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1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION 2 In the Matter of: 3 DOCKET NO. 130009-EI 4 NUCLEAR COST RECOVERY CLAUSE. 5 6 7 8 VOLUME 2 9 Pages 242 through 514 10 PROCEEDINGS: HEARING 11 COMMISSIONERS CHAIRMAN RONALD A. BRISÉ 12 PARTICIPATING: COMMISSIONER LISA POLAK EDGAR 13 COMMISSIONER ART GRAHAM COMMISSIONER EDUARDO E. BALBIS 14 COMMISSIONER JULIE I. BROWN Monday, August 5, 2013 15 DATE: 16 Commenced at 11:05 a.m. TIME: Concluded at 12:18 p.m. 17 Betty Easley Conference Center 18 PLACE: Room 148 19 4075 Esplanade Way Tallahassee, Florida 20 REPORTED BY: LINDA BOLES, CRR, RPR 21 Official FPSC Reporter (850) 413-673422 APPEARANCES: (As heretofore noted.) 23 24 25

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(Transcript follows in sequence from Volume 1.)

CHAIRMAN BRISÉ: Okay. We will reconvene at this time. Okay. Now we are moving on to the FPL portion.

Mr. Lawson.

MR. LAWSON: Yes, Chairman.

At this time FPL and OPC have presented a stipulation regarding all of the issues, or impacting all of the issues in the FPL portion, portion of this docket, a copy of which was just distributed to you. If it is the will of the Commission, it would be appropriate for the Commissioners to take up FPL's stipulation at this time.

CHAIRMAN BRISÉ: Okay. Thank you. And we will give Mr. Anderson and Mr. -- who's handling this, Mr. McGlothlin, okay -- Mr. McGlothlin the opportunity to, to explain or present the stipulation.

Mr. Anderson.

MR. ANDERSON: Good morning, Chairman Brisé, Commissioners. In the interest of administrative efficiency, we were able to negotiate

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with the parties a stipulation with respect to a number of the different issues and positions, mainly with the aim of streamlining this year's proceeding, and at all times recognizing this is the Commission's hearing, not our hearing. What you need to hear is what you need to hear, and that's what we're all here for.

The bottom line is the result of the stipulation would be an agreement on our part to reduce our request this year by about a \$1,623,449 in Issue 1. That would reflect our application of our now current 9.63 percent pretax AFUDC rate, and essentially mooting out the legal issue and eliminating a need for the Commission to take its time to brief that and decide that and that type of thing. We conceded and agree that, with that with the parties. In consideration of that, other parts of the stipulation is the agreement that the parties would waive cross-examination of all The exception was SACE took exception witnesses. and did not join in the stipulation. They've asked that we have Mr. Scroggs and Dr. Sim here. They are here, they are prepared to go, ready to go.

So bottom line, the procedural effect, at page 8 I just kind of spelled it out. If, if -- and

if this were accepted, I think it would be the way the argument would, the case would flow, is all parties except for SACE agree that legal Issue 1 is moot and need not be argued or decided because of FPL's agreement to reduce its recovery amount by the amount I indicated. The Commission should determine whether Issue 1 is moot and whether oral argument is needed.

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We thought that if it benefits the Commission, the parties would make opening statements as provided for in your Prehearing Order. We state that all parties waive cross-examination and stipulate to the entry of all prefiled testimony or amended testimony, if applicable, and exhibits, with the exception of Exhibit TOJ-27, which is in your staff list, into the record, except for Messrs. Scroggs and Sim, who would present their direct testimony and exhibits and appear for cross-examination by SACE. And then the parties would file post-hearing briefs.

To be clear, Public Counsel is maintaining its disallowance recommendation. We would join issue on that in the briefs under Issue 13. SACE, which has not entered the stipulations in, in a number of respects, would brief with us the

contested Turkey Point 6 issues, which are 4, 5, 6, 8, and 10.

So just to sum it up, our objective was to work to make the most efficient use of your time and resources and also respect the parties' rights. And also we did make the dollars and cents concession, which I, which I mentioned. That concludes my summary.

CHAIRMAN BRISÉ: Thank you.

Mr. McGlothlin.

MR. McGLOTHLIN: That was an accurate summary. I would just add this: OPC does seek an adjustment in the context of Issue 13, an adjustment to the uprate amounts. The disposition of that issue will, will affect the amounts that flow from that. So to the extent that the following language of the stipulation says that we'd stipulate to FPL's position subject to Issue 13, that is how the 13 relates to the issues that follow. And we've also agreed, subject to the Commissioners' pleasure as to what you want to hear, FPL and I have said we will waive appearance and cross if you will. And that's the basis of the stipulation before you today.

CHAIRMAN BRISÉ: Okay. Thank you. We will at this time ask to hear from the other

Intervenors.

MR. WRIGHT: We're in the same position as Public Counsel, Mr. Chairman. Thank you.

CHAIRMAN BRISÉ: Okay. Mr. Cavros.

MR. CAVROS: Good morning. Good morning,
Commissioners.

I think that the stipulation agreement was described accurately by Mr. Anderson. We do take exception with their position on legal Issue 1. We believe that the stipulation does not resolve the underlying legal issue. We believe that the -- let me back up by saying we do support the application of the current AFUDC rate in this, in this proceeding, but we believe that the stipulation does not resolve the underlying legal issue that was presented to us and is -- we have briefed that consistent with the Prehearing Order. We believe that the Legislature's intent was that it be applied in this, in this proceeding.

But FPL's position as it relates to legal Issue 1 hasn't changed. They believe that the new law should not be applied in this, in this docket. If FPL's position was to change and that it was in fact applying the current AFUDC rate in this docket because it was the proper application of law, then

we would, then our position on, on that provision of 1 the stipulation would change. But we believe that 2 3 the issue as it stands right now should be resolved by the Commission. 4 CHAIRMAN BRISÉ: Okay. Thank you. 5 Mr. Moyle. 6 7 MR. MOYLE: The stipulation that was passed out and is before you represents FIPUG's view 8 9 and we're fine with it. CHAIRMAN BRISÉ: Okay. Thank you. 10 this time we're going to ask, as the stipulation 11 12 involves three legal issues in this docket, 1, 2, 13 and 3, we ask Duke for your position on this. 14 MR. BURNETT: Yes, sir. Thank you, Mr. 15 Chairman. 16 As to all three legal issues, those are 17 moot and non-applicable to Duke, and we take no 18 position on any stipulation in the FPL case. 19 CHAIRMAN BRISÉ: Okay. Thank you. 20 MR. ANDERSON: If I might note one other 21 thing. 22 CHAIRMAN BRISÉ: Sure. 23 MR. ANDERSON: Is that on Issues 2 and 24 3, all the parties stipulate that those are moot. 25 CHAIRMAN BRISÉ: Okay. Thank you.

MR. BURNETT: Commissioner, I'm sorry, may 1 the Duke legal team be excused at this point, or do 2 3 you need us to stay around? CHAIRMAN BRISÉ: I believe that, if my 4 understanding is correct, you may be excused. Thank 5 6 you. 7 MR. LAWSON: I was going to say, if any of the Commissioners had any questions for Duke on the 8 9 legal issues, you might keep them around. But with that, there's -- if the Commissioners don't have 10 questions for Duke on the legal issues, they can 11 12 certainly head for the door. CHAIRMAN BRISÉ: Sure. Let me make sure I 13 14 ask that question. Do any of the Commissioners have 15 questions for Duke on the three legal issues? Okay. Seeing that there are none, Duke 16 17 may be excused. 18 MR. BURNETT: Thank you, sir. CHAIRMAN BRISÉ: Thank you. 19 MR. BREW: Mr. Chairman. 2.0 21 CHAIRMAN BRISÉ: Yes, sir. 22 MR. BREW: Inasmuch as PCS only cares 23 about Duke, would it be possible, possible for us to 24 be excused as well? 25 (Laughter.)

CHAIRMAN BRISÉ: Yes, it is appropriate for you to be excused.

MR. BREW: Thank you very much.

CHAIRMAN BRISÉ: Thank you.

All right. So at this time we're going to open the floor to Commissioners to see how we want to proceed with respect to the stipulation.

Commissioner Balbis.

COMMISSIONER BALBIS: Mr. Chairman, if I can just have a clarification as to what posture we're in right now.

CHAIRMAN BRISÉ: Sure.

COMMISSIONER BALBIS: Because I'd like to present my opinion on Issue 1, the legal issue. But if you want to talk about different witnesses that would or would not be excused -- so I'd look for guidance from you on that.

CHAIRMAN BRISÉ: Sure. We are going to take a look at the stipulation as, as a whole and see how we want to deal with that, whether we want to deal with the stipulation as a whole and sort of deal with Issues 1, 2, and 3 separately. And so that's, that's where we are.

COMMISSIONER BALBIS: Okay. Then I'd like to take this opportunity to discuss Issues 1, 2, and

3 and really focus on Issue 1.

As Prehearing Officer on this, I mean, obviously I'm involved with dealing with what issues are appropriate or not, and I was, to be honest, I was surprised with Issue 1 that there would be any, any difference of opinion as to when Senate Bill 1472 was effective because the plain language of the statute clearly states it's effective July 1. So I was surprised to see that the parties had a different legal position on that, so I gave them the opportunity to file legal briefs and set forth in the Prehearing Order the opportunity to provide oral arguments to the Commission on it.

And with the monetary change with the new AFUDC rate, you know, I believe the intent of the statute has been met. And my question is, and maybe it's for staff or maybe Mr. Cavros to elaborate, with us determining that Issue 1 is moot and not ruling on it but having the customers see the reduction in their bills in association with that Senate Bill 1472, what would be the danger in that?

MR. CAVROS: Thank you, Commissioner. As I previously stated, we do support the application of the current AFUDC rate in this, in this proceeding. The issue is currently not moot. But

if you were to approve a stipulation that would not recognize SACE's position, that would essentially render the provision moot because there would be no more controversy. And we would certainly be open to, you know, you know, following the will of the Commission.

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Our position is very nuanced and I, and I concede that ahead of time. It doesn't -- by, by accepting the stipulation, it doesn't, it doesn't resolve the underlying legal issue. I understand that FPL is applying the correct AFUDC rate in this proceeding, but their legal position is that they don't, they don't have to, and we believe that's not what the Legislature intended. And although the point will be rendered moot if, you know, if, if the Commission acts on the stipulation at a certain point, we just believe that the underlying legal issue will not be resolved.

COMMISSIONER BALBIS: Okay. And I guess I would pose, pose the same question to the Office of Public Counsel, because your position was similar to SACE's in the legal briefs.

MR. McGLOTHLIN: Commissioner, the division of labor within our office is such that Mr. Sayler will answer that question for you.

MR. SAYLER: Erik Sayler with the Office of Public Counsel. Would you refresh me with your question again? I was --

COMMISSIONER BALBIS: Sure. If we accept the proposed stipulation on Issue 1, what would be the risk in doing that when essentially the AFUDC, the AFUDC rate as specified by Senate Bill 1472 would be applied and the customers would see that reduction? And if we do not rule on that issue and it's considered moot, what would be the danger or risk to the ratepayers?

MR. SAYLER: My understanding,

Commissioner Balbis, is that the stipulation is

actually going to lower their AFUDC ask or reduce it

by about \$1.6 million. So that would definitely be

a benefit to the customers.

As far as any danger to the customers if the Commission does not rule, I suppose it might be something that comes up in next year's NCRC proceeding. Because of FPL's position, as I understand it, is that the new statute doesn't apply because they filed their petition before the new effective date. So they made an ask for 2013 and also 2014, so the question would potentially be alive for next year. But as far as in this year's

proceeding, I don't think it would be a harm to the 1 2 customers. COMMISSIONER BALBIS: Okay. I don't have 3 any further questions on Issue 1. 4 CHAIRMAN BRISÉ: Okay. 5 COMMISSIONER BALBIS: But I'll give the 6 7 opportunity to --CHAIRMAN BRISÉ: It seems like Mr. 8 9 Wright --10 MR. WRIGHT: Thank you, Mr. Chairman. CHAIRMAN BRISÉ: Sure. Sure. Go ahead. 11 12 MR. WRIGHT: I'll answer Commissioner 13 Balbis's question. 14 The way the stipulation is framed is no 15 party is waiving their position. If you accept the stipulation, you're holding that it's moot. You're 16 17 not ruling on it. I don't believe there's any harm 18 to anybody, not to the Commission, not to customers. 19 COMMISSIONER BALBIS: Thank you. And I'm glad you said that because that's where I was on 20 21 this. I couldn't see what the danger was in 22 rendering this moot. 23 CHAIRMAN BRISÉ: Okay. Thank you. 24 Commissioner Brown. 25 COMMISSIONER BROWN: Thank you.

And I want to thank the parties for filing these briefs. It was very helpful, very thorough analysis. I don't think oral argument is needed at all based on the arguments that were presented and laid out before us. So I appreciate y'all doing that for us.

Procedurally, staff, I wanted to ask a question about -- so the parties have proposed a stipulation but subject to Issue 13, which, my understanding, will be briefed by all of the parties?

MR. LAWSON: That is correct. Yes.

COMMISSIONER BROWN: Okay. So if we approve the stipulation and then we take witness testimony on Scroggs and Sim, when would we decide Issue 13?

MR. LAWSON: Issue 13 would be decided in the normal course. There would be -- they would have a chance for briefs, recommendation. And then at the Special Agenda -- after staff's recommendation we have a Special Agenda on October 1st, and that's when the Commission would formally take it up and render a decision.

COMMISSIONER BROWN: Okay. So the only matter that would be before us then on October 1st

would be the Issue --

MR. LAWSON: Yes. Well, there would be six issues actually, and I'll kind of go through it. By doing this procedure, technically the Commission does render an issue on everything post Issue 3. It's just that everyone sort of agrees what it is and limited the issues, so it's a very simple subject.

Issue 13 is the one issue that will be briefed as a normal issue. Issue 17 is a fallout issue which will, of course, require the adjustments made in Issue 13 to be factored into it.

If it's approved, the parties have also stated that SACE and FPL would also brief contested Turkey Point 6 and 7 Issues 4, 5, 6, 8, 9, and 10. So there would be some limited briefs from two parties, plus whatever staff has. So there would be eight issues that are actually briefed, that are actually dealt with in one form or another.

COMMISSIONER BROWN: Thank you. That's helpful. Thanks.

CHAIRMAN BRISÉ: All right. Thank you.

Commissioner Balbis.

COMMISSIONER BALBIS: Thank you, Mr. Chairman.

As we're having some discussion on the other issues and not just Issue 1, I, I appreciate that Florida Power & Light has indicated that several of the witnesses are available to, to move forward with their testimony. And I think that at least for myself that tying into Issue 13 and also other issues that not only Witness Scroggs, but I have some questions for Witness Jones concerning some cost overruns on the EPU project, and Witness Sim was discussed, and also staff Witnesses Fisher and Rich concerning the audit that was performed I'm going to have questions for. So there would be four witnesses, actually five because Fisher and Rich are not one, but five witnesses that I have a few questions for.

CHAIRMAN BRISÉ: Okay. So you --

COMMISSIONER BALBIS: That seemed to all tie into Issue 13, so I think --

CHAIRMAN BRISÉ: Right. Okay. So you are seeking to make sure that we have Witness Jones, Sim, and Scroggs available.

COMMISSIONER BALBIS: Correct, along with staff Witness Fisher and Rich.

CHAIRMAN BRISÉ: Fisher and Rich. Okay.

Okay. Any other witnesses that we think we may need

to have available?

All right. So now moving back to the stipulation, are we ready to, to take action on the stipulation? And if so, we are in posture for a motion, unless we need some time to figure out how we're going to act on it.

Commissioner Balbis.

COMMISSIONER BALBIS: Mr. Chairman, I move that we accept the proposed stipulation, with the provision that those witnesses that were previously discussed are available to present their testimony and for cross-examination.

CHAIRMAN BRISÉ: Okay. There's a motion. Is there a second?

MS. HELTON: If I could make one suggestion that we mark this as an exhibit number to make it clear what it is that you're voting on right now.

CHAIRMAN BRISÉ: Okay.

MR. LAWSON: Commissioner, this would be marked as Exhibit 112, just so you know.

CHAIRMAN BRISÉ: 112? Thank you. So the stipulation for a short title, Exhibit 112, the FPL case stipulation.

(Exhibit 112 marked for identification.)

Okay. Commissioner Edgar.

COMMISSIONER EDGAR: So, Mr. Chairman, just so that I'm clear also procedurally, am I correct that the posture that we are in now is that the stipulations and procedural agreements that have just been marked are before us for approval and that that does include the legal issues 1, 2, and 3?

CHAIRMAN BRISÉ: That is my understanding.

COMMISSIONER EDGAR: Okay. And a motion has been made; is that correct?

CHAIRMAN BRISÉ: That is my understanding as well.

COMMISSIONER EDGAR: Okay. Then just a brief comment, if I may.

CHAIRMAN BRISÉ: Sure.

COMMISSIONER EDGAR: I think I heard something about was there, SACE, possibly raising the point for discussion of is there a danger for us to render Issue 1 moot? And I guess I'd just like to state my own understanding of where we are and how I'm thinking about it, which is from where I sit I believe that there is not a danger in recognizing Issue 1 as moot as this docket now exists before us procedurally and substantively, but I do understand, especially with all the work that the parties have

put into their briefs and analysis, that SACE, and maybe others, would prefer, instead of a recognition of moot, but would prefer a finding by this Commission on that specific issue. I, however, am hesitant to make a legal finding, especially recognizing that it's a brand new statute and therefore kind of a first impression before us, I'm hesitant to make a legal finding when there are, in my mind, basically facts not at issue to make that determination and therefore unsure of if that would have potentially any bearing on other dockets that may come before us.

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So with that, I am comfortable having
Issue 1 determined to be moot from where I
understand, and I would second the motion that is
before us.

CHAIRMAN BRISÉ: Okay. It's been moved and seconded. Any further discussion?

Okay. Seeing none, I think we're ready for the question. All in favor, say aye.

(Vote taken.)

All right. Thank you very much. We have just approved the stipulation of positions and issues and procedural agreements amongst the parties for this docket at this time.

Now that the stipulation and Duke's

Energy -- Duke Energy's motion to defer has been

argued, I believe the legal issues have been

rendered moot for this hearing and that there will

be no longer we will have need to hear oral

arguments on these legal, legal issues as we

originally anticipated.

Staff.

MR. LAWSON: Yes. This would -- we have a few administrative matters in light of the approved stipulation.

First, just a technicality, have we moved Exhibit 112 into the record? And if not, I would ask that it be moved into the record at this time.

CHAIRMAN BRISÉ: Okay. I'm not sure if we did, so to make sure that we do, we will move Exhibit 112 into the record, seeing no objections.

Okay. Seeing none, it's been moved into the record.

(Exhibit 112 admitted into the record.)

MR. LAWSON: And also since we, I believe we have some witnesses that are ready to be excused, I'd like to just take a moment to confirm that, and also to adjust the order of witnesses as they'll appear in the FPL case accordingly.

My understanding, based on the

Commissioners' statements, is that we will have testimony and questions for Witness Scroggs, Witness Sim, Witness Jones, and then staff Witnesses Fisher and Rich which are taken up together, and we would like to recommend that that be the order they be taken up. That would again be Scroggs, Sim, Jones, Fisher and Rich. And if no one has any objections, I think you'd be able to sign off on that.

CHAIRMAN BRISÉ: All right. Are there any objections to that? Okay. Seeing none, then that's the order we will proceed with.

MR. LAWSON: And with that, I believe the utility would be in a position to ask to excuse the remainder of its witnesses. We've previously excused staff Witnesses Maitre and Piedra.

CHAIRMAN BRISÉ: Okay. So Witnesses
Maitre and Piedra will be excused. Okay.

MS. CANO: May FPL at this time move the stipulated witnesses' testimony and exhibits into the record?

CHAIRMAN BRISÉ: Sure.

MS. CANO: Thank you. FPL moves the prefiled direct testimony, along with any errata sheets, of Nils Diaz, Albert Ferrer, John Reed, and Winnie Powers into the record as though read. And

FPL also moves the amended rebuttal testimony of John Reed and Terry Deason into the record as though read.

CHAIRMAN BRISÉ: Okay. So we have moving into the record the testimonies of Witness Diaz, is it Ferrer, Reed, Powers, his direct testimony. Okay. Is there any objection to that? Okay. Seeing none, this testimony will be moved into the record.

Mr. McGlothlin.

MR. McGLOTHLIN: Mr. Chairman, if this is the appropriate time, I'll move the stipulated testimony of Dr. Jacobs.

CHAIRMAN BRISÉ: Let me finish with -they have one other set of witnesses I need to move in as well. Sorry about that.

And then Witnesses Reed and Deason as rebuttal. Okay. So we will move those into the record, seeing no objections.

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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF NILS J. DIAZ
4		DOCKET NO. 130009-EI
5		March 1, 2013
6		
7	Q.	Please state your name and business address.
8	A.	My name is Nils J. Diaz. My business address is 2508 Sunset Way, St.
9		Petersburg Beach, Florida, 33706.
10	Q.	By whom are you employed and what is your position?
11	A.	I am the Managing Director of The ND2 Group (ND2). ND2 is a consulting
12		group with a strong focus on nuclear energy matters. ND2 presently provides
13		advice for clients in the areas of nuclear power deployment and licensing, high
14		level radioactive waste issues, and advanced security systems development.
15	Q.	Please describe your other industry experience and affiliations.
16	A.	I presently hold policy advising and lead consulting positions in government and
17		industry, board memberships in private institutions, and Chair the American
18		Society of Mechanical Engineers Presidential Task Force on Response to Japan
19		Nuclear Power Plant Events. I previously served as the Chairman of the United
20		States Nuclear Regulatory Commission (NRC) from 2003 to 2006, after serving
21		as a Commissioner of the NRC from 1996 to 2003. Prior to my appointment to
22		the NRC, I was the Director of the Innovative Nuclear Space Power and
23		Propulsion Institute for the Ballistic Missile Defense Organization of the U.S.

1 Department of Defense, and Professor of Nuclear Engineering Sciences at the 2 University of Florida. I have also consulted on nuclear energy and energy policy 3 development for private industries in the United States and abroad, as well as the 4 U.S. Government and other governments. I have testified as an expert witness to 5 the U.S. Senate and House of Representatives on multiple occasions over the last 30 years. I also served as a Commissioner on Florida's Energy and Climate 6 7 Commission from 2008 to 2010. Additional details on my background and 8 experience are provided in my Resume, which is attached as Exhibit NJD-1.

- 9 Q. Are you sponsoring any Exhibits in this case?
- 10 A. Yes. I am sponsoring Exhibit NJD-1 Summary Resume of Nils J. Diaz, PhD.
- 11 Q. What is the purpose of your testimony?

41. The second

- 12 A. The purpose of my testimony is to review the prudence of Florida Power & Light
 13 Company (FPL's) continued pursuit of a Combined Operating License (COL) for
 14 the Turkey Point Nuclear Units 6 and 7 (Turkey Point 6 & 7) project in 2012 in
 15 light of certain nuclear industry considerations and the prudence of FPL's actions
 16 related to a letter received on May 4, 2012, from the NRC.
- 17 Q. Please describe your review of FPL's approach to the licensing of Turkey
 18 Point 6 & 7.
- I have been well-informed of FPL's Combined Operating License Application

 (COLA) for the Turkey Point 6 & 7 project since participating in the Need

 Determination proceedings for Turkey Point 6 & 7 and subsequent Nuclear Power

 Plant Cost Recovery proceedings. I am knowledgeable regarding the

 Westinghouse AP 1000 new nuclear plant design referenced by FPL in its COLA,

having worked on the certification of that design when I was on the NRC, and
afterwards. I have also reviewed FPL's project approach, as described in detail in
the Direct Testimony of Steven Scroggs, FPL's Senior Director for Project
Development for the Turkey Point 6 & 7 project, filed with the Commission prior
to 2013 and on this date. I have also discussed FPL's approach and certain
licensing-related issues with Mr. Scroggs and other key project personnel
Finally, I am familiar with past and ongoing NRC reviews of other COL
applications.

Q. Please comment on the NRC regulatory reviews and requirements addressing the Fukushima events, as they relate to the licensing of Turkey Point 6 & 7.

During 2012, the NRC conducted a number of regulatory reviews arising out of the Fukushima events that occurred during 2011. Presently, there should be no significant impacts on the licensing of Turkey Point 6 & 7.

A.

With respect to new reactors, the NRC has recognized the significant safety enhancements already inherent in reactors with passive safety systems, such as the AP 1000 reactor selected for the Turkey Point 6 & 7 project. The NRC has stated that "all of the current COL and design certification applicants are addressing new seismic and flooding requirements adequately in the context of updated NRC guidance." The NRC Staff also concluded that "[b]y nature of their passive design and inherent 72-hour coping capability for core, containment and spent fuel cooling with no operator action required, the . . . AP 1000 design [has] many

of the design features and attributes necessary to address the Task Force recommendations." It is apparent that the certified AP 1000 reactor referenced in the Turkey Point 6 & 7 COLA is likely to satisfy the majority of the post-Fukushima changes under consideration by the NRC. Those regulatory changes affecting the FPL COL are mostly established and should be well-incorporated into the final safety review prior to issuance of the license. In my opinion, it was prudent for FPL during 2012 to continue to pursue a COL referencing the AP 1000 Design Certification.

A.

- Q. Please comment on the letter FPL received from the NRC related to Section
 2.5 and Section 9.3 of its COLA, in light of the events at Fukushima.
 - FPL received a letter from the NRC in 2012 indicating that additional information was required in two areas of FPL's COLA: the seismic, geologic and geotechnical engineering information contained in Section 2.5 of the Safety Review, and FPL's Alternative Site analysis contained in Section 9.3 of the Environmental Review. It also requested that FPL perform additional quality reviews and indicated that FPL's COLA review schedule was on hold pending receipt of the additional information that NRC staff determined it needed. It is to be expected that, after the Fukushima events, NRC staff review would be more focused in the two sections identified in its letter to FPL, particularly the seismic, geologic, and geotechnical information. Furthermore, requests for applicants to perform quality reviews such as the one requested in this letter are fairly common. FPL worked diligently to provide all additional information requested by NRC staff and to

- 1 perform the requested quality reviews to enable continued NRC staff review of its
- 2 COLA on a timely basis.
- 3 Q. Please comment on the status of the NRC's waste confidence rule as it relates
- 4 to Turkey Point 6 & 7.
- 5 In June 2012, the U.S. Court of Appeals for the D.C. Circuit overruled and A. 6 remanded the NRC's revised "Waste Confidence" rule. The NRC had found that 7 the federal government would make available a national geologic repository for high level nuclear waste when necessary following the shutdown of reactors, and 8 9 reflected the NRC's determination that spent fuel can be safely stored onsite 10 during the period between plant shutdown and the opening of a repository. The 11 Court held that the NRC must perform additional environmental reviews 12 associated with the rule. The NRC suspended the issuance of new reactor licenses 13 and license extensions; however, the NRC is continuing the full review of 14 pending applications. The NRC staff has published a schedule to complete 15 environmental reviews for the remanded Waste Confidence rule by September 16 2014. The NRC will take final action on pending applications when the NRC has 17 finished its revised rulemaking in response to the remand.
- Q. Was FPL's approach to the continued pursuit of a COL for the Turkey Point
 6 & 7 project in 2012 prudent?
- 20 A. Yes. Based on my review, the decisions and management approaches used by
 21 FPL during 2012 were prudent and consistent with a reasonable strategy for
 22 pursuing the licensing and construction of the proposed Turkey Point 6 & 7
 23 project.

1	Q.	Does this conclude your direct testimony?
2	A.	Yes.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF ALBERT M. FERRER
4		DOCKET NO. 130009-EI
5		MARCH 1, 2013
6	Q.	Please state your name and business address.
7	A.	My name is Albert M. Ferrer. My business address is 800 Kinderkamack
8		Road, Oradell, New Jersey 07649.
9	Q.	By whom are you employed and what is your position?
10	A.	I am employed by Burns and Roe Enterprises, Inc. (BREI) as Vice President.
11	Q.	Please describe your educational background and professional
12		experience.
13	A.	I hold an M.S. in Nuclear Engineering from New York University and a B.S.
14		in Mechanical Engineering from Manhattan College, with honors. I have been
15		a Vice President of BREI since 2005 providing management, executive
16		leadership, and oversight for engineering consulting services performed by
17		BREI.
18	Q.	Please describe BREI.
19	A.	BREI is an engineering, procurement, construction, operations, and
20		maintenance company that provides services to private and governmental
21		power industry clients worldwide.

The Power Consulting Division provides consulting services to the nuclear, renewable and fossil power industry. Services provided by the division include owner's engineer, independent engineering, due diligence, acquisition services, uprate analyses, life extension studies, engineering, procurement and construction (EPC) oversight, contract evaluation and EPC project management.

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BREI's nuclear experience includes both some of the earliest U.S. commercial nuclear power plants and some of the most recent and innovative nuclear power projects. BREI has been involved in the design of eight commercial nuclear power plants. More recently, BREI provided a conceptual design of the Traveling Wave Reactor (TerraPower) – a 3,000 megawatt sodium-cooled reactor using a revolutionary core design funded by the Gates Foundation. The Babcock & Wilcox Company used BREI to develop conceptual designs for their mPowerTM reactor – a passively safe, small modular reactor with a below-ground containment structure. BREI evaluated General Electric's Economic Simplified Boiling Water Reactor for compliance with the Electric Power Research Institute's Utility Requirements Document. For the use of the U.S. Department of Energy (DOE), BREI performed independent due diligence investigations for four new U.S. nuclear plants in support of the DOE's utility loan guarantee project applications. BREI also participated in the development of three combined Construction and Operating License Applications for new nuclear power plants in the southeast U.S.

Q. What was your professional experience prior to BREI?

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A. Prior to my employment at BREI, I was Senior Vice President and Managing Director for Stone and Webster, with responsibility for the firm's Strategic Management, Markets and Regulatory, and Project Finance Services practices. During my career at Stone and Webster, I held positions ranging from project engineer to manager of major EPC power plant projects involving site feasibility, environmental impact evaluations, conceptual engineering, detailed design, procurement, cost and estimating, construction engineering, construction management, and start up and testing of a variety of technologies including coal plants, simple cycle and combined cycle gas plants, nuclear plants, geothermal plants, and small hydro facilities. As a project engineer or project manager, I was responsible for cost and scope control, planning, coordinating, scheduling and supervising engineering activities for various nuclear projects, as well as managing major subcontractors with large work forces. I also provided expert testimony at hearings before the Nuclear Regulatory Commission's (NRC) Advisory Committee on Reactor Safeguards involving the construction permit process for nuclear plants.

18 Q. What is the purpose of your testimony?

The purpose of my testimony is to summarize an independent review conducted by myself and other BREI senior nuclear power professionals under my direction regarding Florida Power & Light Company's (FPL) execution of the Extended Power Uprate (EPU) related activities at the St. Lucie (PSL) and Turkey Point (PTN) power plants during 2012. The purpose of this

independent due diligence review was to determine whether FPL's execution of project activities in 2012 was reasonable and prudent. In conducting the review, we applied the prudence standard that has been used by the Florida Public Service Commission, which is whether FPL's management actions and decisions are within the range of what a reasonable utility manager would have done, in light of the conditions and circumstances which were known, or should have been known, at the time the decisions were made.

8 Q. Please describe the major areas of your review.

- A. BREI reviewed the following areas:
- Project Plans, Outage Execution Plans, Schedules and Organization;
- Engineering and the Engineering Work Control Process; and
- Outage Execution.

Α.

13 Q. Please summarize your testimony.

Based on the review conducted by the team I lead, FPL's execution of project activities in 2012 were reasonable and prudent. During 2012, FPL's EPU project management exhibited reasonable and prudent oversight of the EPU project, including oversight of its contractors. FPL applied consistent management and contractor oversight approaches across the four units that make up its EPU project, and project management actively looked for ways to shorten schedules and reduce costs. FPL's performance was comparable to, or better than, other large construction projects. Planned EPU work was completed on or close to schedule, and power output increases exceeded engineering estimates.

1 Q. What is the basis for your conclusions regarding FPL's oversight of the

2 EPU project?

My conclusions are based on my personal experience gained over the course 3 A. of my career managing major construction projects and large contracted work 4 forces, as well as my and my team's extensive review of EPU project 5 documentation and personnel interviews. My team was comprised of senior 6 level personnel with experience in nuclear power plant engineering, nuclear 7 plant licensing, nuclear power plant operations, power plant construction, and 8 project controls. We reviewed project plans, technical reports, letters, 9 drawings, procedures, schedules, descriptions of organization roles and 10 responsibilities, qualifications of EPU team personnel, and correspondence 11 with the NRC. We also reviewed contract change orders, performance metrics 12 (such as key performance indicators), quality assurance records, industrial 13 14 safety reports, corrective action reports, periodic and special reports to FPL management, and license amendment documents. In addition, BREI 15 interviewed key EPU project personnel. 16

- 17 Q. Please describe the characteristics of good project management and oversight.
- During 2012, the EPU project was well into the implementation phase with planning, scheduling and engineering essentially complete and plant modifications well under way. During the implementation phase, good managers focus on the data pertaining to the actual performance of work.

 Indicators of good project management include: creation of a system of

by management of these indicators to identify leading indicators or performance trends, and the prompt implementation of effective corrective actions and lessons learned.

5 Q. Please summarize examples of FPL's contractor oversight.

- There are several examples of prudent implementation and oversight by FPL management of its contractors, the thousands of contracted workers, and the tens of thousands of individually planned work activities.
 - FPL identified a risk that the primary EPU constructor (Bechtel) would be
 challenged to execute all the uprate modifications and tasks effectively and
 efficiently. FPL prudently developed plans for reallocating specific work
 tasks to other competent contractors such as Shaw, PCI and WeldTech.
 BREI considers this to be a significant contributor to the project's
 successful schedule performance.
 - FPL has an effective program for identifying and applying lessons learned and implementing them through its own employees and the contractors that it manages. The benefits of executing identical (or very similar) modifications on two units were realized by FPL. The second unit at PSL was completed in less time and at reduced cost as compared to the first unit, and similar results were expected at PTN as of December 31, 2012.
 - Special attention was appropriately paid to the execution of tasks that were unique, first of a kind, high-risk, and/or infrequently performed. FPL worked with contractor teams to practice selected tasks using mock-ups of

- the equipment, tools and procedures to gain familiarity and experience before executing the actual task. During these practice sessions potential problems could be identified, and improved methods developed and tested.
- To reduce costs and improve schedule adherence, FPL used a "First Time Quality" program. While programs like this are not unique, they effectively re-focus the labor force and are particularly appropriate for projects such as the EPU project, where the labor force is made up of contractors. Initiatives like this can be particularly effective during long outages, such as those in 2012. FPL employed a variety of indicators to track and trend costs, safety, efficiency, efficacy or effectiveness and potential risks.

Q. Please describe the conclusions of BREI's review of the EPU project plan, schedule, and organization.

A. FPL prudently managed the EPU project planning and scheduling in 2012.

BREI reviewed the processes by which EPU project plans and schedules are
developed and revised and determined that FPL uses robust project planning
and scheduling tools and properly accounts for the information and new scope
that is almost constantly discovered during the course of this project.

Additionally, the EPU organization at FPL is appropriately structured to
manage the project in an efficient and thorough manner.

21 Q. What are FPL's plans for project closeout?

22 A. FPL has developed EPU project closeout plans for both PSL and PTN. BREI reviewed both plans which were similar in format and content. BREI found

1	that the plans address the critical elements of a comprehensive program. The
2	plans establish a roadmap to close the project with reasonable goals and key
3	milestone dates. They consider lessons learned from other projects and the
4	transition to non-EPU project status. FPL personnel are proceeding at both
5	stations to sell any items no longer needed and obtain value which will be
6	credited to the EPU project.

Q. Does FPL have a plan for the disposal of spare or unneeded supplies and equipment?

- 9 A. Yes. An FPL initiative will sell spare or unneeded supplies or equipment.

 10 BREI reviewed a list of equipment or supplies for disposal. In general, the

 11 value of these supplies appears reasonable. Some equipment will be sold as

 12 scrap or salvage. This is reasonable considering the unique characteristics,

 13 condition and age of the equipment replaced.
- Q. Please summarize the conclusions of BREI's review of EPU engineering
 and the engineering work control process.
- FPL performed the design and engineering very well considering the 16 A. 17 congested plant work areas and magnitude of the work that was being simultaneously performed. FPL followed the station modification process for 18 19 the Engineering Changes for the EPU project at PSL and PTN. However, the 20 distinguishing characteristic of power uprates is the number of simultaneous 21 modifications and their potential for unforeseen or unintended interactions and 22 consequences. This is especially true for older nuclear plants such as PSL and PTN which are very compact and congested. While strict adherence to the 23

station modification process is a given, comprehensive project management oversight and controls are requisite to controlling costs and schedules during the design and implementation of the EPU modifications. The FPL EPU project had the necessary organization structure and management and utilized a variety of controls and activities such as human performance tools, vendor oversight, risk analysis, walk-downs, constructability reviews, and integration reviews during the engineering design process to ensure engineering change quality and minimize deficiencies in the engineering changes. It is only after the engineering change package is approved and issued to construction for development of the work plans and installation, that the detailed sequence of steps (i.e., work plan) for installing the modification can be developed. It is during the planning phase and the installation phase that the unforeseen or unintended interactions can be visualized and discovered. However, FPL had implemented the necessary controls to minimize these discoveries and had the resources and contingencies to rapidly effect their corrective actions (i.e., revise the modification).

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Q. Please summarize the conclusions of BREI's review of the execution of the EPU outages that were completed in 2012.

FPL succeeded in completing the uprate of three nuclear power generating units in 2012, as planned. Based upon our review, FPL prudently managed the execution of this work. Subcontractor readiness plans were in place well before the outages started, allowing FPL and Bechtel to schedule subcontractors and associated staff to support the outages and to subsequently

demobilize in a controlled manner. Milestones were established and, if challenged, recovery plans were developed and approved. FPL also continued to use its risk register process. Separately, a procurement risk matrix was developed and implemented well in advance of the outages to support activities as scheduled. A material delivery watch list was used to track the status of important components/materials.

FPL management appropriately maintained a focus on safety during the execution of the EPU work. In fact, safety is almost always discussed first throughout internal EPU project management presentations. Additionally, the EPU project team implemented safety stand downs for employees and contractors as needed in 2012 to correct worker practices and mitigate safety events. In the nuclear industry, these safety practices are an expected and essential part of project management because they are directed at preventing both recurrence and more serious events which can have far worse consequences.

FPL also focused on quality and human performance. Lessons learned from prior outages resulted in increased management validation and reinforcement of supervisor behavior. Bechtel adopted FPL's corrective action program and used it to track and trend issues and to implement corrective actions. Where necessary, resources were added or activities were shifted to others to assure schedules were met.

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At daily Bechtel and other vendor cost progress review meetings, Cost Performance Index (CPI) and Schedule Performance Index (SPI) indicators were presented. These presentations highlighted situations where CPI and SPI performance indictors did not meet pre-set targets and described recovery action plans. In this way, the FPL project team closely monitored Bechtel's and other vendors' progress. The CPI and SPI were used to measure progress and performance versus a budget and target schedule. Many factors can affect these performance indicators, such as changes in work scope, additional required engineering analyses, additional regulatory requirements, constructability reviews needing additional implementation considerations, and estimates based on conceptual design information. Additional FPL oversight via the Fundamental Management System Observation Program provided data and areas for focus. In this format, selected observations were presented as examples for the edification of the participants. Corresponding Bechtel and Siemens observation program data were presented as well. These types of reviews enabled thorough oversight by FPL and clear understanding of EPU project needs.

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During 2012 FPL prudently managed the identification and performance of large volumes of work found to be needed as existing equipment was disassembled and new equipment was installed at each unit. Such "discovery" was a major contributor to work scope growth at each unit. One indicator of

1	the extent of such scope growth is the large volume of additional materials
2	required to install the new plant components. Of course, the installation of
3	more commodities also required corresponding increases in the necessary
4	engineering, design and labor for that work. As an illustration of the very
5	large volume of this growth in work scope necessitated by implementation
6	phase discovery, one can consider the large amounts of additional
7	commodities needed for the PTN 3 2012 implementation outage:
8	 Structural Steel quantities increased by 24%;

- Large Bore Pipe Welds increased by 21%;
- Large Bore Piping Structural Supports increased by 19%; and
- Conduit and Cable Tray increased by 22%.
- The need for increased commodities and additional required labor to implement the modifications at each unit was properly identified and prudently managed by FPL during 2012.
- O. Did BREI review FPL's incorporation of lessons learned into the second outage at each nuclear power plant in 2012?
- 17 A. Yes. FPL prudently implemented various cost and time saving lessons learned
 18 from the previous outages, which have proven to be effective and appropriate.
 19 Some examples of lessons learned at PTN are:
- Limited scopes of work were removed from the prime contractor and
 awarded to other contractors improving the efficiency of the overall work
 performance.

1		• FPL brought in a specialist logistics manager to help control and
2		consolidate materials and equipment, thus improving coordination efforts.
3		• FPL successfully completed the spent fuel pool cooling modification using
4		a separate team of contractors prior to the start of the outage.
5		• There was a better layout of crane positioning for easier use by the various
6		work crews.
7		• FPL also enhanced their quality program with an initiative called "First
8		Time Quality," which is a project-wide campaign to raise the collective
9		awareness of the project's large contractor workforce. The First Time
10		Quality program's message encouraged workers to perform tasks assigned
11		to them correctly the first time, thus saving time and costs for the project.
12	Q.	Please summarize your conclusions related to FPL's 2012 EPU project
12 13	Q.	Please summarize your conclusions related to FPL's 2012 EPU project activities.
	Q.	
13		activities.
13 14		activities. Overall, FPL's management of the EPU project was as good as, or better than,
13 14 15		activities. Overall, FPL's management of the EPU project was as good as, or better than, the management of other comparable engineering projects. FPL achieved its
13 14 15 16		activities. Overall, FPL's management of the EPU project was as good as, or better than, the management of other comparable engineering projects. FPL achieved its objective of completing the uprate of three nuclear generating units in 2012 by
13 14 15 16		activities. Overall, FPL's management of the EPU project was as good as, or better than, the management of other comparable engineering projects. FPL achieved its objective of completing the uprate of three nuclear generating units in 2012 by utilizing reliable project planning techniques and effectively managing various
113 114 115 116 117		activities. Overall, FPL's management of the EPU project was as good as, or better than, the management of other comparable engineering projects. FPL achieved its objective of completing the uprate of three nuclear generating units in 2012 by utilizing reliable project planning techniques and effectively managing various
13 14 15 16 17 18		activities. Overall, FPL's management of the EPU project was as good as, or better than, the management of other comparable engineering projects. FPL achieved its objective of completing the uprate of three nuclear generating units in 2012 by utilizing reliable project planning techniques and effectively managing various separate contractors and a large workforce.

from prior, similar EPU projects to improve contractor performance or avoid

issues. FPL also routinely monitored overall project performance – including key performance indicators – so that trends were identified and mitigating actions implemented as necessary. Risk management techniques were used to prioritize the implementation of mitigating actions. FPL identified and retained additional resources to facilitate quick responses should less-than-expected performance be detected or unanticipated events encountered. These actions, as well as those discussed above, contributed to a successful execution of 2012 EPU implementation work.

- 9 Q. Does this conclude your direct testimony?
- 10 A. Yes.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF JOHN J. REED
4		DOCKET NO. 130009-EI
5		March 1, 2013
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7	<u>Secti</u>	on I: Introduction
8	Q.	Please state your name and business address.
9	A.	My name is John J. Reed. My business address is 293 Boston Post Road West,
10		Marlborough, Massachusetts 01752.
11	Q.	By whom are you employed and what is your position?
12	Α.	I am the Chairman and Chief Executive Officer of Concentric Energy Advisors,
13		Inc. ("Concentric").
14	Q.	Please describe Concentric.
15	Α.	Concentric is an economic advisory and management consulting firm,
16		headquartered in Marlborough, Massachusetts, which provides consulting
17		services related to energy industry transactions, energy market analysis, litigation,
18		and regulatory support.
19	Q.	Please describe your educational background and professional experience.
20	Α.	I have more than 35 years of experience in the energy industry, having served as
21		an executive in energy consulting firms, including the position of Co-Chief
22		Executive Officer of the largest publicly-traded management consulting firm in
23		the United States and as Chief Economist for the largest gas utility in the United
24		States. I have provided expert testimony on a wide variety of economic and DOCUMENT NUMBER - DATE

financial issues related to the energy and utility industry on numerous occasions
before administrative agencies, utility commissions, courts, arbitration panels and
elected bodies across North America. I also have provided testimony on behalf
of FPL in its NCRC proceedings in 2008, 2009, 2010, 2011 and 2012. A
summary of my educational background can be found on Exhibit JJR-1.

Q. Are you sponsoring any exhibits in this case?

A.

7 A. Yes. I am sponsoring Exhibits JJR-1 through JJR-5, which are attached to my direct testimony.

9	Exhibit JJR-1	Curriculum Vitae
10	Exhibit JJR-2	Current Testimony of John J. Reed
11	Exhibit JJR-3	Total Production Cost of Electricity
12	Exhibit JJR-4	List of the EPU Project's Periodic Meetings
13	Exhibit JJR-5	PTN 6 & 7 Project Organizational Chart

14 Q. What is the purpose of your testimony in this proceeding?

The purpose of my testimony is to review the benefits of nuclear power and the appropriate prudence standard to be applied to Florida Power & Light's ("FPL" or the "Company") decision-making processes in this Nuclear Cost Recovery Clause ("NCRC") proceeding before the Florida Public Service Commission (the "FPSC" or the "Commission"). In addition, I provide a review of the system of internal controls used by the Company in 2012 during construction phases of the Extended Power Uprate ("EPU") project at the Turkey Point ("PTN") and St. Lucie ("PSL") generating stations (together, the "EPU Project"), and in creating the opportunity to construct two new nuclear generating units ("PTN 6 & 7" or "New Nuclear Project") at FPL's existing Turkey Point site. Finally, I provide an

1		opinion as to whether the EPU and PTN 6 & 7 expenditures for which FPL is
2		seeking recovery in this proceeding have been prudently incurred.
3	Q.	Please describe your experience with nuclear power plants, and
4		specifically your experience with major construction programs at these
5		plants.
6	A.	My consulting experience with nuclear power plants spans more than 30 years.
7		My clients have retained me for assignments relating to the construction of
8		nuclear plants, the purchase, sale and valuation of nuclear plants, power uprates
9		and major capital improvement projects at nuclear plants, and the
10		decommissioning of nuclear plants. In addition to my work at FPL's plants, I
11		have had significant experience with those activities at the following plants:
12		Big Rock Point Oyster Creek
13		 Callaway Palisades
14		Darlington Peach Bottom
15		Duane Arnold Pilgrim
16		Fermi Point Beach
17		Ginna Prairie Island
18		 Hope Creek Salem
19		Indian Point Seabrook
20		Limerick
21		 Millstone Wolf Creek
22		Monticello Vogtle
23		Nine Mile Point
24		I recently have been active on behalf of a number of clients in pre-
25		construction activities for new nuclear plants across the United States and in
26		Canada. Those activities include state and federal regulatory processes, raising

debt and equity financing for new projects and evaluating the costs, schedules and economics of new nuclear facilities. Those activities have included detailed

reviews of contracting strategies, cost estimation and construction project
management activities of other refurbishment and new nuclear projects.

3 Q. Please summarize your testimony.

A.

The remainder of my testimony covers six main topic areas. Section II contains an introduction to the projects and a discussion of the benefits of nuclear power to Florida. Section III describes the appropriate prudence standard that should be applied in this case, and discusses precedent with respect to the prudence standard in Florida. In Section IV, I discuss the internal controls, processes, and procedures that were the focus of Concentric's review. In Section V, I discuss Concentric's assessment of the EPU Project that is nearing completion at both of FPL's Florida nuclear generating stations, and in Section VI, I present Concentric's review of the New Nuclear Project. My conclusions are provided in Section VII. Each of those topics is summarized below.

FPL's four existing nuclear reactors in Florida have provided, and continue to provide, substantial benefits to Florida customers. Those benefits include virtually no air emissions, increased fuel diversity, reduced exposure to fuel price volatility, fuel cost savings, highly reliable base load capacity, and efficient land use. Additional nuclear capacity is expected to provide more of those same benefits to Florida.

The rule that governs the Commission's review of FPL's nuclear projects calls for an annual prudence determination. The prudence standard encapsulates three main elements. First, prudence relates to the reasonableness of decisions and actions, not costs incurred by a utility. Second, the prudence standard includes a presumption of prudence with regard to the utility's actions. Absent

evidence to the contrary, a utility is assumed to have acted prudently. Third, the prudence standard excludes the use of hindsight. Thus, the prudence of a utility's actions must be evaluated on the basis of information that was known or could have been known at the time the decision was made.

Finally, Concentric has reviewed the processes and procedures that are used to manage and implement the EPU and PTN 6 & 7 projects. That review has focused on the Company's internal controls that are in place to provide assurance that the Company meets its strategic, financial, and regulatory objectives related to the projects. Our review is premised on a framework developed by Concentric when advising potential investors in new nuclear development projects and our recent regulatory experience.

Q. What are your summary conclusions?

13 A. Concentric's review found that FPL appropriately and prudently managed the
14 EPU Project and PTN 6 & 7 in 2012.

A.

Section II: Introduction to the Projects and Benefits of Nuclear Power to Florida

17 Q. Please provide a brief introduction to FPL's EPU Project.

FPL is implementing an EPU at PSL and PTN. An EPU is the process of modifying and upgrading specific components at a nuclear power plant to increase the maximum power level at which the plant can operate. Once completed, the EPU Project is expected to increase the nuclear generating capacity of PSL and PTN by about 512 to 526 megawatts electric ("MWe") for the benefit of FPL's customers, which is 22 to 36 MWe greater than the expected increase at this time last year, and 113 to 127 MWe greater than the original plan

of 399 MWe for the EPU Project. The final increase in capacity will not be known until all modifications and testing are complete.

3 Q. Please also generally describe PTN 6 & 7.

4 A. The PTN 6 & 7 Project remains focused on obtaining the licenses and permits 5 that will provide FPL and its customers the option to construct two nuclear units at the existing PTN site. Specifically, through PTN 6 & 7, FPL continues to 6 7 create the opportunity to construct approximately 2,200 MWe of additional 8 nuclear capacity. The Company's project management strategy is focused on 9 preserving appropriate flexibility and multiple hold points and off-ramps during 10 which PTN 6 & 7's progress can be delayed for further analysis, or progressed to 11 meet the existing schedule. A decision on whether to move forward with 12 development of new units can be made based on the project's ability to achieve a 13 balance of high value to customers and decreased exposure to risk at the point 14 when all relevant permits have been obtained. The option to construct will last 15 for a period of at least 20 years from the date the final license is issued.

Q. Has nuclear power benefited FPL customers?

A. Yes. Nuclear power has and continues to play a crucial role in FPL's power generating fleet. The four reactors at FPL's existing PSL and PTN sites have been in operation for an average of over 36 years. Throughout the last three and a half decades, these units have provided numerous and substantial benefits to Florida customers by reliably producing carbon-free energy, enhancing fuel diversity and insulating customers from commodity price spikes.

Q. Is it prudent to continue the development of additional nuclear capacity in

24 Florida?

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1	A.	Yes. It is prudent to continue the development of additional nuclear capacity in
2		Florida whenever that capacity can be developed on an economic basis over its
3		full life-cycle.

4 Q. What are the advantages of using nuclear power as a base load energy source?

A.

One of the greatest advantages to additional nuclear power is that it has virtually no carbon dioxide emissions. Unlike alternative, carbon-intensive base load sources in Florida, nuclear energy does not burn fossil fuels and, therefore, emits no greenhouse gases ("GHG"). Based upon FPL's 2011 generation data and the Environmental Protection Agency's ("EPA") eGrid tool, the four nuclear units FPL operates in Florida currently avoid between 9 and 10 million tons of CO₂ emissions per year compared to an average natural gas-fired, combined cycle generating station.¹ The magnitude of avoided emissions is even greater when compared to other carbon-based fuels (e.g., oil, coal) that produce the same amount of energy.

In addition to its environmental benefits, nuclear power provides a vital source of diversification to the electric generation mix. In recent years, Florida has become increasingly dependent on natural gas as a fuel source for electric generating facilities. According to the Florida Reliability Coordinating Council's 2012 Load and Resource Plan, natural gas generation could approach 58% by 2021.² Utilities in the state should continue to develop alternatively-fueled facilities in order to mitigate the incremental dependence on natural gas-fired generation. This will help limit the state's exposure to natural gas price spikes and potential supply disruptions.

Q. Do lawmakers have plans to address carbon emissions anytime soon?

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Legislation aimed at curtailing carbon emissions has been introduced on several occasions. The current administration has voiced support for carbon emissions regulation that would cover existing power plants as well as new ones, though it plans to pursue such action through its executive agencies rather than Congressional legislation. In 2009, the EPA declared CO₂ and several other GHGs to be dangerous to public health and welfare, and began a process to enact federal regulations on the emission of these gases.³ This "endangerment finding" has been applied to various sources of GHGs, including power plants and large vehicles. In March 2012, the EPA proposed a Carbon Pollution Standard Rule, which would establish CO₂ emission limits for new fossil-fuel electric generating units. The U.S. Court of Appeals for the D.C. Circuit has upheld the EPA's authority to regulate CO₂ like other hazardous pollutants under the Clean Air Act. However, plans to enact this type of regulation have not yet been finalized. In the absence of federal standards, state and regional programs such as the Regional Greenhouse Gas Initiative in the northeast and the Western Climate Initiative in the northwest have been put in place to address carbon emissions.

Although the scope and severity of restrictions remains uncertain, it is likely that these laws will affect industrial emitters, including utilities, over the next several years. Regulations may potentially require installation of new environmental controls, which can lead to the retirement of coal units if technology conversion is deemed uneconomic.

- 1 Q. How does the current price of natural gas compare with recent trends in
- 2 natural gas prices?

of a nuclear facility.

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3 A. Although the price of natural gas is currently on the low end of what we have 4 observed in recent years, it has been subject to significant swings. From 2002-5 2008 spot natural gas prices nearly tripled from \$3.68 to \$9.15 per million British 6 Thermal Units before falling to current levels in response to new supply 7 discoveries and advances in technologies used to recover gas from shale formations.4 While the wholesale price of gas remains below historical levels, it 8 9 is important to consider the long-term outlook for the price of natural gas when 10 evaluating the benefits of resource diversity over the anticipated 60-year life-span

12 Q. How does resource diversity benefit customers in Florida?

- A. Resource diversification provides numerous benefits to Florida residents by mitigating exposure to any single fuel source. This concept, as explained in modern portfolio theory, is based on the idea that a group of diverse assets may collectively lower the risks relative to holding any individual asset or type of asset. Despite currently low natural gas prices, overdependence on natural gas can expose Florida's generation portfolio to volatility in fuel prices. Diversification of fuel sources—through added nuclear power and additional renewables—insulates consumers from commodity price fluctuations and reduces the risk profile of Florida's electric generation mix.
- Q. How do trends in the production cost of natural gas-fired generation compare with trends in the price of nuclear power?

A. Costs associated with nuclear power have remained stable due to the fact that fuel represents a comparatively small portion of nuclear facility operating costs. According to the Nuclear Energy Institute ("NEI"), fuel accounts for approximately 90% of the total production cost of electric energy from natural gas, whereas fuel costs of nuclear power are only 25-30% of the total production With fuel being the single greatest expense for gas plants, costs of production are exceedingly dependent on the price of natural gas. As a result, fuel commodity price swings have a much greater impact on gas plants than they do on nuclear plants. Nuclear plants can help insulate customers from the effects of gas price volatility.

Q.

Exhibit JJR-3 provides a simplified analysis showing that the production cost of energy from nuclear power is substantially lower than other sources of base load energy. Nuclear production costs have declined more than 30% in the last ten years to an average of 2.0 cents per kilowatt-hour. While a comparison of competing resources for resource planning purposes should be analyzed in a more comprehensive resource planning environment, Exhibit JJR-3 indicates that, as a result of lower production costs of nuclear power, the electric bills of Florida residents are and have been lower and much less subject to fuel price volatility.

- Is it appropriate for the Commission to continue to allow recovery of certain pre-construction costs and construction carrying costs prior to the units entering into service?
- A. Yes. It is appropriate to allow for cost recovery through the annual NCRC process given the magnitude of the potential benefits of additional nuclear

1		capacity. The NCRC is important for both the Company and its customers. It
2		provides FPL's debt and equity investors with some measure of assurance of cost
3		recovery if their investments are used to prudently incur costs. In addition, by
4		permitting recovery of carrying costs associated with construction, the NCRC
5		eliminates the effect of compound interest on the total project costs, which will
6		reduce customer bills when the facilities are fully implemented.
7	Q.	Have other utilities considering nuclear development activities noted the
8		necessity of NCRC-like recovery mechanisms?
9	A.	Yes. Utilities such as Duke, SCANA, Georgia Power, Progress Energy and
10		Ameren have publicly acknowledged the benefits and the necessity of cost
11		recovery mechanisms like the NCRC.
12	Q.	Are there benefits of nuclear power other than those that quantitatively
13		affect the price of electricity?
14	A.	Yes. One benefit of nuclear generation that is often overlooked is its relatively
15		small footprint compared to other clean, emissions-free technologies. Nuclear
16		power plants require less land, and thus limit the degree of forest clearing,
17		wetlands encroachments, and other environmental impacts associated with siting
18		a generating facility.
19		
20	Section	on III: The Prudence Standard
21	Q.	Please generally describe the prudence standard as you understand it.
22	A.	The prudence standard is captured by three key features. First, prudence relates
23		to actions and decisions; costs themselves are not prudent or imprudent. It is the
24		decision or action that must be reviewed and assessed, not simply whether the

costs are above or below expectations. The second feature is that the standard incorporates a presumption of prudence, which is often referred to as a rebuttable presumption. The burden of showing that a decision is outside of the reasonable bounds falls, at least initially, on the party challenging the utility's actions. The final feature is the total exclusion of hindsight. A utility's decisions must be judged based upon what was known or knowable at the time the decision was made by the utility.

8 Q. What test for prudence has been adopted by the Commission?

A. The Commission has prohibited the use of hindsight when reviewing utility management decisions and has instead chosen to strictly follow the standard I described above. In 2012, the Commission reaffirmed this approach, referring to "longstanding Commission practice" (Order No. PSC-12-0650-FOF-EI):

[T]he standard for determining prudence is consideration of what a reasonable utility manager would have done, in light of the conditions and circumstances which were known, or should have been known, at the time the decision was made.

Section IV: Framework of Internal Controls Review

- 19 Q. What is meant by the term "internal control" and what does it intend to 20 achieve?
- A. The Committee of Sponsoring Organizations of the Treadway Commission

 ("COSO") is a global industry organization that provides guidance as to the

 development, implementation and assessment of systems of internal control.

 COSO has defined internal control as a process that provides reasonable

 assurance of the effectiveness of operations, reliability of financial reporting and

 compliance with applicable laws and regulations. This definition has been

1		further expanded to reflect four critical concepts. First among these is that
2		internal control is a process. While internal control may be assessed at specific
3		moments in time, a system of internal control can only be effective if it responds
4		to the dynamic nature of organizations and projects over time. Second, internal
5		control is created by people, and thus the effectiveness of an internal control
6		system is dependent on the individuals in an organization. Third, internal
7		control is specifically directed at the achievement of an entity's goals. Thus, risks
8		that present the greatest challenge to the achievement of those objectives must
9		take priority. Finally, internal control can provide only reasonable assurance.
10		Expectations of absolute assurance cannot be achieved.
11	Q.	Please describe the framework Concentric used to review the Company's
12		system of internal control as implemented by the EPU Project and PTN 6
13		& 7 in 2012.
14	A.	In order to review and assess the Company's internal controls, Concentric
15		utilized a similar framework to that which it has used previously for FPL's
16		NCRC proceedings. That framework is based upon Concentric's
17		contemporaneous experience advising prospective investors in new nuclear
18		projects and Concentric's regulatory experience.
19		In summary, the framework has focused on six elements of the
20		Company's internal controls, including:
21		Defined corporate procedures;
22		Written project execution plans;
23		 Involvement of key internal stakeholders;
24		Reporting and oversight requirements;

1		 Corrective action mechanisms; and
2		Reliance on a viable technology.
3		Each of these elements was reviewed for five processes including:
4		 Project estimating and budgeting processes;
5		 Project schedule development and management processes;
6		 Contract management and administration processes;
7		Internal oversight mechanisms; and
8		• External oversight mechanisms.
9		Concentric's work in this proceeding is additive to our work reviewing the
10		projects in prior years. In other words, Concentric's review of the EPU Project's
11		and PTN 6 & 7's 2012 activities incorporates the information and understanding
12		of the projects gained during Concentric's reviews of FPL's activities from 2008
13		through 2011.
14	Q.	Please describe how Concentric performed this review.
15	A.	Concentric's review was performed over the period from December 2012 to
16		February 2013. Concentric began by reviewing the Company's policies,
17		procedures and instructions with particular emphasis placed on those policies,
18		procedures or instructions that may have been revised since the time of
19		Concentric's previous review. In addition, Concentric reviewed the current
20		project organizational structures and key project milestones that were achieved in
21		2012. Concentric then reviewed other documents and conducted several in-
22		person interviews of personnel from both FPL's corporate office and the plant
23		sites to make certain the EPU Project's and PTN 6 & 7's policies, procedures
24		and instructions were known by the project teams, were being implemented by

1		the projects and have resulted in prudent decisions based on the information that
2		was available at the time of each decision.
3		Concentric's in person interviews included representatives from each of the
4		following functional areas:
5		Project Management;
6		Project Controls;
7		 Integrated Supply Chain Management ("ISC");
8		Employee Concerns Program;
9		 Quality Assurance/Quality Control ("QA/QC");
10		• Internal Audit;
11		• Transmission;
12		Environmental Services; and
13		Licensing and Permitting.
14	Q.	Please describe why you believe it is important for FPL to have defined
15		corporate procedures in place throughout the development of the projects.
16	A.	Defined corporate procedures are critical to any project development process as
17		they detail the methodology with which the project will be completed and make
18		certain that business processes are consistently applied to the project. To be
19		effective, these procedures should be: (1) documented with sufficient detail to
20		allow project teams to implement the procedures; (2) clear enough to allow
21		project teams to easily comprehend the procedures; and (3) should be revisited
22		and revised as the project evolves and as lessons are learned. It is also important
23		to assess whether the procedures are known by the project teams and adopted

into the Company's culture, including a process that allows employees to openly challenge and seek to improve the existing procedures and to incorporate lessons learned from other projects into the Company's procedures. Within the EPU Project and PTN 6 & 7, the Project Controls staff is primarily responsible for ensuring the Company's corporate procedures are applied consistently by the various FPL and contractor staff members who are working on the projects. However, it is acknowledged that this is a shared responsibility held by all project team members, including the project managers.

9 Q. Please explain the importance of written project execution plans.

A.

Written project execution plans are necessary to prudently develop a project. These plans lay out the resource needs of the project, the scope of the project, key project milestones or activities and the objectives of the project. These documents are critical as they provide a "roadmap" for completing the project as well as a "yardstick" by which overall performance can be monitored and managed. It is also important for the project sponsor to require its large-value contract vendors to provide similar execution plans. Such plans allow the project sponsor to accurately monitor the performance of these vendors and make certain at an early stage of the project that each vendor's approach to achieving key project milestones is consistent with the project sponsor's needs. These project plans must be updated to reflect changes to the project scope and schedule as warranted by project developments.

Q. Why is it important that key internal stakeholders are involved in the project development process?

A. One of the most challenging aspects of prudently developing a large project is
the ability to balance the needs of all stakeholders, including various Company
representatives and the Company's customers. This balance is necessary to make
certain that the maximum value of the project is realized. By including these
stakeholders in a transparent project development process, the project sponsor
will be better positioned to deliver on these high-value projects.

Q. Why is it important to have established reporting and oversight requirements?

A.

Effective internal and external communications enable an organization to meet its key objectives, and allow employees to effectively discharge their responsibilities. By having an established reporting structure and periodic reporting requirements, the project sponsor's senior management will be well informed on the status of the project's various activities. Reporting requirements give senior management the information it needs to leverage its background and previous experience to direct prudently the many facets of the project. In addition, established reporting requirements ensure that senior management is fully aware of the activities of the respective project teams so management can effectively control the overall project risks. In the case of the EPU Project and PTN 6 & 7, this level of project administration by senior management is prudent considering the large expenditures that will be required to complete the projects and the potential impact of the projects on the Company overall.

In order to be considered robust, these reporting requirements should be frequent and periodic (i.e., established daily, weekly and monthly reporting requirements) and should include varying levels of detail based on the frequency

1		of the report. The need for timely and effective project reporting is well
2		recognized in the industry. To that point, a field guide for construction
3		managers notes:
4 5 6 7 8		Cost and time control information must be timely with little delay between field work and management review of performance. This timely information gives the project manager a chance to evaluate alternatives and take corrective action while an opportunity still exists to rectify the problem areas. ⁷
9	Q.	What is the purpose of corrective action mechanisms and why are they
10		important to ensure the Company is prudently incurring costs?
11	A.	A corrective action mechanism is a defined process whereby a learning culture is
12		implemented and nurtured throughout an organization to help eliminate
13		concerns that can interfere with the successful completion of the project.
14		Corrective action mechanisms help identify the root cause of issues, such as an
15		activity that is trending behind schedule, and provide the opportunity to adopt
16		mechanisms that mitigate and correct the negative impact from these issues. A
17		robust corrective action mechanism assigns responsibility for implementing the
18		corrective actions and a means by which these activities are managed. In
19		addition, a corrective action mechanism educates the project team in such a
20		manner as to ensure project risks are prudently managed in the future.
21	Q.	Are there any other elements of the Company's internal controls included
22		in your review?
23	A.	No. There were no other elements of the Company's internal controls included
24		in my review.

1 Section V: EPU Project Activities in 2012

- 2 Q. How is this section of your testimony organized?
- 3 A. This section describes my review of the five key processes (i.e., project estimating
- 4 and budgeting, project schedule development and management, contract
- 5 management and administration, internal oversight mechanisms, and external
- 6 oversight mechanisms), described above, as they related to the EPU Project in
- 7 2012.
- 8 Q. As a preliminary matter, what did your review lead you to conclude with
- 9 regard to the prudence of FPL's actions in 2012 as they related to the EPU
- 10 **Project?**

11

- A. FPL's decision making and management actions as they related to the EPU
- Project in 2012 were prudent. Those decisions and actions included:
- management and receipt of the necessary NRC license amendment request
- 14 ("LAR") approvals for both the PTN and PSL sites; management of five
- implementation outages, including one mid-cycle outage; incorporation of
- lessons learned from earlier outages into the design, engineering, and
- implementation of subsequent outages; and the re-assignment of work scope
- from the Engineering, Procurement, and Construction ("EPC") vendor to other,
- 19 qualified specialist firms in order to efficiently manage the multiple outages,
- along with rigorous oversight and management of those vendors. As a
- consequence, it is my opinion that FPL's 2012 expenditures on the EPU Project
- 22 have been prudently incurred.
- 23 Q. What period of time did your review of the EPU Project encompass?

1 A. Our review of the EPU Project was for the period January 1, 2012 through 2 December 31, 2012. Concentric's review of this time period relied upon data 3

that was provided to Concentric in the period from December 2012 to February

2013. 4

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Α.

5 Q. What steps has FPL taken to plan and execute the EPU Project?

6 Α. The EPU Project consists of four overlapping phases: (i) the Engineering 7 Analysis Phase; (ii) the Long Lead Equipment Procurement Phase; (iii) the 8 Engineering Design Modification Phase; and (iv) the Implementation Phase. In 9 2012, the Engineering Analysis Phase was completed with receipt from the NRC 10 of four LAR approvals (PSL Unit 1, PSL Unit 2, PTN Units 3 and 4, and the 11 PTN Core Operating Limits Report). The Long Lead Equipment Procurement 12 Phase and the Engineering Design Modification Phase were also essentially 13 completed in 2012. In the Implementation Phase, four outages were completed 14 in 2012, and a fifth (the final EPU implementation outage, at PTN Unit 4) began. 15 As of December 31, 2012, the PTN Unit 4 outage was expected to be completed 16 in April 2013. The activities undertaken in each of the four phases presented 17 above are further described in the testimony of FPL Witness Jones.

Q. As of the end of 2012, what activities remain in the EPU Project?

The remaining activities as of the end of 2012 include the completion of the final implementation outage at PTN Unit 4, and the conclusion of close out activities. As of December 31, 2012, the EPU Project was scheduled for completion in 2013, including project close out activities. FPL added approximately 365 MWe in 2012, representing FPL's owner net share, subject to final testing. additional 115 to 123 MWe is expected to be gained in 2013 from PTN Unit 4.

Q. Were there any modifications to the overall EPU outage schedule in 2012?

A. No. While FPL made the decision to delay the start of the 2012 outages at PTN
Unit 3 and PSL Unit 2 by approximately one month each, and those outages
both took longer than originally forecasted, those increased outage lengths did
not affect the overall EPU Project schedule in 2012. The final PTN Unit 4
outage was still expected to be completed in April 2013, as of December 31,
2012.

8 Q. How was the EPU Project organized in 2012?

A.

As it has been since 2009, the EPU Project is organized at the site level, with managers at each site to oversee construction, project controls, licensing, procurement, and other critical functions. Having these functions at both EPU sites is appropriate and necessary given the number of activities that require oversight at each plant. Furthermore, the EPU Project implemented additional oversight at each plant by splitting the role of Implementation Owner – South, and designating an Implementation Owner at each site. That change, which officially took place in January 2012, reflects the fact that the EPU Project has moved out of the engineering and planning phases and into a mode of almost continuous implementation, in which each site will benefit from the increased focus brought by its directly-assigned Implementation Owner. By the end of the year, with the PSL implementation outages complete, FPL was able to reassign the PSL Implementation Owner outside of the EPU Project.

In Juno Beach, there remained a centralized core project management team providing oversight of the EPU Project from FPL headquarters. The primary centralized positions included: the Nuclear Power Uprate Vice President,

1	responsible for all aspects of project execution, including licensing, design,
2	engineering, cost, implementation and regulatory; the Controls Director, who
3	provides direction, oversight and governance to the Project Control Supervisor
4	at each site and has overall responsibility for the EPU Project control functions
5	including cost control, estimating, scheduling and support activities; the
6	Licensing and Regulatory Interface Manager, who is responsible for the
7	oversight, coordination, production and technical quality of the licensing
8	engineering and analysis related to the LARs and other regulatory submittals; a
9	Manager of Nuclear Sourcing, responsible for purchasing at the EPU sites, and
10	the EPU Nuclear Cost Recovery interface manager, responsible for the overall
11	coordination of the project with the Commission and FPL Regulatory Affairs.

- Q. Did the EPU Project team consist of any other centralized management positions?
- 14 A. Yes. The EPU Project team also included a Quality Assurance ("QA") manager
 15 at the Company's headquarters. Described in greater detail later in my testimony,
 16 this function necessarily acted separately from the functions described above to
 17 maintain independence when assessing the EPU Project.
- 18 Q. Is the management structure explicitly defined in a Company procedureor instruction?
- A. Yes. The management structure is outlined in Extended Power Uprate Project
 Instruction ("EPPI")-140: Roles and Responsibilities.
- 22 Q. What major milestones were met on the EPU Project in 2012?

1 A. The EPU Project reached several major milestones in 2012, including receipt of all required LAR approvals for the project, completion of four implementation

outages, and the commencement of the eighth and final implementation outage.

Project Estimating and Budgeting Processes

- Q. Please describe the mechanisms utilized to track the project's 2012
 budgets and cost estimate.
- A. Several budget and cost reporting mechanisms exist to ensure that key decisions related to the EPU Project were prudent and made at the appropriate level of FPL's management structure. Those reporting mechanisms included presentations and status calls as well as periodic reports. That allowed the Company to leverage the experience of its executive team. A list of the EPU Project's periodic meetings can be found in Exhibit JJR-4.

14 Q. Was the EPU Project's cost estimate modified in 2012?

A. Yes. In adherence with FPL procedure EPPI-302, "Nonbinding Cost Estimate Range," which calls for an update to the cost estimate range to be performed annually, FPL performed a review and update to its cost estimate in 2012. Specifically, FPL updated its cost estimate range for direct EPU Project costs of \$2.32 billion to \$2.48 billion, to a new range of \$2.96 billion to \$3.15 billion. The range was updated to reflect the evolution of scope of the project and lessons learned to date. As of December 31, 2012, the EPU Project cost forecast exceeded that range. The result of the cost forecast exceeding the estimated range was that the EPU Project had \$0 contingency in its cost forecast as of December 31, 2012. Given the fact that the EPU Project is nearing completion,

which decreases uncertainty related to the final cost of the project, I do not consider this level of contingency to be a material issue. In addition, it is my understanding that FPL plans to update its cost estimate again on or before May 1, 2013, incorporating any remaining changes based on the final EPU implementation outage at PTN Unit 4.

6 Q. Did the increase to the cost forecast result from imprudent project 7 management?

A.

A.

No, it did not. The EPU Project is large and multifaceted, and due to the nature of nuclear operations and attendant safety considerations, the scope and schedule can reasonably be expected to expand and be extended as the outage teams go through first time implementation of complex modifications. As I have stated previously, it is not uncommon for a mega project of this size to require regular updates to its cost forecast, especially given the fact that the EPU Project is currently in the Implementation Phase in which significant new items of scope (referred to as "discovery scope") are revealed. The reason for that is, often, the full scope of a work package cannot be known until the modifications to the facility have begun.

18 Q. What steps did FPL take to control costs of the EPU Project in 2012?

First, FPL worked closely with its vendors to focus them on productivity, safety, and performance. Second, the Company sought concessions from vendors that are working on the EPU Project, including reductions in labor rates and daily living allowances, as well as the elimination of the EPC vendor's (*i.e.*, Bechtel's) incentive fee. Third, as discussed in more detail later in my testimony, FPL reassigned portions of the scope on the PTN Unit 4 outage from Bechtel to

1		other, highly-qualified industry experts, including PCI Energy Services ("PCI")
2		Shaw Stone & Webster ("Shaw"), and WeldTech.
3	Q.	Were there any changes to the structure of the contract between FPL and
4		its EPC vendor in 2012?
5	A.	Yes. FPL and Bechtel (the EPC vendor) had instituted a target price structure in
6		2011 that was set aside in 2012. The reason the target price structure was set
7		aside is that FPL found that management personnel spent a considerable amount
8		of time negotiating with the EPC vendor regarding proposed changes to the
9		project's scope and whether those changes would result in changes to the target
10		price. Setting aside the target price eliminated the distraction of such
11		negotiations, and allowed FPL and Bechtel to focus on performance, safety, and
12		productivity.
13	Q.	Were there additional costs associated with setting aside the target price
14		structure?
15	A.	No. Legitimate additions to scope based on scope discoveries would affect the
16		project cost under both a target price structure and a time and materials
17		structure, so setting aside the target price would not affect the overall cost of the
18		project. In addition, as discussed above, FPL negotiated concessions from
19		Bechtel in 2012, which included elimination of its incentive fee, and reductions in
30		hourly rates and daily living allowance rates.
20		
20	Q.	How were project controls executed by the site teams and the overall
	Q.	How were project controls executed by the site teams and the overall project management team to track the EPU Project's 2012 budget?

24

EPU Project's budget.

Those reports included the Monthly Operating

Performance Report that categorized the overall performance of the EPU
Project as either on budget, budget-challenged, or out of budget. Each site also
continued to produce monthly cash flow reports in 2012 that contained monthly
actual capital expenditures as compared to the budget, and explanations of any
increases or decreases. Those reports were reviewed and discussed during formal
project management meetings.

7 Q. Did the EPU Project perform an analysis of its cost effectiveness in 2012?

- 8 A. Yes. In May 2012, the EPU Project was subject to an annual feasibility analysis
 9 that included a review of the cost effectiveness of completing the project.
- 10 Q. In 2012, how did the EPU Project track and identify risks to the project schedule?
- 12 Α. As in prior years, the EPU Project continued to use a risk matrix, referred to as 13 the "Risk Register," to track challenges to the current budgets and cost estimates 14 and to provide a brief explanation of the reasons for the challenges. According 15 to EPPI-340, "EPU Project Risk Management Program," the risk identification 16 process covered identification, assessment and analysis, handling strategy, risk 17 management, categorization, reporting, and mitigation. The Company defined 18 risks as issues that affect nuclear quality, environment, project cost, schedule, 19 safety, security, legal, plant operations, regulatory, and reputation.

20 Q. Did the EPU Project modify any of its processes in 2012?

A. Yes. The managers of the EPU Project have recognized the need to modify and improve processes based on progressive experience. To that end, the EPU Project modified 15 of its policy documents during 2012. Given the late stage of the project, however, most of those updates were editorial in nature. In addition

1	to the EPU Project policies that were modified in 2012, two new EPPIs were
2	created in 2012: (1) EPPI-190, "Human Performance," the purpose of which is
3	to provide guidance to EPU personnel regarding the proper implementation of
4	the Human Performance program; and (2) EPPI-235, "Work Hours Validation
5	Sampling Program," the purpose of which is to provide a mechanism for
6	performing random validation of contractor invoiced hours.

- Q. Did Concentric review the process by which the EPU Project made certain that each plant modification or component replacement is necessary for the completion of the EPU Project?
- 10 A. Yes, Concentric reviewed the process by which FPL made certain that the costs
 11 being charged to the EPU Project in 2012 are separate and apart from the
 12 normal maintenance and operations of PSL and PTN, and, therefore eligible for
 13 recovery under the NCRC. This process, which was previously reviewed and
 14 approved by the Commission,⁸ included a detailed engineering analysis to
 15 determine if the component replacement or plant modification is necessary for
 16 plant operations under uprated conditions.
- Q. What is your conclusion with regard to the EPU Project's processes used
 to track cost performance in 2012?

A. My conclusion is that the EPU Project has a robust set of policies and procedures in place to track and control cost performance. While the cost forecast for the overall Project increased in 2012, it is my opinion that such an increase is not unexpected for a mega project such as the EPU Project that involves complex modifications performed on short schedules in confined spaces that are generally inaccessible during operating cycles.

2	Q.	How did the EPU Project team monitor its schedule performance in 2012?
3	A.	In 2012, the EPU Project team continued to utilize daily, weekly, bi-weekly
4		monthly, and quarterly conference calls and meetings. Presentations and reports
5		were developed to facilitate many of these conference calls and meetings
6		Exhibit JJR-4 provides a listing of the meetings used in 2012 to monitor the EPU
7		Project's schedule performance, and a list of the reports used to monitor the
8		EPU Project's schedule performance can be found in the testimony of FPI
9		Witness Jones as Exhibit TOJ-12. Many of those reports included a discussion
10		of the EPU Project's schedule performance as compared to an initial target
11		schedule.
12	Q.	Were any new reports created in 2012 to assist FPL in managing the
13		project?
14	A.	Yes. With the completion of the implementation outages at PSL, FPL created a
15		project closeout metrics package in October 2012 that tracks project closeout
16		activities and is reviewed weekly. At PTN, daily and weekly reports were created
17		to track schedule and cost performance for two major vendors, Bechtel and
18		Shaw.
19	Q.	Did the EPU Project use any other methods to monitor schedule
20		performance in 2012?
21	A.	Yes. FPL continued to use an industry standard software package known as
22		Primavera P6 Professional Project Management to review the project schedule
23		based on approved updates on an almost real-time basis. Primavera P6 provides
24		Critical Path Method ("CPM") Scheduling, which uses the activity duration.

Project Schedule Development and Management Process

relationships between activities, and calendars to calculate a schedule for the project. CPM identifies the critical path of activities that affect the completion date for the project or an intermediate deadline, and how these activity schedules may affect the completion of the project. This software package is used by many in the nuclear power industry to schedule refueling outages and major capital projects.

A.

A.

Q. What status reports did the EPU Project's key vendors provide to the Company?

In addition to monitoring the EPU Project team's efforts, the Company also required that status reports be provided by its key vendors in 2012. Prior to the commencement of work, FPL required its vendors to provide a reasonable target schedule from which future progress would be measured. The vendors were then responsible for providing daily, weekly, and monthly progress reports regarding that schedule depending on outage or non-outage conditions. During outage conditions, vendors were required to provide status updates on a daily basis and a recovery plan was required for significant deviations from the target schedule.

Q. How did the EPU Project track and identify risks to the project schedule?

In 2012, the EPU Project continued to use the same Risk Register, described earlier, to track challenges to the current schedule and to provide a brief explanation of the reasons for the challenges. Bechtel, the EPC contractor, also provided a "Trend Log" to FPL to track risks to the schedule. The Trend Log is integrated into the Risk Register.

1 Q. What EPPI governs schedule creation and manag
--

- 2 A. The processes for schedule creation and management were described in EPPI-
- 3 310: Project Instructions Development, Maintenance and Update of
- 4 Schedules.

5 Q. Was that EPPI modified in 2012?

6 A. No, it was not.

7 Q. What activities occurred in 2012 that altered the project schedule?

8 A. The overall EPU Project implementation schedule was not altered in 2012.

However, the starting dates of the 2012 outages at PTN Unit 3 and PSL Unit 2

were delayed by approximately one month each. That decision was made to

11 compensate for NRC delays related to LAR approval and to allow for greater

12 certainty regarding the completion of planning and engineering for the upcoming

13 outages.

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In addition, as discussed earlier in my testimony, the PSL Unit 1 and the PTN Unit 3 2012 outages both took longer than originally forecasted due to evolution of the project scope that was caused by discovery and complexity associated with first time implementation of modifications at those units. Moreover, the Company was able to incorporate lessons learned from the outage at PSL Unit 1 into its outage at PSL Unit 2 and completed that outage three days ahead of schedule, and the Company projects that lessons learned from the PTN Unit 3 outage will shorten the PTN Unit 4 outage, which is in progress and was expected to finish in April 2013 as of December 31, 2012.

Q. What outstanding challenges to the timely execution of the EPU Project remain?

1	A.	With construction complete at PSL and construction nearing completion at
2		PTN, the Company does not foresee any significant challenges to the timely
3		execution of the EPU Project. Risks do still exist; however, as additional issues
4		may be discovered as equipment is tested and started up towards the end of the
5		outage.
6	Q.	Please describe Concentric's observations related to the EPU Project's
7		schedule development and management in 2012.
8	A.	Concentric observed that FPL has sufficient systems and procedures in place to
9		allow for appropriate oversight of the project schedule development and
10		management process. In addition, in 2012, FPL incorporated lessons learned
11		from the initial implementation outage at each site to the subsequent outage at
12		each site to maintain the EPU Project on its overall implementation schedule.
13		
14		Contract Management and Administration Processes
15	Q.	In 2012, what processes were used to ensure the EPU Project was
16		prudently managing and administering the Company's procurement
17		functions?
18	A.	The procurement function continued to be governed by several well-defined
19		policies and procedures in 2012. Those policies continued to be administered
20		through the ISC organization and included a significant breadth and depth of
21		procurement processes, including a stated preference for competitive bidding
22		wherever possible, the proper means for conducting a comprehensive
23		solicitation initial contract formation and administration of the contract

1	Q.	Were there cases in 2012 when contracts were executed without first
2		having gone through a competitive bidding process?
3	A.	Yes. Certain situations called for the use of single or sole source procurement
4		methods. The reasons for that included the fact that there were very few
5		suppliers qualified to handle the vast amount of proprietary technical
6		information relied upon when operating or working on a nuclear plant.
7		Additionally, single sourcing was appropriate in certain situations that involved
8		leveraging existing knowledge or expertise or otherwise capitalizing on synergies.
9	Q.	Please describe the procedures involved in the awarding of non-
10		competitively bid contracts.
11	A.	Single and sole source procurements required documented justification for using
12		a single or sole source procurement strategy and senior-level approval. The
13		recommendation of any vendor for a single or sole sourced contract necessitates
14		the completion of a Single/Sole Source Justification ("SSJ") Memorandum.
15		That document must describe the conditions that have given rise to the need to
16		procure outside services, a justification for not seeking competitive bids, and an
17		explanation of the reasonableness of the vendor's costs.
18	Q.	Were there any changes to the process for competitive bidding process in
19		2012?
20	A.	No. That process, which involves a coordinated effort between the department
21		that originates a purchase request and ISC, continued as it has in previous years.
22		Specifically, each competitively-bid purchase involves a purchase requisition
23		from the originating department and the issuance of a request for proposals
24		("RFP") package.

Upon receipt of proposals, a Nuclear Supply Chain ("NSC") Sourcing Specialist sorts and distributes all submissions to subject matter experts for technical and commercial analysis. The originating department undertakes a side-by-side comparison of bids' technical information, taking into consideration scope requirements, differences in operational impacts, whether or not any technical exceptions were necessary, and the potential for impacts to the scope of work. At the conclusion of this process, the NSC Sourcing Specialist and the originating department together determine the recommended supplier.

Q.

Α.

What process was used in 2012 to make certain that the Company and its customers received the full value of the various contracts for services and materials?

FPL continued to utilize an invoice review process to make certain that the Company and its customers received the full value of the goods and services being procured for the EPU Project. That process requires a review of each invoice by key project team members who worked closely with the vendor on the goods and services for which payment was requested to make certain that the costs being billed were correct and appropriate. Project Controls Supervisors at each site ensure that invoice monitoring reports from approved purchases are up-to-date and accurate. Each invoice review requires approval by certain senior project team members based upon the individuals' corporate approval authority. That tiered oversight structure, including technical specialists who are most familiar with the contracted work, ensures that the EPU Project's procured goods and services are providing their full value to the Company and its customers.

- 1 Q. What significant decisions did FPL make in 2012 with regards to its EPC
- 2 contract?
- 3 A. As discussed previously, FPL made the significant decision to reassign certain
- 4 portions of Bechtel's scope to other experienced vendors for the PTN Unit 4
- 5 outage. For example, Shaw was awarded all modifications in the radioactive
- 6 containment at the unit, PCI was assigned pre-outage work on the Unit 4 spent
- fuel pool, and Weldtech was awarded welding implementation and installation
- 8 services work.

9 Q. Was that a reasonable decision made by FPL?

- 10 A. Yes. Reassigning certain portions of the scope provided many advantages to the
- 11 EPU Project. First, with the increase in length of the PTN Unit 3 outage in
- 12 2012, the reassignment of Bechtel's scope allowed Bechtel to focus on
- completing its Unit 3 scope while other vendors could focus on preparing for
- 14 Unit 4. Moreover, having PCI perform the Unit 4 spent fuel pool work allowed
- that work to be accelerated to the pre-outage period. Second, the reassignment
- of scope to experienced vendors allowed FPL additional opportunities to control
- 17 costs. For instance, the spent fuel pool work completed by PCI was done on a
- fixed price basis after a competitive bidding process, and the welding scope was
- won by WeldTech also following a competitive bidding process.

20 Q. Were there any vendor-caused stand downs in 2012?

- 21 A. Yes. There were several vendor safety stand downs in 2012 to correct worker
- 22 practices and mitigate safety events. None of the stand downs materially affected
- 23 either the project schedule or cost. Such stand downs are important and

1		strengthen the project, offering the EPU Project team the opportunity to
2		reinforce safety standards and prevent potentially larger issues from occurring.
3	Q.	Does Concentric have any observations and recommendations related to
4		the processes used to manage the EPU Project's procurement functions in
5		2012?
6	A.	Yes. Overall, Concentric noted that the EPU Project's procurement functions
7		performed quite well in 2012. FPL appropriately reassessed its contracting
8		structure and assignment of EPU scope, and continued to apply robust
9		procedures to its purchasing activities.
10		
11		Internal Oversight Mechanisms
12	Q.	What mechanisms exist for internal oversight and review of the EPU
	Q.	·······
	ų.	Project?
13	Q. A.	
13 14		Project?
13 14 15		Project? There are several mechanisms used to make certain the EPU Project received
13 14 15 16		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and
13 14 15 16		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear
113 114 115 116 117		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear Committee on the Board of Directors, the Company's Nuclear Review Board,
113 114 115 116 117 118		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear Committee on the Board of Directors, the Company's Nuclear Review Board, and On-Site Review Groups at both PSL and PTN. In addition, the Company's
113 114 115 116 117 118 119 220		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear Committee on the Board of Directors, the Company's Nuclear Review Board, and On-Site Review Groups at both PSL and PTN. In addition, the Company's senior management received a briefing of the EPU Project on a periodic basis.
113 114 115 116 117 118 119 220		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear Committee on the Board of Directors, the Company's Nuclear Review Board, and On-Site Review Groups at both PSL and PTN. In addition, the Company's senior management received a briefing of the EPU Project on a periodic basis. The Company's Chief Nuclear Officer also received a briefing on an
113 114 115 116 117 118 119 220 221 222		Project? There are several mechanisms used to make certain the EPU Project received adequate oversight in 2012. First, the Company has in place senior oversight and management committees, including the Board of Directors, the Nuclear Committee on the Board of Directors, the Company's Nuclear Review Board, and On-Site Review Groups at both PSL and PTN. In addition, the Company's senior management received a briefing of the EPU Project on a periodic basis. The Company's Chief Nuclear Officer also received a briefing on an approximately bi-weekly basis.

1	EPU Project team. Lastly, the FPL Employee Concerns Program ("ECP")
2	provided FPL employees and contract workers with the ability to confidentially
3	express concerns related to the EPU Project.

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In addition, FPL transferred operational experience from NextEra's nuclear fleet to the EPU Project. That internal transfer of knowledge allowed FPL to benefit from lessons learned within NextEra that resulted in improved efficiency in the implementation of the EPU Project.

Q. With the EPU Project's management effort largely decentralized, how was information communicated from the site-level to the corporate-level in 2012?

The centralized management staff that operated from the Company's headquarters included director positions that were responsible for each business function. For instance, the Director of Project Controls oversaw the project controls managers at both sites. Communication between overall project management and management at the sites was facilitated by a formal reporting structure that emphasized the timely and comprehensive transfer of information.

Q. Please describe the Internal Audit Department and its functions.

The internal audit process was a backstop to make certain the EPU Project complied with the Company's internal policies and procedures. The Internal Audit Department did not report to any of the EPU Project team members to protect the Internal Audit Department's employees' independence. Rather, Internal Audit reported to the Senior Vice President of Internal Audit and Compliance, who reported directly to the Chairman and CEO of NextEra Energy.

1	Q.	Did the Internal Audit Department complete any audits in 2012?
2	A.	Yes. FPL's Internal Audit Department completed several audits in 2012.
3		Although I have reviewed these, I will not be discussing them in my testimony
4		because the Company maintains confidentiality with respect to these audits.
5	Q.	Did those audits result in findings that were adverse to FPL's application
6		of its procedures and management of the EPU Project?
7	A.	No. While Internal Audit typically issues findings and recommendations as part
8		of its audits, the 2012 findings and recommendations did not indicate imprudent
9		management by FPL, and FPL has taken steps to address those findings to
10		improve its oversight of the project. As I described above, Internal Audit acts as
11		a backstop to the EPU's project controls functions, and its investigations and
12		findings allow the project to address issues of human performance and, in some
13		instances, further improve upon its procedures.
14	Q.	Were any EPPIs issued in 2012 as a result of findings by the Internal Audit
15		Department?
16	A.	Yes. As a result of Internal Audit's PTN and PSL contract worker overtime
17		audit, EPPI-235: Work Hours Validation Sampling Program was issued on
18		August 20, 2012 and provides a mechanism for performing random validations
19		of contractor invoiced hours versus those actually worked on a project to ensure
20		labor billing accuracy. The EPPI mandates a quarterly comparison of vendors'
21		invoices and security gate logs to ensure appropriate charges for all individuals in
22		the random sample.
23	Q.	Is Internal Audit conducting a review of the EPU Project costs charged in
24		2012?

- 1 A. Yes. Costs incurred by the EPU Project in 2012 are being reviewed by the
- 2 Company's Internal Audit Department, with a final report expected to be issued
- 3 by Internal Audit in the second quarter of 2013. Internal Audit performed a
- 4 similar review in 2012 with no significant findings.
- 5 Q. Please describe the FPL QA/QC function and its purpose.
- 6 A. In 2012, the FPL QA/QC employees were responsible for implementing the
- 7 Company's QA Program that was mandated by the NRC in 10 CFR 50,
- 8 Appendix B. The QA/QC function was separate from the EPU Project and
- 9 reported to the Company's Chief Nuclear Officer through the Director of
- 10 Nuclear Assurance. Federal regulations define eighteen criteria for an NRC
- licensee's QA program. It was the responsibility of the QA/QC employees to
- ensure that FPL's QA program met those criteria.

13 Q. What QA activities related to the EPU Project took place in 2012?

- 14 A. Throughout 2012, the QA/QC function oversaw the implementation phase of
- the EPU Project. As the EPU Project commenced its outages, QA/QC
- 16 evaluators were assigned to both PTN and PSL. The QA/QC evaluators were
- also responsible for reviewing certain activities by the EPU Project's vendors,
- both at the EPU Project sites as well as at certain vendors' manufacturing
- 19 facilities. Those activities included multiple in-person reviews of the project
- vendors' methodologies, qualifications and QA programs. Finally, the QA/QC
- 21 evaluators monitored NRC QA activities and suggested changes to the EPU
- 22 Project to respond to the NRC's findings at other power uprate projects.
- 23 Q. Please describe the FPL ECP and its purpose.

1 A. The FPL ECP is a confidential process through which EPU employees and 2 contractors can raise concerns regarding nuclear safety and hostile work 3 environments. ECP had a physical presence at both PSL and PTN, and ECP 4 coordinators conducted outreach in order to educate employees and contractors 5 about the existence of the program. When a concern was brought to the 6 attention of ECP personnel, initial feedback was provided to the concerned 7 individual and, if necessary, a formal investigation was launched. Many of the 8 concerns raised were not substantiated; however, some contract worker 9 supervisors were disciplined. In order to determine whether concerns were 10 resolved, ECP personnel followed-up with concerned individuals three months 11 after their initial meeting to ensure that the employee's concerns were addressed.

Q. What internal operational experience did FPL incorporate into the EPU Project in 2012?

- 14 A. In 2012, FPL incorporated operational experience learned from other plants
 15 within NextEra's nuclear fleet. That operational experience was transferred
 16 directly through meetings and presentations to the EPU Project team, and
 17 indirectly through the reassignment of experienced personnel from other plants
 18 within NextEra's fleet into key positions on the EPU Project.
- 19 Q. Please provide Concentric's observations related to the internal oversight
 20 and review mechanisms utilized in 2012.
- A. FPL has in place the appropriate internal oversight and audit functions to properly manage and survey the EPU Project, including processes by which to address emerging issues. Those are important functions to have within a mega project organization to ensure prudent execution of the project.

External	Oversi	ght	Mechan	isms

- Q. What external oversight mechanisms did the Company utilize in 2012 to ensure the EPU Project had adequate internal controls and were prudently incurring costs?
- As in prior years, there were several external oversight and review mechanisms in place for the EPU Project. Those oversight and review mechanisms included the retention of my firm, Concentric, to perform the review described in this testimony, ongoing contact with the project's major vendors' quality oversight functions, industry contacts, and the FPSC Staff's financial and internal controls audits. Additionally, as a publicly traded company, NextEra Energy must undergo an annual company-wide audit of its financial and internal controls.
- 12 Q. In 2012 did industry contacts provide a form of external oversight and review?
 - A. Yes. FPL is a member of several industry groups, including the Institute of Nuclear Power Operations, the World Association of Nuclear Operators, the Electric Power Research Institute and NEI, among others, which provided further guidance about uprate projects. Each of those groups provided the EPU Project team with access to a wide breadth and depth of information that was used to enhance the project team's effectiveness. Additionally, relationships that the EPU Project team members have with their counterparts at other nuclear power plants around the country allow the EPU Project team to benefit from operating and construction experience at other plants and incorporate that experience into the planning and implementation at PSL and PTN.

1	Q.	Did Concentric have any observations related to external oversight and
2		review of the project in 2012?

- A. During its review, Concentric noted that FPL appeared to have taken reasonable steps to obtain and implement lessons learned from outside sources in 2012.
- 5 These lessons learned are vital to the successful execution of the projects.

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Section VI: PTN 6 & 7 Project Activities in 2012

8 Q. How is this section of your testimony organized?

- 9 A. This section describes Concentric's review of the five key processes (*i.e.*, project 10 estimating and budgeting, project schedule development and management, 11 contract management and administration, internal oversight mechanisms, and 12 external oversight mechanisms) as they were applied to PTN 6 & 7 in 2012.
- 13 Q. As a preliminary matter, what did your review lead you to conclude with
 14 regard to the prudence of FPL's actions in 2012 on the PTN 6 & 7 Project?
 15 A. FPL's decision to continue pursuing PTN 6 & 7 in 2012 was prudent and was
 16 expected to be beneficial to customers. In addition, Concentric's review
 17 indicates that FPL's management of the PTN 6 & 7 Project over the course of
- methodical approach to achieving its licensing goals, which will allow it to

2012 has resulted in prudently incurred costs. During 2012, FPL continued its

- 20 continue to create the option to build new nuclear capacity for the benefit of its
- 21 customers.

22 Q. How was PTN 6 & 7 organized in 2012?

A. Since 2008, few changes have occurred in the PTN 6 & 7 Project organization, which is depicted in Exhibit JJR-5. In 2012, the project organizational structure

continued to be developed around two separate, but collaborative business units:

Project Development and New Nuclear Projects. While both organizations ultimately report through the same executive management chain, their objectives are tied to each group's respective capabilities. That approach allows FPL to ensure the most qualified group is utilized to accomplish the project's objectives.

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The Project Development organization was responsible for all aspects of the project not related to the NRC in 2012. In contrast, the New Nuclear Projects organization remains responsible for submitting and defending the PTN 6 & 7 Construction and Operating License Application ("COLA"). That organization will also be responsible for the engineering, procurement, construction, and subsequent start-up of the project if a decision to proceed is ultimately made.

Q. In 2012, who was responsible for the New Nuclear Projects organization?

In 2012, the New Nuclear Projects organization fell under the leadership of the Executive Vice President of Engineering and Construction, who was supported directly by a Licensing Director. The Licensing Director was supported by multiple Licensing Engineers and Document Control personnel, as well as by a matrix relationship to other departments within FPL.

Q. Who was responsible for the Project Development organization in 2012?

Throughout 2012, the Project Development organization also fell under the leadership of the Executive Vice President of Engineering and Construction. The organization is led on a day-to-day basis by a Senior Director of Development who was supported via matrix relationships by a variety of FPL functional departments.

1	Q.	What internal FPL departments supported the New Nuclear Projects and
2		Project Development organizations in 2012?
3	A.	Both organizations received support from FPL's Juno Environmental Services,
4		Law Department, and ISC, among others.
5	Q.	Did Concentric have any observations related to the PTN 6 & 7
6		organizational structure in 2012?
7	A.	Yes. Concentric believes the organizational structure appropriately assigned
8		responsibility to those employees best equipped to respond to the project needs
9		and properly reflected the project's focus on the licensing and permitting stage
10		that the project is currently in.
11	Q.	What major milestones were achieved by PTN 6 & 7 in 2012?
12	A.	The main focus of the New Nuclear Project in 2012 was to maintain progress in
13		the facilitation of the federal and state licensing reviews. To that end, PTN 6 &
14		7 achieved several important milestones.
15		Since its completion in September 2011, the project's state Site
16		Certification Application ("SCA") has continued to move forward in the review
17		process. Reports from both county and state level agencies provided analysis of
18		the transmission and plant portions of the project, including the ongoing review
19		of two alternative transmission corridors that were formally proposed in
20		December 2012. New Nuclear Project staff has maintained an ongoing dialogue
21		with these agencies in support of the Environmental Impact Statement ("EIS")
22		for the federally authorized land exchange with the Everglades National Park.
23		On November 16, 2012, FPL submitted a draft SCA amendment to reflect

updated information. In addition, work was focused on an Underground Injection Control ("UIC") well construction permit application.

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On the federal licensing front, throughout 2012 the project continued to respond to Requests for Additional Information ("RAIs") from the NRC as the agency's staff reviews the PTN 6 & 7 COLA. On May 4, 2012, the NRC identified two issues with FPL's RAI responses and placed the review of certain portions of the FPL COLA under review, awaiting revisions to a restricted set of RAI responses and reviews of the QA programs in place within the project and within one of the project's contractors. I discuss this issue in greater detail below. QA audits of the internal and external review processes for RAI responses were completed in July 2012 and communicated to the NRC. Finally, in December 2012, FPL submitted the fourth revision of its COLA, which incorporates data addressed in the responses to RAIs throughout 2012.

In addition, FPL applied for zoning approval of its Radial Collector Wells and Reclaimed Water Treatment Facility with Miami-Dade County ("MDC") in July 2012. An initial hearing to determine whether ancillary services associated with water treatment comply with MDC's land-use regulations was held in December 2012.

Were there changes in 2012 that affect expectations for the timing of future regulatory approvals?

As I mentioned above, on May 4, 2012, the NRC sent a letter to FPL in which it identified concerns with responses to a subset of the agency's RAIs that were submitted in the Fall of 2011. The NRC stated that those issues affect the NRC Staff's ability to complete its safety and environmental reviews of certain sections

of the PTN 6 & 7 COLA. The concerns raised by the NRC fall into two specific categories: 1) geology, seismology and geotechnical engineering as discussed in Section 2.5 of the Final Safety Analysis Report ("FSAR"); and 2) alternative sites (Section 9.3 of the Environmental Report). With respect to Section 2.5 of the FSAR, the NRC directed FPL to conduct internal and external audits of its QA practices associated with specific RAIs. In terms of the Environmental Report, the NRC requested that FPL revise its site selection process to generate at least three inland alternative sites.

Two nuclear oversight evaluators performed audits of internal FPL management oversight and QA, and the results were conveyed to the NRC in a July 2012 public meeting. Those audits will be addressed later in my testimony. Work continues on the development of supplemental responses to the previously submitted FSAR 2.5 RAIs.

The effect these scheduling changes will have on the PTN 6 & 7 Project (if any) is currently unknown. If review of the remaining portions of the COLA continues, it is possible that there will be no delay in the review schedule. As of year-end 2012, FPL expected those responses to be complete in February 2013 and a new schedule to be released in early 2013.

In addition to schedule uncertainty on the timing of the federal licensing process, there have been changes to the timing of the SCA process. FPL has been in discussions with MDC over key terms in land-use and zoning policy that affect the siting of the reclaimed water facility required for PTN 6 & 7. A hearing before the MDC County Commissioners was held on this issue in December 2012, and the matter was expected to be resolved in early 2013.

Schedule delays associated with resolution of the land-use issues have caused the public hearings on the project's SCA to be delayed. As of December 31, 2012, that hearing was expected in July 2013. Because the SCA is not a critical path schedule element, those changes are expected to have no effect on the current commercial operation dates for the new units.

Q. Do challenges facing the NRC affect the PTN 6 & 7 Project?

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The NRC was presented with two significant challenges in 2011 that continued to affect the nuclear industry in 2012. In March of that year, the earthquake near Japan's Fukushima Daiichi Nuclear Generating Station prompted the NRC to shift considerable personnel resources to an emergency task force assigned with ensuring that both existing and proposed U.S. nuclear facilities are adequately protected from similar seismic events. An earthquake that struck Virginia only months later caused additional reassignment of NRC engineering staff members to an assessment of that incident. As a result of those emergent priorities, some members of the teams assigned to review licensing applications for new nuclear projects were tasked with other assignments, delaying technical reviews of new nuclear licensing applications. The PTN 6 & 7 Project is not alone in having been affected by those staffing challenges. Exelon, Tennessee Valley Authority, PSEG, and other projects have also received revised review schedules. In addition, ongoing budget discussions within the federal government have created uncertainty with respect to the NRC's budget. FPL has been made aware that constraints have limited the extent to which the NRC can use outside expert technical contractors (a resource that is typically heavily relied upon by the NRC) to assist in its review of licensing applications.

O.	Please d	escribe what	decisions	related to	PTN 6 & '	7 were made in	2012
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FPL determined that continuing to extend PTN 6 & 7's reservation agreement with Westinghouse for reactor vessel head ultra-heavy forgings presented the best value to customers. That agreement was entered into in 2008 when the global market for ultra-heavy forging was becoming increasingly constrained, and, as of year-end 2012, had been extended to March 31, 2013. The constraints on that market have loosened considerably, and FPL has continued to maintain flexibility with regard to the agreement by regularly extending the terms while the Company evaluates the risks and benefits of maintaining the reservation.

In addition, during the process of completing its EIS for the Everglades Land Swap, the National Park Service has indicated that it would prefer to consider additional transmission corridors that were not originally suggested. Despite the fact that the submission deadline had passed for the submission of alternative routes, FPL agreed to re-open the review process to allow interveners to suggest additional alternatives for analysis, increasing the robustness of the review process. As a result, two new proposed pathways were introduced in December 2012 and are currently under review by FPL and state and federal agencies.

Lastly, due to remaining uncertainty with the timing of the NRC's license review process for PTN 6 & 7, FPL has made plans to reevaluate its execution schedule for the units after the NRC publishes a new review schedule.

No other major decisions affecting the direction of the project were made in 2012.

1	Q.	Was PIN 6 & 7 deemed feasible by the Company during the period of
2		your review?
3	A.	Yes. In the second fiscal quarter of 2012, the Company performed a feasibility
4		analysis regarding PTN 6 & 7, concluding that the project continued to be
5		feasible in five of the seven scenarios of fuel and environmental compliance
6		costs considered. FPL revisits its feasibility analysis on an annual basis in
7		accordance with NCRC requirements.
8		
9		Project Estimating and Budgeting Processes
10	Q.	Please describe how the 2012 project budgets were developed for PTN 6 &
11		7.
12	A.	As in prior years, the PTN 6 & 7 budgets were developed based on feedback
13		from each department supporting the New Nuclear Project. Those budgets
14		included a bottom-up analysis that assessed the resource needs of each
15		department during the year, and included an adequate contingency (i.e., 15%) for
16		undefined scope or project uncertainties.
17	Q.	Was the process used by PTN 6 & 7 to develop its budgets consistent with
18		the Company's policies and procedures?
19	A.	Yes, the process utilized by PTN 6 & 7 to develop its 2012 budgets was
20		consistent with FPL's corporate procedures, which outline the process to be
21		used by each business unit when developing annual budgets.
22		No changes were made to the procedures that govern the development
23		of project budgets during 2012.

1	Q.	What mechanisms did the PTN 6 & 7 Project team use to monitor budget
2		performance in 2012?
3	A.	The PTN 6 & 7 Project team used numerous reports to manage budget
4		performance. Those reports are more fully described by FPL Witness Scroggs
5		on Exhibit SDS-4. Throughout the year, on a monthly basis, the PTN 6 & 7
6		Project management team received several reports detailing budget variances by
7		department, with explanations of the variances. Those reports included a
8		description of all costs expended in the current month and quarter as well as
9		year-to-date and total cumulative spending. In addition, the PTN 6 & 7 Project
10		team published quarterly "Due Diligence" reports for the Company's senior
11		executives. Further, project management presented a status update to FPL's
12		senior management on a monthly basis. Those presentations included a
13		description and explanation of any budget variances or significant project
14		challenges.
15	Q.	Are those reporting mechanisms consistent with the PTN 6 & 7 Project
16		Execution Plan?
17	A.	Yes. Reporting mechanisms in place throughout 2012 are consistent with the
18		PTN 6 & 7 Project Execution Plan, which was last revised in March 2010.
19	Q.	Within the PTN 6 & 7 Project team, who was responsible for tracking and
20		reporting project expenditures?

Responsibility for tracking and reporting project expenditures was held by the

PTN 6 & 7 Project Controls Manager, who worked with a Senior Financial

Analyst to review and approve significant vendor invoices, and to track the

project's expenditures relative to PTN 6 & 7's annual budget. The processes in

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1	place for approving invoices and tracking project expenditures are codified in
2	formal procedures used by the PTN 6 & 7 Project team.

- 3 Q. Did Concentric have observations related to the PTN 6 & 7 budget 4 processes?
- 5 A. Concentric found that in 2012 the PTN 6 & 7 Project team acted prudently 6 when developing its annual budget and in tracking its performance relative to the 7 annual budget. As in years past, the PTN 6 & 7 Project team developed a series 8 of reports that track budget performance on a cumulative and periodic basis, 9 along with a process for describing variances in actual expenditures relative to 10 the budget. The PTN 6 & 7 budget processes continue to include a variety of 11 mechanisms that ensure that the project's management and the Company's 12 senior management are well informed of the project's performance.
- 13 Q. What are your observations regarding the Company's Quarterly Risk 14 Assessments?

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A. The Quarterly Risk Assessments, which contain an assessment of key issues in 16 six areas (i.e., NRC License, Army Corps of Engineers Section 404b and Section 10 Permits, State Cite Certification, Underground Injection Control Permit, 18 Miami Dade County Zoning and Land Use, and Development Agreements), 19 along with FPL's mitigation strategy, continue to be important tools to assist the 20 Company in analyzing, monitoring, and mitigating risks. The Quarterly Risk Assessments also provide the Company with another method of tracking trends 22 in key issues facing the project, as well as the potential impacts to 23 implementation, cost, and schedule.

1 The Quarterly Risk Assessments are one of the methods by which FPL's 2 senior leadership is apprised of the PTN 6 & 7 Project's status. It is, therefore, 3 very important to clearly communicate all risks and the full suite of mitigation 4 strategies being considered for the project. In a prior review, I observed several 5 opportunities to improve the Quarterly Risk Assessment, including the 6 identification and explanation of "fall back" or "Plan B" options for listed risks, 7 and I believe that opportunity to strengthen the Quarterly Risk Assessments 8 remains. Including a discussion of alternatives will help executives grasp the 9 importance of properly mitigating risk, and of achieving risk-related milestones. 10 It will also keep the project focused on maintaining and developing the 11 alternative approaches, reducing overall risk to the project. 12 Q. Has FPL developed a cost estimate that is sufficiently detailed for the 13 . current phase of the project? 14 Α. Yes. FPL's cost estimate is currently indicative in nature and will need to be 15 much more definitive before FPL commits to the construction phase of the 16 project. The Company plans to obtain a more definitive cost estimate as the 17 project progresses beyond the licensing phase. 18 Q. Did FPL review its overnight cost estimate for the PTN 6 & 7 Project? 19 A. Yes. FPL evaluated whether design changes that have been incorporated by 20 Westinghouse in response to the Fukushima events are likely to materially affect 21 FPL's cost estimate for PTN 6 & 7. 22 After conducting a thorough review of cost trends among other AP1000 23 projects, FPL determined that no change in its cost estimate is warranted at this 24 time. The Company plans to continue monitoring cost trends among the other

1		utilities pursuing new nuclear units, and will work with them and its contractors
2		to update cost estimates in the future, as appropriate.
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4		Project Schedule Development and Management Processes
5	Q.	Please describe how the PTN 6 & 7 Project team produced and managed
6		the PTN 6 & 7 schedule in 2012.
7	A.	The initial PTN 6 & 7 Project schedule was developed earlier in PTN 6 & 7's life
8		cycle. This schedule continues to be refined and managed using an industry
9		standard software package developed by Primavera Systems, Inc., which I
10		described in the context of the EPU Project's schedule development.
11		As I discussed above, state and federal review schedules continue to
12		evolve. FPL continues to believe that the project can be successfully completed
13		within the current commercial operations schedule. When a revised schedule
14		from the NRC becomes available, FPL will evaluate the effect that any schedule
15		adjustments may have on the project timeline, including the assessment of
16		whether early construction phases can be further condensed to capture lost time
17		from extended regulatory reviews.
18	Q.	What procedures or project instructions existed in 2012 to govern the
19		development and refinement of the PTN 6 & 7 schedule?
20	A.	New Nuclear Project - Project Instruction 100 continues to govern the
21		development, refinement and configuration of the project schedule. No
22		substantive changes were made to this project instruction in 2012.
23	Q.	What mechanisms were in place to ensure that the PTN 6 & 7 Project
24		team prudently managed its schedule performance?

1	A.	The PTN 6 & 7 Project team proactively monitored and managed its schedule
2		performance on a weekly and monthly basis. In addition, the PTN 6 & 7 Project
3		team has incorporated similar reporting requirements into its contracts with key
4		vendors, such as Bechtel. As a result, Bechtel was required to submit monthly
5		progress reports detailing its progress to date, including any projected delays.
6	Q.	Did Concentric have any observations related to how the PTN 6 & 7
7		Project team managed and reported its schedule performance in 2012?
8	A.	Yes. Concentric believes PTN 6 & 7 has taken appropriate steps to prudently
9		manage and report on its schedule performance, which include keeping executive
10		management informed on the project's progress against its schedule plans.
1		
12		Contract Management and Administration Processes
13	Q.	Did PTN 6 & 7 require the use of outside vendors in 2012?
		Yes. In order to avoid the need to recruit, train and retain the significant number
14	A.	res. In order to avoid the need to recruit, train and retain the significant number
14 15	A.	of employees required to obtain a COL and State Certification, to complete
	A.	
15	A.	of employees required to obtain a COL and State Certification, to complete
15 16	A.	of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and
15 16 17	A.	of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local agencies, FPL continued to use a number of outside vendors in 2012.
15 16 17 18	A.	of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local agencies, FPL continued to use a number of outside vendors in 2012. Those vendors were utilized to provide ongoing post-submittal support, among
15 16 17 18	A. Q.	of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local agencies, FPL continued to use a number of outside vendors in 2012. Those vendors were utilized to provide ongoing post-submittal support, among other tasks. As has been the case in years past, FPL's use of outside vendors and
115 116 117 118 119		of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local agencies, FPL continued to use a number of outside vendors in 2012. Those vendors were utilized to provide ongoing post-submittal support, among other tasks. As has been the case in years past, FPL's use of outside vendors and contractors is consistent with expectations in the new nuclear industry.
115 116 117 118 119 120		of employees required to obtain a COL and State Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local agencies, FPL continued to use a number of outside vendors in 2012. Those vendors were utilized to provide ongoing post-submittal support, among other tasks. As has been the case in years past, FPL's use of outside vendors and contractors is consistent with expectations in the new nuclear industry. How did the PTN 6 & 7 Project team make certain that it was prudently

interactions with vendors, produced a desktop Procurement Process Manual that provides more detailed instructions for implementing the corporate procedures, while also containing nuclear-specific procurement procedures. The corporate procedures, along with the Procurement Process Manual, are sufficiently detailed to ensure that ISC prudently manages the procurement activities that must take place to support an endeavor such as PTN 6 & 7. Additionally, those procedures clearly state a preference for competitive bidding except in instances where no other supplier can be identified, in cases of emergencies, or when a compelling business reason not to seek competitive bids exists.

10 Q. Were any procedures used by the ISC team revised in 2012?

A.

In 2012, no changes were made to procedures governing contractor oversight and management. However, several changes were made to procedures related to contractor selection. The threshold for procurements that require competitive bidding was changed from \$25,000 to \$50,000, with a corresponding change to the SSJ threshold. Finally, the instructions outlining the use of pre-determined sources were revised to require approval from an ISC Director level or a higher level in the project organization.

18 Q. Did Concentric review examples of how these processes were 19 implemented throughout 2012?

A. Yes. Concentric reviewed information related to new contracts, purchase orders and change orders issued for the PTN 6 & 7 Project that involved at least \$100,000. Relative to early phases of the project, PTN 6 & 7 entered into comparatively few new contracts in 2012, executing only seven such contracts

1	during the year.	Of these, to	wo were	competitively	bid a	and five	were	single-

- 2 sourced.
- What processes were in place to ensure that PTN 6 & 7 received the full value for the goods and services that were procured in 2012 and that appropriate charges were invoiced to the project?
- 6 A. In order to ensure that the Company and its customers received the full value of 7 the goods and services that were procured, the PTN 6 & 7 project directors and 8 their staffs were responsible for reviewing each invoice received from the major 9 PTN 6 & 7 Project vendors. To perform that review, the Business Manager's 10 staff received the invoices from each of the project's vendors. Upon receipt, an 11 Invoice Review/Verification Form that detailed which technical or functional 12 representative was responsible for reviewing each section of the invoice was 13 attached to the invoice. That form and the respective invoice were then sent to 14 each reviewer to verify that the appropriate charges were included in the invoice 15 and that the work product met PTN 6 & 7's needs and contractual provisions 16 prior to payment. When discrepancies were identified, FPL sought a credit on a 17 future invoice or deducted the amount from the current invoice depending on 18 discussions with the vendor. Similar processes are utilized by the FPL 19 departments that support PTN 6 & 7.
- Q. Were there instances in 2012 in which there was disagreement between the project and its vendors over charges included in invoices?
- 22 A. Yes. In 2012 FPL was charged for warranty work that was performed by
 23 Bechtel. Upon discovering that warranty work would be required, FPL
 24 requested that Bechtel track billings under special billing codes. As a matter of

1	course, the Company then withheld payment of the aggregate overcharge when
2	completing payment of monthly invoices.

The work included in these invoices pertains to work performed in response to the NRC's May 4, 2012 letter in which the agency expressed concerns with RAI responses pertaining to Section 2.5 of the FSAR. The Project Director and Project Controls staff continue to work with Bechtel to resolve these billing issues.

8 Q. Does Concentric have any observations related to FPL's management of 9 the contract management and administration processes?

Yes. FPL managed the contract management and administration process according to its corporate procedures and guidelines in 2012. In addition, the Company continued to follow recommendations that Concentric has made in prior years with respect to contracts and ISC management.

Q.

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A.

Internal Oversight Mechanisms

What internal reporting mechanisms were used to inform the Company's senior management of PTN 6 & 7's status and key decisions?

As I discuss above, the PTN 6 & 7 Project team continued to use a number of periodic reports in 2012 to inform the project management team and the Company's executive management of progress with PTN 6 & 7. Those reports are described in greater detail in the direct testimony of FPL Witness Scroggs and are used to make certain that the costs PTN 6 & 7 is incurring are the result of prudent decision-making processes. Those reports included monthly reports that detailed key budget and schedule performance.

1 Q. What other internal oversight and review mechanisms exist for the New

2 Nuclear Project?

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3 A. PTN 6 & 7 is subject to FPL's corporate procedures, but has been developed 4 outside of the FPL Nuclear Division. Thus, PTN 6 & 7 has not been 5 automatically subject to the Nuclear Division's policies. 6 condition, and to remain in compliance with the NRC's QA requirements, the 7 FPL QA/QC department developed a procedure, QI-2-NNP-01, that identifies 8 which FPL Nuclear Division polices are applicable to PTN 6 & 7. QA/QC staff 9 has created a regular update schedule to revise and update this procedure in 10 order to adapt to the dynamic nature of the project.

Additionally, there were two primary active internal oversight and review mechanisms for PTN 6 & 7: the FPL Internal Audit Department and the FPL QA/QC department.

14 Q. Please describe the FPL Internal Audit Department and its function.

FPL's Internal Audit Department, described earlier, performs regular audits of PTN 6 & 7, not only focusing on the eligibility of the costs being recorded to the NCRC for recovery from customers, but also considering internal controls as part of its procedures, and commenting to PTN 6 & 7 if it finds areas for improvement. Each year, the FPL Internal Audit Department performs an audit of PTN 6 & 7 to test whether charges billed to the project are appropriate and that those charges are being accounted for correctly. Very often, findings are resolved during the course of the audit, and any unresolved items are tracked within a database to make sure they are completed on schedule. Costs incurred by the New Nuclear Project in 2012 are currently being reviewed by the

- 1 Company's Internal Audit Department. As of December 31, 2012, a final report
 2 was expected to be issued by Internal Audit in May 2013.
- 3 Q. Please describe the FPL QA/QC function and its purpose.

A.

- 4 A. The FPL QA/QC function has a similar mandate with regard to PTN 6 & 7 as it does for the EPU Project, which was discussed earlier in my testimony.
- Q. Please describe the QA/QC function's findings from the audit performed in response to the NRC's May 4 Letter regarding questions on Section 2.5 of the FSAR.
 - As I have discussed in testimony filed in prior years, FPL has reasonably and appropriately relied on Bechtel to prepare responses to RAIs in situations in which FPL staff does not have the specific expertise required to address questions. This is the case for questions related to geologic seismology, which is discussed in Section 2.5 of the FSAR, a subsection of the PTN 6 & 7 COLA. In January 2012, the NRC began to express concern with responses that had been submitted to RAIs pertaining to this portion of the COLA. The NRC's subsequent letter to FPL indicated that several responses had failed to address the questions posed, and that there were indications that the QA protocols in place to ensure accurate responses may have been lacking.

In order to determine whether there were any faults in the QA programs as implemented by the PTN 6 & 7 Project, the FPL QA/QC team undertook an extensive audit of FPL management oversight and QA processes in the areas of geology, seismology, and geotechnical engineering. Despite finding that FPL's framework for meeting regulatory requirements is satisfactory, the QA audit confirmed that several responses pertaining to seismology and geology submitted

to the NRC were of poor quality and had failed to adequately address the questions that had been asked. In addition, the report indicated that while FPL had initially failed to identify the need for additional expert resources to confirm the accuracy of certain RAI responses, the Company's decision to immediately hire an outside industry expert to support its RAI response program was the appropriate corrective action.

7 Q. Did the report find any deficiencies with Bechtel's QA processes?

Q.

A.

Yes. The audit found deficiencies in the implementation of Bechtel's independent QA oversight of RAI responses. Specifically, there was no independent Bechtel QA oversight associated with the responses to RAIs pertaining to FSAR Section 2.5, and responses had been submitted without all relevant questions being addressed.

FPL's QA Manager communicated specific concerns identified in the QA audit to Bechtel, which undertook significant efforts to rectify the issues identified by the NRC and the FPL QA audit. In September 2012, the FPL QA/QC team conducted a comprehensive audit of Bechtel's processes for responding to NRC RAIs. That audit was conducted at Bechtel's offices in Frederick, Maryland, and involved an extensive review of work product samples and in-person interviews. The results of the audit confirmed that the Bechtel QA program, as revised and improved in response to concerns raised by the NRC and FPL, is being implemented properly.

Did the QA/QC function conduct an Extent of Condition review to determine whether similar problems exist in FPL's responses to other parts of the COLA?

1	A.	Yes it did. An Extent of Condition review found similar concerns with review
2		processes for COLA documents beyond those associated with FSAR Section 2.5.
3		Specifically, the audit found that internal and external reviews had not detected
4		errors in a subset of responses that had been submitted to the NRC.
5		However, in all cases identified, FPL was able to detect and rectify errors
6		and resubmit responses before any issues were raised by the NRC.
7	Q.	How did FPL respond to the NRC's early indications of concern with the
8		responses related to Section 2.5 of the FSAR?
9	A.	Because FPL does not have internal expertise in geologic seismology, FPL
10		contracted with AMEC, a recognized industry leading expert in geology and
11		seismology, in January 2012, immediately after learning of the NRC's concerns.
12		The scope of the contract with AMEC included a review of all responses that
13		had been provided on FSAR Section 2.5, as well several additional components
14		of the COLA. AMEC had performed similar work on behalf of Progress Energy
15		Florida for the proposed Levy nuclear plant.
16	Q.	How else has FPL responded to the QA findings?
17	A.	Lessons learned in the evaluation of responses to questions on Section 2.5 of the
18		FSAR have been used to improve the technical review of all RAI responses
19		provided to the NRC. FPL also has confirmed that Bechtel has responded
20		vigorously to the NRC's concerns and has implemented revisions to its QA
21		processes to ensure that similar errors do not occur in any of its responses.
22	Q.	Has FPL issued warranty claims for work performed by Bechtel in
23		response to the issues raised by FPL and the NRC?

1	A.	Yes. FPL has continued to work with Bechtel to resolve these warranty claims
2		and, as of year-end 2012, expected to resolve all outstanding claims in 2013.
3	Q.	What is your overall assessment of FPL's decisions, policies and
4		procedures as they relate to the issues raised by the NRC?
5	A.	My overall assessment is that the issues raised by the NRC are not the result of
6		imprudent management or decision making by FPL. FPL reasonably relied on
7		an industry expert (i.e., Bechtel) to perform the initial RAI responses, acted
8		quickly and appropriately to the issue by hiring an additional expert (i.e., AMEC),
9		increased its internal and vendor oversight of the RAI response process, and
10		issued warranty claims to Bechtel for the corrected work.
11	Q.	Does the Company maintain other internal oversight and review
12		mechanisms for PTN 6 & 7?
13	A.	Yes. The Company maintains other internal oversight mechanisms that are
14		available to help ensure that PTN 6 & 7 is prudently incurring costs. The first of
15		those mechanisms is the FPL Corporate Risk Committee. This committee
16		consists of FPL director-level and other senior employees, and is charged with
17		ensuring that the project appropriately considers risks when making key project
18		decisions. That committee is available to the project when necessary as an
19		additional oversight tool.
20	Q.	Did Concentric have any observations related to PTN 6 & 7's internal
21		oversight mechanisms?
22	A.	Yes. Concentric has found that FPL's internal oversight mechanisms were
23		prudently and appropriately applied in 2012.
24		

1		External Oversight Mechanisms
2	Q.	What external review mechanisms were used by the PTN 6 & 7 Project
3		team in 2012 to ensure the Company is prudently incurring costs?
4	A.	PTN 6 & 7 and FPL have been subject to several external reviews. These
5		reviews are utilized to make certain industry best practices are incorporated into
6		PTN 6 & 7 and to improve overall project and senior management performance.
7		These reviews include Concentric's review of the Company's activities and
8		project controls and the FPSC Staff's financial and internal controls audits.
9		Those reviews are in addition to NextEra Energy's company-wide audit of its
10		financial and internal controls, discussed earlier.
11	Q.	Are there other external information sources relied upon by the PTN 6 & 7
12		Project team?
13	A.	Yes. In 2012, FPL maintained membership in several industry groups that relate
14		to the development of new nuclear projects. Those groups include the NuStart
15		Consortium, APOG (the AP1000 owners group), the Electric Power Research
16		Institute, and NEI, among others. Each of those groups provides the PTN 6 &
17		7 Project team with access to a breadth and depth of information that can be
18		used to enhance the PTN 6 & 7 Project team's effectiveness.
19	Q.	Did Concentric have any observations related to the external oversight
20		mechanisms utilized by FPL in 2012?
21	A.	Based on Concentric's review to date, Concentric believes the PTN 6 & 7
22		Project team is proactively seeking to incorporate best practices into the
23		management of PTN 6 & 7. That is being achieved by retaining outside experts
24		to review and comment on certain aspects of the project and by soliciting

external information sources that can provide useful guidance to the project team.

A.

Section VII: Conclusions

Q. Please summarize your conclusions.

It is my conclusion that there were no imprudently incurred costs or project management deficiencies that led to imprudently incurred costs for the EPU Project and PTN 6 & 7 in 2012. FPL's decision making and management actions as they related to the EPU Project in 2012 included: management and receipt of the necessary NRC license amendment request ("LAR") approvals for both the PTN and PSL sites; management of five implementation outages, including one mid-cycle outage; incorporation of lessons learned from earlier outages into the design, engineering, and implementation of subsequent outages; and the re-assignment of work scope from the EPC vendor to other, qualified specialist firms in order to efficiently manage the multiple outages, along with rigorous oversight and management of those vendors. For PTN 6 & 7, FPL continued its methodical approach to achieving its licensing goals, which will allow it to continue to create the option to build new nuclear capacity for the benefit of its customers. As a consequence, it is my opinion that FPL's 2012 expenditures on the EPU Project and PTN 6 & 7 were prudently incurred.

In addition, it is important to note that for over three decades nuclear power has provided a number of substantial benefits to utility customers in Florida. Those benefits include electric generation with virtually no GHG emissions, fuel cost savings, fuel diversity, reduced exposure to fuel price

volatility and more efficient land use. As a result, it is prudent for FPL to
develop additional nuclear capacity for the benefit of its customers. In order to
do so, FPL is carefully managing the EPU Project and PTN 6 & 7 through
capable project managers and directors who are guided by detailed company
procedures and appropriate management oversight.

- 6 Q. Does this conclude your testimony?
- 7 A. Yes, it does.

	1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION FLORIDA POWER & LIGHT COMPANY AMENDED REBUTTAL TESTIMONY OF JOHN J. REED DOCKET NO. 130009 July 26, 2013
	2		FLORIDA POWER & LIGHT COMPANY
	3		AMENDED REBUTTAL TESTIMONY OF JOHN J. REED
	4		DOCKET NO. 130009
	5		July 26, 2013
	6		
	7	Q.	Please state your name and business address.
	8	Α.	My name is John J. Reed. My business address is 293 Boston Post Road West,
	9		Marlborough, Massachusetts 01752.
	10	Q.	Have you previously filed direct testimony in this proceeding?
	11	Α.	Yes, I have.
	12	Q.	Please state the purpose of your rebuttal testimony.
	13	A.	I have been asked by Florida Power & Light Company ("FPL" or the
	14		"Company") to respond to the direct testimony of William Jacobs, Jr., and
	15		specifically Witness Jacobs' recommendation that the Florida Public Service
	16		Commission (the "Commission") disallow \$200 million of Extended Power
	17		Uprate ("EPU") project (i.e., EPUs at Turkey Point ("PTN") and St. Lucie
	18		("PSL"), which I refer to as the "EPU Project" or the "Project") costs incurred
	19		by FPL.
_	20	Q.	Please summarize your conclusions regarding the direct testimony of
COM 5	21		OPC Witness Jacobs.
APA I	22	A.	It is my opinion that Witness Jacobs' recommendation to disallow \$200 million
ENG _	-2 3		of EPU Project costs is inconsistent with both a reasonable application of the
(DM) 5	_24		prudence standard (as described in my direct testimony in this proceeding and
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further in my rebuttal testimony) and the scope of this proceeding. Specifically, Witness Jacobs' recommendation to disallow \$200 million is not linked to any imprudent decision or action by the Company in 2012 (i.e., the period of review in this proceeding) or in any other period. A reasonable application of the prudence standard involves evaluating decisions and actions, and, if there is a finding of imprudence, quantifying the cost impact that can be attributed to those decisions and actions. Witness Jacobs has not done that and simply relies on a results-oriented analysis to create a recommended disallowance.

The prudence standard also requires an exclusion of hindsight. Witness Jacobs, however, embraces rather than excludes hindsight from his evaluation, as he performs a review of the EPU Project based on information that was not available at the time FPL had to make its decisions, and uses the results of that approach to question decisions made by FPL as far back as 2007 (i.e., the year FPL decided to undertake the EPU Project). All of FPL's decisions that occurred prior to 2012 were previously reviewed by the Commission, and were found to be reasonable. Witness Jacobs recounts how all of his previous challenges to those actions were found by the Commission to be without merit, but he attempts to revisit those recommendations, and reverse the Commission's prior findings, based solely on the fact that the Project has turned out to cost more than expected. That is the epitome of reliance on hindsight. For that reason, among others, I conclude that the Commission should reject Witness Jacobs' recommendation to disallow \$200 million of EPU Project costs.

I also disagree with Witness Jacobs' suggestions that excluding sunk costs from forward-looking feasibility analyses is a flawed approach, and that the PTN

and PSL uprates should be evaluated on a separate, stand-alone basis. I note that both of these arguments by Witness Jacobs have been rejected by the Commission in the past. The Company's assessment of the economic feasibility of the EPU Project must only focus on avoidable expenses and must ignore sunk or unavoidable costs that have already been incurred. In addition, because of the high levels of joint costs and project interdependence, the EPU Project is best considered on an integrated basis as a single project.

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- Q. Please briefly describe the testimony that was filed by Witness Jacobs that
 you will address in your Rebuttal Testimony.
 - A. In his direct testimony, Witness Jacobs reviewed and evaluated FPL's request for authority to collect historical and projected costs associated with the EPU Project and FPL's new nuclear project. Witness Jacobs accepts the charges incurred by FPL for the new nuclear project. He recommends, however, a disallowance associated with the EPU Project. Witness Jacobs assessed the economic feasibility of the EPU modifications at PTN and PSL on separate bases and concluded that the EPU modifications at PTN are uneconomic. Witness Jacobs recommends an arbitrary disallowance of \$200 million, which he asserts at page 22 of his testimony "provides only partial protection to the ratepayers" based on the difference between Witness Jacobs' assessment of actual spending at PTN in 2012 and the estimate provided by the Company in April 2012. As discussed earlier, Witness Jacobs does not identify any specific decision that led to this \$200 million of "disallowed" cost as having been imprudent, and he has not tied this amount to any excess costs based on what he believes would have been an alternative prudent decision.

1	Q.	Witness Jacobs implies on page 19 of his testimony that FPL's decision to
2		undertake the PTN EPU was imprudent. Is that decision relevant to this
3		proceeding?
4	Α.	No. FPL's decision to undertake the EPU Project, including modifications as
5		PTN, was approved by the Commission over five years ago in the certificate of
6		need filing in Docket No. 070602-EI. ¹ Since that time, the Commission has
7		approved FPL's request to recover all of its prudently-incurred costs through the
8		annual Nuclear Cost Recovery Clause ("NCRC") proceedings. Witness Jacobs
9		therefore suggests that the Commission essentially reverse former prudence
10		findings, which I believe is both unfounded and inconsistent with NCRC rules
11		and basic ratemaking principles.
12	Q.	Witness Jacobs asserts that the PTN EPU was uneconomic in 2012, which
13		suggests the project should have been abandoned. Does Witness Jacobs
14		demonstrate that FPL should have abandoned the PTN EPU in 2012?
15	A.	No, nor could he. In 2012, at such a late stage in the implementation process of
16		a mega project such as the EPU Project, there would typically be very few
17		remaining costs that were truly avoidable. As stated in my direct testimony, at
18		page 20, in late 2012 the Engineering Analysis Phase of the EPU Project was
19		completed, the Long Lead Equipment Procurement Phase and the Engineering
20		Design Modification Phase were essentially completed, and the Implementation
21		Phase of the EPU Project was well underway and nearing completion. At that
22		point, therefore, the vast majority of the EPU Project costs were either spent
23		(i.e., sunk costs), or unavoidable (i.e., unspent but contractually obligated). In my

stages of the Project, including incorporation of lessons learned from earlier outages into the design, engineering, and implementation of subsequent outages, and the re-assignment of work scope from the Engineering, Procurement, and Construction ("EPC") vendor to other, qualified specialist firms in order to efficiently manage the multiple outages, along with rigorous oversight and management of those vendors. Witness Jacobs fails to address those decisions and actions by the Company. Instead, he focuses on the end result with no analysis of the challenges faced by FPL in implementing the EPU Project and the Company's response to those challenges.

Q.

A.

Is Witness Jacobs correct to assess the prudence of FPL's decision to undertake and complete the PTN uprate based solely on the final cost of the project?

No. Witness Jacobs concludes that the PTN EPU is uneconomic based on his assessment of the near-completed cost of the PTN modifications. Further, Witness Jacobs states at page 11 of his testimony that "[n]ow that the full cost of the Turkey Point EPU project is finally coming into focus, the magnitude of the harm to ratepayers can be comprehended," and at page 19 of his testimony that "[s]ometimes the impact of an imprudent decision does not show up in the form of unreasonable (and even inordinate) costs until subsequent periods." This is incorrect and an unreasonable application of the prudence standard described in my direct testimony for two reasons. First, Witness Jacobs implies that we do not know whether a decision is prudent or imprudent until the final cost is known. This approach clearly relies on hindsight and is a violation of the prudence standard that has been consistently applied by the Commission.

Second, Witness Jacobs points to and seeks to revisit decisions that happened long before 2012 (i.e., the period under review), such as FPL's decision to "undertake the Turkey Point EPU." As stated above, those decisions were evaluated and approved by the Commission in prior NCRC proceedings, and Witness Jacobs' implication that they should be revisited now is clearly inconsistent with the scope of this proceeding and a reasonable application of the prudence standard. Further, Witness Jacobs' recommendation to assess the prudence of FPL's decision to undertake and complete the PTN uprate based solely on the final cost of the project is reminiscent of the highly unsuccessful "all-or-nothing" regulatory paradigm that was applied in some jurisdictions in the 1980s. It was the avoidance of this kind of hindsight-based review that led to the establishment of the NCRC, and the desire to avoid the highly contentious and destructive results that occurred in the 1980s.

14 Q. Please explain.

Α.

The regulatory processes applied to the development of nuclear generation in the 1980s were characterized by significant cost disallowances, at times owing to results-oriented hindsight reviews that determined whether plants turned out to be economic a decade or more after construction had begun. The standards used by regulators at that time evolved from traditional prudence reviews to include an "economically used and useful" standard that, based on hindsight, determined what portion of a plant's prudently incurred cost was "economically" useful in providing service to customers. The recovery of prudently-incurred costs was further narrowed by the adoption of more onerous standards such as an "economic benefits test" and eventually simple "risk sharing," whereby costs

1 were simply declared unrecoverable on the basis that the total cost was too large 2 for customers alone to bear the burden. By recommending a disallowance based 3 on the final cost of the EPU Project, regardless of the Commission's views on the prudence or imprudence of the actions of the utility, Witness Jacobs is 4 5 essentially calling for a return to mistaken methodologies of the distant past. The 6 Nuclear Cost Recovery rule, however, demonstrates that the Florida Legislature 7 and the Commission wished to provide a framework within which the Commission has the opportunity to address and avoid many flawed aspects of those past regulatory processes. Q. Did Witness Jacobs address any of the specific actions and decisions of the Company as they related to FPL's execution of the EPU Project? A. No. Witness Jacobs asserts at page 20 of his testimony that FPL Witness Jones has not established the reasonableness of FPL's PTN expenditures, yet Witness Jacobs does nothing to establish their unreasonableness other than to point out that the EPU Project's costs were higher than anticipated. inappropriate application of the prudence standard. Q. What is an appropriate application of the prudence standard as it relates to FPL's 2012 expenditures? As described in my direct testimony, at pages 11 and 12, the prudence standard is A. captured by three key features: (1) prudence relates to actions and decisions; costs themselves are not prudent or imprudent; (2) the standard incorporates a presumption of prudence, which is often referred to as a rebuttable presumption; and (3) there is a total exclusion of hindsight. An appropriate application of the prudence standard also considers a range of reasonable behavior regarding

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elements of the EPU Project that are within FPL's control. That standard of prudence is consistent with the standard applied by the Commission, many other state and federal utility regulators, the U.S. Supreme Court, and regulatory advisory groups such as the National Regulatory Research Institute ("NRRI").²

A.

Q.

Witness Jacobs has violated all of the above-mentioned features of an appropriate application of the prudence standard by: (a) focusing on the end result (i.e., total costs), rather than the Company's decisions and actions in implementing the EPU Project; (b) assuming imprudent management of the Project by the Company based on his assessment of increasing costs, rather than any analysis of specific decisions FPL made in implementing the Project; and (c), as described above, relying on hindsight.

Witness Jacobs states at page 21 of his testimony that if the Commission had known FPL's actual total calendar year 2012 expenditures in Docket No. 120009-EI, "it may have decided the issue of disallowance that OPC raised at that time differently." Do you agree with Witness Jacobs' speculation?

No. Witness Jacobs' argument is predicated on the Commission agreeing with the approach to determining a disallowance that Witness Jacobs presented in Docket No. 120009-EI. As Witness Jacobs acknowledges, at page nine of his testimony, the Commission did not adopt his recommendation in that proceeding. In addition, Witness Jacobs already concluded that the PTN EPU was uneconomic in the 2012 proceeding, and recommended a cap on FPL's recovery of EPU costs. Simply because Witness Jacobs finds the PTN uprate to be *more* "uneconomic" this year does not mean the Commission would have

reversed its rejection of his analytical framework and recommendations in that prior proceeding. In addition, as discussed by Witness Jones in his rebuttal testimony, it is notable that the final cost of the EPU Project on a cost per kilowatt basis is only modestly higher than the non-binding cost estimate presented by Witness Jones in April 2012 in Docket No. 120009-EI, despite what Witness Jacobs attempts to demonstrate in his testimony. Lastly, as discussed above, Witness Jacobs fails to consider that nearly all of the Project's costs were either sunk or unavoidable in 2012, and that FPL had to make its decision on whether or not to complete the project based on a comparison of avoidable costs and lost benefits. Witness Jacobs recommends a disallowance of \$200 million for the EPU Q. Project. Is such a disallowance formulated consistently with a sound application of the prudence standard? A. No. A proper application of the prudence standard involves: (a) finding that specific actions or decisions were within or outside a range of reasonable behavior; and (b) quantifying the impact of those specific actions or decisions. That quantification should occur by comparing what did occur to what would have occurred under a "minimally prudent" course of action. Witness Jacobs has done neither. His recommendation, therefore, is simply based on his view that the Project costs more than was expected or more than he now believes it is

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worth, and does not reflect any application of the prudence standard.

1	Q.	Witness Jacobs asserts that FPL Witness Sim has a "flawed insistence or
2		ignoring sunk costs." ³ Do you agree?
3	Α.	No. Sunk costs are costs that have already been incurred up to a given point in a
4		project and it is important to note that sunk costs cannot be avoided whether the
5		project is cancelled or not. The irrelevance of sunk costs for purposes of
6		determining the forward-looking economic feasibility of a project is a basic
7		principle of economics and corporate finance. ⁴ Due to the fact that sunk costs
8		cannot be changed or avoided based on decision-making today, those costs don't
9		affect or even enter into the analysis underlying a decision as to whether it is
10		economically advisable to complete a project or not.
11	Q.	Does Witness Jacobs' Exhibit No. WRJ-7, that he relies on, support his
12		position?
13	A.	No, in fact it supports my conclusion, which is the opposite of Witness Jacobs'
14		conclusion. Exhibit No. WRJ-7 of Witness Jacobs' direct testimony is an article
15		titled "Successful Software Management: How to Improve Your Decision
16		Making - Sunk Costs". The first page of that article states the following:
17 18		Sunk costs are money that you've already spent on one of the options, before making the decision. Regardless of which
19		option you choose, the money has already been spent. That
20		money is, for all intents and purposes, gone. If you choose
21		option A, the money is spent. If you choose option B, the
22 23		money is spent. If you choose to do nothing, the money has
24		still been spent. The result is that sunk costs should not be considered in your decisions. Sunk costs do not alter the future
25		costs and revenues of your options, so they should not be
26		included in the analysis.
27		Witness Jacobs' exhibit clearly supports the position that FPL Witness Sim has
28		taken, and provides strong support for the exclusion of sunk costs when
29		assessing the economic feasibility of large capital projects. Under the correct

- 1 methodology, there is no question that it was prudent for FPL to complete the
- 2 EPU Project, and that this decision maximized the benefits to ratepayers.
- 3 Q. Does this conclude your testimony?
- 4 A. Yes, it does.

Order No. PSC-08-0021-FOF-EI, Issued January 7, 2008, in Docket No. 070602-EI, <u>In re: Petition</u> for determination of need for expansion of Turkey Point and St. Lucie nuclear power plants, for exemption from Bid Rule 25-22.082, F.A.C., and for cost recovery through the Commission's Nuclear Power Plant Cost Recovery Rule, Rule 25-6.0423, F.A.C.

For example, as contained in National Regulatory Research Institute, <u>The Prudent Investment Test in the 1980's</u>, April 1985.

Direct Testimony of William R. Jacobs, Jr., Ph.D., at 21.

See, e.g., Ross, Stephen A., Westerfield, Randolph W., and Jordan, Bradford, Jordan D., Fundamentals of Corporate Finance, 4th ed., at 280.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Cost	DOCKET NO. 130009-E
Recovery Clause	FILED: July 3, 2013

ERRATA SHEET

MARCH 1, 2013 TESTIMONY OF WINNIE POWERS

PAGE#	LINE#	
Page 3	Line 18	Change "(\$1,718,507)" to "(\$1,726,074)"
Page 3	Line 18	Change "\$234,370,947" to "\$234,363,379"
Page 3	Line 22	Change "\$1,718,507" to "\$1,726,074"
Page 4	Line 13	Change "\$1,718,507" to "\$1,726,074"
Page 4	Line 15	Change "\$234,370,947" to "\$234,363,379"
Page 9	Line 12	Change "\$3,884,294" to "\$3,876,726"
Page 9	Line 13	Change "\$5,701,842" to "\$5,705,405"
Page 9	Line 14	Change "\$7,332,596" to "\$7,347,934"
Page 9	Line 15	Change "\$5,515,047" to "\$5,519,255"
Page 10	Line 2	Change "\$1,298,309,799" to "\$1,298,471,769"
Page 10	Line 7	Change "\$1,194,776,378" to "\$1,194,850,323"
Page 10	Line 13	Change "\$110,611,569" to "\$110,615,132"
Page 10	Line 17	Change "\$5,701,842" to "\$5,705,405"
Page 10	Line 20	Change "\$7,520,744" to "\$7,505,125"
Page 10	Line 20	Change "\$7,214,153" to "\$7,198,815"
Page 11	Line 4	Change "\$7,332,596" to "\$7,347,934"
Page 12	Line 12	Change "\$85,107,276" to "\$85,111,451"
Page 12	Line 12	Change "\$84,590,266" to "\$84,594,473"
Page 12	Line 13	Change "(\$517,010)" to "(\$516,977)"
Page 12	Line 17	Change "\$5,515,047" to "\$5,519,255"
Page 13	Line 1	Change "\$2,002,403,888" to "\$2,002,423,826"
Page 13	Line 2	Change "\$1,913,267,000" to "\$1,913,808,590"
Page 13	Line 13	Change "\$2,002,403,888" to \$2,002,423,826"
Page 13	Line 13	Change "\$1,913,267,000" to "\$1,913,808,590"

MARCH 1, 2013 EXHIBITS OF WINNIE POWERS

EXHIBIT #	PAGE #	LINE #	
WP-1	Page 1	Line 16, Column (B)	Change "\$112,000,508" to
	-		" \$112,004,071"
WP-1	Page 1	Line 21, Column (B)	Change "\$7,214,153" to "\$7,198,815"
WP-1	Page 1	Line 22, Column (B)	Change "\$85,107,276" to "\$85,111,451"
WP-1	Page 1	Line 23, Column (B)	Change "(\$517,010)" to "(\$516,977)"
WP-1	Page 1	Line 24, Column (B)	Change "\$84,590,266" to "\$84,594,473"
WP-1	Page 1	Line 25, Column (B)	Change "\$202,415,988" to
			"\$202,408,420"
WP-1	Page 1	Line 27, Column (B)	Change "\$234,370,947" to
			"\$234,363,379"

Note that these corrections affect other lines/columns (i.e., subtotals and totals) of this exhibit. The result of this correction is a (\$7,568) decrease in FPL's requested 2012 revenue requirement true-up.

EXHIBIT #	PAGE #	LINE #	
WP-2	Page 2	Line 20	Change "\$1,391,412,421" to
			"1,391,407,477"
	Page 2	Line 28	Change "\$23,573" to "\$0"
	Page 2	Line 29	Change "\$8,094,706" to "\$340,950"
	Page 2	Line 31	Change "\$0" to "\$9,902,752"
	Page 2	Line 37	Change "\$19,101,012" to "\$21,226,435"
	Page 2	Line 51	Change "\$1,266,602" to "\$949,225
	Page 2	Line 53	Change "\$5,580,806" to "\$3,772,760"

Note that these corrections affect other lines/columns (i.e., subtotals and totals) on this exhibit.

EXHIBIT #	PAGE#	LINE #	
WP-3	Page 1	Line 63 (Total)	Change "\$32,212" to "\$34,927"
WP-3	Page 1	Line 76 (Total)	Change "\$1,968,384" to "\$1,969,844"
WP-3	Page 1	Line 86 (Total)	Change "\$85,107,276" to "\$85,111,451"

Note that these corrections affect other lines/columns (i.e., subtotals and totals) on this exhibit.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF WINNIE POWERS
4		DOCKET NO. 130009-EI
5		MARCH 1, 2013
6	Q.	Please state your name and business address.
7	A.	My name is Winnie Powers. My business address is 700 Universe Boulevard, Juno
8		Beach, FL 33408.
9	Q.	By whom are you employed and what is your position?
10	A.	I am employed by Florida Power & Light Company (FPL or the Company) as the
11		New Nuclear Accounting Project Manager.
12	Q.	Please describe your duties and responsibilities in that position.
13	A.	I am responsible for the accounting related to the new nuclear projects, which include
14		Turkey Point 6 & 7 (TP 6 & 7 or New Nuclear) and the Extended Power Uprate
15		Project at Turkey Point and St. Lucie Nuclear Plants (EPU or Uprate Project). I
16		ensure that the costs expended and projected for these projects are accurately reflected
17		in the Nuclear Cost Recovery Filing Requirements (NFR) Schedules. In addition, I
18		am responsible for ensuring that the Company's assets associated with these projects
19		are appropriately recorded and reflected in FPL's financial statements.
20	Q.	Please describe your educational background and professional experience.
21	A.	I graduated from the University of Florida in 1976 with a Bachelor of Science Degree
22		in Business Administration, majoring in Accounting. After college, I was employed
23		as an accountant by RCA Corporation in New York. In 1983, I was hired by

FPSC-COMMISSION CLERK

Southeastern Public Service Company in Miami and attained the position of manager of corporate accounting. In 1985, I joined FPL and have held a variety of positions in the regulatory and accounting areas during my 28 years with the Company. I obtained my Masters of Accounting from Florida International University in 1994. I am a Certified Public Accountant (CPA) licensed in the State of Florida, and I am a member of the American Institute of CPAs.

7 Q. Are you sponsoring or co-sponsoring any Exhibits in this case?

- 8 A. Yes, I am sponsoring the following Exhibits for the TP 6 & 7 and EPU projects:
 - Exhibit WP-1, Final True-Up of 2012 Revenue Requirements, details the components of the 2012 TP 6 & 7 and EPU revenue requirements reflected in the True-Up (T-Schedules) by project, by year and by category of costs being recovered (e.g. for Site Selection and Pre-construction costs, carrying costs on unrecovered balances and on the deferred tax asset/liability, and for the Uprate Project, carrying costs on construction costs and on the deferred tax asset/liability, recoverable operation and maintenance (O&M) costs including interest, and base rate revenue requirements including interest for the year plant is placed into service).
 - Exhibit WP-2, Turkey Point 6 & 7 2012 Site Selection and Pre-construction Costs and Uprate Project 2012 Construction Costs, details the total company costs and jurisdictional costs by project and by cost category.
 - Exhibit WP-3, 2012 Base Rate Revenue Requirements, details the 2012 actual revenue requirements for the Uprate Project plant modifications placed into service during 2012. FPL Witness Jones describes the plant being placed into service.

• Exhibit WP-4, 2012 Incremental Labor Guidelines, flowcharts the process used by the business unit accounting teams to determine incremental payroll costs 2 chargeable to the TP 6 & 7 and EPU projects for 2012.

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- Additionally, I sponsor or co-sponsor some of the NFRs included in exhibits sponsored by FPL Witnesses Scroggs and Jones as described below:
- Exhibit SDS-1, T-Schedules, 2012 Turkey Point 6 & 7 Site Selection and Pre-7 construction Costs, consists of the 2012 TP 6 & 7 Site Selection Schedules T-1 and 8 T-3A and the 2012 TP 6 & 7 Pre-construction Schedules T-1 through T-7B. Page 2 9 of SDS-1 contains a table of contents which lists the T-Schedules sponsored and co-10 sponsored by FPL Witness Scroggs and by me, respectively. 11
 - Exhibit TOJ-1, T-Schedules, 2012 EPU Construction Costs, consists of the 2012 Uprate Project T-Schedules T-1 through T-7B. Page 2 of TOJ-1 contains a table of contents which lists the T-Schedules sponsored and co-sponsored by FPL Witness Jones and by me, respectively.

What is the purpose of your testimony? 16 Q.

17 Α. The purpose of my testimony is to present the true-up calculation of the 2012 revenue requirements of (\$1,718,507). This is a result of the difference between \$234,370,947 18 19 in actual 2012 revenue requirements that FPL is requesting the Commission approve 20 as prudent in this filing compared to the Actual/Estimated revenue requirements for 21 2012 of \$236,089,453 (approved by the Commission in Docket No. 120009-EI, Order No. PSC 12-0650-FOF-EI). The overrecovery of \$1,718,507 will reduce the Capacity 22 Cost Recovery Clause (CCRC) charge to be paid by customers in 2014. The revenue 23

requirements are summarized in my Exhibit WP-1 and shown in the NFR T-Schedules for 2012 TP 6 & 7 Site Selection and Pre-construction costs and 2012 Uprate Project costs. I provide an overview of the components of the revenue requirements included in FPL's filing and demonstrate that the filing complies with the Florida Public Service Commission (FPSC or Commission) Rule No. 25-6.0423, Nuclear or Integrated Gasification Combined Cycle Power Plant Cost Recovery (Nuclear Cost Recovery or NCR) Rule. I also explain how carrying costs are provided for under the Nuclear Cost Recovery Rule, describe the base rate revenue requirements included for recovery in the NFR Schedules, and discuss the accounting controls FPL relies upon to ensure only appropriate costs are charged to the TP 6 & 7 and EPU projects.

Q. Please summarize your testimony.

FPL is requesting the Commission approve as prudent its 2012 costs and the resulting overrecovery of revenue requirements of \$1,718,507 which will reduce the CCRC charge to customers in 2013. As shown in my Exhibit WP-1, these revenue requirements are comprised of the difference between \$234,370,947 actual costs versus \$236,089,453 Actual/Estimated costs. My testimony includes the exhibits and NFRs needed to support the true-up of the 2012 actual costs.

A.

FPL is complying with the NCR Rule and the robust and comprehensive corporate and overlapping business unit controls for incurring and validating costs and recording transactions associated with FPL's TP 6 & 7 and EPU projects. I describe these controls and outline the documentation, assessment and auditing process for these

1		overlapping control activities. Throughout my testimony, I refer to exhibits and NFR
2		Schedules that provide the details of the true-up of the 2012 revenue requirements.
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4		NUCLEAR COST RECOVERY RULE
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6	Q.	Please describe the Commission's Nuclear Cost Recovery Rule and the NFR
7		Schedules.
8	A.	On March 20, 2007, in Order No. PSC-07-0240-FOF-EI, the FPSC adopted the
9		Nuclear Cost Recovery Rule to implement Section 366.93, Florida Statutes (the
10		Statute), which was enacted by the Florida Legislature in 2006.
11		
12		The NFR Schedules provide an overview of nuclear power plant projects and a
13		roadmap to the detailed project costs. The NFR Schedules consist of True-Up (T)
14		Actual/Estimated (AE), Projected (P), and True-Up to Original (TOR) Schedules. The
15		T-Schedules filed each March provide the final true-up for the prior year.
16		
17		The Nuclear Cost Recovery Rule applies to FPL's TP 6 & 7 and EPU projects. In
18		compliance with the NCR Rule, FPL is recovering the costs and carrying costs for the
19		TP 6 & 7 Project on an annual basis as the work is being performed for the licensing
20		and permitting activites described by FPL Witness Scroggs. Since the Uprate Project
21		is in the construction phase, FPL is recovering only the carrying charges on the
22		construction balance together with recoverable O&M and the base rate revenue
23		requirements for the year plant is placed into service.

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A.

FPL does not recover its capital investment in the EPU project until systems or
components are placed into service, and even then, such base rate recovery does not
reimburse FPL immediately. Rather, the substantial sums FPL is expending during
construction to purchase equipment, pay vendors, etc., will be recovered over the lives
of the uprated units or lives of the systems placed into service.

Q. Please describe the process by which FPL recovers the Uprate Project plant inservice subsequent to the year it is placed into service.

In accordance with Nuclear Cost Recovery Rule No. 25-6.0423 (7), costs to be recovered subsequent to the year plant is placed into service are requested in a petition for Commission approval of the base rate increase related to the plant.

Q. Please describe the NFR Schedules you are filing in this Docket.

FPL is filing its 2012 final T-Schedules in this docket to provide an overview of the financial aspects of our nuclear plant projects, outline the categories of costs and provide the calculation of detailed project revenue requirements. We are including for the TP 6 & 7 Project Site Selection and Pre-construction NFRs, and for the Uprate Project Construction NFRs.

TURKEY POINT 6 & 7 2012 TRUE-UP

Site Selection

Q. Is FPL filing any NFRs related to TP 6 & 7 Site Selection costs?

1	A.	Yes. FPL is filing the NFR Schedules T-1 and T-3A described in FPL Witness
2		Scroggs's testimony for TP 6 & 7 Site Selection costs.
3	Q.	What are FPL's 2012 actual TP 6 & 7 Site Selection expenditures compared to
4		the previous Actual/Estimated costs?
5	A.	FPL's TP 6 & 7 Site Selection expenditures ceased with the filing of its need petition
6		on October 16, 2007. All recoveries of site selection costs and resulting true-ups have
7		been reflected in prior nuclear cost recovery filings. Accordingly, the true-up of costs
8		and resulting revenue requirements each equal zero.
9	Q.	What are FPL's 2012 TP 6 & 7 Site Selection actual carrying charges compared
10		to the previous Actual/Estimated carrying charges and any resulting
11		over/underrecovery of costs?
12	A.	The calculation of FPL's 2012 actual TP 6 & 7 Site Selection carrying charges on the
13		deferred tax asset are \$180,883 as shown in Exhibit SDS-1, Schedule T- 3A. FPL's
14		previous Actual/Estimated carrying costs on the deferred tax asset were \$180,883
15		The deferred tax asset is created by the recovery of Site Selection costs and the
16		payment of income taxes before a deduction for the costs is allowed for income tax
17		purposes. Since FPL no longer incurs Site Selection costs other than the return on the
18		deferred tax asset, there is no true-up of 2012 costs needed.
19		
20		Pre-construction
21		
22	Q.	Is FPL filing any NFRs related to 2012 TP 6 & 7 Project Pre-construction costs?

- 1 A. Yes. FPL is filing the NFR Schedules T-1 through T-7B as described in FPL Witness
 2 Scroggs's testimony for the final true-up of TP 6 & 7 Pre-construction costs.
- What revenue requirement amount is FPL requesting to reflect the final true-up of its 2012 TP 6 & 7 Pre-construction costs?
- 5 A. FPL is requesting to include in its 2014 CCRC charge an overrecovery of \$5,602,800
 6 in revenue requirements, which represents an overrecovery of Pre-construction costs
 7 of \$5,245,763, and an overrecovery of carrying charges of \$357,038 as shown on
 8 Exhibit WP-1 and in the calculations in Exhibit SDS-1, Schedule T-2 and T-3A. The
 9 overrecovery of \$5,602,800 will reduce the CCRC charge paid by customers when the
 10 CCRC is reset for 2014.
- 11 Q. What are FPL's 2012 actual TP 6 & 7 Pre-construction expenditures compared 12 to 2012 Actual/Estimated costs and any resulting over/under recoveries of costs?
- A. FPL's actual TP 6 & 7 Pre-construction expenditures for the period January through 13 December 2012 are \$29,565,631, (\$29,034,114 on a jurisdictional basis) as presented 14 in FPL Witness Scroggs's testimony and provided on SDS-1, Schedule T-6. FPL's 15 16 Actual/Estimated 2012 Pre-construction expenditures were \$34,907,426 (\$34,279,877 on a jurisdictional basis). The result is an overrecovery of Pre-17 construction revenue requirements of \$5,245,763. 18
- Q. What are FPL's 2012 actual TP 6 & 7 Pre-construction carrying charges compared to 2012 Actual/Estimated carrying charges and any resulting over/under recoveries of costs?
- A. FPL's 2012 actual TP 6 & 7 Pre-construction carrying charges are \$2,739,962. FPL's previous Actual/Estimated carrying charges were \$3,097,000, resulting in an

1		overrecovery of revenue requirements of \$357,038. The calculations of the carrying
2		charges can be found in Exhibit SDS-1, Schedules T-2 and T-3A.
3		
4		UPRATE 2012 TRUE-UP
5		
6	Q.	Is FPL filing any NFRs related to its 2012 Uprate Project costs?
7	A.	Yes, FPL is filing the NFR Schedules T-1 through T-7B as described in FPL Witness
8		Jones's testimony for the final true-up of 2012 Uprate Project costs as shown in
9		Exhibit TOJ-1.
10	Q.	What revenue requirement amount is FPL requesting to reflect the final true-up
11		of its 2012 Uprate Project costs?
12	A.	FPL is requesting to include an underrecovery of \$3,884,294 in revenue requirements,
13		which represents an underrecovery of carrying costs of \$5,701,842, an overrecovery of
14		O&M and interest costs of \$7,332,596, and an underrecovery of base rate revenue
15		requirements and carrying costs of \$5,515,047, as shown on Exhibit WP-1.
16	Q.	What are FPL's 2012 actual Uprate Project expenditures compared to 2012
17		Actual/Estimated expenditures?
18	A.	FPL's actual Uprate Project generation and transmission expenditures for the
19		calculation of carrying costs, for the period January through December 2012 are
20		\$1,346,527,380, total company as shown on my exhibit WP-2 and in NFR
21		Schedule T-6. As presented in FPL Witness Jones's testimony and shown on Exhibit
22		TOJ-1, Schedule T-6, the portion of this total for which the St. Lucie Unit 2
23		participants are responsible is deducted and then the retail jurisdictional factor is

applied to the remainder. This results in jurisdictional, net of participants Uprate

Project generation and transmission expenditures of \$1,298,309,799.

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For the calculation of actual carrying charges further adjustments are made to present the expenditures on a cash basis (i.e., excluding accruals and pension and welfare benefit credits) and results in the expenditures shown on Exhibit TOJ-1, T-3 for the calculation of carrying charges of \$1,194,776,378. These adjustments are necessary in order to comply with the Commission's practice regarding Allowance for Funds Used During Construction (AFUDC) accruals.

10 Q. Where within the filing are FPL's Uprate Project 2012 actual carrying charges included?

12 A. The Uprate Project actual carrying charges on construction expenditures and on the
13 deferred tax liability of \$110,611,569 are shown in my Exhibit WP-1 and detailed in
14 the NFRs in Exhibit TOJ-1, Schedules T-3 and T-3A, respectively. FPL's previous
15 Actual/Estimated 2012 Uprate Project carrying charges were \$104,909,726. As a
16 result of the final true-up of 2012 carrying charges in this March 1, 2012 filing, there
17 is an underrecovery of \$5,701,842 in 2012.

Q. What are FPL's Uprate Project 2012 actual recoverable O&M costs?

FPL's Uprate Project 2012 actual recoverable O&M costs including interest are 19 A. \$7,520,744 (\$7,214,153 jurisdictional, net of participants), the calculation of which 20 can be found in Exhibit TOJ-1, Schedule T-4. FPL's previous Actual/Estimated 2012 21 Uprate Project recoverable O&M including interest \$15,000,523 22 was (\$14,546,749 jurisdictional, net of participants). As shown in Schedule T-4, 23

over/under recoveries of recoverable O&M accrue interest at the AA Financial 30-day rate posted on the Federal Reserve website. As a result of the actual final true-up of 2012 Uprate Project recoverable O&M including interest, there is an overrecovery of \$7,332,596 jurisdictional, net of participants in 2012.

Q. Please describe the calculation of base rate revenue requirements.

As described in Order No. PSC-08-0749-FOF-EI in Docket No. 080009-EI, FPL "shall be allowed to recover through the NCRC associated revenue requirements for a phase or portion of a system placed into commercial service during a projected recovery period. The revenue requirement shall be removed from the Nuclear Cost Recovery Clause (NCRC) at the end of the period. Any difference in recoverable costs due to timing (projected versus actual placement in service) shall be reconciled through the true-up provision". Until the plant is placed into service, FPL will continue to recover the carrying charges on the construction costs.

A.

In accordance with FPL accounting policies, effective in the month each transfer to plant in-service is made, FPL transfers the related costs from Construction Work in Progress (CWIP) to plant in-service. For plant placed into service less than \$10 million, carrying charges are calculated for half a month and base rate revenue requirements are calculated for half a month. For plant placed into service greater than \$10 million, the calculation of carrying charges and base rate revenue requirements are to the day the plant is placed into service. For intangible plant, which is amortized over the life of the asset, carrying charges are calculated for half a month and amortization expense for half a month regardless of the dollar amount of

the plant being placed into service. The License Amendment Requests (LARs) are an example of Uprate Project intangible plant placed into service. Subsequent to the month the plant is placed into service, carrying charges cease and the 2012 base rate revenue requirements related to the plant being placed into service is included for recovery through the NCRC. Included in the base rate revenue requirement is any non-incremental labor related to the Uprate Project. FPL's 2012 actual transfers to plant in service, including non-incremental labor, are shown in Exhibit WP-3, with details in Exhibit TOJ-1, Appendix B.

- Q. Where within the filing are FPL's actual base rate revenue requirements for plant being placed into service in 2012 for the Uprate Project included?
- A. Uprate Project actual base rate revenue requirements for plant being placed into service in 2012 of \$85,107,276, or \$84,590,266 including carrying charges of (\$517,010), are shown in Exhibit WP-1. FPL's previous Actual/Estimated 2012 base rate revenue requirements were \$79,552,085, or \$79,075,219 net of carrying charges of (\$476,866). As a result of the true-up of actual 2012 Uprate Project base rate revenue requirements, including carrying charges, there is an underrecovery of \$5,515,047 as shown on my Exhibit WP-1. The plant being placed into service, the calculation of the base rate revenue requirements and the carrying charge is shown in Exhibit TOJ-1, Appendix B. The carrying charges on the over/underrecoveries of the base rate revenue requirements compared to prior Actual/Estimated are shown in TOJ-1, Appendix C.
- Q. What is the total of FPL's 2012 actual transfers to plant in-service for the Uprate Project in 2012?

1	Α.	in 2012, FPL's actual transfers to plant in service total \$2,002,403,888
2		(\$1,913,267,000 jurisdictional, net of participants), as shown on TOJ-1, Appendix B.
3		The 2012 Actual/Estimated transfers to plant in service were \$1,058,854,365
4		(\$1,017,306,408 jurisdictional, net of participants) Appendix B provided the details of
5		the plant placed into service. A description of the plant placed into service in 2012 is
6		found in FPL Witness Jones's testimony.

Q. What caused the difference between the 2012 base rate revenue requirements in the AE-Schedules and the base rate revenue requirements in the T-Schedules for the EPU modifications placed into service?

The 2012 AE-Schedules reflect FPL's estimate that EPU modifications of \$1,058,854,365 (\$1,017,306,408 jurisdictional, net of participants) would be placed into service in 2012. The actual plant placed into service during 2012 was \$2,002,403,888 (\$1,913,267,000 jurisdictional, net of participants), which is reflected in my Exhibit WP-3. The plant placed into service in 2012 and the actual in-service dates are also shown in TOJ-1, Appendix B. FPL Witness Jones addresses the actual plant placed into service in 2012 in his testimony.

A.

In the AE-Schedules, FPL used its then most current rate of return which was based on the December 2011 Surveillance Report. The rate of return in our 2012 T-Schedules is the rate of return based on the most current 2012 monthly surveillance reports at the time the Uprate modifications are placed into service. This is in accordance with the requirements of the Nuclear Cost Recovery Rule No. 25-6.0423 Section 7(d).

1	Q.	What accounting and regulatory treatment is provided for costs that would have
2		been incurred regardless of the Uprate Project?

Costs that would have been incurred regardless of the Uprate Project are not included in FPL's NCRC calculations. Such expenditures that are not "separate and apart" Uprate Project expenditures will be accounted for under the normal process for O&M and capital expenditures. Capital expenditures will accrue AFUDC while in CWIP until the system or component is placed into service. Only costs incurred for activities necessary for the Uprate Project are charged to the Uprate Project work orders/internal orders and included as recoverable O&M or as construction costs included in the calculation of carrying charges in the NFR Schedules. This method ensures that FPL only receives recovery of the appropriate recoverable O&M or carrying charge return under the Nuclear Cost Recovery Rule and expenses or accrues the appropriate O&M or AFUDC return on costs that are not "separate and apart." FPL employs a rigorous, engineering-based process to segregate costs that are "separate and apart" from those that would have normally been incurred, so that only the appropriate costs are reflected in the NCRC request. This process is discussed in more detail in FPL Witness Jones's March 1, 2013 testimony.

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ACCOUNTING CONTROLS

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Q. Please describe the accounting controls FPL relied upon to ensure proper cost recording and reporting for these projects in 2012.

- 1 A. FPL relied on its comprehensive corporate and overlapping business unit controls for
- 2 recording and reporting transactions associated with any of its capital projects
- including the Uprate Project and TP 6 & 7. These comprehensive and overlapping
- 4 controls included:
- FPL's Accounting Policies and Procedures;
- Financial systems and related controls including FPL's general ledger (SAP) and construction asset tracking system (PowerPlant);
- FPL's annual budgeting and planning process;
- Reporting and monitoring of plan costs to actual costs incurred; and
- Business Unit specific controls and processes.
- The project controls are discussed in the March 1, 2013 testimony of FPL Witnesses
- Scroggs and Jones.
- 13 Q. Were there any changes to existing accounting controls or additional accounting
- 14 controls implemented and relied upon for these projects and the related
- 15 **reporting in 2012?**
- 16 A. No.
- 17 Q. Were these controls documented, assessed and audited and/or tested?
- 18 A. Yes. The FPL corporate accounting policies and procedures were documented and
- published on the Company's internal website, Employee Web. In addition, accounting
- 20 management provided formal representation as to the continued compliance with those
- 21 policies and procedures each year. Sarbanes-Oxley processes were identified,
- documented, tested and maintained, including specific processes for planning and
- executing capital work orders, as well as acquiring and developing fixed assets.

1 Certain key financial processes were tested during the Company's annual test cycle.

The Company's external auditor, Deloitte & Touche, LLP, as a part of its annual audit, which includes assessing the Company's internal controls over financial reporting and testing of general computer controls, expressed an opinion as to the effectiveness of

6 Q. Describe the responsibilities and accounting controls of the New Nuclear

Accounting Project Group in 2012.

those controls.

The primary responsibility of the New Nuclear Accounting Project Group was to provide financial accounting guidance for the recovery of costs under the Nuclear Cost Recovery Rule. Additional responsibilities included the preparation and maintenance of the NFR Schedules, (i.e., T, AE, P, and TOR-Schedules) and on a monthly basis, ensuring the costs included in the NFR Schedules are recorded to the financial records of the Company and reconciled to the NFRs. The Nuclear Cost Recovery projects utilized unique internal orders to capture costs directly related to these projects. After ensuring accurate costs were recorded, adjustments were made to reflect participants' credits, jurisdictionalize the costs, and include other adjustments required in the NFR Schedules. Monthly journal entries were prepared to reflect the effects of the recovery of these costs and monthly reconciliations of the NFR accounts were performed. The resulting NFR Schedules are included in our Nuclear Cost Recovery filings and described in testimony.

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The New Nuclear Accounting Project Group worked closely with the Nuclear Business Unit, Engineering, Construction & Corporate Services Division (ECCS), and

the Transmission Business Unit to address issues surrounding the costs related to the projects. This involved researching, providing direction and resolving project accounting issues that arose.

TURKEY POINT 6 & 7 SPECIFIC ACCOUNTING CONTROLS

A.

Q. Describe the role of the ECCS Division related to the TP 6 & 7 Project.

The ECCS Division had a Project Controls Group that reported through the Vice President of ECCS and provided structural leadership, governance and oversight for the project. On a monthly basis, the group completed a thorough review of all costs ensuring accuracy of the charges posted to the project. Additionally, Project Controls prepared monthly variance reports, identifying variances against budgeted information. Team members and project management met monthly to review and understand existing budget variances against the projected forecast. The Project Controls group included a Manager of Cost and Performance with Accounting and Real Estate degrees, who had been with the ECCS organization since 2011. His previous experience includes over seven years with Deloitte & Touche specializing in energy industry auditing. A Director of Construction with 29 years experience at FPL and nine years with the Engineering and Construction department oversaw the Project Control group. Staff with business, finance and accounting degrees and nuclear and construction experience supported the Project Controls leadership team.

- Q. Describe the Engineering, Construction & Corporate Services Division 1 accounting controls which ensured costs were appropriately incurred for the TP 2 3 6 & 7 Project.
- 4 A. When FPL filed its Need Determination in October 2007, costs related to the project recorded in a deferred debit account were transferred to CWIP. A separate work order 5 was set up for Site Selection costs and Pre-construction costs. As stated in the Rule, a 6 site is deemed to be selected upon the filing of a petition for a determination of need; 7 therefore, all costs expended prior to the Need Filing were categorized as Site 8 Selection costs. All Site Selection expenditures have been determined prudent by this 9 Commission in Order No. PSC-08-0749-FOF-EI and all recoveries (other than 10 carrying costs on the deferred tax asset) with resulting true-ups have been reflected in 11 previous filings. Pre-construction costs are costs expended after a site has been 12 selected, captured in a unique work order/internal order, and are included in the Pre-13 construction T-Schedules for actual costs incurred in each year. 14
- Describe the ECCS Division accounting controls which ensured costs were 15 Q. 16 appropriately charged to the TP 6 & 7 Project.

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When a potential goods or services expenditure greater than \$10,000 was identified, A. project personnel routed the relevant information detailing the need, justification, estimated cost and documentation for the request to the Project Controls Group for review. Upon verification of the documentation and availability of budgeted resources, the Project Controls Group electronically advised the requestor of the appropriate internal order and cost element for charging. The requester then created a "shopping cart" in the Integrated Supply Chain (ISC) module of SAP, attaching the 23

aforementioned documentation including the electronic notification from the Project Controls Group. This information was sent electronically through the shopping cart system to the ISC agent of the functional area who verifies the appropriate documentation is attached to the shopping cart. Upon verification, a Purchase Order (PO) was initiated by the ISC agent and forwarded with the attachments to the applicable Director for review to ensure the expenditure was appropriate and relevant to the project. If the Director is in agreement with the expenditure, he electronically approved the PO and a notification was sent to the issuing ISC agent. The ISC agent will then electronically issued to the vendor a PO available for charging, copying the original requestor, the Project Controls Group and the approving Director. After the goods were received or services were rendered, an invoice was received either by the functional area or by Project Controls, it was reviewed, and if determined to be appropriate, approved based on FPL Approval Authorization amounts. Approved invoices were then forwarded to the Invoice Processor and upon verification of the approvals and account coding the invoice was entered into the SAP system for processing and payment to the vendor.

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Currently, Bechtel Power Corporation is the vendor with the greatest single proportion of costs and is handling the Combined Operating License Application (COLA) and supporting the site certification application. The invoices from this and other vendors which can be quite voluminous may be received electronically by the Project Controls Group. They were loaded into a Share Point database and routed to the appropriate business unit contacts to assess, review and approve where appropriate. After the

1	invoice was reviewed by the functional area, the Project Controls Analyst ensured all
2	parties had signed off on their appropriate section of the invoice checklist approval
3	form prior to payment. The invoices were also reviewed for compliance with the
4	purchase order and/or contract and differences with vendors were resolved. The
5	remaining invoices related to charges incurred by groups such as Transmission and
6	Environmental Services.

Q. Describe the review and reporting performed by the ECCS Project Controls organization related to the TP 6 & 7 Project.

The Project Controls organization was responsible for preparing, analyzing and clearly and concisely explaining variances against planned budgets for current month, year-to-date and year end. Project Controls held monthly meetings with team members and project management to review and understand existing budget variances and any projected variances. Project Controls provided the resulting expenditures to Accounting for inclusion in the NFR Schedules.

A.

UPRATE PROJECT SPECIFIC ACCOUNTING CONTROLS

Nuclear Business Unit Accounting Controls

- Q. Describe the oversight role of the Nuclear Business Operations (NBO) Group related to the Uprate Project in 2012.
- A. The NBO Group was independent of the EPU Project Team and provided oversight of the costs charged to the Uprate Project. The NBO Group was primarily responsible for the work order/internal order maintenance function, reviewing payroll to ensure

only appropriate payroll was charged to the Uprate Project, determining appropriate
accounting for costs, raising potential issues to the Property Accounting Group when
necessary, providing accounting guidance and training to the Uprate Project team,
assisting with internal and external audit-related matters, reviewing project projections
and producing monthly variance reports.

- Q. Describe the accounting controls which ensured costs were appropriately
 incurred and tracked for the Uprate Project in 2012.
- A. 8 The NBO Group accounted for the activities necessary to perform the Uprate Project at the four nuclear units, Turkey Point Units 3 and 4 and St. Lucie Units 1 and 2. 9 Costs associated with the work performed on components defined as a property 10 11 retirement unit was transferred from CWIP to plant in service at the end of each outage or when they became used and useful. In order to facilitate this process, a 12 separate work breakdown structure was set up for each unit along with capital work 13 orders/internal orders to capture costs related to each EPU outage. Additional work 14 15 orders/internal orders were set up, as necessary, to capture costs associated with plant 16 placed into service at a different time than the outages.
- 17 Q. Describe the accounting controls which ensured costs were appropriately
 18 charged to the Uprate Project.

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A. Invoices were routed to the St. Lucie or Turkey Point site project controls analyst, as appropriate. The analyst checked the invoices for accuracy and for agreement to the PO terms and conditions. Once the invoice had been appropriately verified, the analyst recorded invoice information on an Invoice Tracking Log. The Invoice Approval/Route List was then routed for verification of receipt of goods/services and

all required approvals. Before payment could be made on any invoice greater than \$1 million, the approval of the Vice President, Nuclear Power Uprate was required. Before payment could be made on any invoice greater than \$5 million, the approval of the Executive Vice President & Chief Nuclear Officer was required. Once all necessary approvals had been obtained, the project controls analyst processed the invoice for payment in NAMS (Nuclear Asset Management System) against the respective purchase order. Extended Power Uprate Project Instruction Number EPPI-230, *Project Invoice*, detailed the flow of the invoice through the approval, receipt and payment process at the sites and established responsibilities at each stage of the process.

Q. Describe the review performed by the EPU Project Controls Team and the NBO Group related to the Uprate Project.

Throughout the month, general ledger detail transactions were monitored by the EPU Project Controls Team and NBO to ensure that costs charged to the Uprate Project were appropriate and were accurately classified as capital or O&M. Site cost engineers performed reviews to ensure invoices were accurately coded to the appropriate activity/scope work order/internal order. NBO reviewed internal labor costs to ensure that only appropriate payroll was charged to the Uprate Project. In addition, all steps in this process were subject to internal and external audits and reviews.

The Project engineers and NBO worked to

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The Project engineers and NBO worked together closely to make sure the costs were appropriate and were accurately classified as capital or O&M. Construction Leads

performed reviews to ensure invoices were accurately coded to the appropriate activity/scope work order/internal order.

- Q. Describe the reporting performed by the EPU Project Controls Team and the

 NBO Group related to the Uprate Project.
- The Uprate Project Controls Director, along with the Uprate Project Controls Team at
 each site, recorded schedule changes, project delays, and project costs. The Uprate
 Project Controls Director, along with the Uprate Project Controls Team, supported risk
 management and contract administration.

The NBO Group drafted monthly variance reports that compare actual expenditures incurred to the originally estimated budget and reported year end forecast estimates. The draft reports were sent to the St. Lucie and Turkey Point Uprate Project Controls Team responsible for providing variance explanations and forecast updates to NBO. The reports were reviewed by the Uprate Project control supervisors and management prior to the submission to NBO. NBO reviewed the variance explanations and forecast numbers for reasonableness and accuracy prior to compilation and inclusion in the Nuclear Business Unit corporate monthly variance report submitted to the Corporate Budget Group. NBO was also responsible for reviewing numbers reported to the FPL Executive Steering Committee to ensure consistency with corporate variance reports and for providing the Accounting Department with project amounts for inclusion in the NFR Schedules.

Transmission Business Unit Accounting Controls

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Q. Describe the role of the Transmission Business Unit related to the Uprate Project.

- A. The Transmission Business Unit incurred expenditures related to the Uprate Project in order to perform substation and transmission line engineering, procurement, and construction on specific work orders/internal orders assigned to projects which resulted from transmission interconnection and integration studies performed by FPL Transmission Planning. These studies were based on incorporating the additional megawatts to be generated by the uprated nuclear units at St. Lucie 1 & 2 and Turkey Point 3 & 4 into the FPL transmission system. The Transmission Business Unit cost and performance team ensured costs were appropriately incurred and charged to the Uprate Project. The Transmission Business Unit reviewed payroll to ensure only appropriate payroll was charged to the Uprate Project, determined appropriate accounting for costs, raised potential issues to the Property Accounting Group when necessary, provided accounting guidance and training to the Uprate Project team, assisted with internal and external audit-related matters, reviewed project projections, and produced monthly variance reports. Transmission related work for the Uprate Project was also accounted for by work order/internal order based on the scope of work and was placed into service when the respective work was used and useful.
- Q. Describe the Transmission Business Unit accounting controls which ensured costs were appropriately incurred and tracked for the Uprate Project.
- A. The Transmission Business Unit identified the transmission activities necessary to support the increased electrical output of the Uprate Project at the four nuclear units,

St. Lucie Units 1 & 2 and Turkey Point Units 3 & 4. Costs associated with the work performed for each outage were transferred from CWIP to plant in service by Property Accounting as appropriate. In order to facilitate this process and identify activities, two separate work breakdown structures were set up with appropriate sub activities and multiple internal orders. Purchase Orders (PO) were handled by ISC via the Shopping Cart Process. A Shopping Cart PO request was routed from the originator to all approvers required based on the dollar amount of the PO. The PO Requisitioning group determined the required approvals based on the business unit's PO approval limits, and routed the request as required. Once all required approvals were secured, the PO was created based on the information in the Shopping Cart request.

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- Q. Describe the Transmission Business Unit accounting controls which ensured costs were appropriately charged to the Uprate Project.
 - Invoices were routed to the Transmission Project Control Administrator (Administrator). The Administrator checked the invoices for accuracy and for agreement to the PO terms and conditions. Once the invoice was appropriately verified, the Administrator recorded invoice information on the Cost Control Tracking sheet and routed the invoice for all required approvals. Invoices found to contain any inaccuracies were returned to the requestor for revisions. Any invoice greater than \$1 million required the approval of the Business Unit Vice President. Any invoice greater than \$5 million required the approval of the FPL President & Chief Executive Officer before payment was made. Once all necessary approvals were obtained, the Administrator processed the invoice for payment in SAP against the respective PO.

1	Q.	Describe the additional reviews performed by the Transmission Business Unit
2		elated to the Uprate Project.

The Cost & Performance Analyst updated the Turkey Point and St Lucie Uprate Project Cost reports on a monthly basis for actual costs incurred. The Turkey Point and St Lucie Uprate Project Cost reports were then reviewed by the assigned Project Managers and Administrators who worked closely together to ensure that all costs were appropriately charged to the Uprate Project and were accurately classified as either Capital or O&M. Construction Leaders also performed reviews to ensure all invoices were accurately assigned and coded to the appropriate work order/internal order for the Uprate Project as well. Any discrepancies identified as a result of these reviews were resolved at this time. The assigned Project Manager then updated the individual work order/internal order forecasts, if warranted.

Q. Describe the reporting performed by the Transmission Business Unit related to the Uprate Project.

The Transmission Cost & Performance group drafted monthly variance reports that compare actual expenditures incurred to the originally estimated budget and reported year end forecast estimates. These Corporate monthly variance reports were reviewed by the assigned Project Manager for reasonableness and accuracy and the final was then submitted to the Corporate Budget Group.

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ADDITIONAL NEW NUCLEAR AND UPRATE PROJECT

ACCOUNTING OVERSIGHT

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- Q. Were there any additional controls relied upon for these projects and the related
 reporting in 2012?
- Yes. The Company had previously issued specific guidelines for charging costs to the 6 A. project internal orders. These guidelines emphasize the need for particular care in 7 charging only incremental labor to the project internal orders included for nuclear cost 8 9 recovery and ensure consistent application of the Company's capitalization policy. These guidelines describe the process for the exclusion of non-incremental labor from 10 current NCRC recovery while providing full capitalization of all appropriate labor 11 costs through the implementation of separate project capital internal orders that will be 12 included in future non-NCRC base rate recoveries. Exhibit WP-4 provides a flowchart 13 depicting this process for 2012. 14
- O. Did the guidelines for charging costs to the project work orders/internal orders change from 2011 to 2012?
- 17 A. No. The guidelines in effect in 2011 applied to 2012. As a result of FPL's 2009 rate
 18 case (Docket No. 080677-EI), the Company reset the basis upon which incremental
 19 employee labor is established in determining which employees are clause recoverable.
 20 Starting in 2010, personnel previously determined non-incremental became
 21 incremental and eligible to record labor to NCRC work orders/internal orders. Any
 22 employee dedicated to the project and charging 100% of his time to the NCRC during
 23 2010 is considered incremental for the entire year 2010. Any employee that charged a

percentage of his time to capital in the NCRC in 2010 will be designated incremental
for that percentage of his costs. This remains the basis for determining incremental
payroll in 2012.

- 4 Q. What is the purpose of the continuous internal audits conducted by FPL on the
 5 TP 6 & 7 and EPU projects?
- The Company continues to undergo specific project related internal audits. 6 A. objective of these audits is to test the propriety of expenses charged to the NCRC to 7 ensure they are recoverable project expenses and to ensure compliance with the 8 Commission's Rule. Any potential process improvements identified during the audits 9 are communicated to management to further enhance internal controls. FPL will 10 continue to ensure these projects are audited on an ongoing basis. The audits of the 11 2012 costs and controls related to the TP 6 & 7 and the EPU projects are currently 12 underway and will be complete prior to the start of the hearing in this docket. These 13 audits will continue to provide assurance that the internal controls surrounding 14 transactions and processes are well established, maintained and communicated to 15 employees, and provide additional assurance that the financial and operating 16 information generated within the Company is accurate and reliable. 17
 - Q. Please comment on the overall level of control and oversight of the NCRC process.

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20 A. The ongoing cycles of cost collection, aggregation, analysis and review which lead to
21 the NFR filings provide for a level of detailed review that is unprecedented. For
22 example, in the preparation of the NFR Schedules, transactional expenditures are
23 projected by activity and an immediate review of projection to actual, in many cases at

1		the transactional level, is conducted. The nature of the data collection and
2		aggregation process, along with the calculation of carrying charges and construction
3		period interest, provides an increased level of detailed review. The requirements of
4		the Rule have, by design, significantly increased the review and transparency of the
5		costs themselves.
6	Q.	Does this conclude your testimony?
7	A.	Yes
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Cost)	DOCKET NO. 130009-EI
Recovery Clause		FILED: July 3, 2013

ERRATA SHEET

MAY 1, 2013 TESTIMONY OF WINNIE POWERS

PAGE #	LINE #	
Page 1	Line 16	Change "\$28,280,172" to "\$45,084,695"
Page 2	Line 10	Change "\$28,280,172" to "\$45,084,695"
Page 2	Line 12	Change "(\$1,718,507)" to "(\$1,726,074)"
Page 2	Line 13	Change "\$5,164,762" to "\$21,136,506"
Page 2	Line 14	Change "\$24,833,917" to "\$25,674,264"
Page 3	Line 16	Insert:

- Exhibit WP-7, St. Lucie and Turkey Point Uprate Project, Incremental 2012 Plant Placed into Service as of December 31, 2012 shows the calculation of the revenue requirements related to the difference between our actual 2012 Plant Placed into Service as filed in our March 1, 2013 filing and the amount currently being recovered in base rates effective January 2, 2013 as filed in Docket No 120244-EI.
- Exhibit WP-8, St. Lucie and Turkey Point
 Uprate Project, Actual/Estimated Net Book
 Value of Retirements, Removal Cost &
 Salvage for Plant Placed into Service in
 2012 shows the calculation of the return on
 the difference between our 2012 actual Net
 Book Value of Retirements, Removal Cost
 and Salvage and the amount currently being
 recovered in base rates as filed in Docket No
 120244-EI.

Page 9	Line 20	Change "\$28,280,172" to "\$45,084,695"
Page 9	Line 22	Change "(\$1,718,507)" to "(\$1,726,074)"
Page 9	Line 22	Change "\$5,164,762" to "\$21,136,506"
Page 10	Line 1	Change "\$24,833,917" to "\$25,674,264"
Page 14	Line 6	Change "\$6,320,736" to "\$22,292,480"

Page 14	Line 13	Change "\$91,570,685" to "\$107,542,429"
Page 14	Line 14	Change "\$6,320,736" to "\$22,292,480"
Page 14	Line 17	Change "\$6,320,736" to "\$22,292,480"
Page 14	Line 19	Change "\$6,320,736" to "\$22,292,480"
Page 14	Line 19	Change "\$4,910,348" to "\$4,912,831"
Page 14	Line 20	Change "\$4,534,043" to "\$4,534,025"
Page 14	Line 21	Change "(\$3,123,656)" to "\$12,845,624"
Page 15	Line 4	Change "\$20,344,266" to "\$20,346,709"
Page 15	Line 7	Change "\$4,910,348" to "\$4,912,831"
Page 15	Line 12	Change "\$9,790,528" to "\$9,790,510"
Page 15	Line 12	Change "\$9,611,913" to "\$9,611,895"
Page 15	Line 20	Change "\$4,534,043" to "\$4,534,025"
Page 16	Line 2	Add after 2013, "Incremental 2012 EPU plant
-		placed into service and carrying charges on the
		Actual/Estimated 2012 Net Book Value of
		Retirements, Removal, Salvage".
Page 16	Line 2	Change "\$61,614,546" to "\$77,583,826"
Page 16	Line 10	Change "\$765,539,144" to "\$765,692,636"
Page 17	Line 12	Insert:
-		O Place explain the revenue requiremen

- Q. Please explain the revenue requirements associated with the true-up of Incremental 2012 EPU Plant Placed into Service that FPL is including in its actual/estimated EPU NFRs.
- A. To properly account for the 2013 effect of truing up FPL's 2012 EPU Plant in Service, FPL has included approximately \$14 million in revenue requirements in its actual/estimated 2013 EPU costs. The going-forward effect of truing up FPL's 2012 EPU Plant in Service will be reflected in FPL's fall 2013 EPU base rate increase filing.

The revenue requirement of \$13,825,845 shown in my Exhibit WP-7 reflects the recovery of revenue requirements associated with FPL's actual 2012 plant placed into service not being recovered through the base rate adjustment effective January 2, 2013 (Incremental 2012 EPU Plant Placed into Service). FPL filed its Base Rate Increase request for 2012 plant placed into service on October 1, 2012 in Docket No. 120244-EI. At that time, FPL estimated that as of December 31, 2012, plant placed into

service would be \$1,878,131,732, Total Company, \$1,794,897,191, jurisdictional, net of participants as shown on my Exhibit WP-7. FPL's T schedules filed on March 1, 2013 in this docket, show that FPL's actual 2012 plant placed into service was \$1,999,281,325 Total Company, \$1,913,808,590 jurisdictional, net of participants. FPL's Non-incremental 2012 Plant in Service was included in base rates effective January 2, 2013 as a result of FPL's general rate case. Excluding these Non-incremental costs as shown in my Exhibit WP-7, page 2, results in 2012 Plant in Service of \$1,910,775,238, jurisdictional, participants. The net resulting Incremental 2012 EPU Plant Placed into Service of \$115,878,047, jurisdictional, net of participants as of December 31, 2012 is the basis for the calculation of the \$13,825,845 in 2013 revenue requirements. The Incremental 2012 EPU Plant Placed into Service is due to more Plant in Service and Post in Service costs than had been estimated for purposes of the Base Rate Increase. FPL has included in its 2013 Actual/Estimated **NFRs** the revenue requirements on the 13 month average of Incremental 2012 Plant Placed into Service that is not being recovered in base rates.

- Q. Please explain the carrying charges associated with the true-up of the Actual/Estimated 2012 Net Book Value of Retirements, Removal Cost and Salvage related to the 2012 EPU Plant Placed into Service.
- A. FPL is including carrying charges of \$1,396,293 on FPL's actual 2012 Net Book Value of Retirements, estimated Removal Cost and estimated Salvage not being recovered in the base rate adjustment effective January 2, 2013 (Actual/Estimated 2012 NBV) related to the 2012 EPU Plant Placed into Service as shown in my Exhibit

WP-8. The Actual/Estimated 2012 NBV results from the true-up of the 2012 actual retirements, estimated removal cost and estimated salvage as compared to that which is being recovered through base rates effective January 2, 2013 as approved in Docket No 120244-EI. Included in FPL's base rates effective January 2, 2013, was a net amount consisting of the net book value of retirements, removal cost and salvage of \$13,509,262 on a jurisdictional, net of participants basis. The actual 2012 net book value of retirements, estimated removal costs, and estimated salvage is \$26,209,670 on a jurisdictional, net of participant basis as shown in my Exhibit WP-8, page 1. The Actual/Estimated 2012 NBV is \$12,700,408 and is included in WP-8. FPL has included \$1,396,293 in carrying charges in its 2013 A/E NFRs for the revenue requirements not being recovered in base rates.

Page 17	Line 22	Change "\$682,800" to "\$1,523,146"
Page 18	Line 10	Change "\$682,800" to "\$1,523,146"
Page 18	Line 12	Change "\$683,849" to \$1,524,201"
Page 18	Line 13	Change "(\$1,049)" to "(\$1,055)"
Page 18	Line 20	Change "\$10,887,829" to "\$27,692,352"
Page 18	Line 22	Change "\$3,884,294" to "\$3,876,726"
Page 19	Line 1	Change "\$6,320,736" to "\$22,292,480"
Page 19	Line 2	Change "\$682,800" to "\$1,523,146"
Page 21	Line 22	Change "\$28,280,172" to "\$45,084,695"
Page 22	Line 1	Change "(\$1,718,507)" to "(\$1,726,074)
Page 22	Line 3	Change "\$5,164,762" to "\$21,136,506"
Page 22	Line 4	Change "\$24,833,917" to "\$25,674,264"

MAY 1, 2013 EXHIBITS OF WINNIE POWERS

EXHIBIT WP-5

EXHIBIT#	PAGE #	LINE #	
WP-5	Page 1	Line 27, Column (2)	Change "\$112,000,508" to
			"\$112,004,071"
WP-5	Page 1	Line 30, Column (2)	Change "\$7,214,153" to "\$7,198,815"
WP-5	Page 1	Line 33, Column (2)	Change "\$85,107,276" to "\$85,111,451"
WP-5	Page 1	Line 34, Column (2)	Change "(\$517,010)" to "(\$516,977)"
WP-5	Page 1	Line 27, Column (5)	Change "\$20,365,414" to "\$20,367,897"

WP-5	Page 1	Line 27, Column (9)	Change "\$683,849" to "\$1,524,201"
WP-5	Page 1	Line 30, Column (5)	Change "\$9,611,913" to "\$9,611,895"
WP-5	Page 1	Line 33, Column (5)	Change "\$62,039,072" to "\$75,864,917"
WP-5	Page 1	Line 34, Column (5)	Change "(\$424,525)" to "\$1,718,909"
WP-5	Page 1	Line 30, Column (9)	Change "(\$1,049)" to "(\$1,055)"
WP-5	Page 1	Line 41, Column (10)	Change "\$28,280,172" to "\$45,084,695"

Note that these corrections affect other lines/columns (i.e., subtotals and totals) of this exhibit. The result of these corrections reflects the \$16,804,522 increase to FPL's requested 2014 revenue requirements.

EXHIBIT WP-6

EXHIBIT #	PAGE #	LINE #	
WP-6	Page 1	Insert Line 48, "2012 Incremental Pl	ant Placed into Service"
WP-6	Page 1	Line 48, Col (Actual January)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Actual February)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected March)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected April)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected May)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected June)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected July)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected August)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected September)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected October)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected November)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Projected December)	Insert "\$1,152,154"
WP-6	Page 1	Line 48, Col (Total)	Insert "\$13,825,845"
WP-6	Page 1	Line 61	Insert new Footnote (A)

Note that these corrections affect other lines/columns (i.e., subtotals and totals) of this exhibit. The result of this correction is a \$13,825,845 change in 2013 Base Rate Revenue Requirements shown on this schedule and included in the total requested increase in 2014 revenue requirements.

EXHIBIT WP-7

EXHIBIT

Insert new Exhibit WP-7 after WP-6 (Includes 4 Pages)

WP-7 "St. Lucie & Turkey Point Uprate Project, Revenue Requirements on 13 Month Average of Incremental 2012 Plant Placed into Service"

1		PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF WINNIE POWERS
4		DOCKET NO. 130009-EI
5		May 1, 2013
6		
7	Q.	Please state your name and business address.
8	A.	My name is Winnie Powers. My business address is 700 Universe Boulevard,
9		Juno Beach, FL 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company (FPL or the Company) as
12		New Nuclear Accounting Project Manager.
13	Q.	Have you previously filed testimony in this docket?
14	A.	Yes.
15	Q.	What is the purpose of your testimony?
16	A.	The purpose of my testimony is to present the calculation of the \$28,280,172
17		revenue requirements that FPL is requesting to recover through the Capacity
18		Cost Recovery Clause (CCRC) in 2014. These revenue requirements are
19		summarized in my Exhibit WP-5 and shown in the Nuclear Filing
20		Requirement Schedules (NFRs) FPL is now filing in this docket. Included in
21		these revenue requirements is FPL's final true-up for the 2012 T Schedules
22		filed on March 1, 2013, in this docket. In addition, I provide an overview of
23		the components of the revenue requirements included in FPL's filing and

1 demonstrate that the filing complies with the Florida Public Service 2 Commission (FPSC or Commission) Rule No. 25-6.0423, Nuclear or 3 Integrated Gasification Combined Cycle Power Plant Cost Recovery (Nuclear Cost Recovery Rule or NCR Rule). I also explain how carrying charges are 4 provided for under the Nuclear Cost Recovery Rule, describe the base rate 5 revenue requirements included for recovery in the NFRs and discuss the 6 accounting controls FPL relies upon to ensure only appropriate costs are 7 charged to the projects. 8

9 Q. Please summarize your testimony.

- 10 A. FPL is requesting to recover \$28,280,172 in revenue requirements in 2014.
- 11 These revenue requirements are based on:
- 12 (1) The final true-up of 2012 costs of (\$1,718,507);
- 13 (2) The actual/estimated true-up of 2013 costs of \$5,164,762; and
- 14 (3) The projection of 2014 costs of \$24,833,917.
- FPL's 2013 Actual/Estimated (AE) and 2014 Projected (P) Schedules comply
 with the Nuclear Cost Recovery Rule and reflect information subject to the
 robust and comprehensive corporate and overlapping business unit controls
 for incurring and validating costs and recording transactions associated with
 FPL's Turkey Point 6 & 7 (TP 6 & 7 or New Nuclear) and Extended Power
- 20 Uprate (EPU or Uprate) Projects.
- 21 Q. Are you sponsoring or co-sponsoring any Exhibits in this case?
- 22 A. Yes. I am sponsoring the following exhibits:

- Exhibit WP-5, 2014 Revenue Requirements, details the Revenue 1 Requirements requested to be recovered in 2014. These amounts include 2 the results of the 2012 True-Up (T) NFRs filed in this docket on March 1, 3 2013, the 2013 AE NFRs, and the 2014 P NFRs FPL is now filing. The 4 NFRs detail the components of cost by project, by year and by category 5 of costs being recovered. For TP 6 & 7 this includes Site Selection and 6 Pre-construction costs, and carrying costs on unrecovered balances and 7 on the deferred tax asset/liability. For the EPU, this includes carrying 8 9 costs on construction costs and on the deferred tax asset/liability, 10 recoverable operation and maintenance costs (O&M) including interest, and base rate revenue requirements, including carrying charges, for the 11 12 year plant is placed into service.
 - Exhibit WP-6, 2013 Base Rate Revenue Requirements, details the revenue requirements for the Uprate Project plant modifications expected to be placed into service during 2013 (as updated for actual/estimated information).

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- I additionally sponsor or co-sponsor some of the NFRs included in Exhibits sponsored by FPL Witnesses Scroggs and Jones as described below.
- Exhibit SDS-7, Turkey Point 6 & 7 Site Selection and Pre-construction NFRs, consists of 2013 AE Schedules, 2014 P Schedules, and 2014 Trueup to Original (TOR) Schedules. The NFRs contain a table of contents

1	listing the schedules sponsored and co-sponsored by FPL Witness Scroggs
2	and me, respectively.

Exhibit TOJ-13, EPU NFR Schedules, consists of 2013 AE Schedules, 2014 P Schedules, and 2014 TOR Schedules. The NFRs contain a table of contents listing the schedules that are sponsored and co-sponsored by FPL Witness Jones and me, respectively.

NUCLEAR FILING REQUIREMENT SCHEDULES

A.

11 Q. Please describe the NFRs you are filing in this Docket.

FPL is filing its 2013 AE, 2014 P, and 2014 TOR Schedules in this docket consistent with the requirements of the NCR Rule to provide an overview of the financial and construction aspects of its nuclear power plant projects, outline the categories of costs represented, and provide the calculation of detailed project revenue requirements. FPL previously filed its 2012 T Schedules on March 1, 2013 in this docket. My testimony refers to Exhibits that include the 2013 AE Schedules, 2014 P Schedules, and the 2014 TOR Schedules. The 2014 TOR Schedules provide an updated summary of the project costs.

Q. Please generally describe the types of costs that FPL is seeking recovery of in this docket.

1	A.	With respect to TP 6 & 7, FPL is seeking recovery of costs necessary to pay
2		vendors and personnel working now to obtain the licenses and permits needed
3		for the project, as described by FPL Witness Scroggs. These costs are Pre-
4		construction costs.
5		
6		Because the EPU Project is in the construction phase, FPL is recovering
7		carrying charges on its investment, O&M, and partial-year revenue
8		requirements for those portions of the project that are placed into service -
9		FPL does not recover its capital investment dollar-for-dollar as
10		expended. FPL will recover its capital investment through base rates over the
11		decades that the uprated units are serving customers. As described by FPL
12		Witness Jones, the EPU implementation work is complete and the EPU
13		Project is in the close-out phase. As such, there are no projected 2014 EPU
14		Construction or O&M costs.
15	Q.	Does the Nuclear Cost Recovery Rule describe the annual filing
16		requirements that a utility must make in support of its current year
17		expenditures for Commission review and approval?
18	A.	Yes. The Nuclear Cost Recovery Rule states:
19		"1. Each year, a utility shall submit, for Commission review and approval, as
20		part of its Capacity Cost Recovery Clause filings:
21		b. True-Up and Projections for Current Year. By May 1, a utility
22		shall submit for Commission review and approval its Actual/Estimated true-
23		up of Projected pre-construction expenditures based on a comparison of

current year Actual/Estimated expenditures and the previously-filed estimated expenditures for such current year and a description of the pre-construction work projected to be performed during such year; or, once construction begins, its Actual/Estimated true-up of Projected carrying costs on construction expenditures based on a comparison of current year Actual/Estimated carrying costs on construction expenditures and the previously filed estimated carrying costs on construction expenditures for such current year and a description of the construction work projected to be performed during such year."

- 10 Q. Is FPL complying with these requirements with respect to its 2013

 11 Actual/Estimated TP 6 & 7 and Uprate Project costs?
- 12 A. Yes. FPL has included for TP 6 & 7 the 2013 AE Schedules in Exhibit SDS-7
 13 for Site Selection and Pre-construction costs. FPL has included for the Uprate
 14 Project the 2013 AE Schedules in Exhibit TOJ-13. These schedules include
 15 two months of actual costs and ten months of estimated costs. In their
 16 testimonies, FPL Witness Scroggs for the TP 6 & 7 Project and FPL Witness
 17 Jones for the Uprate Project provide the reasons why these actual/estimated
 18 costs and resulting true-ups are reasonable.
- Q. Does the Nuclear Cost Recovery Rule describe the annual filing requirements that a utility must make for the projected year expenditures for Commission review and approval?
- 22 A. Yes. The Nuclear Cost Recovery Rule states:
- "1. Each year, a utility shall submit, for Commission review and approval, as

part of its Capacity Cost Recovery Clause filings: ...

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- c. Projected Costs for Subsequent Years. By May 1, a utility shall submit, for Commission review and approval, its Projected pre-construction expenditures for the subsequent year and a description of the pre-construction work projected to be performed during such year; or, once construction begins, its Projected construction expenditures for the subsequent year and a description of the construction work projected to be performed during such year."
- 9 Q. Is FPL complying with these requirements with respect to its 2014

 10 Projected TP 6 & 7 Project and Uprate Project costs?
- Yes. FPL has included for TP 6 & 7 the 2014 P Schedules in Exhibit SDS-7 A. 11 for Site Selection and Pre-construction costs. FPL has included for the Uprate 12 Project certain 2014 P Schedules to show the refund/collection of the carrying 13 charges or interest on the final True-up of 2012 costs and the actual/estimated 14 True-up of 2013 costs. My Exhibit WP-5, details the true up of 2012 actuals 15 (as filed on March 1, 2013 in this docket), and the 2013 actual/estimated and 16 2014 projected revenue requirements FPL is filing now and requesting to 17 recover in 2014. 18
- Q. Why is FPL only including certain 2014 P Schedules for the EPU Project
 in its filing?
- 21 A. The Uprate Project will be completed in 2013 and no additional construction 22 or O&M costs are projected for 2014. However, FPL will refund or collect 23 any over/under recoveries resulting from its 2012 and 2013 true-ups in 2014.

1	Therefore, FPL is filing 2014 P Schedules to show the refund/recovery, along
2	with related carrying charges or interest expense on any over/under recoveries
3	of carrying charges, base rate revenue requirements or O&M expenses as a
4	result of the 2012 final true-up and 2013 partial true-up filed in this docket.

- 5 Q. How is FPL providing an update to the original TP 6 & 7 Project and
 6 Uprate Project costs, respectively?
- A. FPL has included for TP 6 & 7 the 2014 TOR Schedules in Exhibit SDS-7 for Site Selection and Pre-construction costs. FPL has included for the Uprate Project the 2014 TOR Schedules in Exhibit TOJ-13. The TOR Schedules follow the format of the T, AE, and P Schedules but also detail the actual to date project costs and projected total retail revenue requirements for the duration of the project based on the best available information prior to the filing.

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- Schedule TOR-1 Reflects the jurisdictional amounts used to calculate the final true-up, actual/estimated true-up, projection, deferrals, and requested recovery amounts for each project included in the Nuclear Cost Recovery Clause (NCRC).
- Schedule TOR-2 Reports the budgeted and actual costs as compared to the estimated in-service costs of the proposed power plant as provided in the petition for need determination or revised estimate if necessary.
- Schedule TOR-3 Provides a summary of the actual amounts through 2012
 and projected total amounts for the project.

1	•	Schedule TOR-4 - Provides the annual construction O&M expenditures by
2		function as reported for all historical years through 2012, for the current
3		year, and for the projected year.

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- Schedule TOR-6 Provides the actual expenditures through 2012 and projected annual expenditures by major tasks performed within Site Selection, Pre-construction, and Construction for the project.
- Schedule TOR-6A Provides a description of the major tasks performed within the Site Selection, Pre-construction, and Construction category for the year filed.
- Schedule TOR-7 Reflects initial project milestones in terms of costs, budget levels, initiation dates, and completion dates as well as all revised milestones and reasons for each revision.
- Q. What are the sunk costs that FPL is accounting for in the feasibility analysis?
- As discussed in FPL Witness Dr. Sim's testimony, for TP 6 & 7, FPL is excluding in the feasibility analysis a total of approximately \$192 million of sunk costs as of December 31, 2012.
- 18 Q. Please explain the components of the revenue requirements that FPL is 19 requesting to include for recovery effective January 1, 2014.
- 20 A. The total amount FPL is requesting to recover in 2014 is \$28,280,172. This
 21 amount reflects the true-up of 2012 actual costs as filed on March 1, 2013 of
 22 (\$1,718,507), the true-up to 2013 actual/estimated costs of \$5,164,762, and

1		the recovery of 2014 projected costs of \$24,833,917 as shown on Exhibit
2		WP-5.
3		
4		TURKEY POINT 6 & 7
5		Actual/Estimated Revenue Requirements - 2013
6		
7	Q.	What is the revenue requirement amount that FPL is requesting to reflect
8		in the true-up of its 2013 TP 6 & 7 Costs?
9	A.	FPL is requesting (\$1,155,974) in revenue requirements, representing an
10		under recovery of Pre-construction costs of \$62,726, and an over recovery of
11		carrying charges of (\$1,218,700) as shown on Exhibit WP-5. This amount
12		will be reflected in the CCRC charge paid by customers when the CCRC is
13		reset in 2014. There is no true-up of 2013 Site Selection costs since there is
14		only the recovery of carrying costs remaining on the deferred tax asset for Site
15		Selection and no true-up is required, as presented on FPL Witness Scroggs's
16		Exhibit SDS-7, Schedule AE-3A.
17	Q.	What are FPL's 2013 actual/estimated TP 6 & 7 Pre-construction
18		expenditures compared to costs previously projected and any resulting
19		(over)/under recoveries of costs?
20	A.	FPL's actual/estimated TP 6 & 7 Pre-construction expenditures for the period
21		January through December 2013 are \$29,277,715 (\$28,748,963 on a
22		jurisdictional basis) as presented in FPL Witness Scroggs's testimony and
23		provided on SDS-7, Schedule AE-6. FPL's previous projected 2013 Pre-

	construction expenditures were \$28,686,236 on a jurisdictional basis. The
	result is an under recovery of Pre-construction revenue requirements of
	\$62,726.
Q.	What are FPL's 2013 actual/estimated TP 6 & 7 Pre-construction
	carrying charges compared to carrying charges previously projected and
	any resulting (over)/under recoveries of costs?
A.	FPL's 2013 actual/estimated TP 6 & 7 Pre-construction carrying charges are
	\$4,908,335. FPL's previous projected carrying charges were \$6,127,036,
	resulting in an over recovery of revenue requirements of (\$1,218,700). The
	calculations of the carrying charges can be found in Exhibit SDS-7, Schedules
	AE-2 and AE-3A.
	AE-2 and AE-3A.
	AE-2 and AE-3A. Projected Revenue Requirements - 2014
Q.	
Q.	Projected Revenue Requirements - 2014
Q. A.	Projected Revenue Requirements - 2014 What revenue requirement amount is FPL requesting for its 2014
	Projected Revenue Requirements - 2014 What revenue requirement amount is FPL requesting for its 2014 projected TP 6 & 7 Costs?
	Projected Revenue Requirements - 2014 What revenue requirement amount is FPL requesting for its 2014 projected TP 6 & 7 Costs? FPL is requesting recovery of \$24,151,118 in revenue requirements related to
	Projected Revenue Requirements - 2014 What revenue requirement amount is FPL requesting for its 2014 projected TP 6 & 7 Costs? FPL is requesting recovery of \$24,151,118 in revenue requirements related to its projected 2014 TP 6 & 7 Site Selection and Pre-construction costs. These
	Projected Revenue Requirements - 2014 What revenue requirement amount is FPL requesting for its 2014 projected TP 6 & 7 Costs? FPL is requesting recovery of \$24,151,118 in revenue requirements related to its projected 2014 TP 6 & 7 Site Selection and Pre-construction costs. These revenue requirements consist of projected TP 6 & 7 Pre-construction
	_

in Exhibit SDS-7, Schedule P-2 and P-3A. Also included are projected TP

1		6 & 7 Site Selection carrying costs on the deferred tax asset of \$180,883 as
2		shown on Exhibit SDS-7.
3	Q.	What is the total amount FPL is requesting to recover in its 2014 NCRC
4		Capacity Cost Recovery factor for TP 6 & 7 Pre-construction costs?
5	A.	FPL is requesting to include \$17,392,343 of revenue requirements in 2014 for
6		TP 6 & 7 Pre-construction costs.
7		
8		This amount consists of the true-up of 2012 actual TP 6 & 7 Pre-construction
9		costs and carrying costs of (\$5,602,800), described in my March 1, 2013
10		testimony, the true-up of 2013 actual/estimated TP 6 & 7 Pre-construction
11		costs and carrying costs of (\$1,155,974), the 2014 projected TP 6 & 7 Site
12		Selection carrying costs of \$180,883 and 2014 Pre-construction costs and
13		carrying costs of \$23,970,235, as shown on Exhibit WP-5.
14		
15		For the reasons stated in FPL Witness Scroggs's testimony, FPL respectfully
16		requests that the Commission approve the 2013 Actual/Estimated, and 2014
17		Projected Pre-construction costs and the Pre-construction and Site Selection
18		carrying charges as reasonable, and approve the resulting revenue
19		requirements described in my testimony for recovery in FPL's 2014 CCRC
20		charge.
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UPRATE PROJECT

2	Actual/Estimated	Revenue	Requirements -	2013
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Q. What are FPL's 2013 actual/estimated Uprate Project expenditures compared to costs previously projected?

A. FPL's actual/estimated Uprate generation and transmission expenditures for the period January through December 2013 are \$170,108,464, total company. As presented in FPL Witness Jones's testimony and shown on Exhibit TOJ-13, Schedule AE-6 deducts the portion of this total for which the St. Lucie Unit 2 participants are responsible and then applies the retail jurisdictional factor to the remainder. This results in jurisdictional, net of participants

Uprate generation and transmission expenditures of \$166,953,395.

For actuals, further adjustments are made to present the expenditures on a cash basis (i.e., excluding accruals and pension and welfare benefit credits) for the calculation of carrying charges. These adjustments are necessary in order to comply with the Commission's current practice regarding Allowance for Funds Used During Construction (AFUDC) accruals. Since the estimated costs are on a cash basis, it is not necessary to project any non-cash accruals for the remainder of the year. After making these additional adjustments for calculating carrying charges, the actual/estimated 2013 jurisdictional, net of participants Uprate Project expenditures are \$166,537,880, as shown on AE-6 in Exhibit TOJ-13. FPL's previous projected 2013 Uprate Project

1	expenditures	were	\$163,996,072	(\$161,047,828,	jurisdictional,	net	of
2	participants)						

- What is the revenue requirement amount that FPL is requesting to reflect the true-up of its 2013 actual/estimated Uprate Project costs?
- 5 A. FPL's requested true-up of its 2013 revenue requirements for the Uprate
 6 Project is \$6,320,736.
- Q. What are FPL's 2013 actual/estimated Uprate Project carrying charges, recoverable O&M, and base rate revenue requirements for plant placed into service in 2013 compared to costs previously projected and any resulting (over)/under recoveries of costs?
- 11 A. FPL's 2013 actual/estimated Uprate Project carrying charges, recoverable
 12 O&M, and base rate revenue requirements for plant placed into service in
 13 2013 are \$91,570,685. FPL's previously projected revenue requirements were
 14 \$85,249,950, resulting in an under recovery of \$6,320,736. The details of
 15 these jurisdictional costs (carrying charges, recoverable O&M and base rate
 16 revenue requirements) are summarized on Exhibit WP-5.
- 17 Q. What are the components of the true-up of \$6,320,736 of 2013 revenue requirements?
- 19 A. The \$6,320,736 consists of the true-up of carrying charges of \$4,910,348,
 20 recoverable O&M including interest of \$4,534,043 and base rate revenue
 21 requirements including carrying charges of (\$3,123,656) as shown on Exhibit
 22 WP-5.

1	Q.	Where can the calculation of FPL's Uprate Project 2013 actual/estimated
2		carrying charges be found?

- A. The calculation of the Uprate Project 2013 actual/estimated carrying charges of \$20,344,226 can be found in Exhibit TOJ-13, Schedules AE-3 and AE-3A.

 FPL's previous projected 2013 Uprate carrying charges were \$15,433,878 as filed in Docket No. 120009-EI. As a result of the actual/estimated true-up of 2013 carrying charges in this filing, there is an under recovery of \$4,910,348 in 2013.
- 9 Q. What are FPL's Uprate Project 2013 actual/estimated recoverable O&M

 10 costs and where can these costs be found?
- FPL's Uprate Project 2013 actual/estimated recoverable O&M costs A. 11 including interest are \$9,790,528 (\$9,611,913 jurisdictional, net of 12 participants) and can be found in Exhibit TOJ-13, Schedule AE-4. FPL 13 previously projected 2013 recoverable O&M costs including interest of 14 \$5,170,770 (\$5,077,869, jurisdictional, net of participants) as filed in Docket 15 16 No. 120009-EI. As explained in Schedule AE-4, over/under recoveries of 17 recoverable O&M incur interest at the AA Financial 30-day rate posted on the 18 Federal Reserve website. As a result of the actual/estimated true-up of 2013 Uprate Project recoverable O&M including interest, there is an under recovery 19 of \$4,534,043, jurisdictional, net of participants in 2013. 20
- Q. What are the base rate revenue requirements for plant being placed into service in 2013 for the Uprate Project and where can the calculations be found?

1 A. The Uprate Project actual/estimated base rate revenue requirements including
2 carrying charges for plant being placed into service in 2013 are \$61,614,546
3 as shown in Exhibit TOJ-13, Appendix C. FPL previously projected base rate
4 revenue requirements including carrying charges in the amount of
5 \$64,738,202.

The 2013 actual/estimated base rate revenue requirement calculations along with over/under recoveries are shown on Appendices B and C in Exhibit TOJ-13. In 2013, FPL's actual/estimate transfers to plant in service total is \$765,539,144 (\$751,675,324, jurisdictional, net of participants), as shown on TOJ-13, Appendix B. The 2013 projected base rate revenue requirements were based on transfers to plant in service filed in Docket No. 120009-EI of \$719,494,626 (\$706,559,889, jurisdictional, net of participants, net of adjustments). The plant placed in service and expected to be placed into service in 2013 is presented by FPL Witness Jones.

As described in Order No. PSC-08-0749-FOF-EI in Docket No. 080009-EI, FPL "shall be allowed to recover through the NCRC associated revenue requirements for a phase or portion of a system placed into commercial service during a projected recovery period. The revenue requirement shall be removed from the NCRC at the end of the period. Any difference in recoverable costs due to timing (projected versus actual placement in service) shall be reconciled through the true-up provision." Until the plant is placed

into service, FPL will continue to recover the carrying charges on the construction costs. Effective in the month each transfer to plant in-service is made, FPL will transfer the related costs from Construction Work in Progress to plant in-service and the carrying charges will cease. For the portion of the month the plant is in service and in subsequent months, inclusion of the 2013 base rate revenue requirements related to the plant being placed into service is included for recovery through the NCRC. Included in the base rate revenue requirement is any non-incremental labor related to the Uprate Project. FPL's 2013 actual/estimated transfers to plant in service, including non-incremental labor, is shown in Exhibit WP-6. An explanation of non-incremental labor was provided in my March 1, 2013 testimony in this docket.

Projected Revenue Requirements - 2014

- 15 Q. What are FPL's Projected Uprate Project construction expenditures, 16 recoverable O&M, and base rate revenue requirements for plant placed 17 into service in 2014, for the period January through December 2014?
- A. FPL is completing the Uprate Project in 2013. Therefore there are no Uprate
 Project construction costs, recoverable O&M, or base rate revenue
 requirements for plant placed into service in 2014 projected for 2014.
 - Q. What are FPL's 2014 Projected Uprate Project costs?
- A. FPL's 2014 projected Uprate Project costs are \$682,800, as shown on Exhibit WP-5. As previously discussed, certain P Schedules are being filed to

1	refund/recover prior year true-ups along with carrying charges or interest on
2	those true-ups for 2014.

- Q. Please describe the P Schedules you are sponsoring in 2014 for the Uprate 3 Project. 4
- A. FPL is filing the P-1, P-3 and P-4 Schedules in 2014 to show the impacts of 5 refunding/collecting its 2012 final true-up and 2013 actual/estimated true-up
- in 2014. 7

- Q. Please describe what each of these P-Schedules includes. 8
- 9 A. The P-1 Schedule summarizes what FPL will refund/recover from Schedules P-3 and P-4 in 2014 and shows an under recovery of \$682,800. Schedule P-3 10 consists of the calculation of the Uprate Project 2014 projected carrying 11 charges on under recoveries of \$683,849 as shown on Exhibit TOJ-13. 12 Schedule P-4 shows the Uprate Project 2014 projected interest of (\$1,049) on 13 14 O&M over recoveries in 2012 and 2013 and is shown in Exhibit TOJ-13. As explained in Schedule P-4, over/under recoveries of recoverable O&M incur 15 interest at the AA Financial 30-day rate posted on the Federal Reserve Board 16 website.
- What is the amount FPL is requesting to recover through the Capacity 18 Q. Clause Recovery factor for the Uprate Project in 2014? 19
- 20 A. In 2014, FPL is requesting to recover \$10,887,829 for the Uprate Project. This amount consists of carrying charges and interest on the true-up of 2012 21 actual Uprate Project revenue requirements of \$3,884,294 described in my 22 March 1, 2013 testimony, the true-up of 2013 actual/estimated Uprate Project 23

1		revenue requirements of \$6,320,736, and 2014 projected Uprate revenue
2		requirements on under recoveries of costs of \$682,800.
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4		For the reasons stated in FPL Witness Jones's testimony, FPL respectfully
5		requests that the Commission approve FPL's 2013 actual/estimated
6		expenditures and the resulting revenue requirements as well as the 2014
7		revenue requirements as reasonable, and approve the resulting revenue
8		requirements described in my testimony for recovery in FPL's 2014 CCRC
9		charge.
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11		ACCOUNTING CONTROLS
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13	Q.	Please describe the accounting controls that provide you reasonable
14		assurance that the costs included in the filing are correct.
15	A.	As described more fully in my March 1, 2013 testimony, FPL has a robust
16		system of corporate accounting controls. The Company relies on its
17		comprehensive corporate and overlapping business unit controls for recording
18		and reporting transactions associated with any of its capital projects including
19		the TP 6 & 7 Project and Uprate Project. Highlights of the Company's
20		comprehensive and overlapping controls which continued to be utilized in
21		2013 include:

• FPL's accounting policies and procedures;

1	•	Financial systems and related controls including FPL's general ledger
2		and construction asset tracking system;

- FPL's annual budgeting and planning process;
- Reporting and monitoring of plan costs to actual costs incurred; and
- Business unit specific controls and processes.

- Q. Are these controls documented, assessed, audited and/or tested on an
 ongoing basis?
- 8 A. Yes. The FPL corporate accounting policies and procedures are documented and published on the Company's internal website (Employee Web). Included 9 on the Company's internal website are the corporate procedures regarding 10 cash disbursements, accounts payable, contract administration, and financial 11 closing schedules, which provide the business units guidance as to the 12 processing and recording of transactions. The business units can then build 13 their more specific procedures around these corporate procedures. FPL's 14 internal audit department annually audits the TP 6 & 7 and Uprate Projects. 15 The FPSC staff also is continuing its audits. Additionally, by virtue of the 16 NFRs themselves, a high level of transparency allows all parties to review and 17 determine the prudence and reasonableness of our filing. 18
- 19 Q. How does FPL ensure only incremental payroll is charged to the 20 projects?
- 21 A. The Company has issued specific guidelines for charging labor costs to the 22 project work orders. These guidelines emphasize the need for particular care 23 in charging only incremental labor to the project work orders included for

1		nuclear cost recovery and ensure consistent application of the Company's
2		capitalization policy. These guidelines describe the process for the exclusion
3		of non-incremental labor from NCRC recovery while providing full
4		capitalization of all appropriate labor costs through the implementation of
5		separate project capital work orders that will be included in future base rate
6		recoveries.
7	Q.	Did anything change in the method incremental labor is established from
8		2012 to 2013?
9	A.	Yes. As a result of FPL's rate case in Docket No. 120015-EI, the Company
10		will reset the basis upon which incremental employee labor is established as
11		clause recoverable. Employees dedicated to the project and charging 100% of
12		their time to the NCRC projects during 2013 will be considered incremental
13		for the entire year 2013 and as a result, incremental for 2014. Employees
14		charging a percentage of their time to capital in the NCRC in 2013 will be
15		designated incremental for that percentage of their labor costs in 2013 and
16		2014.
17		
18		SUMMARY
19		
20	Q.	What is the total revenue requirement FPL is requesting the Commission
21		approve for the 2014 Capacity Cost Recovery Clause factor?
22	A.	FPL is requesting that the Commission approve recovery of \$28,280,172 in

revenue requirements through the 2014 Capacity Cost Recovery factor. This

amount consists of a true-up of (\$1,718,507) in revenue requirements as calculated in the 2012 T Schedules filed on March 1, 2013, a true-up of \$5,164,762 in revenue requirements as calculated in the 2013 AE Schedules, and \$24,833,917 in revenue requirements as calculated in the 2014 P Schedules.

FPL is also requesting the Commission to determine that FPL's 2013 actual/estimated and 2014 projected costs and the resulting revenue requirements are reasonable as supported by my Exhibit WP-5 and the testimonies and exhibits filed by other FPL witnesses in this docket.

- 11 Q. Does this conclude your testimony?
- 12 A. Yes.

000419 COMPANION 123

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION FLORIDA POWER & LIGHT COMPANY

3 AMENDED REBUTTAL TESTIMONY OF TERRY DEASON

4 DOCKET NO. 130009-EI

- 6 Q: Please state your name and business address.
- 7 A: My name is Terry Deason. My business address is 301 S. Bronough Street,

JULY 26, 2013

- 8 Suite 200, Tallahassee, Florida 32301.
- 9 Q: By whom are you employed and in what capacity?
- 10 A: I am employed by the Radey Law Firm as a Special Consultant specializing in
- the fields of energy, telecommunications, water and wastewater, and public
- 12 utilities generally.
- 13 Q: Please describe your educational background and professional
- 14 experience.

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- 15 A: I have thirty-six years of experience in the field of public utility regulation
- spanning a wide range of responsibilities and roles. I served a total of seven
- 17 years as a consumer advocate in the Florida Office of Public Counsel (OPC)
- on two separate occasions. In that role, I testified as an expert witness in
- 19 numerous rate proceedings before the Florida Public Service Commission

20 (Commission). My tenure of service at the Florida Office of Public Counsel

was interrupted by six years as Chief Advisor to Florida Public Service

Commissioner Gerald L. Gunter. I left OPC as its Chief Regulatory Analyst

when I was first appointed to the Commission in 1991. I served as

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1 Commissioner on the Commission for sixteen years, serving as its chairman 2 on two separate occasions. Since retiring from the Commission at the end of 3 2006, I have been providing consulting services and expert testimony on behalf of various clients, including public service commission advocacy staff 4 and regulated utility companies, before commissions in Arkansas, Florida, 5 Montana, New York and North Dakota. My testimony has addressed various 6 7 regulatory policy matters, including: regulated income tax policy; storm cost 8 recovery procedures; austerity adjustments; depreciation policy; subsequent year rate adjustments; appropriate capital structure ratios; and prudence determinations for proposed new generating plants and associated 10 transmission facilities. I have also testified before various legislative committees on regulatory policy matters. I hold a Bachelor of Science Degree in Accounting, summa cum laude, and a Master of Accounting, both from Florida State University. Q: Are you sponsoring any exhibits? A: Yes. I am sponsoring the following rebuttal exhibits: TD - 1, Biographical Information for Terry Deason TD - 2, Jacobs' Non-symmetrical Analysis for Turkey Point Applied to St. Lucie What is the purpose of your rebuttal testimony? Q: The purpose of my rebuttal testimony is to respond to certain assertions and a A: recommendation to disallow costs made by OPC Witness Jacobs concerning

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1		Florida Power & Light Company's (FPL) extended power uprate (EPU)
2		project.
3	Q:	Does witness Jacobs make a recommendation on how the Commission
4		should treat certain costs of the EPU project?
5	A:	Yes. Based on a strained analysis of the relative cost effectiveness of the
6		Turkey Point portion of the EPU project versus the St. Lucie portion of the
7		EPU project, witness Jacobs, on behalf of the OPC, recommends that the
8		Commission disallow \$200 million of costs incurred to complete the EPU
9		project. In essence, witness Jacobs is recommending an arbitrary cap on
10		otherwise prudently incurred costs.
11	Q:	Should the Commission accept this recommendation?
12	A:	No, the Commission should absolutely reject this recommendation.
13	Q:	Why should the Commission reject witness Jacobs' recommendation?
14	A:	A close examination of this recommendation quickly reveals that it is a
15		rehashing and repackaging of arguments that have already been considered
16		and rejected by the Commission. In addition, his recommendation runs
17		grossly afoul of Florida's policy to promote nuclear generation, the standards
18		of nuclear cost recovery contained in statute and rule, principles of
19		ratemaking, and sound regulatory policy.
20	Q:	What is Florida's policy concerning nuclear generation?
21	A:	Florida's policy is to promote electric utility investment in nuclear power
22		plants and allow for the recovery in rates of all such prudently incurred costs.
23		This is expressly stated in Rule 25-6.0423, F.A.C.

- 1 Q: What was the impetus for the Commission's adoption of Rule 25-6.0423,
- 2 F.A.C.?

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- 3 A: The most direct and obvious impetus was the enactment in 2006 of Section
- 4 366.93, Florida Statutes, which directed the Commission to "establish, by
- 5 rule, alternative cost recovery mechanisms for the recovery of costs incurred
- 6 in the siting, design, licensing and construction of a nuclear power plant."
- 7 Q: What was the purpose of this directive?

The Legislature determined that the risks of planning, constructing, and operating new nuclear generation were great and that the traditional regulatory model was insufficient to address those risks. The traditional regulatory model, which was used in the last round of new nuclear plants constructed in the United States, resulted in the disallowance of substantial investments based on reviews being undertaken only after plants were completed and requests were made to have them included in rate base. Often these reviews entailed upwards of a decade of costs that had been incurred. This caused several problems, not the least of which was the complexity and the span of time of the reviews. Another factor was the accumulated carrying costs of the investments and their resulting impact on rates. For investors to be willing to devote their capital to the planning, construction, and operation of new nuclear plants and for the benefits of new nuclear generation to be achieved, the Legislature determined that a different regulatory approach was needed. A key component of this new approach was to provide greater certainty to the amount and timing of recovery of all prudently incurred costs. Providing

1 regulatory certainty for the recovery of all prudently incurred costs avoided 2 the unacceptable risk of a determination of imprudence being made only after 3 many years of construction expenditures had been incurred. Pursuant to this 4 directive, Rule 25-6.0423, F.A.C., established annual prudence determinations 5 with much needed finality. 6 Q: Did the Commission specifically address the need for annual prudency 7 reviews and the need for finality? 8 A: Yes, the matter received much discussion at the Commission's December 19, 9 2006, Agenda Conference during which the Commission voted to propose 10 Rule 25-6.0423, F.A.C. The Public Counsel, while acknowledging his initial 11 opposition to an annual prudence review, stated that "it's probably a good idea 12 for you to take an annual look at this program, a pervasive look, and enter a 13 judgment as to whether you believe the investment undertaken to that point is 14 prudent or not prudent..." And in response to a question on the finality of those determinations, the Commission's General Counsel stated: "I think the 15 concept of administrative finality doesn't let you go back and revisit decisions 16 that were made looking at the record and doing the normal course of things." 17 And the general sentiment of the Commission was encapsulated in this 18 19 statement by Commissioner Arriaga: Are we leaving doors open in the middle so that the companies 20 may not avail themselves of the rules? I think the purpose here is 21 to make sure that nukes are built, because we need that energy. 22 We said it over and over and over, we need nuclear energy. Ten 23

1		years from now if we don't have it, we are going to look back and
2		say we did not do our job as Commissioners.
3	Q:	Why is this finality needed?
4	A:	It is needed to avoid the same concerns I expressed earlier with prudence
5		reviews spanning unacceptable time frames and addressing costs that have
6		accumulated over multiple years. Without the finality of the annual prudence
7		determinations, it is possible and perhaps likely that investments in new
8		nuclear generation would be subject to the same risks that plagued earlier
9		investments in nuclear generation.
10	Q:	What is Florida's policy on the finality of prudence determinations of
11		nuclear costs?
12	A:	Florida's policy is to review the prudence of incurred costs annually and to
13		disallow those costs found to be imprudent. Costs determined to be prudent
14		are no longer subject to disallowance or further prudence review.
15	Q:	Were there any other statutory changes in 2006 setting forth Florida's
16		policy concerning nuclear generation?
17	A:	Yes, there were significant additions and clarifications made to Section
8		403.519, Florida Statutes. These changes work in conjunction with Section
19		366.93, Florida Statutes, and Rule 25-6.043, F.A.C., to further delineate and
20		implement Florida's policy to promote nuclear generation.
21	Q:	What were the notable changes to Section 403.519, Florida Statutes?
22	A:	Section 403.519 establishes the Commission to be the exclusive forum for a
23		determination of need of an electrical power plant subject to the Florida

1		Electrical Power Plant Siting Act. The notable changes did three things.
2		First, nuclear generation was exempted from Rule 25-22.082, F.A.C., which is
3		commonly referred to as "the bid rule." Second, standards and procedures for
4		the determination of imprudence were established. And third, the
5		Commission was specifically charged to consider whether a proposed nuclear
6		generation facility would: "Enhance the reliability of electric power
7		production within the state by improving the balance of power plant fuel
8		diversity and reducing Florida's dependence on fuel oil and natural gas."
9	Q:	Was this last item a new consideration for the Commission?
10	A:	No, while this specific statutory language was new, the Commission had long
11		recognized the need for fuel diversity and the need to reduce Florida's
12		dependence on fuel oil and natural gas.
13	Q:	What has the Commission done to promote fuel diversity?
14	A:	The Commission recognized the need for generation from "solid fuel" plants.
15		As early as the 1980s the Commission encouraged utilities to purchase "coal-
16		by-wire" from the Southern Company, which had coal capacity available. As
17		part of this initiative, the Commission instituted an "Oil Back-out Clause" to
18		provide a more rapid recovery of costs and thus to promote the use of coal
19		generation. In 2005, FPL's and Progress Energy's contracts with Southern
20		came up for renewal and the Commission approved them.
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22		The Commission also expressed concern over the increasing reliance on
23		natural gas as a base-load generation fuel. As part of its review of 2004 Ten

1 Year Site Plans, the Commission stated, "based on current fuel mix and fuel 2 price projections, Florida's utilities should explore the feasibility of adding 3 solid fuel generation as part of future capacity additions." 4 Q: What was the response from the utilities? 5 The result was the inclusion of seven new coal plants in the reporting utilities' A: 6 2005 Ten Year Site Plans. JEA, Gainesville Regional Utilities and Seminole 7 Electric Cooperative, Inc. each proposed to build new coal-fired generating units. The Florida Municipal Power Agency, JEA, Reedy Creek, and City of 8 Tallahassee proposed joint ownership in a new coal-fired project. 10 Orlando Utilities Commission planned to build an integrated coal gasification 11 combined cycle unit. And FPL planned to build two new coal-fired units. 12 Were any of these planned units ever constructed? Q: 13 A: No. 14 Q: What were the circumstances concerning FPL's two planned coal-fired 15 units? 16 A: In response to the Commission's concerns over a lack of fuel diversity, FPL 17 committed to file a feasibility study of coal-fired alternatives, which was filed 18 in 2005. In 2006, in emphasizing its concern of a lack of fuel diversity, the 19 Commission further stated that utilities should not assume the automatic 20 approval of gas-fired plants in future need determination proceedings. In 21 response to the Commission's direction, FPL then proposed building two 22 ultra-supercritical pulverized coal units in Glades County to come online in 23 2012 and 2013. These units were referred to as the FPL Glades Power Park

1		and were the subject of a proposed need determination before the Commission
2		in 2007. While the project had attractive economics and significant reliability
3		benefits, it was not approved by the Commission. The Commission cited
4		concerns with the risks associated with new coal generation in light of
5		anticipated greenhouse gas emissions regulations. FPL then found itself in a
6		situation of needing to meet its customers' 2012 electricity capacity needs
7		reliably and cost effectively and provide greater fuel diversity while
8		minimizing greenhouse gas emissions. As a result, FPL proposed the EPU
9		project on an expedited basis in order to meet these needs. The Commission
0		issued an order approving FPL's need determination request in 2008.
1	Q:	Why did the Commission encourage utilities to pursue solid fuel
2		generation?
3	A:	The Commission had two primary reasons. First was a desire to maintain the
4		reliability of Florida's electric generation. Second was a desire to mitigate the
5		impact of the volatility of natural gas prices and the resulting impact on
6		customers.
7	Q:	Why was the Commission concerned with the reliability of Florida's
8		electric generation?
9	A:	During the time the Commission was encouraging the pursuit of solid fuel
0		generation, the Commission was particularly concerned with two fundamental
1		facts impacting Florida's electric generation reliability, facts which continue
2		to this day.

First is the fact that Florida is a peninsula with limited electric power import capability. In the early 1990s, the Commission attempted to address this constraint. Studies were performed to determine the feasibility of constructing additional transmission lines that would increase the import capability of coal-fired generation from the north. Cost effectiveness considerations, local opposition to construction, and ambiguity in wholesale pricing policies all led to the project not being constructed. And in subsequent years, the amount of coal-fired generation available for import declined.

A:

The second fundamental fact is that Florida was then becoming and continues now to be increasingly dependent on gas fired generation to meet base-load requirements. This fact, coupled with Florida's dependency on only two main natural gas pipelines into the state, added to the urgency.

14 Q: Are there instances in which these concerns actually manifested 15 themselves?

Yes, there are at least two. First, was an incident involving the Florida Gas Transmission line. In 1998, when natural gas supplied approximately only 15 percent of Florida's needs, a lightning strike and subsequent explosion at a compressor station near Perry, Florida, significantly reduced the pressurization and pumping capability in the pipeline. This in turn reduced the amount of gas fired generation available for dispatch and jeopardized the integrity of the grid. The Florida Department of Environmental Protection declared a thirty day state of emergency and stated: "The Department finds

that the explosion has created a state of emergency threatening the public
health, safety, and welfare throughout portions of the state that are adversely
affected by the curtailment of natural gas supply to various power plants in
these areas." Resulting environmental waivers to allow increased output from
non-gas generating units and the extensive use of load control programs were
necessary to maintain integrity and prevent a large scale black-out. And then
in 2005, Hurricanes Katrina and Rita shut down natural gas production in the
Gulf of Mexico. As a result, gas importation into Florida was curtailed and
utilities had to make public appeals for conservation and had to seek
environmental waivers allowing them to burn back-up fuels such as oil.
In response to previous questions you indicated that the Commission was
also concerned with the price volatility of natural gas and its impact on
customers. Could you explain?
While the price of natural gas is low at present, it still remains volatile and
difficult to predict. This exposes utilities and their customers to the potential
for large under-recoveries of fuel costs. This was particularly evident during
the years 2001 through 2005. The Commission's Review of 2007 Ten-Year
Site Plans addressed this and at page 10 stated:
Starting in 2001, natural gas prices began to increase nationwide
Starting in 2001, natural gas prices began to increase nationwide despite electric utility forecasts of flat prices with moderate growth
despite electric utility forecasts of flat prices with moderate growth

Q:

A:

hurricanes and tropical storms in the Gulf of Mexico caused shortterm spikes as high as \$12 per MMBtu due to gas supply
disruptions. The effects of higher volatile gas prices can be
dramatic on customer bills. Between 2003 and 2005, Florida's
IOUs experienced record fuel cost under-recoveries compared to
forecasts. Under-recoveries of fuel costs totaled approximately
\$670 million in 2003, \$353 million in 2004, and \$1.564 billion in
2005. The three years of higher than predicted fuel costs alone are
approximately the same as the capital cost of a new coal-fired
plant.

A:

Q: How does the Commission's encouragement of solid fuel generation relate to FPL's EPU project?

All of the concerns expressed earlier by the Commission arising from an increasing reliance on natural gas continue today. Coal no longer appears to be an available means to increase solid fuel generation in Florida, primarily due to concerns with air emission impacts. Nuclear generation remains a cost-effective means to increase solid fuel generation without air emission impacts. The policy of the State of Florida recognizes this and encourages the development of additional nuclear generation. Relying on this policy and the procedures provided in law and rule, FPL has taken on the higher risk of constructing additional nuclear generation to comply with this policy and to address the Commission's long held concerns.

1	Q:	Given Florida's policy of promoting nuclear and the procedures in law
2		and rule, why is nuclear a higher risk option?
3	A:	As a general rule, a higher capital cost and lower fuel cost alternative is a
4		more risky choice than a lower capital cost and higher fuel cost alternative.
5		This risk differential is further amplified in the case of nuclear construction
6		and the unique challenges it brings. This is clearly stated by Commission
7		Staff in its February 1, 2007 recommendation to the Commission to adopt new
8		Rule 25-6.0423, F.A.C., which the Commission did by Order No. PSC-07-
9		0240-FOF-EI:
10		No new nuclear power plants have been built in the United States

No new nuclear power plants have been built in the United States in several decades. This is in part due to the extraordinary obstacles faced by electric utilities wishing to construct new nuclear power plants that are not present for other types of generation like coal and natural gas. These obstacles include the requirement of an intensive federal application, permitting, and review process, including oversight by the federal Nuclear Regulatory Commission; an extremely long permitting and construction period; and a public perception of nuclear generation which can pose significant challenges. The clear intent of the 2006 Florida Legislation is to promote new nuclear generation in Florida by providing Florida utilities the incentives needed to overcome these obstacles; the Legislature was clearly concerned that without these incentives, Florida utilities will continue to build

1 natural gas and coal fired generation to meet Florida's growing 2 The provisions of the rule which staff is energy needs. 3 recommending for adoption were designed to address the intent of the statute and these concerns, which are unique to construction of 5 nuclear power plants. 6 Q: In an answer to a previous question, you stated that Section 403.519, 7 Florida Statutes, was revised in 2006 to establish standards and procedures for the determination of prudence or imprudence. What is 9 the standard in making these determinations? 10 After a new nuclear project has received a determination of need, the A: 11 associated costs are not subject to challenge unless and only to the extent the Commission finds, based on a preponderance of the evidence adduced at a 12 13 hearing, that certain costs were imprudently incurred. In addition, imprudence 14 shall not include any cost increases due to events beyond the utility's control. 15 Further, a decision to proceed with construction after a determination of need 16 is granted "shall not constitute or be evidence of imprudence." This standard 17 is contained in Section 403.519(4)(e), Florida Statutes, and is specifically 18 referenced by Rule 25-6.0423, F.A.C. 19 Q: Is witness Jacobs' recommendation consistent with this standard? 20 A: It is not. Witness Jacobs' recommendation presents at least three 21 inconsistencies with this standard. First, witness Jacobs' recommendation is 22 not based on evidence that certain costs were imprudently incurred. Rather, 23 his recommendation is based on an arbitrary disallowance of otherwise

This same

prudently incurred costs. Second, he ignores the statutory requirement that any costs incurred due to events beyond the utility's control are not subject to a finding of imprudence. Witness Jacobs arbitrarily recommends that \$200 million of the EPU project cost be disallowed. At no place in his testimony does witness Jacobs specifically identify cost increases that were within FPL's control and that those specific increases resulted from management imprudence. And third, witness Jacobs' recommendation would effectively penalize FPL for proceeding with construction after a determination of need had been granted by the Commission and after a consistent annual determination by the Commission that completing the EPU project was in the customers' best interest and would produce substantial cost savings as properly based on a Cumulative Present Value of Revenue Requirements (CPVRR) analysis. These and other inconsistencies cause witness Jacobs' recommendation to be in direct contravention of Florida's policy and standards to promote nuclear power. Q: Are there other provisions contained in Section 403.519, Florida Statutes, which witness Jacobs' recommendation ignores? A: Yes, there are at least two. Section 403.519(4)(a) recognizes that the estimate of costs of a nuclear power plant presented as part of a need determination is non-binding. This provision recognizes that the same challenges, which make the construction of new nuclear power difficult and in need of policies to overcome them, also make the estimation of costs difficult. Thus it is clearly

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set forth in statute that the cost estimates are non-binding.

acknowledgement and rationale would logically extend to subsequent cost estimates. However, witness Jacobs' recommendation would, in essence, have the Commission make the April 2012 cost estimate binding on FPL. And second, Section 403.519(4)(c) declares that no provision of Rule 25-22.082, F.A.C., shall be applicable to a nuclear power plant, including provisions for cost recovery. This provision recognizes that the many challenges of constructing nuclear power plants, such as the high capital costs, the many permits and licenses required, the length of construction, and the difficulty of estimating costs, make the bidding and cost control provisions of Rule 25-22.082, F.A.C., inapplicable. Yet witness Jacobs' recommendation ignores this and would deny recovery of costs in excess of the non-binding estimate. It should also be noted that even Rule 25-22.082, F.A.C., when applied to conventional power plants allows a public utility an opportunity to demonstrate that costs over those identified in the need determination are prudently incurred. The provisions of Rule 25-6.043, F.A.C., specifically recognize the need for this and provide for annual prudence determinations of costs incurred. FPL has been demonstrating annually that costs were incurred prudently since the inception of the EPU project. However, witness Jacobs' recommendation would violate this basic opportunity to show costs to be prudently incurred and declare that \$200 million of costs in excess of the April 2012 forecast were imprudently incurred and should be denied recovery. In response to a previous question, you stated that witness Jacobs' recommendation is a rehashing and repackaging of previous

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1		recommendations that have been rejected by the Commission. Please
2		explain.
3	A:	Witness Jacobs' recommendation to disallow \$200 million of the Turkey
4		Point portion of the EPU project is basically a repackaging of five arguments
5		that have previously been considered and rejected by the Commission.
6	Q:	What is the first argument that has been presented and rejected by the
7		Commission?
8	A:	The first argument is that a risk sharing mechanism should be adopted for the
9		recovery of nuclear project costs.
10	Q:	How does witness Jacobs' recommendation constitute a risk sharing
11		mechanism?
12	A:	Whether called a "risk sharing" mechanism or a "disallowance," both
13		approaches attempt to accomplish the same outcome of denying FPL the
14		opportunity to recover all prudently incurred costs. As I explained earlier, the
15		disallowance based on an increase in costs above the April 2012 projection
16		does not attempt to determine whether costs were prudently incurred and thus
17		is in conflict with the statutory and rule provisions encouraging nuclear
18		projects. In Order No. 11-0095-FOF-EI, the Commission found that a risk
19		sharing mechanism would not be consistent with the clear statutory
20		requirement that all prudently incurred costs are recoverable. The
21		Commission stated:
22		In conclusion, based upon the analysis above, we find that we do
23		not have the authority under the existing statutory framework to

1		require a utility to implement a risk sharing mechanism that would
2		preclude a utility from recovering all prudently incurred costs
3		resulting from the siting, design, licensing, and construction of a
4		nuclear power plant. To do so would limit the scope and effect of
5		a specific statute, and an agency may not modify, limit, or enlarge
6		the authority it derives from the statute.
7		This same rationale would equally apply to witness Jacobs' current
8		recommendation. Accordingly, his recommendation should be rejected.
9	Q:	What is the second argument that has been presented and rejected by the
10		Commission?
11	A:	The second argument that has been rejected is that FPL was imprudent to "fast
12		track" the EPU project. While witness Jacobs' recommendation to disallow
13		\$200 million of EPU costs is based upon an increase in cost estimates
14		presented by Mr. Jones, witness Jacobs criticizes the cost increases as being
15		impacted by the imprudence of failing to accomplish advanced engineering at
16		the outset. However, the Commission has previously rejected the notion that
17		costs have increased due to the decision to fast track. In its Order No. PSC-
18		11-0547-FOF-EI, the Commission stated:
19		We find that the above testimony suggests that witness Jacobs
20		views the cost increases relative to the original project estimate
21		would have likely occurred even without a fast track approach. In
22		its brief, FPL argued that there is no basis for OPC witness

1		Jacobs' claim that project costs were higher due to FPL's EPU
2		approach. We agree.
3		And later in the same order, the Commission concluded:
4		Therefore, based on the record evidence, we are hesitant to place
5		any weight on the assumption that a traditional approach was a
6		reasonable option when considering all relevant facts and
7		circumstances surrounding FPL's decision, because there is no
8		dispute that a traditional approach to the EPU project would not
9		have met the target 2012-2013 need requirements and would have
10		resulted in less customer fuel savings. We find that the record
11		demonstrates that FPL's decision to implement the EPU project
12		using a fast track approach was dependent on the outcome of its
13		EPU need petition.
14	Q:	What is the third argument that has been presented and rejected by the
15		Commission?
16	A:	The third argument that has been rejected is that sunk costs should be
17		considered in the economic feasibility analysis. Witness Jacobs refers to this
18		as the "sunk cost exclusion" and states that the "sunk cost exclusion" form of
19		feasibility analysis may not be sufficient, in and of itself, to identify a project
20		that is "spiraling out of control."
21	Q:	What did the Commission say about using sunk costs in a feasibility
22		analysis?
23	A:	In its Order No. PSC-11-0547-FOF-EI, the Commission stated:

1		Sunk costs, by definition, would exist regardless of the
2		continuation or cancellation of the EPU project. In adding sunk
3		costs to only one side of a CPVRR analysis, witness Smith engaged
4		in hindsight review. We note that the feasibility analysis is meant
5		to determine whether the EPU projects should be continued or
6		canceled. The feasibility analysis does not address the issue of
7		whether or not a different path, starting at some point in the past,
8		would have resulted in a better outcome. Without the ability to
9		make changes to the past, such analysis is not fruitful and does not
10		provide us with information to address our charge of determining
11		whether the EPU project should be continued.
12	Q.	Witness Jacobs attaches an article to his testimony as Exhibit No. WRJ-7
13		What does this article say about the use of sunk costs?
14	A.	This article was apparently written to give decision making advice to software
15		managers. On the subject of sunk costs, the article rejects the use of sunk
16		costs in decision making and states:
17		The result is that sunk costs should not be considered in your
18		decision making. Sunk costs do not alter the future costs and
19		revenues of your options, so they should not be included in the
20		analysis.
21		The article continues by giving software managers advice to avoid over-
22		optimism and other aspects of psychological barriers and human nature.

1	Q.	Witness Jacobs first references this article when responding to a question
2		about "the risk of using FPL's feasibility methodology for a project that
3		involves substantial uncertainty." Should this article be relied upon by
4		the Commission to change its approach to determine economic
5		feasibility?
6	A.	No. First, the CPVRR feasibility analysis is not FPL's approach, but rather is
7		a generally recognized approach used throughout the industry and routinely
8		relied upon by regulators. Second, the article is directed to software managers
9		making decisions about their internal projects and how to avoid wrong
10		decisions based on human nature perspectives. It has no applicability to
11		decision making in an evidentiary proceeding where economic feasibility is an
12		objective standard based on evidence. It is this objective standard and its
13		annual application that is a fundamental foundation of Florida's policy to
14		promote nuclear energy in the face of substantial uncertainty, while insuring
15		that it is done in a manner which protects customers and provides benefits to
16		them.
17	Q.	What is the fourth argument that has been presented and rejected by the
18		Commission?
19	A.	The fourth argument that has been rejected is that the EPU project should be
20		viewed and analyzed as two separate projects. Witness Jacobs makes a
21		number of assumptions to calculate what he believes to be the cost of the St.
22		Lucie portion of the EPU project compared to the Turkey Point portion of the
23		EPU project. Based on his calculations, he concludes that the St. Lucie

portion is "economically justifiable and beneficial to customers." However, 1 for the Turkey Point portion, witness Jacobs opines that it "will be 2 uneconomic to ratepayers." Based on this opinion and differences in cost 3 4 estimates, witness Jacobs recommends a \$200 million disallowance of EPU 5 project costs. 6 Q: Is this appropriate? 7 A: No, it is not. The EPU project was planned and executed as a single project. 8 The need determination was for a single project. The feasibility of the EPU project has consistently been reviewed and approved by the Commission as a 10 single project. In its Order No. PSC-11-0547-FOF-EI, the Commission found 11 a separate economic analysis for each of the individual project plant[s] would 12 be "unnecessary", "difficult to calculate", and would "incorrectly attribute to 13 the individual plants the benefits gained from performing uprates at both 14 plants simultaneously." In the following year, in its Order No. PSC-12-0650-15 FOF-EI, the Commission reaffirmed its previous decision and went on to say: 16 Finally, we note that OPC argues in its brief that, "At this 17 advanced stage of the project, OPC believes FPL should complete the project." Consequently, the additional [separate plant] 18 19 analysis does not have any bearing on whether the FPL EPU 20 project should be completed. Does this passage from Order No. PSC-12-0650-FOF-EI have any bearing Q: on the issue of a disallowance currently before the Commission? Yes, it goes right to the heart of the issue. A:

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- 1 Q. How so?
- 2 A. It clearly shows that OPC's true purpose of proposing a separate-site approach
- 3 to evaluate the feasibility of the Turkey Point portion of the EPU project is not
- 4 being done to determine whether the EPU project should be completed, but
- 5 rather is an attempt to not pay the full cost of the EPU project once it is
- 6 completed.
- 7 Q. Is this appropriate?
- 8 A. No, this position takes the true purpose of a feasibility analysis and "stands it
- 9 on its head". The true purpose of a feasibility analysis, whether it be a
- 10 CPVRR analysis or a breakeven analysis, is to determine the ongoing
- financial feasibility of completing a project, not to propose a disallowance of
- 12 otherwise prudently incurred costs.
- 13 Q. Has OPC previously advanced a position to use a breakeven analysis to
- 14 propose a disallowance of costs?
- 15 A. Yes.
- 16 Q: Is this the fifth of the five arguments that have been presented and
- 17 rejected by the Commission?
- 18 A: Yes. This argument was presented by witness Jacobs in Docket No. 110009-
- 19 EI and was rejected by the Commission. While finding that the Commission
- 20 is not limited to any specific form of economic analysis, breakeven or
- 21 otherwise, to determine cost-effectiveness, the Commission in Order No.
- 22 PSC-11-0547-FOF-EI stated:

However, we do not find that a breakeven analysis is necessary at 1 2 this time for the EPU project. As noted above, the EPU project is scheduled to have completed or begun all four of the uprate 3 outages by the end of 2012. We find that the capital cost estimates 4 5 provided by FPL are adequate. A breakeven analysis would not 6 provide additional, dispositive information beyond that which is 7 provided in the CPVRR to determine the cost-effectiveness of the 8 project. 9 And in this same order, the Commission went on to emphatically reject the use of a breakeven analysis to disallow otherwise prudently incurred costs, 10 11 stating: However, as we addressed below, the breakeven analysis 12 suggested by OPC relies on hindsight and does not distinguish 13 14 between prudent and impudent FPL management actions and 15 resultant costs. Consequently, OPC's suggestion to interpret or define what constitutes "certain costs" in Section 403.519(4), F.S., 16 implements hindsight review and does not consider specific 17 management actions or resultant costs. 18 19 What is the relevant language in Section 403.519(4), F.S. to which the Q. 20 Commission was referring? The relevant language addresses the right of a utility to recover costs incurred 21 A. prior to the commercial operation of a nuclear power project and states that 22 23 such costs:

1		shall not be subject to challenge unless and only to the extent the
2		commission finds, based on a preponderance of the evidence
3		adduced at a hearing before the commission under s. 120.57, that
4		certain costs were imprudently incurred.
5	Q.	What is the significance of this language?
6	A.	Consistent with Florida's policy to promote the development of new nuclear
7		generation, which I earlier discussed, this language makes it clear that any
8		disallowance must be based on an evidentiary finding of imprudence.
9	Q.	Do witness Jacobs' assertions supporting his recommendation to disallow
10		\$200 million of costs meet this standard?
11	A.	No, not in my opinion. He refers to a "2012 surge in unreasonable costs" and
12		asserts that costs have increased to the point that the Turkey Point portion of
13		the EPU project is now "uneconomic to ratepayers." In no place in his
14		testimony does he attribute the increase in costs to be the result of imprudence
15		on the part of FPL management, which is required before costs can be
16		disallowed.
17	Q:	If actual costs are ultimately higher than a previous projection, would
18		those costs be imprudent?
19	A:	Not necessarily. There is nothing so magical about a particular cost estimate
20		that would render costs incurred above that estimate unreasonable or
21		imprudent, as witnesses Jacobs' recommendation implies. Rather, it is the
22		nature of the costs themselves and whether the costs have been prudently
23		incurred that determines their recoverability.

1 Q. As you noted earlier, witness Jacobs also asserts that the Turkey Point 2 portion of the EPU is now uneconomic to ratepayers. Does this meet the 3 standard in Section 403.519(4) F.S. before costs can be disallowed? 4 A. First, it should be recognized that this is only his assertion and is contingent 5 on the Commission reversing itself and looking at the Turkey Point portion of the EPU project on a stand-alone basis. Further, his assertion is forcefully 6 rebutted by other FPL witnesses. Nevertheless, his assertion clearly does not 8 meet the statutory standard. Even if one assumes (merely for that the sake of 9 argument) that the Turkey Point portion of the EPU project is uneconomic, 10 this does not equate to management imprudence. Other than his assertion that 11 the decision to expedite the EPU project affected costs, witness Jacobs does 12 not attribute the relative economic feasibility of the EPU project as being 13 attributable to any imprudence. And the challenge to FPL's decision to 14 expedite the EPU project is a contention that has already been rejected by the 15 Commission. Furthermore, his assertion and recommendation to disallow 16 costs totally ignore the fundamental truth that costs can and likely will 17 increase due to factors beyond management control. This fundamental truth is 18 a reason why cost estimates are non-binding. Witness Jacobs would have the 19 Commission ignore this fundamental truth and would have the Commission essentially impose a guarantee that all projects, and sub-parts of projects, will 20 21 meet his definition of being economic or be subject to having part of the 22 project costs disallowed. 23 Q: Are there other reasons why the cost estimates are non-binding?

1	A:	Yes, there are at least two. First, estimating costs on any large construction
2		project and especially ones of the complexity of the EPU project is difficult.
3		Second and perhaps more importantly, a regulatory requirement to impose
4		binding cost estimates would essentially "close the door" on complex, capital-
5		intensive projects that are needed to provide the best options for customers in
6		terms of cost, reliability, and diversity.
7	Q:	In response to a previous question, you answered that witness Jacobs was
8		essentially seeking to have the Commission impose a guarantee. Could
9		you please explain your answer?
10	A:	Yes. Despite having been thoroughly scrutinized annually and having been
11		consistently found to be economically feasible, witness Jacobs would have the
12		Commission, at this late date, guarantee that recoverable costs could not
13		exceed those which are economic (according to his calculation of being
14		economic) without substantial costs being disallowed. Besides not being
15		consistent with Florida's policy to encourage nuclear power, such a guarantee
16		is inconsistent with sound ratemaking principles as applied to any investment,
17		regardless of technology.
18	Q:	How is this inconsistent with sound ratemaking principles?
19	A:	Besides potentially closing the door on many capital-intensive projects as I
20		earlier discussed, witness Jacobs' proposed "guarantee" is asymmetric.
21	Q:	Please explain.
22	A:	A regulated utility has an obligation to provide safe, reliable, and efficient
23		service. As part of this obligation, a regulated utility has a further obligation

to plan its system and make additions or changes as needed to reliably meet customer demand and to do it as cost effectively as possible. Cost estimates and construction budgets are tools used by utility managers and regulators to continually evaluate construction projects to better achieve these goals. However, when a construction project is completed, it is the actual cost of construction that was prudently incurred that ultimately gets included in the utility's rate base. This is regardless of whether the actual cost of construction was under or over previous cost estimates or over or under some calculated amount to break even. This is regulatory symmetry and the operative standard is one of prudency. In stark contrast to this symmetry based on prudency, witness Jacobs wants to "have his cake and eat it too". Witness Jacobs wants to ignore actual costs for a sub-part of a project when they exceed his calculated breakeven point and reduce the amount of costs to be allowed for recovery, in this case by \$200 million. When actual costs are lower than his calculated breakeven point, he wants to allow only the amount of actual costs. If witness Jacobs wanted to present a balanced recommendation based on his breakeven analysis, what would it be? First, I do not endorse witness Jacobs' breakeven analysis, or his continued attempt to break apart the EPU project into two pieces. FPL witness Sim explains the inappropriateness of witness Jacobs' approach in his rebuttal testimony. However, if witness Jacobs wanted to be balanced and continue to recommend a \$200 million disallowance for the Turkey Point portion of the EPU project, he would also need to recommend a \$470 million increment, or

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1 bonus, to be added to the recoverable cost of the St. Lucie portion of EPU 2 project. This calculation is based on the numbers presented in witness Jacobs' 3 testimony of the relative positions of the Turkey Point and the St. Lucie 4 portions of the EPU project compared to his breakeven point. 5 Q: How did you calculate the \$470 million bonus for St. Lucie? 6 A: The calculation is shown on my Exhibit TD - 2. I begin by showing the 7 calculation of the \$338,720,000, which witness Jacobs states is the amount by 8 which the Turkey Point portion of the EPU exceeds his breakeven benchmark. 9 I then calculate the percentage of his recommended disallowance, which is 59.046%. This is all shown on the top half of Exhibit TD - 2. 10 11 The lower half of the exhibit uses the same approach used by witness Jacobs 12 for Turkey Point and symmetrically applies it to the St. Lucie portion of the 13 EPU. Once again, I use witness Jacobs' numbers to calculate the amount by 14 15 which the St. Lucie portion of the EPU is below witness Jacobs' breakeven benchmark or \$795,200,000. Applying the same 59.046% to this amount 16 results in the calculated bonus of \$470 million. Furthermore, if one were to 17 account for the additional 10 Turkey Point megawatts described in FPL 18 witness Jones' rebuttal testimony, this would increase the calculated bonus 19 20 amount for St. Lucie to about \$584 million. Do you recommend that a \$470 million or \$584 million bonus be added to 21 Q: the cost of the St. Lucie portion of the EPU project? 22

1	A:	No. The Commission should continue to evaluate the EPU project as one
2		project as it was originally planned and approved by the Commission. The
3		Commission should also continue to determine the amount of costs to be
4		recovered on a symmetrical basis using a standard of prudency, consistent
5		with sound ratemaking principles and Florida's policy to promote nuclear
6		power.
7	Q:	How is witness Jacobs' recommendation inconsistent with Florida's
8		policy?
9	A:	In addition to it being inconsistent with specific statutory and rule provisions
10		which I earlier identified, witness Jacobs' recommendation essentially
11		constitutes one of the fundamental problems that plagued earlier nuclear
12		projects and acted as a barrier to new nuclear development that policy makers
13		in Florida wanted to avoid.
14	Q:	What is this problem which acts as a barrier?
15	A:	It is the problem of making large disallowances of costs after a project has
16		been completed or is near completion. I identified this problem earlier in my
17		testimony. Witness Jacobs' recommendation is exactly that - a large
18		disallowance recommended to occur at the end of the EPU project and after it
19		had consistently been determined to have been economically justified and all
20		costs heretofore determined to have been prudently incurred.
21	Q:	You have indicated that witness Jacobs' recommendation is inconsistent
22		with Florida's policy to encourage nuclear power, inconsistent with
3 .		Commission precedent, and inconsistent with sound ratemaking

1 principles. Is his recommendation consistent with good regulatory 2 policy? 3 No, it is not. Consistent with good regulatory policy, the Commission has the A: 4 responsibility to balance the needs of investors and customers. Customers 5 have the reasonable expectation to receive safe, reliable and efficient services 6 and the responsibility to pay the cost of providing those services. Investors 7 have the reasonable expectation that capital deployed to provide services to 8 customers will earn a reasonable return and will be eventually repaid in the 9 form of depreciation allowances. In balancing these interests, the 10 Commission should protect customers from imprudently incurred costs and 11 yet ensure that all prudently incurred costs are recovered. Witness Jacobs' 12 recommendation does not do this and would not be consistent with good 13 regulatory policy. 14 Do you have any other concerns with witness Jacobs' recommendation? Q: 15 A: Yes, I do. Aside from the fact that the Commission has previously found the 16 rationale for his recommended disallowance to be statutorily impermissible, 17 and that it constitutes bad regulatory policy, I am concerned that adopting such an approach to determining recoverable costs would have severe 18 19 negative implications for future generation expansion plans in Florida. 20 Q: How so? 21 I believe good regulatory policy should encourage utilities to consider all cost-A: 22 effective options for new generation. Having a full array of viable options can 23 only serve to provide benefits to customers in terms of reliability, cost and

fuel diversity. I fear that disallowing costs based on an ever changing breakeven analysis, as contemplated by witness Jacobs, will lead to only the lower-risk options being considered. In today's environment, this would mean an even greater reliance upon gas-fired generation. Of course, a potential over reliance on natural gas is one of the things the Legislature and Commission are attempting to mitigate by encouraging additional nuclear generation.

- 8 Q: Does this conclude your rebuttal testimony?
- 9 A: Yes, it does.

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CHAIRMAN	BRISÉ:	All	right.
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Mr. McGlothlin.

MR. McGLOTHLIN: OPC moves into the record the amended testimony of Dr. William Jacobs and the exhibits that have been identified in the staff's Comprehensive Exhibit List.

CHAIRMAN BRISÉ: Okay. So we will move into the record the testimony of Witness Jacobs and the exhibits that go along with his testimony. All right.

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1		AMENDED DIRECT TESTIMONY
2		OF
3		WILLIAM R. JACOBS, JR., Ph.D.
4		On Behalf of the Office of Public Counsel
5		Before the
6		Florida Public Service Commission
7		Docket No. 130009-EI
8		
9	Q.	PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.
10	A.	My name is William R. Jacobs, Jr., Ph.D. I am an Executive Consultant with GDS
11		Associates, Inc. ("GDS"). My business address is 1850 Parkway Place, Suite 800,
12		Marietta, Georgia 30067.
13		
14	Q.	DR. JACOBS, PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND
15		AND EXPERIENCE.
16	A.	I received a Bachelor of Mechanical Engineering in 1968, a Master of Science in Nuclear
17		Engineering in 1969 and a Ph.D. in Nuclear Engineering in 1971, all from the Georgia
18		Institute of Technology. I am a registered professional engineer and a member of the
19		American Nuclear Society. I have more than 30 years of experience in the electric power
20		industry including more than 12 years of power plant construction and start-up
21		experience. I have participated in the construction and start-up of seven power plants in
22		this country and overseas in management positions including start-up manager and site
23		manager. As a loaned employee at the Institute of Nuclear Power Operations ("INPO"), I

participated in the Construction Project Evaluation Program, performed operating plant evaluations and assisted in the development of the Outage Management Evaluation Program. Since joining GDS in 1986, I have participated in rate case and litigation support activities related to power plant construction, operation and decommissioning. 1 have evaluated nuclear power plant outages at numerous nuclear plants throughout the United States. I served on the management committee of Plum Point Unit 1, a 650 MWe coal fired power plant located near Osceola, Arkansas. As a member of the management committee, I assisted in providing oversight of the EPC contractor for this project. I am currently the Georgia Public Service Commission's ("GPSC") Independent Construction Monitor for Georgia Power Vogtle 3 and 4 nuclear project. As the Independent Construction Monitor, I assist the GPSC Commissioners and Staff in providing regulatory oversight of the project. My monitoring activities include regular meetings with project management personnel and regular visits to the Vogtle plant site to monitor construction activities and assess the project schedule and budget. My résumé is included as Exhibit WRJ-1.

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Q. WERE YOU ASSISTED BY OTHER GDS PERSONNEL IN THIS EFFORT?

Yes, I was assisted by Mr. James P. McGaughy, Jr., a former nuclear utility executive with over 40 years of experience. Mr. McGaughy's résumé is attached to this testimony as Exhibit WRJ-2. I have reviewed the work of Mr. McGaughy, and have incorporated and adopted it as my own in this testimony.

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Q. WHAT IS THE NATURE OF YOUR BUSINESS?

A. GDS is an engineering and consulting firm with offices in Marietta, Georgia; Austin, Texas; Manchester, New Hampshire; Madison, Wisconsin; and Auburn, Alabama. GDS provides a variety of services to the electric utility industry, including power supply planning, generation support services, rates and regulatory consulting, financial analysis, load forecasting and statistical services. Generation support services provided by GDS include fossil and nuclear plant monitoring, plant ownership feasibility studies, plant management audits, production cost modeling and expert testimony on matters relating to plant management, construction, licensing and performance issues in technical litigation and regulatory proceedings.

Q. WHOM ARE YOU REPRESENTING IN THIS PROCEEDING?

13 A. I am appearing on behalf of the Florida Office of Public Counsel ("OPC"), who
14 represents the ratepayers of Florida Power & Light Company ("FPL").

A.

Q. WHAT WAS YOUR ASSIGNMENT IN THIS PROCEEDING?

I was asked to assist OPC in conducting a review and evaluation of requests by FPL for authority to collect historical and projected costs associated with extended power uprate ("EPU") projects being pursued at the Turkey Point Units 3&4 and at the St. Lucie Units 1&2 nuclear plants, and historical and projected costs associated with FPL's Turkey Point Units 6&7 new nuclear project through the capacity cost recovery clause. In light of the progress made on these projects and the availability of new information, I was

asked to present my findings to assist the Florida Public Service Commission ("FPSC" or "Commission") in making its determination regarding FPL's requests.

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4 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

5 A. Yes. I testified on behalf of OPC in the previous nuclear cost recovery clause ("NCRC")
6 proceedings in Docket Nos. 080009-EI, 090009-EI, 100009-EI, 110009-EI, and 120009-

7 EI.

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Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE NATURE AND STATUS OF FPL'S NUCLEAR PROJECTS.

FPL currently has two categories of major nuclear projects — "uprates" and proposed 11 Α. 1.2 new nuclear units — underway. The most active projects at this time are the projects to 13 increase the existing generating capacities of Turkey Point Units 3&4 and St. Lucie Units 14 1&2 by a total of 512 MWe. FPL refers to these activities at existing Turkey Point and 15 St. Lucie nuclear units as the "extended power uprate" or the "EPU project." According to FPL, the EPU projects are essentially complete, with each unit now operating to 16 achieve a total of 512 additional MWe. As of December 31, 2012, FPL had spent 17 approximately \$3.1 billion on the EPU projects and had estimated that the final cost of 18 these projects, including transmission and AFUDC, would total \$3.4 billion when 19 20 completed in 2013. Of this total amount, approximately \$2.2 billion is attributable to the Turkey Point EPU project and the remaining \$1.2 billion to the St. Lucie EPU project. 21 22 On a dollar-per-kilowatt (\$\frac{\\$}{k}\{W}\) basis, this results in approximately \$9,500/kW for 23 Turkey Point and approximately \$4,300/kW for St. Lucie. When only construction costs are included, the Turkey Point and St. Lucie EPU values are \$8,100/kW and \$3,800/kW, respectively. In 2007, FPL estimated that the Turkey Point EPU project would cost only 10% more than the St. Lucie EPU on a \$/kW basis. However, based on current information, the Turkey Point EPU project now costs nearly TWICE the cost of the St. Lucie EPU project on a \$/kW basis.

The other active project is the development of Turkey Point Units 6&7, a new nuclear plant consisting of two Westinghouse AP1000 reactors. This project is in the development stage. FPL projects that this plant will provide 2,200 megawatts (MWe) of capacity with on-line dates of 2022 and 2023.

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Q. PLEASE SUMMARIZE OPC'S PAST PARTICIPATION IN THE PROCEEDINGS ON FPL'S NUCLEAR PROJECTS.

I will begin with the proposed new Turkey Point Units 6&7. I am informed that OPC's earliest involvement was when OPC objected to FPL's request for a declaratory statement concerning the classification of expenses that FPL was to incur prior to the date that site selection expenses were completed. FPL asked the Commission to confirm that such items would be treated as pre-construction expenses, and thus would qualify for recovery through the NCRC. Because FPL's examples included expensive, "long lead" equipment, OPC asked for a hearing on FPL's petition to develop its impact on customers' bills. The Commission denied OPC's request for a hearing and granted FPL's petition.

In Docket No. 080009-El, I criticized FPL's initial policy of contracting for the development of Turkey Point Units 6&7 on the basis of separate contracts rather than an

overall EPC contract. More recently, because I believe that the minimalist approach that FPL is taking with respect to the development of its proposed new nuclear units in light of the downward trend in gas prices and uncertainty regarding future load growth is a preferable course of action, OPC has not taken exception to FPL's pursuit of licensing or the costs related to that effort.

A.

Q. WHAT ABOUT FPL'S EPU ACTIVITIES AT THE TURKEY POINT AND ST. LUCIE UNITS?

OPC frequently has opposed aspects of FPL's EPU activities. In Docket No. 080009-EI, I testified that FPL's support for entering numerous "sole source" and "single source contracts" rather than seeking competitive bids was inadequate. I recommended that the Commission disallow the return on equity portion of the largest such unjustified contract, or, at a minimum, direct FPL to improve its procedures for determining when a departure from competitive bidding was acceptable. The Commission declined to adopt my recommendations.

In Docket No. 090009-EI, I criticized the absence of a rigorous methodology for ensuring that only costs that are incremental in nature and attributable only to FPL's EPU activities are collected through the clause. I proposed a discrete "separate and apart" analytical methodology, which FPL opposed on the grounds that the different review it had in place was sufficient for the purpose. Ultimately, the Commission rejected my recommended methodology and accepted FPL's presentation.

In Docket No. 100009-EI, during which FPL reported that its total estimated EPU costs had increased by \$500 million over the prior year, I challenged FPL's methodology

for gauging the economic feasibility of its uprates, which involved excluding past expenditures from the study. I cautioned that this methodology is not well suited to a situation in which projected completion costs are increasing significantly. I also recommended that the Commission direct FPL to develop a risk-sharing mechanism so that it would have "skin in the game." However, the Commission ruled that it had no authority to impose a risk-sharing mechanism.

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In Docket 110009-EI (which included issues from the prior year that had been carried over by stipulation), I testified that FPL failed to present the Commission with the most current construction cost estimate that it projected for its EPU project during the September 2009 hearing. Based on my testimony, OPC recommended in its brief that the Commission conclude that FPL had violated the rule governing the nuclear cost recovery proceedings, and that it impose a fine on FPL at or near the maximum amount of \$1,180,000. The Commission voted to deny OPC's recommendation.

In Docket No. 110009-EI, I also testified that it was imprudent for FPL to "fast track" the construction of the uprates when FPL had not begun detailed design work, and thus had no adequate grasp of either the scope or the cost of the project. As a decision on the matter had been "carried over," I also reiterated my criticism of the application of FPL's methodology for measuring economic feasibility of the EPU project, and recommended that the Commission require FPL to perform a "breakeven analysis" for the uprates similar to the breakeven analysis that FPL proposed, and the Commission endorsed, for FPL's proposed new nuclear units. In order to ensure that one less-than-cost-effective project was not being subsidized by the other, I recommended that the Commission require FPL to prepare separate breakeven analyses for the St. Lucie and

Turkey Point plants. The Commission rejected OPC's positions and ruled in favor of FPL.

1n Docket No. 120009-EI, my colleague Brian Smith and I addressed the \$682 million year-over-year increase in FPL's estimate of the total cost of the EPU projects to which FPL witness Terry Jones testified in August 2012. We pointed out that \$555 million, or 81% of this projected amount, was attributable to the soaring costs of the Turkey Point EPU activities. I testified that the cost of the Turkey Point uprate capacity had become more expensive than the corresponding cost of a new nuclear unit, as measured by FPL's estimate of the cost of its proposed Turkey Point Units 6&7, expressed in 2012 dollars. Mr. Smith sponsored an exhibit demonstrating that the Turkey Point EPU project was already on course to be non-cost-effective under assumptions that were extremely favorable to FPL. Based on this information, I recommended that the Commission limit the total cost of the EPU project that FPL could recover from customers to the revised estimate of \$1.6 billion of construction costs that FPL's witnesses sponsored in the docket. (I note that in his rebuttal testimony, FPL witness Jones said that the total cost to complete the Turkey Point EPU project was \$1.673 billion.) Ultimately, the Commission accepted FPL's presentation, and did not adopt my recommendation.

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Q. PLEASE SUMMARIZE FPL'S REQUEST FOR COST RECOVERY IN THIS DOCKET UNDER THE NUCLEAR COST RECOVERY CLAUSE.

A. With respect to Turkey Point Units 6&7, FPL has continued to limit its activities to those necessary to pursue an operating license. At this time, I am not recommending any

adjustments to the amounts that FPL wishes to recover from customers to sustain its conservative approach.

With respect to the now-completed EPU activities, FPL has increased its estimated cost of completion from \$3.1 billion to \$3.4 billion. Essentially, this entire amount is attributable to the Turkey Point EPU project. More critically, the revised "nonbinding estimate" for the Turkey Point EPU project is now approaching \$2.2 billion, or nearly three times the amount of the original \$750 million estimate submitted by FPL in its 2007 Need Determination proceeding.

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Q. ON WHAT DO YOU BASE YOUR \$2.2 BILLION FIGURE?

I used the Turkey Point EPU cash flow summaries (through 2012) provided by FPL in a late-filed exhibit to witness Jones' deposition taken on June 17, 2013. [Exhibit WRJ-3] I added all items designated as specific to Turkey Point. Then, I added the Carrying Charges on Construction, Non-Incremental Capital, and Carrying Charges DTA/(DTL) and multiplied that sum by the ratio of Turkey Point EPU Incremental Capital to the sum of Turkey Point EPU and St. Lucie EPU Incremental Capital. I assumed that these charges are roughly proportional to the Capital Charges. To determine the 2013 charges to Turkey Point, I used the \$280 million EPU completion amount from TOJ-13, TOR-2. Finally, I multiplied that amount by the ratio of 2013 capital charges for Turkey Point (\$227 million) to the combined 2013 capital charges for Turkey Point and St. Lucie (\$243 million). I did not include any allocation of Participation on Incremental Capital, as this item only applied to the St. Lucie EPU project.

Q. PLEASE SUMMARIZE YOUR ASSESSMENT OF THE INFORMATION THAT FPL HAS PRESENTED IN SUPPORT OF ITS PENDING REQUEST.

A. The fundamental differences between the design/configuration of the St. Lucie plant site
and that of the Turkey Point plant site that FPL witness Jones and I described in earlier
testimony continue to result in vastly different outcomes for the respective EPU project
activities and, unhappily, for FPL's customers.

Α.

Q. PLEASE ELABORATE, BEGINNING WITH THE ST. LUCIE EPU ACTIVITIES.

In this proceeding, the FPL witnesses testify that the St. Lucie uprates, which are now in service, have added 280 MWe of capacity. At a cost of \$1.2 billion, this computes to \$4,300/kW. As 1 will discuss further below, it appears that the St. Lucie EPU will provide capacity at a cost that is economically justifiable and beneficial to customers.

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A.

Q. WHAT ABOUT THE TURKEY POINT EPU ACTIVITIES?

The Turkey Point EPU is an entirely different story. One year ago, Mr. Smith and 1 testified that, at the cost levels projected by FPL at the time, Turkey Point was "under water" — or exorbitantly expensive to the point that, considering the future construction and related costs alone (in other words, consistent with *FPL's* preferred feasibility methodology), costs would exceed benefits to customers. After August 2012, FPL engaged in an expensive frenzy of spending to complete the Turkey Point EPU project. Now that the full cost of the Turkey Point EPU project is finally coming into focus, the magnitude of the harm to ratepayers can be comprehended.

1	Q.	HOW	MUCH	DID	FPL	SPEND	IN	2012	AND	201.3	TO	COMPLETE	THE
2		TURK	EY POI	NT EI	PU PR	OJECT?							

A. In prefiled testimony dated April 2012, FPL witness Jones stated that the construction costs associated with the Turkey Point EPU in 2012 would amount to \$688 million. As it turned out, FPL spent \$975 million on the Turkey Point EPU in calendar year 2012 alone, and FPL now projects that it will spend another \$280 million (including AFUDC) in 2013 to complete the EPU project. I note that the new estimate of 2013 EPU construction costs is \$50 million higher than the amount that Mr. Jones predicted for 2013 just last year. Fortunately, the Turkey Point EPU work has been completed, so this should be the last year of such outsized deliveries of bad news.

12 Q. EARLIER YOU SAID THAT IT APPEARS THE ST. LUCIE EPU ACTIVITIES
13 HAVE BEEN COMPLETED AT A COST THAT IS ECONOMIC FOR
14 RATEPAYERS. BASED ON THE ADDITIONAL COSTS THAT FPL
15 INCURRED IN 2012 AND THAT YOU DESCRIBED ABOVE FOR 2013, IS THIS
16 TRUE OF THE TURKEY POINT EPU ACTIVITIES?

17 A. No. To the contrary, the extremely expensive cost of the Turkey Point EPU capacity will
18 be uneconomic to ratepayers. Therefore, I recommend that the Commission act to
19 disallow some of these excessive and unreasonable costs. In my testimony below, I will
20 identify the basis for such an adjustment.

.

Q. PLEASE CONTINUE.

The original estimate of the Turkey Point EPU project was \$750 million. The current estimate is \$2.2 billion. In his feasibility analyses, FPL witness Dr. Steven Sim never presented the feasibility of the Turkey Point EPU project on a standalone basis. Thus, FPL's methodology diluted the extremely high costs of the Turkey Point uprate activities with those of the more economically sound St. Lucie project activities. The Commission made clear in Order No. PSC-09-0783-FOF-EI that it has the discretion to determine whether a methodology for assessing economic feasibility that it approved for a project in the past continues to be appropriate for that project. That should hold true for the manner of measuring the economics of the project and the reasonableness of the final increment of costs, as well. More than ever, a separate appraisal of the economics of the Turkey Point EPU activities is needed now to illuminate the situation from the ratepayers' perspective.

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Q. DOES FPL WITNESS DR. SIM'S 2013 TESTIMONY GIVE SUPPORT TO TURKEY POINT'S ECONOMIC BENEFITS TO CUSTOMERS?

No. If, as Dr. Sim contends, his breakeven calculation quantifies the maximum installed cost of new nuclear capacity that is cost-effective, then it follows that Turkey Point uprate capacity must cost less than the breakeven value to be cost-effective. This is true because the economics of a nuclear plant are driven by the amount of fuel savings over time necessary to overcome the high initial capital cost. The breakeven value of a new nuclear unit is based on an expectation that the new unit will generate fuel savings for at least 40 years. The Turkey Point EPU project has only 19 years remaining on already

extended licenses. Accordingly, Dr. Sim's breakeven value is a very conservative choice
as the test for the economics of the Turkey Point EPU project.

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- Q. PLEASE DESCRIBE HOW YOU COMPARED THE TURKEY POINT EPU
 CAPACITY TO THE COST OF THE PROPOSED TURKEY POINT UNITS 6&7
 FOR THIS PROCEEDING ON A COMPARABLE, APPLES-TO-APPLES BASIS.
- 7 A. I performed this comparison by utilizing Dr. Sim's May 2013 testimony. He determined the "breakeven costs" for new nuclear capacity for a number of cases.

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10 Q. WHAT IS A BREAKEVEN ANALYSIS, AND WHY IS IT AN APPROPRIATE
11 METHODOLOGY FOR THE COMMISSION TO USE IN THIS PROCEEDING
12 TO ASSESS THE ECONOMICS OF THE TURKEY POINT EPU PROJECT?

A breakeven analysis calculates the maximum capital investment that can be made in 1.3 A. 14 additional nuclear capacity to remain cost-effective relative to the utility's alternative. 15 Dr. Sim calculates the Cumulative Present Value Revenue Requirements (CPVRR) for 16 alternative generation capacity scenarios with variable assumptions concerning fossil fuel 17 prices and environmental costs. For each scenario, he then determines the capital cost in 18 2013 dollars for a nuclear plant on a \$/kW basis to provide the same overall costs to 19 ratepayers over the long term as the fossil fuel alternative generation. This is what he 20 calls the nuclear "breakeven cost." If this "breakeven cost" exceeds his estimate of the 21 2013 "overnight cost' for a new nuclear plant, then the nuclear option would be 22 economic. However, if the "overnight cost" is higher than the "breakeven cost," then the nuclear project is not cost-effective. Note that, because the analysis compares the full 2.3

cost of the nuclear option to the full costs of FPL's gas-fired alternative, the breakeven calculation takes into account the fuel savings associated with nuclear generating capacity. In other words, if the nuclear option exceeds the breakeven cost, it is not cost-effective, despite the fuel savings to which FPL points as one of the chief benefits of the uprate.

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Q. WHAT ARE "OVERNIGHT COSTS"?

The term "overnight costs" refers to the costs that are associated with the assumption that a project is constructed immediately, in the present. Overnight costs eliminate carrying costs and the effect of inflation over time. They are expressed in current dollars. Accordingly, overnight costs are expressed in the same "units" as the cost of a project entering service now — except that, to the extent that the project actually entering service includes historical costs incurred during the period 2008-2013, the actual project costs understate what they would be if expressed in 2013 dollars. For that reason, the use of overnight costs is a conservative way of comparing the EPU costs to the capacity costs of Turkey Point Units 6&7.

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A.

Q. DIDN'T FPL WITNESS DR. SIM DISPUTE YOUR USE OF OVERNIGHT COSTS IN A COMPARISON ONE YEAR AGO?

Yes. Dr. Sim asserted that the cost of EPU capacity completed at the present time should be compared to the cost of the Turkey Point Units 6&7 expressed in dollars that have been inflated over a period of some 10 years. His assertion had no value, other than the fact that it was one way of trying to avoid the obvious conclusion that the Turkey Point

EPU capacity was already more expensive than the corresponding cost of new nuclear capacity one year ago.

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4 Q. PLEASE CONTINUE.

When evaluating the economics of the EPU project, it is conservative (i.e., more favorable to the EPU project) to consider the EPU construction costs as overnight costs to be compared with Dr. Sim's breakeven costs.

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Q. WHY IS THIS THE CASE?

THE ST. LUCIE UPRATE.

A. The cost of the EPU capacity, which was completed in early 2013, is expressed in current 2013 dollars. Dr. Sim's "breakeven costs" are also expressed in 2013 dollars, so the numbers are "apples-to apples." Given that a significant portion of the EPU dollars were spent prior to 2013 and are thus subject to less inflation, the actual EPU dollars would be somewhat understated in terms of 2013 dollars, therefore making the 2013 EPU dollar cost look more favorable when compared to Dr. Sim's 2013 overnight costs.

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Q. PLEASE ADDRESS THE BREAKEVEN CALCULATION APPLICABLE TO

19 A. Looking at plant construction costs alone, the St. Lucie EPU project comes in at \$3,800/kW and the corresponding value for the Turkey Point EPU is \$8,100/kW. Dr.

Sim's breakeven costs for new nuclear construction are in a range of \$4,217/kW to

\$6,640/kW. [Exhibit SRS-8 of witness Dr. Sim's 2013 testimony] The St. Lucie EPU

1	project, at \$3,800/kW is well below all the breakeven cost scenarios and thus, using Dr.
2	Sim's logic, is economic.

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4 Q. TURNING TO THE TURKEY POINT EPU PROJECT, WHAT WAS THE 5 CORRESPONDING COMPARISON FROM ONE YEAR AGO?

In his 2012 testimony, Dr. Sim's breakeven costs (expressed in overnight dollars) ranged from \$4,202 to \$6,326/kW, while the Turkey Point EPU project was predicted to come in at \$6,700/kW (in 2013 dollars).

A.

10 Q. WHAT IS THE APPROPRIATE BREAKEVEN COMPARISON FOR THE 11 TURKEY POINT EPU PROJECT AT THIS TIME?

As I stated, in his current testimony Dr. Sim's breakeven costs range from \$4,217 to \$6,640/kW. Turkey Point's EPU project costs have increased to \$8,100/kW. Further, as I explained earlier, the range of \$4,217 to \$6,640 is the cost of capacity that will be expected to remain in service (and reducing fuel costs compared to the alternative) for a minimum of 40 years. By contrast, the uprate has an expected life of only 19 years before the already extended operating licenses expire. For this reason, using even the "breakeven cost" of Turkey Point Units 6&7 as the maximum cost-effective level for uprate capacity is conservative. Because the uprate has a shorter life span in which to use lower fuel costs to overcome the capital cost burden of nuclear capacity, the "breakeven cost" of the uprate would be lower than that of a new unit.

1	Q.	WHAT BEARING DOES THIS INFORMATION HAVE ON THE ECONOMICS
2		OF TURKEY POINT EPU CAPACITY?

3 Α. The Turkey Point EPU, at \$8,100/kW, is clearly uneconomic for FPL's customers. The 4 cost of the Turkey Point EPU capacity exceeds \$6,640/kW (the upper end of Dr. Sim's 5 breakeven values for new nuclear capacity, and therefore the most conservative and 6 favorable value to FPL) by \$1,460/kW. There are 232,000 kW of Turkey Point EPU 7 This means that, under the breakeven standard, the Turkey Point EPU 8 investment exceeds the maximum cost-effective level for new nuclear capacity by \$338,720,000. Note that this differential is conservative, in that the cost of Turkey Point 9 10 EPU capacity would need to be less than the cost for new nuclear capacity in view of its 11 shorter operating life, as explained above.

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Q. EARLIER, YOU ALLUDED TO DR. SIM'S USE OF 2013 DOLLARS AND 2022-2023 DOLLARS IN THE SAME COMPARISON. CAN FPL JUSTIFY THE COST OF THE TURKEY POINT EPU PROJECT USING THAT YARDSTICK IN THIS HEARING CYCLE, WHICH INVOLVES EPU PROJECT COMPLETION AND CLOSE-OUT COSTS?

18 A. No.

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20 Q. PLEASE EXPLAIN.

At the time of Dr. Sim's testimony in 2012, he claimed that the Turkey Point EPU project costs were less than the costs for Turkey Point Units 6&7; however, he used 2022 and 2023 dollars for Units 6&7 in his comparison. I addressed the shortcoming of this

comparison earlier. Even using Dr. Sim's seriously flawed methodology, the claim that the Turkey Point EPU project is less expensive than Turkey Point Units 6&7 is no longer the case. FPL's upper range for Turkey Point Units 6&7 (\$18.5 billion for 2,200 MWe, including transmission and financing costs) is \$8,400/kW in 2022 dollars, while the Turkey Point EPU project is coming in at about \$9,500/kW (\$2.2 billion for 232 MWe, including transmission and financing costs) in 2013 dollars.

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A.

Q. ARE THERE ANY MORE CONSIDERATIONS THAT YOU BELIEVE SHOULD WEIGH ON THE COMMISSION'S DECISION ON FPL'S REQUEST TO RECOVER COSTS FROM ITS CUSTOMERS?

Yes. The Commission will recall that FPL witness Jones contended in 2011 that FPL's \$2.48 billion projection for the cost of both EPU projects was "highly informed," only to testify later that the following year's projection exceeded this estimate by \$682 million. In April 2012, FPL witness Jones projected that FPL would spend \$688 million on the Turkey Point EPU activity in 2012. As it turned out, FPL spent \$975 million on Turkey Point during calendar year 2012. FPL's response to OPC's Second Set of Interrogatories, Interrogatory Number 3 in this docket establishes that, as of the end of August 2012, FPL had already spent \$670 million of the \$688 million that FPL projected in its April 2012 filing for all of 2012. Sometimes the impact of an imprudent decision does not show up in the form of unreasonable (and even inordinate) costs until subsequent periods. I believe that is the case with FPL's decision to undertake the Turkey Point EPU project in the face of the levels of complexity and uncertainty of which FPL was aware at the

1 outset, and to continue the project without developing an adequate provision for 2 contingency when the costs began to soar.

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4 Q. DOESN'T FPL WITNESS JONES EXPLAIN THE CAUSES AND SOURCES OF 5 THE HIGH COSTS THAT FPL INCURRED DURING 2012 IN THE 6

TESTIMONY THAT HE FILED IN MARCH 2013?

Mr. Jones identifies the items on which FPL spent money. However, under the circumstances of the Turkey Point EPU project, describing the items on which money was spent in 2012 does not establish the reasonableness of the expenditures. Further, in his March testimony, Mr. Jones does not justify the discrepancy between the amount to which he testified and the level of expenditures that FPL actually incurred.

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1.3 O. PLEASE EXPLAIN YOUR ANSWER.

First of all, as the Commission is aware, Mr. Jones has demonstrated in past testimony that he is (and has been) keenly aware of the differences in design configuration between the St. Lucie and the Turkey Point Units. The problem is that he uses the differences and the resulting complications as after-the-fact justifications, when instead these illustrate the imprudence of failing to either accomplish advanced engineering at the outset of these projects or to incorporate a contingency that is commensurate with the enormity of the risk involved.

Q. PLEASE CONTINUE.

A. In 2012, I recommended that the Commission protect customers from a portion of the excessive costs of the Turkey Point EPU project. Had FPL's projection of 2012 costs and total costs for this project at the time been more realistic, the magnitude of the extent to which the Turkey Point EPU project is uneconomic for customers would have been apparent sooner. (The actual expenditures for calendar year 2012 exceeded FPL's April 2012 estimate of \$688 million by \$287 million.) Had the FPSC known this information one year ago, it may have decided the issue of disallowance that OPC raised at that time differently.

Q. WHAT DO YOU RECOMMEND?

12 A. Given the large, unrevealed increase in 2012 costs of the Turkey Point EPU project, I
13 recommend that the Commission disallow \$200 million.

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15 Q. ON WHAT DO YOU BASE YOUR RECOMMENDATION OF A

16 DISALLOWANCE?

A. If the need for an alternative method of measuring the impact of the economics of the Turkey Point EPU project on customers was not apparent before, it should have been apparent in 2012, when FPL had likely spent the entire amount that it forecasted for that year by the end of August 2012. As I stated, in 2012 the Turkey Point EPU project would have been recognized as uneconomic, based even on Dr. Sim's flawed insistence on ignoring sunk costs. Had FPL provided realistic figures in 2012, the extent of the disparity that the analysis disclosed would have been substantially greater. Viewing the

economics of the project with the benefit of near-final cost information reveals the extent

to which the cost — particularly 2012 costs — reached unreasonable levels.

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Q. IS YOUR RECOMMENDATION BASED ON HINDSIGHT?

No, it is not. As I have addressed in testimony in prior years, on a stand-alone basis the Turkey Point EPU project is clearly uneconomic and harmful to FPL customers. Absent FPL's presentation of a gross under-estimation of the EPU project final cost, the Commission may have accepted my earlier recommendations to protect FPL's customers. My testimony in prior NCRC dockets, in which I warned the Commission of continued cost overruns and that the Turkey Point EPU project would be uneconomic when completed, clearly demonstrates that this recommendation is not based on hindsight. Further, the recommended disallowance of \$200 million relates to 2012 expenditures, over which the Commission still has jurisdiction, as I have been informed by OPC. The amount is less than the \$338,720,000 by which the Turkey Point EPU exceeds the breakeven standard for a new nuclear project (measured on a basis highly favorable to FPL) by \$138,720,000. The disallowance, then, provides only partial protection to the ratepayers.

Q. DO YOU HAVE ANY FURTHER COMMENTS ON THE FPL "EPU EXPERIENCE"?

A. I believe that the overall experience is a "cautionary tale" with respect to any future projects that are analogous to the Turkey Point EPU project. To avoid a case of runaway spending resulting in a project that is harmful to ratepayers, it is clear that a utility

contemplating a project having the magnitude and complexity of the Turkey Point EPU project must either perform a level of engineering sufficient to provide a grasp on overall costs, or must incorporate a level of contingency adequate to reflect the uncertainty of not having performed the engineering at the outset. Similarly, for a multi-year project of vast complexity and uncertainty that is being "fast-tracked," the "sunk cost exclusion" form of feasibility study may not be sufficient, in and of itself, to identify a project that is spiraling out of control. Lastly, a feasibility study that combines plant sites that are geographically separate and that present very different challenges from an engineering and construction standpoint can result in a strong project obscuring the deficiencies of a weak one.

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Q.

ARE YOU ALONE IN YOUR CHARACTERIZATION OF THE RISK OF USING FPL'S FEASIBILITY METHODOLOGY FOR A PROJECT THAT INVOLVES SUBSTANTIAL UNCERTAINTY?

- A. No. Other cost managers have made similar observations. They have coined the term "sunk cost dilemma" for the phenomenon of a series of decisions that appear to be appropriate when sunk costs are excluded, but which lead due to changes in the assumptions that drive each of a series of decision points to a non-economic result. To avoid such a result, some authors recommend such steps as:
 - Ask hard questions early;
 - Iterate rapidly and inexpensively;
 - After repeatedly missing forecasts, managers should be that much more diligent about ensuring that future estimates are realistic; and

 Avoid getting caught in the trap of repeatedly believing questionable estimates, when past evidence suggests that they are unreliable.

I have attached as Exhibit WRJ-7 a monograph by Charles Conway that is one of several examples of articles on the subject of which I have become aware. I believe that the steps recommended in this and other similar articles are consistent with the recommendations regarding the need for advanced engineering and an adequate provision for contingency that I made in earlier testimony.

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Q. IN MAY 2013, FPL WITNESS JONES TESTIFIED THAT THE BENEFITS OF THE EPU PROJECT WOULD NOT HAVE BEEN POSSIBLE IF THE LEGISLATURE HAD NOT ENACTED THE NUCLEAR COST RECOVERY LAW AND RULE. HOW DO YOU RESPOND?

I suspect it is likely that FPL would have been unwilling to undertake the EPU project in the absence of a vehicle such as the NCRC; however I regard that likelihood as a function of the risk that arises from the uncertainty associated with proceeding in the absence of up-front engineering and an unwillingness to incorporate adequate contingency.

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Q. PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATION.

Year after year, FPL has underestimated the cost of the Turkey Point EPU project to the point that the project costs will ultimately exceed the original estimate by more than \$1.4 billion and this will be unreasonable and uneconomic to FPL's ratepayers. The costs resulting from this pattern of year after year cost increases should not fall solely on the ratepayers. The Commission can and should apply the breakeven standard to gauge the

l	magnitude of excessive Turkey Point EPU project costs in order to protect ratepayers
2	from the 2012 surge in unreasonable costs. While the dollar amount in my
3	recommendation falls short of disallowing the full extent of the uneconomic costs of the
4	Turkey Point EPU project, it does protect FPL customers from the 2012 surge in costs.

6 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

7 A. Yes, it does.

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1	CHAIRMAN BRISÉ: All right. Any other
2	testimony that we need to put into the record? All
3	right.
4	Mr. Lawson.
5	MR. LAWSON: We will hold off until after
6	Mr. Fisher and Rich give their testimony, and then
7	we'll move everything in, along with their exhibits,
8	at that time.
9	CHAIRMAN BRISÉ: Sure. That works.
10	Ms. Cano.
11	MS. CANO: Those witnesses also have some
12	exhibits.
13	CHAIRMAN BRISÉ: Sure.
14	MS. CANO: Okay. FPL moves exhibits that
15	have been marked as 12, 39 through 51, and 82
16	through 83.
17	CHAIRMAN BRISÉ: 82 through?
18	MS. CANO: 83.
19	CHAIRMAN BRISÉ: 83. Okay. So we will
20	move into the record Exhibit 12, 39 through 51, and
21	82 and 83. Okay.
22	MS. CANO: Thank you.
23	CHAIRMAN BRISÉ: Are there any objections?
24	Okay. Seeing none, Exhibits 12, 39
25	through 51, 82 and 83 will be moved into the record

1	at this time.
2	(Exhibits 12, 39 through 51, 82, and 83
3	admitted into the record.)
4	Okay. Mr. Lawson.
5	MR. LAWSON: We'll go ahead and move our
6	stipulated witnesses in at this time. At this time
7	we'd like to move in the Exhibits 71 through 79.
8	CHAIRMAN BRISÉ: Okay. We will move in
9	Exhibits 71 through 79.
10	(Exhibits 71 through 79 admitted into the
11	record.)
12	MR. LAWSON: And we'd also like to move in
13	the prefiled testimony of Witness Betty Maitre and
14	Iliana Piedra, and Exhibits 69 and 70 respectively.
15	CHAIRMAN BRISÉ: Okay. I missed the last
16	part. You said Witness Maitre and Piedra?
17	MR. LAWSON: Piedra, yes.
18	CHAIRMAN BRISÉ: Piedra?
19	MR. LAWSON: Uh-huh. Yes, sir.
20	CHAIRMAN BRISÉ: Okay. All right. So we
21	will move in the testimony of Witnesses Maitre and
22	Piedra into the record. Are there any objections?
23	Okay. Seeing none, they're moved into the
24	record.
25	And you had also requested that Exhibits
	FLORIDA PUBLIC SERVICE COMMISSION

1	71 through 79 be moved into the record. Are there
2	any objections?
3	Okay. Seeing none, 71 through 79 have
4	been entered into the record.
5	MR. LAWSON: And also Exhibits 69 and 70.
6	CHAIRMAN BRISÉ: Exhibits 69 and 70?
7	MR. LAWSON: Yes, sir.
8	CHAIRMAN BRISÉ: Are there any objections
9	to Exhibits 69 and 70?
10	Okay. Seeing none, Exhibits 69 and 70
11	have been entered into the record.
12	(Exhibits 69 and 70 admitted into the
13	record.)
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1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	COMMISSION STAFF
3	DIRECT TESTIMONY OF BETY MAITRE
4	DOCKET NO. 130009-EI
5	JUNE 21, 2013
6	Q. Please state your name and business address.
7	A. My name is Bety Maitre and my business address is 3625 N.W. 82nd Ave., Suite
8	400, Miami, Florida, 33166.
9	Q. By whom are you presently employed and in what capacity?
10	A. I am employed by the Florida Public Service Commission as a Public Utility
11	Analyst III in the Office of Auditing and Performance Analysis.
12	Q. How long have you been employed by the Commission?
13	A. I have been employed by the Florida Public Service Commission since August,
14	2008.
15	Q. Briefly review your educational and professional background.
16	A. I have a Bachelor of Science degree with a major in Accounting from Florida
17	Agricultural and Mechanical University and a Master of Accounting with a major in
18	Accounting Information Systems from Florida State University. I was hired as a
19	Regulatory Analyst II by the Florida Public Service Commission in August of 2008.
20	Q. Please describe your current responsibilities.
21	A. Currently, I am a Public Utility Analyst III. I conduct utility audits of manual and
22	automated accounting systems for historical and forecasted data.
23	Q. Have you presented testimony before this Commission or any other
24	regulatory agency?
25	A. I filed testimony in Florida Power & Light Company's Nuclear Docket No.

- 1 | 120009-EI.
- 2 Q. What is the purpose of your testimony today?
- 3 A. The purpose of my testimony is to sponsor the staff audit report of Florida Power
- 4 & Light Company (FPL or Utility) which addresses the Utility's filing in Docket No.
- 5 | 130009-EI, Nuclear Cost Recovery Clause (NCRC) for costs associated with its nuclear
- 6 uprate projects. We issued an audit report in this docket for the nuclear uprate projects on
- 7 June 7, 2013. This audit report is filed with my testimony and is identified as Exhibit
- 8 BM-1.
- 9 Q. Was this audit prepared by you or under your direction?
- 10 **A.** Yes, it was prepared under my direction.
- 11 Q. Please describe the work you performed in these audits.
- 12 A. I have broken the audit work into the following categories.
- 13 Rate Base
- 14 We reconciled the amounts for Plant in Service from the orders to FPL's books and the
- 15 Utility's filing of March 1, 2013. We recalculated the Accumulated Depreciation and
- 16 Depreciation Expense estimates on a test basis using Commission approved rates from
- 17 Docket No. 080677-EI. Plant in Service, Accumulated Depreciation, and Depreciation
- 18 Expense were compared to Commission Order No. PSC-12-0647-PAA-EI, in Docket No.
- 19 | 120244-EI, issued December 11, 2012, and Order No. PSC-11-0575-PAA-EI, in Docket
- 20 No. 110270-EI, issued December 14, 2011.
- 21 | Construction Work in Progress (CWIP)
- 22 | We traced CWIP additions in Schedule T-6 to the general ledger and selected a sample
- 23 for testing. We verified that additions had appropriate supporting documentation, were
- 24 | related to the Extended Power Uprate (EPU) project, and were charged to the correct
- 25 accounts.

1	Recovery

- 2 We verified the NCRC amount approved in Order PSC-11-0547-FOF-EI, in Docket No.
- 3 |110009-EI, issued November 23, 2011, to the Capacity Cost Recovery Clause. In that
- 4 audit, we reconciled revenues to the ledger and the Utility's "Revenue and Rate" reports.
- 5 We also selected a random sample of bills to verify use of the approved rate.

6 Operation and Maintenance Expense

- We traced expenses in the filing to the general ledger. We selected a sample of 2012
- 8 O&M Expenses for testing. The source documentation for selected items was reviewed to
- 9 ensure the expense was related to the EPU project and that the expense was charged to the
- 10 correct accounts.

11 Carrying Cost on Deferred Tax Adjustment

- We traced the projected True-Up adjustments and the beginning balances to prior NCRC
- 13 Commission Orders. We traced the estimated tax deduction for research and development
- 14 to supporting schedules and the 2011 Federal Income Tax return. We traced the AFUDC
- 15 | rate applied by the Utility to the rate approved in Commission Order No. PSC-13-0163-
- 16 PAA-EI, in Docket No. 130051-EI, issued April 22, 2013. We recalculated Schedule T-
- 17 3A and verified the Construction Carrying Cost on DTA and the Under (Over) Recovery
- 18 balance.

19 Separate and Apart Process

- 20 We read FPL's testimony and procedures related to the separate and apart process. We
- 21 | reviewed the Recoverable Cost Justification Forms prepared by FPL and reconciled them
- 22 to the sample items when applicable.
- 23 True-up
- 24 We traced the revenue requirements for Carrying Costs on Construction and Deferred Tax
- 25 Adjustment, O&M, and Base Rate to supporting calculation schedules. We recalculated

- 1 | the True-Up amounts as of December 31, 2012 using the Commission approved
- 2 | beginning balance as of December 31, 2011, Debt and Equity Components, the Financial
- 3 | Commercial Paper rates, and the 2012 EPU costs. We traced all adjustments to source
- 4 documents.
- 5 Analytical Review
- 6 We compared 2012 to 2011 costs and used the information to select a sample.
- 7 Q. Please review the audit findings in this audit report, Exhibit BM-1.
- 8 A. There were two findings is this audit.
- 9 Finding 1: Adjustments to Construction Carrying Cost
- 10 Total costs on Schedule T-6 and other associated schedules of the Utility's NCRC filing
- 11 | included work order T00000002434 GSU St. Lucie Spare GSU Transformer Coolers &
- 12 Pumps. The costs included in this work order were calculated using an incorrect
- 13 jurisdictional factor. The jurisdictional factor used was the Transmission Other factor of
- 14 | 0.90431145. The correct jurisdictional factor for Transmission GSU is 0.98051733. This
- 15 adjustment will result in an increase of \$3,740 in construction carrying cost revenue
- 16 requirements.
- 17 | Work order T00000002434 GSU St. Lucie Spare GSU Transformer Coolers & Pumps
- 18 was placed into service in November of 2012. Therefore, there is also an effect on the
- 19 costs being transferred to plant in service. This adjustment will result in an increase of
- 20 |\$2,735 in base rate revenue requirements in the March 1, 2013 filing.
- 21 Finding 2: Adjustment to Recoverable O&M
- 22 | The Utility paid \$15,609.16 for one-year extended warranties on 521 hand held radios
- 23 during 2012 which were included in the costs on Schedule T-4 of the utility's NCRC
- 24 | filing. Each radio comes with a 3-year warranty. The extended warranty claim period is
- 25 outside the remaining duration of the project, which is scheduled to be completed in 2013.

1	On M	May 29, 2013, the Utility reclassified the extended warranty purchases from
2	recove	erable O&M to non-recoverable O&M. This adjustment will result in a decrease of
3	\$15,32	29 in Recoverable O&M Revenue Requirements.
4	Q.	Does that conclude your testimony?
5	A.	Yes.
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1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	COMMISSION STAFF
3	DIRECT TESTIMONY OF Iliana Piedra
4	DOCKET NO. 130009-EI
5	JUNE 21, 2013
6	Q. Please state your name and business address.
7	A. My name is Iliana Piedra and my business address is 3625 N.W. 82nd Ave., Suite
8	400, Miami, Florida, 33166.
9	Q. By whom are you presently employed and in what capacity?
10	A. I am employed by the Florida Public Service Commission as a Professional
11	Accountant Specialist in the Office of Auditing and Performance Analysis.
12	Q. Briefly review your educational and professional background.
13	A. In 1983, I received a Bachelor of Business Administration from Florida
14	International University with a major in accounting. I am also a Certified Public
15	Accountant licensed in the State of Florida. I have been employed by the Florida Public
16	Service Commission since January 1985. I have been employed by the Florida Public
17	Service Commission since January 1985.
18	Q. Please describe your current responsibilities.
19	A. Currently, I am a Professional Accountant Specialist with the responsibilities of
20	planning, and conducting utility audits of manual and automated accounting systems for
21	historical and forecasted data.
22	Q. Have you presented testimony before this Commission or any other
23	regulatory agency?
24	A. Yes. I testified in the City Gas Company of Florida rate case, Docket No.
25	1940276-GU, the General Development Utilities, Inc. rate cases for the Silver Springs

- 1 Shores Division in Marion County and the Port Labelle Division in Glades and Hendry
- 2 Counties in Dockets Nos. 920733-WS and 920734-WS, respectively, the Florida Power
- 3 & Light Company storm cost recovery case in Docket No. 041291-EI, the Embarg storm
- 4 cost recovery case in Docket No. 060644-TL, the K W Resort Utilities Corp. rate case in
- 5 Docket No. 070293-SU and the Florida Power & Light Company fuel recovery in Docket
- 6 | 120001-EI.
- 7 Q. What is the purpose of your testimony today?
- 8 A. The purpose of my testimony is to sponsor the staff audit report of Florida Power
- 9 & Light Company (FPL or Utility) which addresses the Utility's filing in Docket No.
- 10 | 130009-EI Nuclear Cost Recovery Clause for costs associated with its proposed nuclear
- 11 units called Turkey Point 6 and 7. We issued an audit report in this docket for the
- 12 proposed nuclear units on June 5, 2013. This audit report is filed with my testimony and
- 13 is identified as Exhibit IP-1.
- 14 Q. Was this audit prepared by you or under your direction?
- 15 A. Yes, it was prepared under my direction.
- 16 Q. Please describe the work you performed in these audits.
- 17 A. Our overall objective in this engagement was to verify that the Utility's 2012
- 18 NCRC filings for the proposed nuclear units Turkey Point 6 and 7 in Docket No. 130009-
- 19 EI are consistent with and in compliance with Section 366.93, F.S., and Rule 25-6.0423,
- 20 F.A.C. To satisfy the overall objective we performed various procedures.
- 21 Recovery
- We verified the NCRC jurisdictional amount approved in Order PSC-11-0547-FOF-EI, in
- 23 Docket 110009-EI, issued November 23, 2011, to the Capacity Cost Recovery Clause in
- 24 Docket 130001-EI. In that audit, we reconciled revenues to the ledger and "Revenue and

1 Rate" reports. We also selected a random sample of bills and recalculated each bill to

2 verify the use of the approved rate.

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We reconciled the Utility's filing to its general ledger and verified that the costs incurred were posted to the proper accounts. We reconciled the monthly site selection, and preconstruction, cost balances, to the supporting schedules in the Utility's 2012 NCRC filing. We recalculated the T-1 schedules and verified the final true-up amount. We traced the Allowance for Funds Used During Construction (AFUDC) rate applied by the Utility to the rate approved in Order No. PSC-10-0470-PAA-EI, issued July 23, 2010. We traced the projected and estimated True-Up amount to prior NCRC Orders. We traced the beginning balances included in the schedule to the prior audit. We reconciled the monthly Site Selection and Pre-Construction Deferred Tax Carrying Cost accruals displayed on Schedule T-3A to the supporting schedules in the Utility's 2012 NCRC filing. We traced the construction of work in process additions in Schedule T-6 to the general ledger and traced a sample of entries to supporting documentation. We verified that additions related to the New Nuclear project were charged to the correct accounts. We tested a sample of salary & overhead costs to the supporting documentation. We reviewed the contracts and the change orders to verify that the charges related to the description in the contracts. We reviewed internal audits related to the project.

- 20 Q. Please review the audit findings in this audit report, Exhibit IP-1.
- 21 **A.** There were no findings is this audit.
- 22 Q. Does that conclude your testimony?
- 23 A. Yes.

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1	CHAIRMAN BRISÉ: Okay. Anything else?
2	MR. McGLOTHLIN: Mr. Chairman, I didn't
3	have the exhibit next to me at the time I moved
4	those exhibits for Dr. Jacobs. For clarification
5	the exhibits that I moved are 61, 62, 63, and 67.
6	CHAIRMAN BRISÉ: 61, 62.
7	MR. McGLOTHLIN: 63 and 67.
8	CHAIRMAN BRISÉ: Okay. We will move in
9	Exhibits 61, 62, 63, and 67. Are there any
10	objections?
11	Okay. Not seeing any, we will move
12	Exhibits 61, 62, 63, and 67 into the record.
13	(Exhibits 61, 62, 63, and 67 admitted into
14	the record.)
15	MR. YOUNG: Mr. Chairman, just for
16	clarification also, I take it that Exhibits 64, 65,
17	and 66 were withdrawn.
18	MR. McGLOTHLIN: That's correct.
19	CHAIRMAN BRISÉ: Okay. So that's sixty
20	give me one second. 64 through 66 have been
21	withdrawn. I think that
22	MR. McGLOTHLIN: Correct.
23	CHAIRMAN BRISÉ: Perfect. Thank you.
24	All right. I think we excused some
25	witnesses already.

1	MS. CANO: If you don't mind, I'd like to
2	just confirm that Witnesses Diaz, Ferrer, Reed,
3	Powers, and Deason may be excused from the
4	proceeding.
5	CHAIRMAN BRISÉ: Yes, they may be excused
6	from the proceeding.
7	MR. McGLOTHLIN: May we notify Dr. Jacobs
8	that he need not come to Tallahassee?
9	CHAIRMAN BRISÉ: Sure.
10	MR. McGLOTHLIN: Thank you.
11	CHAIRMAN BRISÉ: He's excused as well.
12	Okay. All right. And just so that we're
13	clear, I'm going to ask staff to go over the, the
14	order of the witnesses once again so that people
15	know when they need to be here.
16	MR. LAWSON: Yes. What will happen is
17	when we take up the case, FPL's case, there will be
18	opening statements, followed by the witnesses, which
19	will be Mr. Scroggs, Mr. Sim, Mr. Jones, Mr. Fisher
20	and Mr. Rich.
21	CHAIRMAN BRISÉ: All right. Thank you.
22	Commissioners, any other questions or
23	comments before we start moving towards the case?
24	Okay.
25	COMMISSIONER BALBIS: Mr. Chairman, I have

a question.

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CHAIRMAN BRISÉ: Sure.

COMMISSIONER BALBIS: Are we going to proceed immediately into the witnesses or are we going to have the parties provide opening statements?

CHAIRMAN BRISÉ: Yes. We're going to have opening statements, and then we're going to administer the oath and all that good stuff.

All right. And I just want to make sure that I'm in proper posture. I'm trying to process all of this.

Okay. So I think what we'll do is we will get into opening statements and we'll get through opening statements. And after opening statements we will break for lunch, and after we break for lunch we will come back and begin with witnesses. Okay? I think that that makes sense in my mind. Hopefully it makes sense in your mind as well.

Okay? Is this a fresh light or did I miss it? Commissioner Balbis?

COMMISSIONER BALBIS: No.

CHAIRMAN BRISÉ: Okay. Okay. Understood. Understood.

Okay. Let's do this. Let's, let's take a

five-minute break, and then we'll get into opening statements right after that.

(Recess taken.)

Okay. We're going to go ahead and reconvene, give everybody about 30 seconds or so to find a place.

Okay. It's my understanding that
Mr. Anderson has a question for the Commission.

MR. ANDERSON: Yes, two questions. First, clarification on the stipulation you approved, just so that we're all clear for briefing purposes and things. 1 through 3 were moot. 4, 5, 6, and 8 are to be briefed with SACE. And then Issue 13 would be briefing with the parties on the disagreement with respect to the recommendation that, that Public Counsel has. The balance of the issues, which were 14, 15, 16, or a finding of FPL's position noting other people's no position. Have I stated that

correctly?

 $\label{eq:CHAIRMAN BRISÉ:} \textbf{ That is my understanding}$ of our vote.

MR. ANDERSON: Then the second quick question we had just in terms of proceeding is did the Commissioners have questions as to Dr. Sim or Mr. Jones on their rebuttal as well, just in terms

of are we presenting just direct testimony or direct 1 and rebuttal for those two gentlemen? 2 CHAIRMAN BRISÉ: Okay. Commissioners, 3 with respect to the FPL witnesses, do we have 4 questions on the rebuttal testimony as well? 5 CHAIRMAN GRAHAM: Yes. 6 7 CHAIRMAN BRISÉ: Okay. The answer is yes. Okay? 8 9 MR. ANDERSON: So rebuttal both. 10 you for that. CHAIRMAN BRISÉ: All right. Thank you. 11 12 Okay. With that, we are ready to move 13 into opening statements. And opening statements 14 shall not exceed ten minutes for FPL, and the 15 intervening parties have a total of 20 minutes to be allocated amongst the parties as they have mutually 16 17 agreed. Okay? So with that, Mr. Anderson. 18 MR. ANDERSON: In keeping with our theme 19 of administrative efficiency, I'd like to try to do 20 five minutes and reserve the balance, if that's okay 21 with the Commission. 22 CHAIRMAN BRISÉ: Sure. That works fine 23 for me. 24 MR. ANDERSON: And do people have their 25 little booklet? Great. Thanks so much.

CHAIRMAN BRISÉ: Thank you.

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MR. ANDERSON: May I proceed?

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CHAIRMAN BRISÉ: Yes, you may.

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MR. ANDERSON: Thank you. Good morning,

Chairman Brisé and Commissioners.

FPL requests that the Commission approve FPL's nuclear cost recovery request for collection in 2014 the amount now about \$43 million. This is -- less than half of this amount supports licensing the Turkey Point 6 and 7 project. rest represents completion of FPL's extended power uprate project. Including the 1.6 million we talked about earlier today, this is a 72 percent decrease from the current NCR charge. It equates to about 46 per month on a typical residential customer bill. It's about one-half of 1 percent of the total bill.

Let's read Progress and Turkey Point 6 and 7. We all know it's a two-unit 2,200 megawatt new nuclear plant being developed at our existing Turkey Point site down near Homestead. Our work is focused on obtaining an NRC combined operating license for the plant. The witnesses you will hear from today are FPL Senior Director Steve Scroggs, FPL system planning expert Dr. Steve Sim. He'll present his analysis of the economic feasibility of continuing the project.

Page 1 of your booklet contains Dr. Sim's Exhibit SDS-9. And just at a glance it helps us understand why FPL is taking the stepwise approach we are taking, why we are seeing a combined operating license. You can see the very compelling benefits for our customers of keeping this important option available for service in Florida.

The projected lifetime fossil fuel cost savings for customers is about \$78 billion. This is enough electricity for 1.2 million customer homes.

It's equivalent of taking 50 million cars from the road from a carbon dioxide perspective. And for fuel diversity, which is so important here in Florida, it's an 18 percent improvement if we are able to continue and proceed with this project. So we wanted to make clear from the outset why we think this is such an important part of preserving and maintaining service to our customers.

Turning to -- I'd point out that no witness has submitted any testimony seeking disallowance of any cost for the Turkey Point 6 and 7 project, and then I'd turn to the EPU project.

Commissioners, during 2008 FPL accepted the responsibility to provide at least 400 megawatts of additional fuel diverse greenhouse gas free

nuclear generation by 2012. Our company is proud to say we met that goal on schedule in 2012. That has been exceeded now by 30 percent during 2013. Today we have 522 megawatts of additional nuclear generating capacity serving customers that did not exist in 2008. We checked this morning. All four plants are online; they're operating at 100 percent

as we sit here today.

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This was achieved from conducting one uprate project to expand capacity on all four units. If you look at page 2 of our booklet, you see in the bottom right corner, that green portion, that's where 60 percent of FPL's electric load is down between where our St. Lucie and Turkey Point plants are. And megawatts in that area of our state are particularly beneficial and useful because it makes electricity where our people that we serve live and work.

Page 3 of your booklet shows the expected benefits to FPL's customers from the EPU project.

You can see lifetime fossil fuel savings, even with the low natural gas prices currently projected, of about \$3.4 billion. This is enough power for about 326,000 customers' homes. And focusing on fuel diversity, we obtain about a 4 percent reduction in

natural gas through use of this. From an environmental perspective this is equivalent of taking 5 million cars from the road.

Just to give us a sense of what has been done at this project, I'll flip through some of these, the balance of these exhibits. Page 4 is a conceptual drawing of our St. Lucie plant, and every one of those blue bubbles you see is a highly complicated system which was worked on by people here in Florida to achieve the results that we described. Each of the plants was worked on in a similar manner.

Page 5 relates that our workforce summary, which is during 2012 an average of 3,500 personnel were employed to work on the EPU project every day here in Florida, and about half of those were Florida residents.

The following page, page 6, safety is at the core of our company, what we do, how we do things, especially in the nuclear industry. Please look at the OSHA recordable incident rate and you can see how successful this project was in protecting the lives and the safety of the people who performed the work. This is considered a hallmark of good, professional project management.

Then the following page, our project has been recognized by the Nuclear Energy Institute as a top industry practice. This is an award given by the Nuclear Energy Institute to projects recognizing their nuclear safety, cost saving impact, innovation, and productivity. On behalf of all the thousands of people who worked on this project at both plants, our company is very proud of them and very proud of this.

Project wrap-up continues, will be completed by year end. The total nonbinding cost estimate for the project is on a dollar per kilowatt of capacity, it's within a few percent of last year. The final number is \$3.398 billion. The project wrap-up work continues, will be completed by year end. There will be no project costs for 2014.

Commissioners, FPL's past investments in nuclear power are an important part of why our typical residential bill is the lowest of the 55 utilities in Florida, 25 percent lower than the nation as a whole. We're very proud of the reliability and clean generation we deliver. It's your oversight, your policy support for continued prudent investments like those before you today is essential in serving millions of Florida people now

and in the future with low cost, reliable, clean 1 2 energy. For these amounts -- for these reasons we 3 request that you approve our nuclear cost recovery 4 5 amount for this year, find our 2012 decisions were prudent, and approve our costs in '13 and '14 as is 6 7 reasonable. I would like to reserve the balance of my 8 9 time for rebuttal, if needed. Thank you. CHAIRMAN BRISÉ: Thank you. You have 10 3 minutes and 21 seconds left. 11 12 MR. ANDERSON: Thank you kindly. CHAIRMAN BRISÉ: Okay. Mr. McGlothlin. 13 14 MR. McGLOTHLIN: Thank you, Mr. Chairman. As directed by the Prehearing Officer, we 15 16 have arranged a division of time. And based on the 17 fact that OPC is sponsoring testimony, it's been agreed that I will have as many as eight minutes of 18 19 the 20 minutes for my time. CHAIRMAN BRISÉ: Sure. 2.0 21 MR. McGLOTHLIN: I don't want to tread on 22 the time of the others, so if I get close to that or 23 go over it, I would appreciate being, being told. 24 CHAIRMAN BRISÉ: Sure. 25 MR. McGLOTHLIN: Commissioners, in a

moment I'm going to focus on Dr. Jacobs'
recommendation of an adjustment in Issue 13. But at
the outset I want to make this point: I think it's
important that you understand that our office does
not come here in the role of a complete naysayer.
We've been specific and selective with respect to

the issue we've, we've teed up for you at this time.

Dr. Jacobs has not challenged any of the costs of Turkey Point 6 and 7, the proposed new units, in this hearing cycle. With respect to these uprates, Dr. Jacobs accepts FPL's conclusion that the St. Lucie uprate at all-in costs of \$4,300 per installed kW is cost-effective and beneficial to customers.

However, at a corresponding cost of \$9,500 per installed kW and counting the Turkey Point uprate is an entirely different story and one that calls for action on your part to protect customers from excessive costs.

In past years, through Dr. Jacobs' testimony, we have flagged the very different nature of the Turkey Point uprate project. We've flagged the uncertainty that FPL has failed over time to address through an adequate provision for contingency. We have identified the annual

projections of remaining cost of completion that consistently turn out to be unrealistic because of an ever-expanding scope of the project. The impact of these deficiencies on customers is only now coming into sharp focus as the project has reached its finishing stages.

activities of St. Lucie and Turkey Point are governed by legislation that is intended to promote the development of nuclear capacity. We don't disagree with that basic premise. However, we submit that the Legislature did not intend to promote nuclear capacity at any cost.

activities at St. Lucie and Turkey Point are a single integrated project and must be viewed on a composite overall basis. At some point that argument breaks down. It breaks down under the crushing weight of costs that prove all too well that the Turkey Point uprate is a different animal and an undertaking unto itself. If they were truly subparts of a single integrated project, one would expect the costs at St. Lucie and Turkey Point to bear some relationship to each other over time. They do not.

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In the need determination case, FPL estimated that on a cost per kW basis the Turkey Point uprate would cost about 14 percent more than the St. Lucie uprate. Now on the same dollars per kW basis the Turkey Point uprate costs 100 percent more than the St. Lucie uprates, even though the St. Lucie uprate also has increased dramatically over time. The sheer differential in costs defeats the claim that the activities at St. Lucie and Turkey Point constitute a single integrated uprate project.

Last year we asked you to hold the line for the Turkey Point uprate at the level of FPL's then current estimate of about \$1.67 billion and you declined to do so. So it's fair to ask what is different now as compared to a year ago? The answer is in Dr. Jacobs' testimony. The economics of the Turkey Point uprate have worsened dramatically over the course of the past year. The estimate for the Turkey Point uprate is now at \$2.2 billion compared to a year ago. The Turkey Point uprate construction costs have increased from \$6,700 per kW to \$8,100 per kW and counting. Although the idea is difficult to contemplate, the situation now makes that of a year ago seem mild by comparison.

To put this in perspective, for the new

units, Turkey Point 6 and 7, FPL calculates the maximum it can spend on capital costs and remain cost-effective relative to its alternative is \$6,640 per kW. That's in 2013 dollars. And that's for a new unit that will generate fuel savings for 40 years or longer.

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The Turkey Point uprate, which has only 19 years left on already extended licenses, has overnight construction costs of \$8,100. That's a difference of \$1,416 per kW. And at Turkey Point there are 232 megawatts translated into 232,000 kilowatts of uprate capacity.

When one multiplies the differential by the number of kilowatts, you see that the Turkey Point uprate investment exceeds the maximum cost-effective level for new nuclear capacity at the same site by \$338 million. And that takes into account all fuel savings associated with the nuclear operation. That value is also conservative in light of the Turkey Point uprate's much shorter operating life.

A year ago FPL's Dr. Sim resisted this type of comparison by arguing that Dr. Jacobs should have compared the 2012 costs of Turkey Point with the projected 2023 costs off Turkey Point 6 and 7.

The costs of the Turkey Point uprate have swelled so enormously over the past year that even this flawed comparison cannot protect the Turkey Point uprate.

Whether one compares the overnight costs of both projects in 2013 dollars, as Dr. Jacobs maintains should be done, or whether one compares 2013 uprate costs to the inflated 2023 costs of Turkey Point 6 and 7, which is an illogical mismatch that obviously skews the comparison in FPL's favor, the Turkey Point uprate cost exceeds the maximum breakeven level that FPL attributes to new nuclear

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onerous margin.

CHAIRMAN BRISÉ: Mr. McGlothlin, you have about two minutes left.

capacity at Turkey Point and by a dramatic and

 $\ensuremath{\mathsf{MR}}.$ $\ensuremath{\mathsf{McGLOTHLIN}}:$ Thank you. I'm about to wrap up.

FPL will argue essentially that the advanced recovery statute hems you in to the extent that you're powerless to do anything about these costs. We disagree. You have the discretion to apply the economic analysis that you believe appropriate under the circumstances. FPL's failure to address extreme uncertainty with a commensurate level of contingency is an imprudence that has been

a continuing part of this project since its inception.

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In the need case FPL estimated the cost of the Turkey Point uprate to be \$750 million. The current estimate is \$2.2 billion. Dr. Jacobs has shown the Turkey Point uprate to be uneconomic by a conservative \$338 million when compared to FPL's own estimate of the cost of new nuclear capacity at Turkey Point, a conservative measurement. We ask you to disallow \$200 million of this 2012 surge in unreasonable costs, \$975 million that incredibly FPL spent on the Turkey Point uprate during 2012 alone. That disallowance, which is approximately 9 percent of the current estimate of the overall cost of the Turkey Point uprate, will give partial protection to ratepayers.

And for the balance, Commissioners, I'll submit a brief. Thank you for your attention.

CHAIRMAN BRISÉ: All right. Thank you.

Mr. Wright.

MR. WRIGHT: Thank you, Mr. Chairman, Commissioners. Good afternoon.

As I've been saying privately for years, like for a really long time, and as the Florida Retail Federation has been saying publicly and

privately since I've been working for them, which is eight plus years now, the Retail Federation and I personally strongly support nuclear power for a number of reasons, and we believe and we hope that nuclear power will have a place in Florida's energy future. It should.

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However, as Mr. McGlothlin said, and as we believe the Legislature would agree, we do not support nuclear power at any cost, nor do we support any other technology at any cost for that matter.

Our position is simple; it's constant throughout every proceeding that I'm in here.

Utilities are obligated to provide safe, adequate, reliable service at the lowest possible cost.

In this case, Florida Power & Light
Company's costs for the Turkey Point uprate project
are egregiously high. They have gone out of
control. They're even more than FPL's claimed costs
for a brand new unit. To protect consumers, we urge
you, the Florida Public Service Commission, to draw
the line somewhere, and in this case we would urge
you to accept the rather conservative recommendation
of the citizens of the State of Florida to disallow
\$200 [sic] out of the excessive overruns incurred by
Florida Power & Light. Thank you.

CHAIRMAN BRISÉ: Thank you.

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MR. CAVROS: Chairman, Commissioners, good

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afternoon.

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MR. WRIGHT: 200 million. Thank you.

CHAIRMAN BRISÉ: We figured that's what you meant.

(Laughter.)

MR. CAVROS: Chairman, Commissioners, good afternoon. George Cavros on behalf of Southern Alliance for Clean Energy.

This hearing comes on the heels of the cancellation of the Levy nuclear reactor project. That project, by all accounts, was a financial fiasco for customers. Duke Energy Florida customers will have paid well over \$1 billion before the project is closed out. And what did they get for it? Unfortunately nothing, not one kilowatt hour of electricity. Meanwhile, the company's shareholders walk away with a profit.

This fiasco was facilitated by a law that allows the utility companies to shift all the financial risk of building reactors from the company's shareholders to the company's customers. And, you know, companies would never in a competitive market anyway invest in nuclear reactors

on their own dime because in a competitive market natural gas is too low, demand is too flat, and the upfront costs are way too high. But we don't have a competitive market here in Florida.

So you, Commissioners, are the firewall between unreasonable requests by the utility and its customers. And, frankly, Commissioners, that firewall was not there for Duke Energy customers. You continue to approve cost recovery for an increasingly speculative project, yet you have the authority under current law to deny recovery if a project is not economically or qualitatively feasible. And we urge you to use that authority as it relates to FPL. FPL customers do not want to suffer the same fate as Duke Energy customers.

And it's clear that the so-called nuclear renaissance is meeting economic reality, and economic reality appears to be prevailing in Florida. And the Florida Legislature this year, in response to that realization, passed a law that puts more process into the cost recovery process, and I believe demands higher scrutiny by this Commission in approving further costs for proposed nuclear plants. And SACE intends to scrutinize the feasibility of the proposed FPL reactors in this

docket before this Commission today. And we contend that the last proposed nuclear project in Florida, the Turkey Point project, isn't feasible from an economic or a qualitative perspective and that FPL

hasn't met its burden of proving feasibility.

The FPL resource planning process which forms the basis for the feasibility study is biased in favor of moving forward with a proposed project. The company is five years into the project and still can't commit to a price for the project, offering only a range. And even that range is nonbinding. The company is five years into the project and still can't commit to a price for the project or, rather, a date for the project, when it will be built. They can't commit to the 2022/2023 time frame or can't commit to the fact that the project will be, will be built at all, and we feel that's inconsistent with Commission rules on intent to build.

Reactor projects in other states are experiencing delays and cost overruns, and several existing nuclear reactor projects have been canceled or shut down this year. All these flags should -- all these facts should raise red flags for, for this Commission. Again, you know, certainly the FPL customers don't want to find themselves in the same

predicament that Duke Energy customers do.

There are already lower cost and lower risk resources to meet our energy needs. So from an economic and a qualitative feasibility perspective, that already makes the projected or the proposed FPL projects infeasible.

So we look forward to delving into these issues during this proceeding, and we respectfully ask that no more cost recovery be granted to the company for its proposed reactor projects. Thank you.

CHAIRMAN BRISÉ: Thank you.

Mr. Moyle.

MR. MOYLE: Thank you, Mr. Chairman.

One of the hazards of going last is I guess I work with the time that is falling out.

Could you tell me how much time I have approximately?

CHAIRMAN BRISÉ: Sure. You have about six minutes.

MR. MOYLE: Okay. Thank you.

For the record, Jon Moyle on behalf of FIPUG. And I want to just make a couple of general comments and then talk a little bit about the specific issue that's before you in Issue 13.

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remark, talked about low cost reliable energy. And the trend respectfully has been that the adjectives "cost-effective" or "low cost" before nuclear energy are not proving to be the case. And part of that is, is facts beyond control. Gas markets are such that natural gas is a preferred option these days.

But having been to these hearings for a number of years, I don't recall anyone coming in and saying we're here with projections this year and the projections are going down 20 percent. I mean, it seems that, that, that nuclear projects have a trend line with respect to costs that literally is a one-way street. And Mr. McGlothlin in his comments said the cost per kilowatt hour has gone from 6,700 to \$8,100 per kilowatt hour. That's a significant increase in one year and these projects are multiyear.

So it's a tough situation. The

Legislature has enacted a statute that gives

direction. You know, really the, the task that I

see it and as FIPUG sees it is what adjustments can

be made? And in this case I think there's a square

choice before you. Mr. McGlothlin and his witnesses 1 are saying you should disallow 200 million. You 2 know, is that the right number? Mr. McGlothlin 3 would say yes. Is it 100 million, is it 50 million? 4 You have evidence, I think, that allows you to make 5 an appropriate adjustment, and we think an 6 7 adjustment should be made. We don't think FPL, you know, got it 100 percent completely right and would 8 9 encourage you, when you're making your decision on this, which I think will be made next time y'all are 10 11 together with a recommendation because we're not 12 going to be getting into this by agreement, that you 13 seriously look at making an appropriate adjustment. 14 Because I think the trend line is the costs are 15 going up and up and up. As, as SACE said, you serve as the firewall or the governor, and we would ask 16 17 that you use your judgment and discretion to make an 18 adjustment to, to the costs.

So with that, we appreciate the time today. Again, you know, nuclear energy may play a role, but it needs to be, it needs to be cost-effective and affordable for the citizens of Florida. So thank you.

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CHAIRMAN BRISÉ: Thank you.

Okay. FPL, you have three minutes and 30

seconds.

MR. ANDERSON: Thank you, Chairman Brisé.

First, what I'd like to do is point the Commission and all of us back to the law that governs this proceeding and under which we have proceeded. Our statute here in Florida says, After a determination of need is granted, the right of a utility to recover any costs incurred prior to commercial operation, et cetera, shall not be subject to challenge unless a preponderance of the evidence supports a finding that certain costs were prudently incurred.

The statute, you know, makes it very clear that proceeding with the construction of plant following a need determination order shall not constitute or be evidence of imprudence, and imprudence shall not include any cost increases due to events beyond the utility's control.

Why do we have that law? We have that law because FPL is doing what is hard. And you've heard the testimony and seen our witnesses and you've seen the dedication that's gone into things. None of these Intervenors have filed one word of testimony identifying a single management decision or a single cost. That's the legal standard before this

Commission, and we clearly prevail on that basis.

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You can look to the testimony of Terry Jones, Concentric Chairman John Reed, regulatory policy expert Terry Deason all point that out. You can also look to your own staff, who reviewed tens of thousands of pages of paper, interviewed dozens of people, and then concluded, for example, for the EPU that overall the EPU project has in place and employs an adequate system of EPU project controls, risk evaluation, and management oversight.

So the bottom line is our company prudently, properly managed these projects, they've been thoroughly reviewed, and under the law we're entitled to those costs. The arguments we're hearing about EPU are the purest of hindsight; taking results at the end, without consideration of the management decisions, and making arbitrary claims. And that's what the law forbids.

You know, Dr. Jacobs did not have a good year this year. That said, he has no training or experience in utility resource planning. Nevertheless, he tried to do a very poorly drawn economic analysis comparing part of our EPU project with a nuclear plant ten years out in the future and comes up with this, oh, yeah, \$200 million

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recommended disallowance. What does he not do? As Mr. Deason points out in his testimony, if you apply that same methodology to the other part of the project that he doesn't talk about, Public Counsel would be writing us a check, a bonus check for \$470 million. That's what's shown on the last page in your table here.

Now, Commissioners, our company is not asking for any bonus. The point of this is to demonstrate the poverty of analysis that's been offered by Public Counsel, and to ask that you judge this case based upon the law, based upon your prior determinations of the feasibility of these projects, and the evidence before you and approve our request. Thank you.

CHAIRMAN BRISÉ: Thank you. And thank you for the opening statements. As we stated, we're going to take up opening statements and then we were going to break for lunch. It is now 12:18. We will reconvene at 1:30.

(Recess taken.)

(Transcript continues in sequence with Volume

13	000514
1	STATE OF FLORIDA) : CERTIFICATE OF REPORTER COUNTY OF LEON)
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3	
4	I, LINDA BOLES, CRR, RPR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	
7	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this
8	transcribed under my direct supervision, and that this transcript constitutes a true transcription of my notes of said proceedings.
9	
10	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'
11	attorney or counsel connected with the action, nor am I financially interested in the action.
12	DATED THIS 139 day of August, 2013.
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15	Junda Doles
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