maintenance of the plants, how many employees did you have under you?

THE WITNESS: That's a --

COMMISSIONER STEVENS: A round number is fine.

THE WITNESS: Around 5,000.

COMMISSIONER STEVENS: Okay. Were any of these employees responsible for the monitoring of the electric power generated and transmitted to the customers?

THE WITNESS: Only to the extent that we monitor the individual generator voltage and var output at each of the nuclear plants. But, with regard to the bulk electric system, no.

COMMISSIONER STEVENS: Okay. Thank you, Mr. Chairman. Thank you, Mr. Stall.

COMMISSIONER SKOP: Any additional questions from the bench? Hearing none, I just have a few.

Mr. Stall, I guess it would be beneficial to me because you're, I guess, FPL's nuclear expert, to gain a better understanding of exactly what happened within the plant resulting from the substation event that caused the unplanned outage of the Turkey Point 3 and 4 units. So could you speak to that in terms of,

you know, what happened when the turbine generator sets tripped as a result of the --

THE WITNESS: With regard to the transient response of the units in particular?

COMMISSIONER SKOP: Yes. And then what the state of the reactors were. Did they scram, or was it a manual shutdown, and were they in, you know, hot standby, cold restart, or just elaborate on that.

THE WITNESS: Okay. Let me attempt to walk through that, if I can, at a high level. If you back up to just moments before the transient that was initiated in the Flagami substation, both Turkey Point Unit 3 and 4 were at 100 percent power in what we call a steady state condition, normal operating condition.

At T=0 when the transmission event occurred and the fault was introduced into the system, our protection system, undervoltage protection system associated with Units 3 and 4 detected an undervoltage condition of less than 70 percent nominal voltage that lasted for a duration of one second or more. That is the set point of the relays that introduced the undervoltage protection. That generated a reactor trip signal to the reactor trip breakers, which are the devices that hold the control rods elevated above the reactor core. So the reactor trip breakers had a signal

to open, and they did within milliseconds of the event occurring, followed shortly thereafter by 32 milliseconds by this reverse power turbine trip signal that I talked about with Mr. Young a few minutes ago.

All the safety systems on both units responded as designed. There were no malfunctions, there were no operator errors, or any concerns with regard to that. We then performed a detailed analysis, as you have to do anytime there is a transient like this in the plant where we looked at every single relay that actuated, every pump and motor that started, operator response to the event. Did they follow the procedures properly, were they in the right sequence, all of that. And everything responded, including the operators, the way they were trained and the equipment the way it was designed to do.

There was one particular undervoltage relay that we found that was slightly out of calibration, but still within the technical specification limits of the license, and we dealt with that. The transient response was normal. Had that event lasted longer than it did, we could have found ourselves on the emergency diesels, but because the power was restored fairly quickly to the switchyard like it's designed to do, when the normal station service transformers that supply power as we

call them -- in other words, when the generators are in service we tap off of that power to supply what we call the in-house or hotel loads.

When that generator tripped, the power to power all of the safety equipment is going to come from one of two places, off-site power or the emergency diesels. In this case, we swapped over to the reserve service transformers properly, and we had off-site power, so the diesel generators never were required to start and load. So we didn't have that occur.

And from that point on, Commissioner, it was -- of course it was hectic with two units down simultaneously, but the Nuclear Regulatory Commission responded to the control room, and in their inspection report they said that we had done a very good job with handling that transient.

COMMISSIONER SKOP: Okay. With respect to Page 5 of your errata sheet, which is in your rebuttal testimony, you talk about an outage time of 48 hours that's typically necessary to bring a reactor plant back on-line from an unplanned shutdown, is that correct?

THE WITNESS: That's correct.

COMMISSIONER SKOP: Okay. Now, in the instance of what happened as you have just explained, and I won't try and paraphrase, typically -- and this

was probably a little bit more than a typical trip and then having to standby and then restart or get back up to power. But when this event happened, did FPL go immediately -- was it FPL's intent to restart the reactors as quickly as possible thereby keeping the plants in a hot standby condition, or did FPL subsequently decide that, no, we have got to bring them down completely cold because of what happened?

THE WITNESS: On Unit 3, we knew that we had a rod position indication system repair, as we have talked about to complete, and initially it was not clear until we were able to get crews out to their reactor head area whether or not we were going to have to do extensive work. For example, replacing a coil on top of the reactor head, which would have meant dismantling the missile shield, and that would have caused us to take the unit to cold shutdown as you suggest.

In this particular case, we had anticipated that because we did have the time to plan this job, and we were able to get out there within eight hours and start work. And we were able to determine that just by lifting the coil a little bit up and getting some measurements under there we were able to determine that that coil was, in fact, satisfactory and that we could maintain the unit in a hot standby condition and do that

work. So we stayed in hot standby on that unit.

On Unit 4, there was no necessary maintenance or requirement that would have caused us to take the unit to cold shutdown, so we maintained that unit in a hot standby condition, as well.

COMMISSIONER SKOP: On Unit 4, because, again, on Unit 3 there was the issue of the control rod indicator, and with respect to that in a question that Commissioner Klement asked you, you mentioned that there was a legal agreement in writing regarding the need to do that maintenance item prior to restart, is that correct?

THE WITNESS: Yes, sir.

COMMISSIONER SKOP: Okay. Do you know if that legal agreement was provided within any of the exhibits or testimony that FPL provided in this case?

THE WITNESS: I believe it was.

COMMISSIONER SKOP: Okay. All right. And I will ask Mr. Butler or Mr. Ross if you could speak to that briefly. And I just have one or two more questions.

MR. BUTLER: Commissioner Skop, we'll get you the number. It is a discovery response that has been made an exhibit in the staff stipulated exhibits. We just have to confirm which one it is.

COMMISSIONER SKOP: All right. Thank you.

So, Mr. Stall, I think my final question deals with Unit 4 and your rebuttal testimony on Page 5. Certainly in an unplanned outage, according to your testimony, you stated that the 48-hour time frame was reasonable to bring both plants on-line. But there was an additional delay with the restart of Unit 4 as a result of the discussion that we had yesterday, and I guess the question I have is but for the unscheduled outage, FPL would not have had to restart Unit 4. So is it appropriate in light of what happened with the delay and the additional time that Unit 4 was out not to consider the impact of that in terms of the consumers?

THE WITNESS: Let me make sure I understand. You're referring to specifically the steam generator water level trip?

COMMISSIONER SKOP: The 30 additional hours. You said typically when plants go off-line for an unscheduled outage, 48 hours is the maximum time typically necessary to bring those plants back up absent some additional issues that, you know, may have existed with Turkey Point 3. With respect to 4 that was delayed an additional, I guess, 30 hours, apparently, based on what we were discussing yesterday, and I'm trying to understand whether those 30 hours, it would not be

appropriate to include that additional loss time also based on what happened?

THE WITNESS: I don't believe that it is appropriate to include that 30 hours. And yesterday we had a lot of detailed discussion around that, but just to summarize the basis for my response is I think that you have to back up and look at the performance of these units in the aggregate. When we look at 2008, you know, we have two nuclear units down there that outperformed the industry average by over 4 percent in capacity factor, which gave the customers a benefit of about 25 days of extra generation that they wouldn't have had if we had just performed at that average.

And so I think that it is dangerous when we begin to sort of cherry pick at things that don't go well, and say, well, that could have been done better. That didn't have to happen, therefore, you know, we should penalize the company for that, and we ignore the bigger picture of all of the benefits that have accrued because of superior operations.

And I think also equally important that you begin to creep towards the standard of nothing but perfection is acceptable in operating these big nuclear units, and they are just so complex and there is so much to them that we are never going to be perfect. Nobody

is. These events are going to happen from time to time, but if you weigh it in the balance, the preponderance of the evidence is that the customers are benefiting enormously.

COMMISSIONER SKOP: I understand, and I do recognize FPL on its operational performance, your operational performance is above industry average, as has been documented in other instances.

To your point about penalties and what have you, I don't think -- you know, certainly I'm here to listen to the record evidence and make a fair judgment based on the facts that come into evidence. I mean, the whole notion of a penalty, I think, is a little farfetched. It's important to look at things critically and to have a better understanding as to the details, and that's why I have asked you to answer some of the questions that may have got lost in the details so I can make my own independent judgment when we get to that point.

So I think that's all the questions that I have for you. I do want to clarify one point to counsel, with respect to the FERC order that I previously spoke to, my concern with that is on the stipulation and consent agreement, Paragraph 25, there seems to be a little bit of a disagreement between the

FERC order and the FPL consent order about the $5 million shall be remitted and that to enhance reliability of the BES, it doesn't really speak to -- it is a little bit vague there and ambiguous, and then contrasting that to the FERC order, Paragraph 2, and Paragraph 18 and 21. Twenty-one is actually the most specific where it says additional reliability protections on the FPL portion of the BES, but, again, that still does not say peninsular Florida for the benefit of FPL's ratepayers.

MR. BUTLER: We are looking into getting an answer to that question based on your earlier comment on it, Commissioner, and should be able to today before we conclude.

COMMISSIONER SKOP: I appreciate that. And, again, it is a tangential issue, but it is important to ensure value for FPL's ratepayers in Florida. Because this event was a Florida event, and I am reasonably certain that the FERC Commissioners had that intent. Commissioner Wellinghoff, Spitzer, and Commissioner Moeller, I'm sure, would uphold state interests and rights in reaching that conclusion, also. But I don't want to speak for them.

But that takes us to exhibits, which I think we have none.

MR. ROSS: Mr. Chairman.

COMMISSIONER SKOP: Mr. Ross.

MR. ROSS: I have one item for redirect.

COMMISSIONER SKOP: Yes. Redirect.

MR. ROSS: Thank you.

REDIRECT EXAMINATION

BY MR. ROSS:

Q. Mr. Stall, the 70 percent set point that you mentioned in response to Commissioner Skop's question, where is that found? Where is that requirement found?

A. That is found in our technical specifications which form a part of our operating license from the Nuclear Regulatory Commission.

Q. So is that a mandatory requirement that that 70 percent set point actuation, that's a mandatory requirement from the NRC?

A. Yes.

MR. ROSS: That's all the redirect I have.

And, Commissioner, in response to your question about the NRC license amendment which imposed the condition to repair the RPI at the next outage is in Staff Exhibit 31, which is admitted into evidence, and the specific document starts at Bates number 385.

COMMISSIONER SKOP: Thank you, Mr. Ross.

And that concludes the redirect. There are no

exhibits for this witness for his rebuttal testimony.

MR. ROSS: That's correct.

COMMISSIONER SKOP: So I believe that will allow Mr. Stall to be excused. Thank you, Mr. Stall.

THE WITNESS: Thank you.

COMMISSIONER SKOP: All right. Call your next witness, please.

MR. BUTLER: Thank you, Commissioner Skop. We would call Mr. Yupp.

GERARD J. YUPP

was called as a witness on behalf of Florida Power and Light Company, and having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BUTLER:

Q. Mr. Yupp, you have been previously sworn, correct?

A. Yes, I have.

Q. Would you please state your name and business address for the record?

A. Gerard J. Yupp, 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. And by whom are you employed and in what capacity?

A. I am employed by Florida Power and Light

Company as Senior Director in the Energy Marketing and Trading Division.

Q. Have you prepared and caused to be filed in this docket four pages of prefiled Rebuttal Testimony on February 24, 2010?

A. Yes.

Q. Do you have any changes or revisions to your prefiled rebuttal testimony?

A. No, I do not.

Q. If I asked you the questions contained in your prefiled rebuttal testimony, would your answers be the same today?

A. They would.

MR. BUTLER: Commissioner Skop, I would ask that the prefiled rebuttal testimony of Mr. Yupp be inserted into the record as though read.

COMMISSIONER SKOP: The prefiled rebuttal testimony of the witness will be entered into the record as though read.

MR. BUTLER: Thank you.

BY MR. BUTLER:

Q. Mr. Yupp, you also are sponsoring Exhibits GJY-10 through GJY-12, which are attached to your prefiled Rebuttal Testimony?

A. Yes, I am.

Q. And were those prepared by you or your direction, supervision, or control?

A. Yes, they were.

MR. BUTLER: Commissioner Skop, I would note that those exhibits have been premarked for identification as Exhibits 23 to 25.

(Exhibits 23, 24 and 25 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF GERARD J. YUPP

DOCKET NO. 090505-EI

February 24, 2010

Q. Please state your name and address.

A. My name is Gerard J. Yupp. My business address is 700 Universe Boulevard, Juno Beach, Florida, 33408.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL) as Senior Director of Wholesale Operations in the Energy Marketing and Trading Division.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the assertion in the direct testimony of David E. Dismukes, PH.D., on behalf of the Office of Public Counsel (OPC), that FPL earned an estimated return on its Turkey Point investments of approximately $4.7 billion over the past 37 years. His testimony fails to give a comparative figure representing the fuel savings that FPL's customers have received from the operation of the Turkey Point nuclear units. My rebuttal testimony shows that since 1990, FPL's customers have received approximately $7.7 billion in fuel savings (i.e., $3 billion more than the estimated return asserted by witness Dismukes over just half the time period). Additionally, the Replacement Power Costs (RPC) calculation that witness Dismukes provides in his testimony includes additional outage hours that were not a result of the Flagami Transmission Event. My rebuttal testimony includes

RPC calculations based on an outage time of 48 hours for Turkey Point Units 3 and 4.

Q. Have you prepared or caused to be prepared under your supervision, direction and control an exhibit in this proceeding?

A. Yes, I am sponsoring the following exhibits:

- GJY-10: Turkey Point Fuel Savings (1990-2009)
- GJY-11: 48 Hour RPC Calculation vs. System Average Cost
- GJY-12: 48 Hour RPC Calculation vs. Nuclear Fuel Cost

Q. Please describe how you calculated the Turkey Point nuclear fuel savings shown on Exhibit GJY-10.

A. The fuel savings provided by the Turkey Point nuclear units were calculated using a four-step process. First, the annual combined net MWh of Turkey Point Units 3 and 4 were multiplied by the actual annual percentage of natural gas and heavy oil that FPL's system consumed during each year. The resulting equivalent MWh for both natural gas and heavy oil were converted to MMBtu by multiplying each by the actual heat rates for that fuel type as reported on FPL's December Schedule A3 for each year. The equivalent MMBtu for both natural gas and heavy oil were then multiplied by the actual fuel price for the respective fuel type as reported on FPL's December Schedule A3 for each year, yielding the respective equivalent annual costs for both natural gas and heavy oil. The sum of the two components of the previous calculation represents the annual natural gas and heavy oil fuel costs that FPL would have incurred to produce the same net MWh produced by Turkey Point Units 3 and 4. Lastly, the actual fuel costs for Turkey Point Units 3 and 4 were subtracted from the equivalent natural gas and heavy oil fuel costs to yield net fuel savings on an

annual basis. Exhibit GJY-10 is comprised of three components: Turkey Point Units 3 and 4 actual fuel costs (by year), equivalent natural gas/heavy oil fuel costs (by year) and cumulative net fuel savings due to Turkey Point Units 3 and 4 generation over the period January 1990 through December 2009.

Q. What does Exhibit GJY-10 show?

A. Exhibit GJY-10 shows that, since 1990, FPL's customers have saved approximately $7.7 billion in fuel costs as a result of the operation of Turkey Point Units 3 and 4. This is approximately $3 billion more than the return that OPC witness Dismukes asserts FPL earned over the 37-year period that the Turkey Point units have been in operation. While I have not calculated savings for the period before 1990, customers clearly saved additional billions of dollars over that period as well.

Q. In Exhibits DED-7 and DED-8, witness Dismukes calculates the RPC for the Flagami Transmission Event using the full duration of the outages at Turkey Point Units 3 and 4. However, FPL witness Stall's rebuttal testimony states that 48 hours is a conservative estimate of the time that each unit would have been offline following the Flagami Transmission Event in the absence of any complications or emergent work. What would be the RPC under both FPL's system average approach and witness Dismukes' approach of looking specifically to the avoided cost of nuclear units, for an outage duration of 48 hours at Turkey Point Units 3 and 4?

A. FPL's system average approach results in an RPC value of $3,507,899. Witness Dismukes' approach results in an RPC value of $6,491,507. These calculations are shown in Exhibits GJY-11 and GJY-12 respectively.

Q. Does this conclude your testimony?

A. Yes.

BY MR. BUTLER:

Q. And with that I would ask Mr. Yupp to summarize his rebuttal testimony.

A. Good morning, Commissioners. My rebuttal testimony in this docket responds to the assertion in the Direct Testimony of OPC Witness David Dismukes that FPL has earned approximately $4.7 billion over the past 37 years on its investment in the Turkey Point nuclear units. Doctor Dismukes fails to give a comparative figure reflecting the benefits that FPL's customers have received on that same investment.

My rebuttal testimony shows that since 1990, FPL's customers have received approximately $7.7 billion in fuel savings because of the operation of Turkey Point Units 3 and 4. This figure represents $3 billion more than the investment that Doctor Dismukes refers to in his Direct Testimony in just over half the time period.

And that concludes my summary. Thank you.

MR. BUTLER: Thank you, Mr. Yupp. I tender the witness for cross-examination.

COMMISSIONER SKOP: Thank you, Mr. Butler.

Mr. Beck, you're recognized for cross-examination.

MR. BECK: Thank you, Commissioner.

CROSS EXAMINATION

BY MR. BECK:

Q. Good morning, Mr. Yupp.

A. Good morning, Mr. Beck.

Q. Your calculation for the replacement power costs for 48 hours, that does not include power ascension, does it not?

A. In my rebuttal testimony, no, it does not.

Q. And is it not FPL's position that 48 hours is the typical time to bring a single nuclear plant back on-line?

A. I believe that is the case, and this calculation here on 48 hours was done to support the testimony of Witness Stall. I'm not 100 percent sure on the difference between bringing one and two. I know we referenced, or Mr. Stall referenced 48 hours in his testimony, and so that was the basis for my calculation.

Q. But did not Mr. Stall yesterday say that the typical time to bring on two reactors at the same time was three to five days?

A. I don't recall specifically. I do remember hearing something along those lines, so, yes, I would agree.

MR. BECK: Thank you. That's all I have.

COMMISSIONER SKOP: Thank you, Mr. Beck.

Ms. Bradley, you're recognized.

MS. BRADLEY: Thank you.

CROSS EXAMINATION

BY MS. BRADLEY:

Q. Sir, I think we are back to you for the question. The 158 hours for Turkey Point Unit 3 and the 107 hours for Turkey Point 4, were your customers paying replacement costs for that period of time or was it longer than that?

A. Our customers were paying replacement power costs for that period of time. And I'll term it this way; that was once the nuclear units were returned, those two units were lost as a result of the outage, the nuclear units returned, all of the gas-fired generation that had come off the line in response to the outage had also been returned within that time period. So there were no additional replacement fuel costs past 158 and 107 hours.

MS. BRADLEY: No further questions. Thank you.

COMMISSIONER SKOP: Thank you, Ms. Bradley. Ms. Kaufman, you're recognized.

MS. KAUFMAN: Thank you, Commissioner Skop.

CROSS EXAMINATION

BY MS. KAUFMAN

Q. Good morning, Mr. Yupp.

A. Good morning.

Q. On the first page of your rebuttal testimony, and I think you mentioned this in your summary, you talk about the statement of Doctor Dismukes that FPL has earned -- what FPL has earned on its investment in Turkey Point. I think this is starting at Line 16. Do you see that, Page 1?

A. Yes, I do.

Q. You certainly don't dispute that Florida Power and Light has earned a return on the Turkey Point assets, do you?

A. I would not dispute that, no.

Q. And those assets are included in FPL's rate base and have been for many years, correct?

A. That is my understanding.

Q. And ratepayers have paid for those assets as well as a return as long as those assets have been in rate base?

A. That is my understanding, also, yes.

Q. And you would also agree, would you not, and I think we have heard some testimony about this already, that nuclear units are highly capital intensive as compared to other types of generating units?

A. That's my understanding, yes.

Q. And I think you have also testified that

customers have seen substantial fuel savings from the nuclear units, correct?

A. Correct.

Q. Would you not expect the customers to see savings from these highly capital intensive units, and isn't that why FPL proposed them as the appropriate generating choice at the time?

A. No, I would fully expect to see those types of savings from a low cost generation resource such as nuclear. And I think, you know, to clarify why this is in my testimony, I think, in the Direct Testimony of Doctor Dismukes only one side of the equation was given, and that was the return on the investment of Turkey Point 3 and 4.

I think it was important to at least have a comparative figure just as a reference to just what you are speaking of, the enormous amount of savings that these units have provided to FPL's customers over the years.

Q. Thank you.

And you would agree that certainly that is the reason that FPL proposed that it construct these units and that ratepayers pay for them because they expected to see the ratepayers recognize some substantial fuel savings.

MR. BUTLER: I'm sorry, excuse me. Clarification to the question. Are you asking about FPL's original decision to build Turkey Point Units 3 and 4 that went into service in 1972?

MS. KAUFMAN: Yes.

MR. BUTLER: Okay. So I would just instruct, to the extent the witness knows.

COMMISSIONER SKOP: Thank you.

Ms. Kaufman, you may proceed.

BY MS. KAUFMAN:

Q. Do you need me to repeat? Did you understand the question, Mr. Yupp?

A. No, I don't. I guess I would answer it this way: I don't know what our thought process was in 1972. Again, these units have provided more and more fuel savings over the years as fuel prices, particularly gas and oil, have become extremely volatile and have been high in the last recent years. So the time frame in 1972 was different. I don't have any specific knowledge of why we would have decided to build the units at that time.

Q. Let me ask it this way, how long have you been with Florida Power and Light?

A. Since 1989.

Q. Okay. So a few years.

A. Yes.

Q. Would it be fair to say that you would not expect your company to have made a proposal to construct generation that would not have provided benefits to the ratepayers, would you?

A. Let me make sure I answer it correctly using yes or no. No, I would expect the company to make those decisions based on what is the best benefit for our customers, yes.

MS. KAUFMAN: Thank you.

COMMISSIONER SKOP: Thank you, Ms. Kaufman. Staff.

MR. YOUNG: Thank you, sir.

CROSS EXAMINATION

BY MR. YOUNG:

Q. Mr. Yupp, what is the philosophy behind the 48-hour time frame that Mr. Stall alluded to in his Direct and Rebuttal Testimony to bring the plants up normally for one unit?

A. I'm sorry, the philosophy behind the 48 hours?

Q. Yes.

A. I'm not sure I understand.

Q. Do you know the philosophy behind it? Do you know why it would take 48 hours to bring them up?

A. No. I'm not in nuclear operations and I do

not work at a nuclear plant.

Q. Okay. What is the philosophy behind the eight hours?

A. The eight hours, and hopefully this will clarify any confusion that we had on it. The eight hours in my testimony was my -- I won't say guess, but was my determination of the time period that the Flagami Transmission Event impacted the stability of FPL's system. In other words, the policy behind that and behind the Company's approach is what was the time period that the Flagami event affected the stability of FPL's system. And so when I testified yesterday in my determination in looking at all of the data being able to see the realtime output of all of our generating units on our energy management system, that time frame was eight hours.

So, in other words, at 1:10 p.m. on February 26th the event occurred. By approximately 9:10 that night we had -- everything that had been brought on in response to the event had been shut down, and that is predominately the peaking units that we discussed yesterday. So all of the peaking units brought on, and we did bring all of them on in response to the event, had been shut down approximately 9:00 to 9:15 time frame. All of the purchased power that we

bought in response to the event specifically had been sent back to the customers that we had procured it from.

A majority of the gas-fired plants that had come off the line also in response to the event had been brought back on-line. And keep in mind there was roughly 1,600 megawatts of gas-fired generation that came off. Most of that had been brought back on within that eight-hour period.

So in looking at the system being able to return to a normal economic dispatch, that is the determination I made that at that eight-hour mark the system had become stable again and we had recovered from the transmission event at Flagami.

Q. You just mentioned the word normal, the system returned to a normal state. What is your definition of normal, or is the definition recognized -- and is that definition recognized by the electric industry?

A. Can you repeat that last part?

Q. What is your definition of normal? When you say the system returned to a normal state, what is your definition of normal?

A. When I look at our system operating in a normal state it is that most of our units that have not fully loaded up to the top are in automatic. In other words, they are controlling with the load of the system.

As the load is coming up or as the load is coming down our system is pulsing. Our units that are in automatic, they are responding to that load to match generation with load. That is a normal operating condition on Florida Power and Light's system, and that is where we returned to at that point in time, approximately that point in time that evening.

Q. Is that your personal definition or is that an industry standard definition?

A. I honestly do not know what an industry standard definition would be of normal. That is my definition. And I believe, though, if I were to look at it across the board, if any company's system was operating with its units on-line in automatic responding to load, that would be considered normal. I'm not an expert to make that claim, it is my opinion, but that is my definition of normal.

COMMISSIONER SKOP: Mr. Young, can you yield for a moment? I'd like to get a clarification.

Mr. Yupp, you mentioned normal economic dispatch and that that state had occurred approximately eight hours after the event in question, is that correct?

THE WITNESS: Yes.

COMMISSIONER SKOP: Okay. You would agree,

would you not, that nuclear is the lowest cost dispatchable unit on FPL's generating system, is that correct?

THE WITNESS: Yes, I would agree with that.

COMMISSIONER SKOP: But both nuclear units were not on-line within eight hours, is that correct?

THE WITNESS: That is correct, also.

COMMISSIONER SKOP: And Witness Stall has testified that it would normally take an unplanned shutdown at least 48 hours to bring those units back on-line, is that correct?

THE WITNESS: That is correct.

COMMISSIONER SKOP: Thank you.

THE WITNESS: And maybe one point of clarification on that, Commissioner Skop --

COMMISSIONER SKOP: You're recognized.

THE WITNESS: -- with your question is that, again, economic dispatch based on the units that were available to run.

COMMISSIONER SKOP: And that's an important clarification. Thank you.

Mr. Young, you're recognized.

MR. YOUNG: No further questions.

COMMISSIONER SKOP: Thank you.

From the bench, Commissioners, any questions?

Commissioner Klement.

COMMISSIONER KLEMENT: Yes.

Mr. Yupp, looking at your testimony on Page 3, starting with Line 14, the question that refers to other -- the question generates some additional cost projections by you, and then it goes to Exhibit GJY-12 where the net -- let me see if I have it right. The net fuel replacement cost is changed from the previous projections. You have projected a $6 million projection at the rate of calculation according to Mr. Dismukes, and a 3 million according to FPL's average. I'm trying to understand why those -- why that set of projections was included here.

THE WITNESS: Basically, the intent of including these numbers within my rebuttal testimony were to provide support to the Rebuttal testimony and Direct Testimony, for that matter, of Mr. Stall. We have talked a lot about the typical time frame to return a unit, a nuclear unit to service is 48 hours. And I think the point of it in my rebuttal was to give this Commission at least an idea of, you know, compared to the $2 million that we are proposing, and I know is 15.9 million that OPC has in this. What does 48 hours look like from a cost perspective, not only based on nuclear avoided, but also on a system average. So,

purely for reference.

COMMISSIONER KLEMENT: Thank you. That's all I have.

COMMISSIONER SKOP: Thank you, Commissioner.

Any additional questions from the bench?

Hearing none; Mr. Butler, you're recognized for redirect.

MR. BUTLER: Thank you, Commissioner Skop.

REDIRECT EXAMINATION

BY MR. BUTLER:

Q. Mr. Yupp, would you turn to Page 1 in your rebuttal testimony following up on a question by Ms. Kaufman. On Line 21 you present a fuel savings figure of $7.7 billion, and then you have parenthetically $3 billion more than estimated return. Do you see that?

A. Yes, I do.

Q. Would it be fair to characterize the 3 billion figure as being sort of a net fuel savings to customers above and beyond what they have had to pay for the nuclear units?

A. Yes, that would be a fair characterization.

Q. Commissioner Skop asked you a couple of questions about the definition of normal operations, or returning to a stable automatic control position, and you had mentioned clarifying to his questions that on

February 26th when you were seeing a return to that condition after eight hours that it was, you know, economic dispatch given the units that were available to provide service at that time, correct?

A. Correct.

Q. Is that normally the way that FPL would look at economic dispatch is given the units that are available to operate at any particular point in time?

A. Yes. Our normal mode of operation on a day to day basis is economic dispatch operating with units responding to load in automatic, and on any given day there may be units out of service. So it does apply to the units that are available we operate in economic dispatch.

MR. BUTLER: Thank you. That's all the redirect that I have.

COMMISSIONER SKOP: Thank you, Mr. Butler.

That takes us to exhibits, and I believe we have Exhibits 23 through 25.

MR. BUTLER: Yes. I would move Exhibits 23 through 25. Thank you.

COMMISSIONER SKOP: Any objections from the parties? Hearing none, show Exhibits 23 through 25 entered into the record.

And, Mr. Yupp, you are excused.

THE WITNESS: Thank you.

MR. BUTLER: Thank you.

(Exhibit Number 23 through 25 admitted into the record.)

COMMISSIONER SKOP: And, Commissioners, just for planning purposes, we had hoped to break for lunch at 12:00. We had had a request from a Commissioner to delay that until at least 12:30, so I'd like to continue moving forward with witnesses, but this would be good time to take a five-minute break. So we will stand adjourned.

(Recess.)

COMMISSIONER SKOP: Okay. We're going to go back on the record. And, Mr. Butler, call your next witness.

MR. BUTLER: Thank you, Commissioner Skop. We call Dr. Avera, who has been previously sworn.

WILLIAM E. AVERA

was called as a witness on behalf of Florida Power & Light Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BUTLER:

Q. Dr. Avera, would you please state your name and business address for the record?

A. William E. Avera, 3907 Red River, Austin, Texas.

Q. And by whom are you employed and in what capacity?

A. I'm the President of FINCAP, Incorporated.

Q. Thank you. Have you caused to be prepared and filed in this docket 17 pages of rebuttal testimony?

A. Yes, sir.

Q. Okay. Do you have any changes or corrections to your rebuttal testimony?

A. I have one change to make it consistent with Dr. Dismukes' errata.

On Page 11 at Line 22, the number that appears in that line at the end of the line should be 13,950,020. 13,950,020.

Q. Thank you. Is that the only change to your testimony?

A. Yes, sir.

Q. With that change, if I asked you the questions contained in your prefiled rebuttal testimony, would your answers be the same today?

A. They would be.

MR. BUTLER: Commissioner Skop, I ask that Dr. Avera's prefiled rebuttal testimony be inserted into the record as though read.

COMMISSIONER SKOP: The prefiled rebuttal testimony of the witness will be entered into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF WILLIAM E. AVERA

DOCKET NO. 090505-EI

February 24, 2010

Q. Please state your name and address.

A. My name is William E. Avera, 3907 Red River, Austin, Texas, 78751.

Q. Are you the same William E. Avera who previously filed direct testimony in this docket?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. My testimony responds to the economic and regulatory policy arguments raised in the testimony of David E. Dismukes, Ph.D., filed on behalf of the Office of Public Counsel. I will demonstrate that his arguments regarding the proper regulatory treatment of the Replacement Power Cost ("RPC") credit arising from the February 26, 2008 transmission event at Florida Power & Light Company's ("FPL" or "the Company") Flagami substation (the "Flagami Transmission Event") are flawed in large part because they consistently ignore the fact that it was a transmission-created outage, not a nuclear-created outage.

Q. Please summarize the conclusions of your rebuttal testimony.

A. Dr. Dismukes concludes his testimony with the statement, "the Company's proposal does not reflect the actual replacement cost of energy associated with the *transmission-created outage* of February 2008, and simply represents a

transfer of wealth from ratepayers to the Company and its shareholders." (Dismukes Direct, page 39, lines 15-18; emphasis supplied). Despite his recognition that the Flagami Transmission Event had nothing to do with FPL's nuclear operations, his recommended calculation of RPC treats the outage as if it were nuclear-created. Dr. Dismukes makes no claim that FPL was imprudent in taking the Turkey Point units offline in response to the Flagami Transmission Event or in restoring the units to service thereafter. Indeed, the testimony of FPL witness J. A. (Art) Stall confirms that the shutdown of the Turkey Point nuclear units in response to the Flagami Transmission Event was mandated by the Nuclear Regulatory Commission ("NRC") operating licenses for those units, and that FPL brought the units back on line as safely and quickly as possible.

In contrast to Dr. Dismukes' proposed calculation, FPL's RPC calculation identifies the cost attributable only to the transmission-created outage by using system average fuel cost and standard generation recovery times. Separating the low fuel cost and extended recovery times unique to nuclear units from the RPC calculation is the fairest way to recognize FPL's responsibility for the transmission-created outage without penalizing FPL for the fact that the outage happened to affect prudently operated nuclear units. Specifically linking the RPC to the transmission-related outage and separating the nuclear-related costs is sound economics and regulatory policy.

The arguments raised by Dr. Dismukes are largely based on his misunderstanding of the logic of FPL's RPC calculation. There is no "transfer of wealth from ratepayers to the Company," as claimed by Dr. Dismukes; rather,

FPL proposes that customers be fully relieved from paying costs that are associated with the transmission-created outage for which FPL has agreed to take responsibility. My rebuttal testimony explains the specific fallacies in Dr. Dismukes' arguments:

- Dr. Dismukes is wrong in his claim that FPL is asking customers to subsidize its replacement costs to encourage new investment in nuclear, solar, wind, and energy efficiency resources. FPL is not asking for any subsidy whatsoever. FPL is instead arguing that tying transmission-created outage costs to specific affected generation would undermine existing incentives for low energy cost alternatives by exposing utilities to disallowances even when they operate low-cost units prudently.
- The RPC calculation proposed by Dr. Dismukes is identical to that which would be made if the nuclear units had been taken off-line, and remained offline for their full unplanned outage duration, solely due to imprudent operation of the plants. He makes no attempt to recognize that Turkey Point Units 3 and 4 were operated prudently and thus substantially overstates the appropriate amount of RPC attributable to the Flagami Transmission Event.
- Dr. Dismukes incorrectly asserts that the Company's proposal is not consistent with sound economic principles and regulatory policy. In fact, separation of costs based on causation is sound economics and good regulatory policy. Failing to distinguish between transmission-related costs and generation-related costs would not be sound economics because it undermines existing incentives in Florida to encourage energy efficiency.

- Dr. Dismukes incorrectly claims that FPL's RPC proposal is "entirely inconsistent with the efficiency principles of general equilibrium theory" by not providing marginal cost-based price signals to customers as they make electric-consumption decisions. (Dismukes Direct page 21, lines 13-14). He glosses over the fact that Florida's fuel adjustment mechanism is deliberately structured to provide customers with a levelized annual fuel price that is fundamentally (and appropriately) different than a real-time price signal. In any event, FPL's RPC calculation is most consistent with efficiency principles because it provides for customers to pay the energy costs associated with the electricity they use, reduced by the transmission-related costs for which FPL has accepted responsibility.
- FPL's approach to RPC does not raise the issue of moral hazard because the Company has accepted responsibility for the transmission-created outage and will pay an economic penalty equal to the resulting cost. This sends the appropriate price signal for management to take prudent and cost-effective measures to maintain transmission system reliability for the benefit of customers. In contrast, Dr. Dismukes' proposal is opportunistic regulation that would penalize FPL disproportionately because a prudently operated low fuel cost unit happened to be impacted by a transmission-created outage.

Dr. Dismukes' Calculation of RPC Wrongly Includes Generation-Related Outage Costs

Q. How does Dr. Dismukes propose to calculate RPC from the Flagami Transmission event?

A. Dr. Dismukes proposes that the RPC be based on the fuel costs associated with the nuclear units and time they were out of production. As shown in his example (Dismukes Direct page 8 line 12 through page 9, line 4, and Exhibit DED-4), the replacement power calculation focuses only on the lost production from the nuclear plant. This is exactly the same as the calculation that would be done if the nuclear plant had been removed from service due to imprudent plant operations. Dr. Dismukes' failure to recognize this distinction opens the door to opportunistic regulation, where the penalty would be unrepresentatively large when low fuel cost generation happens to be impacted by the transmission-created outage but unrepresentatively small if only high fuel cost generation were affected. As will be discussed later in my rebuttal, Dr. Dismukes' approach undermines the Florida policy to encourage generation alternatives that have low fuel cost and environmental benefits.

FPL's Calculation of the RPC Credit is More Consistent with Sound Economic Principles and Regulatory Practices than Dr. Dismukes' Recommendation

Q. Is there any basis for Dr. Dismukes' claim that FPL is proposing "to transfer close to $14 million in consumer wealth to itself and its shareholders" (Dismukes Direct, page 21, lines 5-7)?

A. No. FPL's proposed RPC does not result in a transfer of wealth from customers to shareholders. On the contrary, the Company has agreed to reimburse

customers for the transmission-related costs that resulted from what Dr. Dismukes agreed was a transmission-created outage. The relevant regulatory policy was cited in my direct testimony, "Under regulatory policy in Florida (as in most states and federal jurisdictions), a utility is allowed to recover prudently incurred fuel and purchased power costs without profit or loss." (Avera Direct, page 6, lines 22-23 continuing to page 7, lines 1-2). The Company did not profit from recovery of fuel costs and it should not suffer a loss beyond that necessary to pay for costs associated with the transmission-created outage. FPL has agreed to reimburse customers for costs from the transmission-created outage of February 26, 2008.

There is no claim that the Company was imprudent in the operation of its nuclear units. On the contrary, FPL witness J. A. Stall has confirmed that the Turkey Point nuclear units were "prudently and properly taken off-line" following the Flagami event. (Stall Direct, page 1, line 23). He further explains that after the outage, "FPL then took prudent and conservative measures to investigate, inspect, and analyze system components prior to safely restarting both units." (Stall Direct, page 8, lines 6-8). Dr. Dismukes takes no exception to Mr. Stall's testimony regarding the prudent operation of the nuclear units during and after the Flagami Transmission Event.

Q. Does Dr. Dismukes' methodology track marginal or opportunity costs more closely than FPL's?

A. No. Marginal cost is an instantaneous concept in real time. Florida's fuel adjustment mechanism is not structured to send customers real-time price signals of system cost. As FPL witness Terry J. Keith explains in his rebuttal

testimony, customers pay bills based on projected, levelized fuel factors that average fuel costs over the course of a calendar year. Moreover, the true-up for differences in actual costs due to an unanticipated event such as the Flagami Transmission Event will be reflected in the levelized fuel factors one or two years after they occur. Thus, regardless of the approach taken to calculating RPC for an outage, the customers would not receive a meaningful price signal from the RPC. I should also point out that Dr. Dismukes uses average nuclear fuel cost just as the Company proposes to use average system fuel cost, so there are no measures of marginal operating costs in either RPC calculation.

Nor is marginal-cost pricing necessarily the desired end result. It is worth noting that the classic regulatory text cited by Dr. Dismukes (Dismukes Direct, page 24, lines 20-25) begins its discussion of marginal cost pricing with a quotation from William Vickery, the winner of the Nobel Prize in Economic Science, "the principle of marginal cost pricing is not in practice to be followed absolutely and at all events, but is a principle that is to be followed insofar as this is compatible with other desirable objectives." (James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates* (1988), page 410). Here, the Commission has reasonably and appropriately decided that customers benefit from having some predictability in the price that they pay for electricity, even when fuel costs are volatile. That decision underlies the use of levelized annual fuel factors, which allow customers to budget for their annual electric bills in the upcoming year better than any system of real-time, marginal-cost pricing.

Finally, the separate identification of transmission-related cost apart from the generation-related costs of an outage, as the Company recommends, is more compatible with marginal cost principles than Dr. Dismukes' approach, which lumps together the transmission-created costs with the generation costs that happened to be impacted in a particular outage. Dr. Dismukes' approach is contrary to Professor Vickery's admonition to consider other "desirable objectives," because it would undermine Florida's policy of encouraging energy-efficient generation, as will be demonstrated in the next section of my rebuttal testimony.

Q. Would the Company's approach to the RPC credit create an opportunity for moral hazard as claimed by Dr. Dismukes? (Dismukes Direct, page 25, lines 15-17).

A. Of course not. Moral hazard arises when an economic agent is insulated from the negative consequences of their actions. As defined by the same classic regulatory policy text cited by Dr. Dismukes, "*Moral hazard* is the failure of a person to behave in a fully responsible way *because* there are no penalties for misbehavior." (James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates* (1988), page 40, emphasis in the original).

FPL's pattern of taking responsibility for the impact of its actions on the welfare of its customers stands in stark contrast to the alleged behavior of leading Wall Street firms in the financial melt-down. FPL has agreed to compensate customers for the RPC attributable to the Flagami Transmission Event. As Mr. Stall explains, FPL took all reasonable and prudent actions to safely restore its

nuclear generation to service after the transmission-created outage. (Stall Direct, page 8, lines 1-8). The Company's approach properly calculates a penalty based on the costs attributable to the transmission-created outage rather than focusing on the outage of prudently operated nuclear units. This approach avoids the problem of insufficient penalties raised in the quote from Professors Bonbright, Danielson, and Kamerschen cited by Dr. Dismukes. (Dismukes Direct, page 24, lines 20-25).

Dr. Dismukes' Calculation of RPC Credit Would Undermine The Policy of Encouraging Low Fuel Cost Generation in Florida

Q. Dr. Dismukes urges the Commission to set the RPC refund at the "true value of the February 2008 outages." (Dismukes Direct, page 26, lines 6-7). Do you agree?

A. I completely agree with his statement, but strongly disagree with his application of it. In my opinion, the Company's RPC approach properly reflects the "true value of the February 2008 outages," because it is more indicative of the transmission-related costs. In contrast, Dr. Dismukes' approach conflates the transmission-related costs with generation-related costs. Besides departing from the "true value" of the transmission-created costs, this approach exposes utilities to future disallowances that, to use Dr. Dismukes' words, are "unknown, speculative, and yet to be identified." (Dismukes Direct, page 26, lines 4-5, emphasis in the original). His approach would expose utilities to open-ended disallowances when their prudently operated fuel-efficient generation units are impacted by a transmission-created outage. The greater the energy cost

efficiency of a particular unit relative to the system average, the greater the unwarranted disallowance penalty under Dr. Dismukes' approach.

Q. Would Dr. Dismukes' approach be contrary to Florida policy to encourage energy efficiency?

A. Yes. Increasing exposure to uncertain and speculative risk of disallowance for prudently operated low fuel cost generating units undermines the energy efficiency policy that Florida leaders have determined is in the interest of customers, the environment, and the economy. In fact, it would work directly against the consistency in incentives that Dr. Dismukes recognizes is so important (Dismukes Direct, page 34, lines 4-20).

Q. Is the Company claiming that it would be unfair to credit customers with the "full cost" of the outage since customers have received all of the benefits of low nuclear costs, as asserted by Dr. Dismukes? (Dismukes Direct, page 26, lines 13-19).

A. No. As I have stated previously, FPL's RPC calculation does reflect the "full cost" of the *transmission-created* outage that is the subject of this docket.

Q. What are reasonable and relevant inferences from the episode of nuclear plant disallowances discussed by Dr. Dismukes? (Dismukes Direct, page 30, lines 1-17, Exhibit DED-11).

A. There are two relevant inferences. First, when there has been imprudence found in the operation and construction of nuclear plants, there can be a specific disallowance. When there is no finding of imprudence, there has been no disallowance, as in the case of FPL's Turkey Point units. Second, Dr. Dismukes' discussion supports my statement that, "FPL's customers have been well-served by FPL's investment in Turkey Point Units 3 and 4." (Avera Direct, page 12,

lines 9-18). During the decades of the 1980s and 1990s, I participated in many cases before state and federal regulatory agencies as well as in civil courts involving the construction cost of nuclear plants. In that era, the cost and performance of the FPL nuclear units set a performance standard in cost and schedule of construction. I recall in many meetings of experts conducting statistical studies to explain the construction time and cost of a plant, there was discussion of developing some rationale to eliminate the FPL plants from the benchmark sample because they "blew the curve." Few, if any, nuclear units completed by other utilities in the decades of the 1980s and 1990s compared favorably in schedule and cost to the FPL units.

Q. What then are the proper inferences to be drawn from the 2005 *Rand Journal of Economics* article cited by Dr. Dismukes? (Dismukes Direct, page 31, lines 12- 27; page 32, lines 1-16).

A. I take away the exact opposite conclusion from Dr. Dismukes. In rejecting the hypothesis that disallowances were "opportunistic," the article found that "regulators appear to have been largely driven by the desire to punish specific poorly managed utilities." (Thomas P. Lyon and John W. Mayo, "Regulatory opportunism and investment behavior: evidence from the U.S. electric utility industry," *RAND Journal of Economics* (Autumn 2005), page 628). In other words, nuclear investment was disallowed when regulators found imprudence, not "opportunistically" just to lower customers' bills. In contrast, Dr. Dismukes is recommending in this docket what amounts to a ~~$13,050,021~~ 15,950,020 add-on disallowance through the RPC credit, where there has been no claim of bad management or imprudence related to nuclear operations. This would fall

squarely within the definition of "opportunistic" regulation of the type that the article felt should be avoided.

Q. Do the "other interesting questions" tested in the article discussed by Dr. Dismukes (Dismukes Direct, page 32, lines 4-16) have any other relevance for this case?

A. No. The single question discussed by Dr. Dismukes is whether the Duff & Phelps regulatory climate rating impacts capital investment by utilities. The authors stated, "we expect investment to be negatively correlated with Duff & Phelps rating." (Lyon & Mayo, *Id.* page 634). Their finding was a positive correlation that was not statistically significant, so as Dr. Dismukes grants, "it is impossible to discern any relationship between investor ratings of regulatory commissions and the investment practices of their utilities." (Dismukes Direct, page 32, lines 14-16).

But Dr. Dismukes' statement should not be taken to suggest that investor rankings of regulatory commissions are irrelevant. For example, while the article established no relationship between levels of investment and regulatory rankings, it did not demonstrate that the risks associated with utilities operating in jurisdictions with low regulatory ratings are not higher than for more supportive commissions. Since required returns are a function of risk, customers in states with less supportive regulatory policies could be expected to pay a penalty in the form of higher capital costs.

Also, the Lyon & Mayo study involved Duff & Phelps rankings that were only published from 1972 to 1991. (Lyon & Mayo, Id., page 633). Because there was no statistical significant relationship in this study relating to plant investment by utilities does not suggest that investors' evaluation of regulatory agencies does not impact the cost and availability of capital, then or now.

Q. Is there any finding in the *RAND Journal of Economics* article that runs counter to Dr. Dismukes' position in this case?

A. Yes. A primary finding of the article, which Dr. Dismukes chose not to discuss, runs contrary to his opinions in this case. Lyons & Mayo found, "our results with controls for nuclear construction consistently indicate that a firm that is disallowed subsequently reduces its investment propensity significantly." (Lyon & Mayo, Id. page 461). This suggests that nuclear disallowances did have the consequence of reducing investment by the utilities that suffered the disallowance. Granted, Florida was not one of the states where a disallowance occurred in this study and the focus was on capital cost disallowances rather than operating costs. But it is entirely rational for utilities to respond to economic risks and penalties if nuclear and other energy-efficient generation sources are operated prudently, but still remain subject to disallowances from an unrelated transmission-created outage.

Q. Is Dr. Dismukes correct to assert that there is "no relationship between the proposed RPC credit in this proceeding and nuclear plant development cost recovery" (Dismukes Direct, page 33, lines 12-24)?

A. No. There are two important links between this case and Florida's nuclear development cost recovery policy. First, that policy confirms the importance to Florida of encouraging the development of nuclear power in the state. As stated

by Dr. Dismukes, "The Commission, and the Florida Legislature, have clearly defined a strong and supportive policy for nuclear power plant development." (Dismukes Direct, page 33, lines 19-21). Second, the effectiveness of this policy will be undermined by the potential for opportunistic disallowances due to transmission-created outages of the kind proposed by Dr. Dismukes, when there has been no finding of imprudence in nuclear operations. The *RAND Journal* discussed above confirmed that disallowances can have a chilling effect on future investment in nuclear generation.

Q. Do you agree with Dr. Dismukes that "consistency is more important to nuclear and renewable power cost recovery than setting policy in a one-time opportunistic fashion (Dismukes Direct, page 34, lines 4-7)?

A. Completely. A consistent policy is far superior to opportunistic treatment. That is why the Company's RPC approach of isolating transmission-related costs is more effective regulatory policy than Dr. Dismukes' approach, which would penalize a utility opportunistically if transmission events cause a prudently operated nuclear unit to come offline.

Dr. Dismukes is completely off base in suggesting that the company is requesting "shareholder subsidies." (Dismukes Direct, page 34, line 10). FPL is requesting no subsidy in this case. Rather, it is proposing a method for calculating transmission-related costs for a transmission-created outage that can be applied consistently through time, in a manner that is fair to the Company and its customers and avoids undermining incentives now in place for what Dr. Dismukes recognizes as "the challenge in the development of high capital cost

power generation assets such as nuclear, solar, and offshore wind." (Dismukes Direct, page 34, lines 8-9).

Q. Dr. Dismukes claims that in competitive markets replacement power for nuclear plant outages would "typically be borne by the nuclear plant operator and its shareholders," citing the recent charge reported by FPL Group for the Seabrook nuclear plant. (Dismukes Direct, page 35, lines 11-17). Does this example support his RPC calculation?

A. No. The Seabrook outage was the result of operating problems at the plant and was not a transmission-created outage like the Flagami Transmission Event. (FPL Group *Form 8K, Exhibit 99* (filed with the U.S. Securities and Exchange Commission, December 23, 2009) page 1). Also, a nuclear plant that sells its power into a competitive market does not have its profits limited by regulatory authorities and can benefit handsomely from the spread between its generating costs and market prices for power when the plant is operating. In this way, high profits from when the plant operates can make up for replacement power when the plant fails to operate. In contrast, the Company's profit on its investment in Turkey Point nuclear units is limited to a fair rate of return and recovered in base rates, while it recovers fuel cost without profit. I would also note that Dr. Dismukes recognizes that the obligation to pay for replacement power is dependent on the contracts and other arrangements underlying power sales agreements. (Dismukes Direct, page 35, footnote 31). In my experience with merchant plant contracts, there are usually specific limitations on the obligations of plant owners and operators to pay replacement power costs, and there is often a test of whether the plant operator could have reasonably prevented the outage, a benchmark not unlike prudency standard for regulated plants.

Q. Dr. Dismukes observes that there are a number of issues that may impede the development of renewable resources such as solar and wind energy. (Dismukes Direct, page 35, lines 19-21; page 36, lines 1-24; page 37, lines 1-7). Is this a reasonable justification for his opportunistic calculation of RPC?

A. Certainly not. The fact that there are many economic and political challenges facing renewable development in Florida does not justify ignoring the effect that Dr. Dismukes' proposed RPC calculation would have in undermining existing incentives and making new incentives less effective. Dr. Dismukes refers to the relatively small amount at issue in the case compared to the massive investment required for nuclear plants and renewable options. However, there is no dollar limit to disallowances under his RPC approach. This open-ended and uncertain exposure would be a real disincentive to nuclear and renewable generation and would undermine present and future state and federal incentives.

Q. Does adopting the Company's transmission-related cost approach to RPC in this case open the door to future claims for renewable energy subsidies, as claimed by Dr. Dismukes (Dismukes Direct, page 38, lines 1-19)?

A. No. The Company is not proposing that the RPC credit or any other aspect of the fuel adjustment clause be used to subsidize nuclear or renewable energy. Rather, FPL's approach is true to the sound economic principle and accepted regulatory policy underlying cost-based rates.

Q. Does the Company's approach lessen the consequences of supporting reliability or undermine distributed energy resources, as claimed by Dr. Dismukes (Dismukes Direct, page 38, lines 21-25; page 39, lines 1-9)?

A. No. Under the Company's proposal, the price of transmission reliability is set consistent with its cost so that economically rational decisions can be made regarding investments in reliability and distributed energy resources. A stable and consistent price is more conducive to rational economic choices over reliability investments than the opportunistic and fluctuating penalty that would result from Dr. Dismukes' approach.

Q. Does this conclude your rebuttal testimony?

A. Yes.

MR. BUTLER: Thank you. And Dr. Avera's rebuttal testimony has no exhibits to it. So with that, I would ask that he summarize his rebuttal testimony.

THE WITNESS: Good afternoon, Commissioners. My rebuttal responds to the economic and policy arguments in Dr. Dismukes' testimony. Dr. Dismukes concludes his testimony with the statement, "The company's proposal does not reflect the actual cost of energy associated, replacement cost of energy associated with the transmission-created outage of February 2008."

Despite his recognition that the Flagami transmission event was not caused by imprudent nuclear operations, his recommended calculation of replacement energy treats the outage as if it were nuclear created. In other words, the replacement power cost calculation proposed by Dr. Dismukes is identical to that which would be made if the nuclear units had been operated imprudently, and thus substantially overstates the appropriate amount of RPC attributable to the Flagami transmission event.

Dr. Dismukes claims that the company's proposal is not consistent with sound economic principles and regulatory policy. In fact, separation of cost based on causation is a fundamental tenet of sound economics and good regulatory policy. Failing to

distinguish between transmission-related costs and generated-related, generation-related costs would be unsound economics and counterproductive regulatory policy because it overstates replacement power credit and undermines existing incentives in Florida to encourage energy efficiency. That completes my rebuttal summary.

MR. BUTLER: Thank you, Dr. Avera. I tender the witness for cross-examination.

COMMISSIONER SKOP: Thank you, Mr. Butler.

Mr. Beck, you're recognized, or Mr. McGlothlin. Sorry.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q. Dr. Avera, you've mentioned in your summary your distinction between transmission-related costs and generation-related costs. And those distinctions appear several times in your rebuttal testimony, do they not?

A. Yes, sir.

Q. And for purposes of my question, I'm looking at Page 9, Line 17, in which you, where you say in part, you assert that Dr. Dismukes' approach completes the transmission-related costs with generation-related costs. Do you see that sentence?

A. Yes.

Q. You would agree with me, sir, would you not, that transmission events can cause generation impacts?

A. Yes. Transmission events can cause generation impacts.

Q. And in terms of measuring that, you are here to support for policy reasons the, the calculations that Mr. Yupp provided in his testimony, do you not?

A. That's correct. Because I believe it properly separates transmission cost from the subsequent generation cost.

Q. And as part of that rationale, you and your client assert that there was no imprudence associated with taking the nuclear units offline; correct?

A. That is correct. And I believe I heard Dr. Dismukes not disagree with that. He certainly doesn't in his testimony and he didn't in his live testimony.

Q. Now the calculation provided by Witness Yupp that you endorse includes as one component the use of heat rates, does it not?

A. Yes. That's how we arrive at the adjusted system cost, or how Mr. Yupp arrived at that.

Q. And would you agree with me that heat rates are an aspect of generators, not transmission lines?

A. That is correct. The heat rate is the

transformation of, of fuel to electric energy. That can only be done in generators. Transmission convey the energy across the system.

Q. Another component of the calculation is fuel cost; correct?

A. Yes.

Q. And there the calculation refers to fuel costs of generators, not transmission lines.

A. That is correct. Because in order to insulate the transmission-related cost we had to use the system average cost. Because during that eight-hour period, as Mr. Yupp testified, there was not the availability of the normal economic dispatch of generators.

Q. Including the Turkey Point nuclear generators, they were unavailable during that time frame and beyond; correct?

A. That is correct. As well as fossil fuel generators. I believe 4,300 megawatts was unavailable instantly and then they started coming back.

Q. Now with respect to the 4,300 megawatts of generation that was unavailable, that includes Turkey Point 3 and 4 plus other units; correct?

A. Yes, sir.

Q. And some of those other units have been incorporated into the calculation of system average

costs?

A. Yes, sir. I believe what Mr. Yupp did is went back and reconstruct system average cost as if all units had been available, including Turkey Point. And that becomes the, the baseline from which you compare the actual cost during the eight hours of the transmission disturbance.

Q. And with respect to the units other than Turkey Point 3 and 4 that are incorporated in that calculation, there has been no issue of imprudence in the way they were taken offline in terms of the operation of those units, has there?

A. That is correct. Just as there's not been for Turkey Point.

Q. Now throughout the case some of the witnesses have referred to the acronym RPC. You're familiar with that?

A. Yes.

Q. What does the R stand for in RPC?

A. Replacement.

MR. McGLOTHLIN: That's all the questions I have.

COMMISSIONER SKOP: Thank you, Mr. McGlothlin. Ms. Bradley, you're recognized.

CROSS EXAMINATION

BY MS. BRADLEY:

Q. Sir, can you tell me if we exclude the nuclear plants, what was the generation loss associated with this event?

A. Well, I believe the nuclear plants were 1,400 megawatts, and the generation loss was 4,300. So the difference would be the other generation that for some period of time or another was, was impacted.

Q. Where did you get those figures?

A. I think the figures are in the FERC report.

Q. Where does it say that the generation loss excluding the nuclear plants was 4,300?

A. It doesn't say that. It says 4,300. I know from other sources that the Turkey Point units were 1,400 together. So the FERC report does not distinguish between the nuclear units and other generation.

Q. So you just decided to subtract that?

A. Well, I think I was trying to respond to your question. 4,300 is in the FERC report. Other sources tell me the Turkey Point generation. So if the question is how much generation other than Turkey Point, you do the subtraction.

Q. But the FERC report does not say that the 4,300 excludes the nuclear plants, does it?

A. It does not. It explicitly says all -- that

is their measure of all of the generation that was affected.

Q. So you just made that assumption based upon your opinion; correct?

A. Well, I think it's a reasonable -- if that's the total amount and we know that included in that amount was Turkey Point, and if the question is how much megawatts other than Turkey Point, you would subtract Turkey Point from the 4,300.

Q. Okay. So the 4,300 includes Turkey Point?

A. Yes, it does.

Q. Okay. I misunderstood what you said. I apologize.

A. Well, maybe I -- I'm glad we're on the same page.

MS. BRADLEY: Thank you. No further questions.

COMMISSIONER SKOP: Thank you, Ms. Bradley.

Ms. Kaufman, you're recognized.

MS. KAUFMAN: Commissioner, I have no questions.

COMMISSIONER SKOP: Thank you.

Staff?

MR. YOUNG: Mr. Chairman, if I can indulge, if I can bear your indulgence for one minute.

COMMISSIONER SKOP: Very well. I'll move on to one other question. To Mr. Butler, I guess they had previously, in response to my question regarding the legal agreement from the NRC, they pointed to a Bates number, and I've subsequently had the opportunity to look at that. Can they specifically identify exactly on what page and what paragraph the requirement as to at the next shutdown you have to do the repairs?

MR. BUTLER: I'm going to ask Mr. Ross to address that. He's more familiar with the agreement than I.

MR. ROSS: Do you have it in front of you, Commissioner Skop?

COMMISSIONER SKOP: I do.

MR. ROSS: If you turn to Bates Number 395.

COMMISSIONER SKOP: Okay. And which paragraph?

MR. ROSS: It's -- at the bottom of the page there is a footnote indicated by two asterisks.

COMMISSIONER SKOP: Okay. All right. I'll just look at that. If I have additional questions -- thank you.

MR. ROSS: Okay.

COMMISSIONER SKOP: Mr. Young, are you ready to go, or do you need a few minutes?

MR. YOUNG: I'm ready, sir.

COMMISSIONER SKOP: All right. You're recognized. Thank you.

CROSS EXAMINATION

BY MR. YOUNG:

Q. Dr. Avera, you heard Ms. Bennett's questions to Dr. Dismukes this morning; correct?

A. Yes.

Q. Do you agree that this is a, that this is a policy decision for the Commission?

A. Yes. I think it's a significant policy decision.

Q. Are there any times, are there any times when risks of a transmission event should be borne only, only by the utility?

A. Well, I believe that the calculation that we presented sorts out the transmission-related cost, and I think FPL has agreed to bear those costs. So I believe the $2,024,035 that Mr. Yupp has calculated represents the transmission-related costs from the Flagami outage that should be borne by the company.

Q. But let me ask it again. And if you can answer yes, no, and then explain your answer.

Are there any times when risk of a transmission event should be borne only by the utility?

A. Yes.

Q. Okay. When?

A. When it is found that the utility has improperly managed their responsibilities or when they agree to it. Yesterday Mr. McGlothlin gave me a series of documents where investors are told that companies may not be able to recover costs when there is a finding of imprudence or improper behavior.

Q. We're going to come back, come back to that.

Dr. Avera, do you know of any case similar to this case?

A. No, not that has exactly the same fact patterns where you have a transmission event for which the company is responsible and then the issue is replacement power costs that would extend to a nuclear plant.

Q. So this case is very uncommon.

A. It is. It's the first -- 40 years of experience, and this is number one for me.

MR. YOUNG: All right. No further questions.

COMMISSIONER SKOP: Thank you. Questions from the bench?

Commissioner Klement, you're recognized.

COMMISSIONER KLEMENT: Thank you.

This reveals my lack of knowledge of nuclear

that the acting Chairman may have more of than I, but it's to Mr. Butler or FPL. In regard to that, the answer to his question at the bottom of Page 395 and the bracketed double asterisk at the bottom, what does Mode 3 mean, please?

MR. BUTLER: Mode 3 is the mode in which the unit is no longer making nuclear power. The reaction, the critical reaction has stopped. And so basically, as I understand it, I was actually just talking to Mr. Ross about this during the questioning, this could be in a planned outage, could be in an unplanned outage, just whenever the unit is brought down to that point. And I would note just as an aside that clearly if it's a planned outage where you're refueling, you have to bring it down not only to Mode 3 but below that to get it to the cold conditions that you would actually be moving fuel in and out.

But the Mode 3 is sort of the break point. If you go into that mode where the reactivity in the reaction, excuse me, in the reactor has been terminated, then that would be the triggering event for having to do these repairs.

COMMISSIONER KLEMENT: Thank you. That's all I have, Chairman.

COMMISSIONER SKOP: Thank you, Commissioner.

Any other questions?

Okay. I guess that brings us to redirect, Mr. Butler or Mr. Ross.

MR. BUTLER: It is I, and I have no redirect.

COMMISSIONER SKOP: Thank you. And there's no exhibits for this witness, so.

MR. BUTLER: No exhibits.

COMMISSIONER SKOP: Dr. Avera, you're excused.

THE WITNESS: Thank you.

COMMISSIONER SKOP: Mr. Butler, call your next witness.

MR. BUTLER: Thank you. That would be Mr. Keith, our final witness.

COMMISSIONER SKOP: Commissioners, I think we'll get through this relatively quickly, I'm hopeful, so we'll see. If not, we'll adjourn, but --

TERRY J. KEITH

was called as a witness on behalf of Florida Power & Light Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. ROSS:

Q. Good afternoon, Mr. Keith.

A. Good afternoon.

Q. Have you prepared and caused to be filed in

this proceeding rebuttal testimony totaling six pages?

A. I have.

Q. Do you have any changes or corrections to that testimony?

A. I do not.

Q. If I asked you the questions contained in your rebuttal testimony today, would your answers be the same?

A. Yes, it would.

MR. ROSS: Mr. Chairman, I'd request that the rebuttal testimony of Mr. Keith be entered into the record as if read.

COMMISSIONER SKOP: The rebuttal testimony of the witness will be entered into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF TERRY J. KEITH

DOCKET NO. 090505-EI

February 24, 2010

Q. Please state your name and address.

A. My name is Terry J. Keith and my business address is 9250 West Flagler Street, Miami, Florida 33174.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company ("FPL" or "the Company") as Director, Cost Recovery Clauses in the Regulatory Affairs Department.

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to the testimony of David E. Dismukes, who is appearing on behalf of the Office of Public Counsel ("OPC") related to FPL's proposed replacement power cost ("RPC") credit associated with the Flagami Transmission Event on February 26, 2008.

Q. Please summarize your testimony.

A. My rebuttal testimony responds to three points in Dr. Dismukes' testimony. First, he asserts that the RPC for the Flagami Transmission Event should be calculated on the basis of 100% of the time that Turkey Point Units 3 and 4 were offline following that event, without presenting any evidence that FPL was imprudent with respect to the events that extended the outages of those units

beyond the time required for a normal restart following an unplanned shutdown. My testimony shows that the Commission's practice has been to limit disallowances of replacement power costs to the portion of outages that are directly associated with imprudent actions. While FPL does not admit imprudence or any other improper action or failure with respect to the Flagami Transmission Event, FPL has agreed to bear the replacement power cost attributable to that Event. See Proposed Resolution of Issues Dated December 4, 2009 and approved by the Commission January 26, 2010.

Second, Dr. Dismukes asserts that FPL's RPC proposal would interfere with price signals that customers would otherwise receive concerning the cost of the fuel for the electricity that they are consuming. My testimony demonstrates that Florida's Fuel Adjustment Clause (FAC) process does not lend itself to real-time price signals for customers, because the FAC factors paid by customers are levelized over the calendar year and are based on projections and prior period cost adjustments.

Finally, I explain why Dr. Dismukes' statement that FPL's customers pay a considerable amount for nuclear power plants in base rates is misleading and ignores both the enormous fuel savings that FPL's customers receive from the operation of Turkey Point Units 3 and 4, as well as the fact that FPL's total bill is among the lowest of peer utilities.

Q. Dr. Dismukes recommends that FPL refund $15,974,055 to customers, which reflects the full period of time that Turkey Point Units 3 and 4 were

offline following the Flagami Transmission Event. Do you believe that his recommendation is consistent with Commission practice?

A. No. The Commission has limited disallowances of RPC to the portion of outages that are directly associated with imprudent actions. For example, On March 29, 1989, FPL agreed with the Nuclear Regulatory Commission ("NRC") to take Turkey Point Unit 3 offline because FPL's nuclear unit operators failed to pass NRC licensing requalification exams. In Order No. 23232, issued on July 20, 1990, the Commission required the refund of RPC for Turkey Point Unit 3 during the period March 29 through April 1, 1989, stating that this outage time was the responsibility of FPL's management because operator training is directly a management function. The three days for which FPL was ordered to refund RPC were part of a much longer series of outages extending throughout the Spring of 1989, but the Commission only disallowed RPC associated specifically with the requalification exam. Order No. 23232 states:

> "However, the outage concurred with a previously scheduled outage for equipment safeguards testing that was set to begin on April 1, 1989. During this planned outage, FPL identified and performed essential repairs. Thus, even though management was responsible for the outage, replacement fuel costs were prudently incurred commencing April 1. Therefore, only replacement fuel costs for the period March 29 through April 1, 1989, should be disallowed.

Applying that same principle here, FPL would not be responsible to refund RPC for the full period of the Turkey Point Units 3 and 4 outages following the Flagami Transmission Event, even under Dr. Dismukes' theory on how RPC should be calculated. Rather, as explained in the rebuttal testimony of FPL witness Stall,

Turkey Point Units 3 and 4 would be able to return to service in 48 hours following an unplanned shutdown, assuming no complications or emergent work. Thus, 48 hours is the appropriate measure of outage time that each Turkey Point nuclear unit would have been offline following the Flagami Transmission Event and under Order No. 23232 that is the maximum duration over which RPC could be calculated.

Q. **Dr. Dismukes's testimony on Page 23, Lines 15 – 23, implies that the Fuel Adjustment Clause is structured such that customers receive real-time price signals that drive their consumption decisions. Do you agree with this assertion?**

A. No. Florida IOUs calculate and set their fuel factors annually, on a levelized basis that does not vary throughout the calendar year. This process provides customers the opportunity to plan with greater certainty their level of expenditures for electricity during a given 12 month period. Fuel factors are calculated based on prior period true-up adjustments, which span portions of two calendar years, and on approximately 18 months of cost projections. These projected costs must be approved by the Commission before cost recovery commences. This process provides customers with more predictable and stable electricity rates throughout the year, but as a result customers are not charged (and hence cannot meaningfully respond to) instantaneous fuel price changes due to the levelization and time lag built into the process. The current FAC process strikes the right balance between customer and shareholder interest without penalizing either.

Q. **Is Dr. Dismukes' testimony criticizing the use of adjustment clauses (Dismukes testimony p. 28, line 14, through p. 29, line 31) relevant to calculation of the RPC credit in this docket?**

A. No. This testimony is not relevant to this proceeding and it is incorrect as a matter of policy. As this Commission has recognized on a number of occasions, fuel adjustment clauses (FAC) benefit customers as well as the Company. This is because the FAC enables the Company to recoup increased costs quickly, but it also enables a refund of fuel savings as quickly as possible. Mr. Dismukes' testimony concerning the deficiencies associated with the FAC ignores the benefits of such clauses. Even the National Regulatory Research Institute (NRRI) article quoted by Mr. Dismukes on page 29 of his testimony acknowledges the benefits of clauses in reducing regulatory lag and more promptly reflecting upward or downward adjustments in customer bills for costs that are: "(1) largely outside the control of a utility, (2) unpredictable and volatile, and (3) substantial and recurring." (page 8, "How Should Regulators View Cost Trackers?", Ken Costello, National Regulatory Research Institute).

Indeed, Mr. Costello's primary concern in the NRRI article cited by Mr. Dismukes is not with fuel cost adjustment mechanisms, but with the use of adjustment mechanisms for costs that are of a smaller magnitude and more predictable nature than fuel costs. Mr. Costello acknowledges the benefits of cost adjustment mechanisms for costs, such as fuel costs, that absent a prompt opportunity for review and recovery outside of a base rate proceeding, would have serious earnings effects on a utility given the magnitude of a cost increase relative to the utility's operating revenues. Considering that the utility's fuel costs for 2009 were more than 6 times FPL's net income for the year, it is obvious that large swings in fuel costs on the scale that we have seen in recent years could significantly affect FPL's earnings absent the opportunity for prompt review and

recovery without the time and expense that a base rate proceeding would involve.

Q. Dr. Dismukes states on page 27, Lines 17 and 18, that "FPL's customers pay (on average, total customers) a considerable amount in base rates relative to other peer utilities." Is this a relevant comparison for evaluating the benefits that FPL's nuclear units provide to customers?

A. No. To start with, it ignores the enormous fuel savings that FPL witness Yupp's rebuttal testimony demonstrates customers receive from the operation of Turkey Point Units 3 and 4. To get a true measure of what customers pay, one should look at the customers' total bill. Based on information from the Florida Municipal Electric Association and JEA, FPL's residential monthly 1,000 kWh bill for January 2010 was the lowest of all the Florida investor-owned utilities ("IOUs"), municipal utilities, and electric cooperatives, and was 28% below the average of Florida utilities. Based on data from the Edison Electric Institute, FPL's residential monthly 1,000 kWh bill for July 2009 was 10% lower than the IOU national average. FPL's residential 1,000 kWh bill for February 2010 is again the lowest among the Florida IOUs.

Q. Does this conclude your testimony?

A. Yes, it does.

BY MR. ROSS:

Q. Mr. Keith, have you prepared a summary of your rebuttal testimony?

A. Yes, I did.

Q. Would you please provide that summary to the Commission?

A. Sure. Good afternoon, Commissioners. My rebuttal testimony responds to Dr. Dismukes' claim that FPL should be responsible for the replacement power costs of the entire duration of the Turkey Point outages. I remind the Commission of its well-founded practice to limit disallowances of replacement power costs to the portion of outages that are directly related to imprudent actions of a utility.

In this case there is no testimony that claims imprudent actions at Turkey Point's nuclear power plant during or after the transmission event. In fact, FPL witness Stall testifies that FPL actions were indeed prudent.

In addition, my testimony clarifies that the fuel adjustment process in Florida does not lend itself to realtime price signals for customers because the fuel factors paid by customers are levelized over the calendar year, which they prefer, and are based on a combination of projections and prior period cost

adjustments that ensures customers only pay for the actual cost of FPL's fuel usage.

Finally, Dr. Dismukes claims that FPL's base rates are higher than peer utilities, with the implication that recovery of FPL's nuclear investments is the reason for higher base rates. Utilities constantly make tradeoffs between capital, O&M and fuel costs, plus different jurisdictions as well as different utilities recover their costs through a combination of base rates and adjustment clauses. Therefore, the only true comparison is the utility's total bill. FPL's total bill is the lowest among all Florida utilities and 10 percent below the national average. This concludes my summary. Thank you.

MR. ROSS: I tender the witness for cross.

COMMISSIONER SKOP: Thank you, Mr. Ross.

Mr. McGlothlin, you're recognized.

MR. McGLOTHLIN: No questions.

COMMISSIONER SKOP: Thank you.

Ms. Bradley.

MS. BRADLEY: No questions.

COMMISSIONER SKOP: Thank you.

Ms. Kaufman.

MS. KAUFMAN: I'm afraid I do have one question.

COMMISSIONER SKOP: You're recognized.

CROSS EXAMINATION

BY MS. KAUFMAN:

Q. Mr. Keith, if you turn to Page 3 of your rebuttal testimony.

A. Okay.

Q. And beginning on Line 15 you quote from Order Number 23232, and we've had some discussion about that already. Am I correct?

A. That's correct.

Q. Am I correct, as you said on Page 15, that the outage that was at issue there occurred concurrently with an outage that had already been scheduled; is that correct?

A. Yes.

Q. And in the case that we have talked about here, the outage that is at issue did not occur at the same time as a planned outage, did it?

A. No. I think the difference here is that this outage actually, this portion of the outage started, was extended, started three days prior to when the planned outage was. So as a result, that's the portion of the time that the Commission held the company responsible for replacement power costs.

Q. Right. And in the situation in Order 23232

the portion of the outage after the initial three days was an outage that had already been previously scheduled; correct?

A. Correct.

MS. KAUFMAN: Thank you. That's all I have.

COMMISSIONER SKOP: Thank you, Ms. Kaufman. Staff.

MS. BENNETT: No questions.

COMMISSIONER SKOP: Commissioners, questions from the bench? Hearing none, that brings us to redirect.

Mr. Ross.

MR. ROSS: No redirect.

COMMISSIONER SKOP: Thank you. No exhibits, so, Mr. Keith, you're excused. And staff --

THE WITNESS: Thank you.

MS. BENNETT: Just as a follow-up, I think Mr. Butler and Mr. Beck were going to move all of their witnesses' testimony.

MR. BUTLER: In an abundance of caution, I would make an omnibus motion for entering into the record any testimonies that may have inadvertently not been entered into the record as though read.

COMMISSIONER SKOP: The motion is granted, and the prefiled testimony of the witnesses as well as any

exhibits that have not been objected to will, are shown as entered.

MR. BUTLER: Thank you.

COMMISSIONER SKOP: And, Mr. Beck, do you have the same --

MR. BECK: We concur.

COMMISSIONER SKOP: All right. Thank you. Okay, staff, any other matters before we close the record?

MS. BENNETT: No.

COMMISSIONER SKOP: Okay. Hearing none, the record is closed. And if staff could briefly provide the dates for the posthearing decision for the parties before we conclude.

MS. BENNETT: Very good. The transcript will be available on March 29th. Briefs will be due April 19th.

The staff recommendation is May 19th. And this will come back to the Commission for its Agenda Conference on June 1st.

COMMISSIONER SKOP: Very well. Any other additional matters that need to be addressed before we adjourn?

MS. BENNETT: Staff has none.

COMMISSIONER SKOP: Okay. Commissioners?

Hearing none, we stand adjourned. Thank you.

(Proceeding adjourned at 12:35 p.m.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 29th day of March, 2010.

Linda Boles

LINDA BOLES, RPR, CRR
FPSC Official Commission Reporter
(850) 413-6734

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 17th day of March, 2010.

JANE FAUROT, RPR
Official FPSC Hearings Reporter
(850) 413-6732