

100009-EI

EXHIBIT B

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FPL's Responses to Staff's 6th Set of Interrogatories, Nos. 20-38

Forward

Please find attached FPL's responses to Staff's 6th Set of Interrogatories, Nos. 20-38, addressing Mr. [REDACTED] February 19, 2010 letter to FPL, the Concentric Energy Advisors ("Concentric") investigation into the issues raised by Mr. [REDACTED] and FPL's response to Concentric's recommendations.

As part of FPL's regular practices for evaluating and improving internal controls, and for providing a work environment in which employees may raise matters of concern in confidence, FPL's Internal Audit department ordinarily would have been asked to investigate and prepare an internal audit investigation report with respect to the allegations raised by Mr. [REDACTED]. However, due to the complex subject matter with which Concentric was already familiar from other independent review work, Concentric was selected to perform an investigation for the purpose of determining whether any of Mr. [REDACTED] allegations or "concerns" (as they are referenced by Staff throughout these interrogatories) reflected legitimate issues.

Additionally, by way of background, in order to help ensure that Mr. [REDACTED] could be certain that his concerns were received and being addressed, Mr. Jones met with Mr. [REDACTED] and shared with him copies of the actual senior management presentations that had been made to FPL's Executive Steering Committee ("ESC") and which were also provided to Commission Staff in response to document requests, to demonstrate to Mr. [REDACTED] that in fact the appropriate information was being presented to FPL's ESC and the Staff of the FPSC. Mr. Jones also shared with Mr. [REDACTED] a general overview of the information that FPL provided to the FPSC Staff auditors during their site visit. Mr. [REDACTED] said that he appreciated the sharing of the information and to whom it was being provided, as he was not aware that that information had been communicated to the ESC or FPSC Staff.

By responding to the following interrogatories, FPL is not conceding the legitimacy of the issues raised by Mr. [REDACTED]. This forward is incorporated by reference into each response to Interrogatories No. 20-38. Accordingly, to the extent any of FPL's responses are entered into the record, this forward should be included as well.

Q.

- 1 In reference to the concerns discussed by ██████ in his February 19, 2010 complaint letter,
 2 provide the chronology of when each FPL manager became aware of the items of concern
 3 discussed in the ██████ complaint letter. Include with the chronology the name of each manager,
 4 his management position, and what contribution, if any, each manager had in preparing FPL's
 5 prefiled testimony in Docket Numbers 080009-EI, 090009-EI, and 100009-EI.

A.

	1	2	3
	Name	Position	Contribution, If Any, to testimony
6	██████	██████	No contribution to 080009-EI or 090009-EI
7	██████	██████	testimony; directly contributed to and sponsored EPU
8	██████	██████	testimony in 100009-EI
9	██████	██████	No contribution to 080009-EI or 090009-EI;
10	██████	██████	reviewed and commented on Terry Jones testimony
11	██████	██████	in 100009-EI
12	██████	██████	Reviewed and commented on Steve Scroggs, Winnie
13	██████	██████	Powers, Steve Sim, and John Reed testimony in
14	██████	██████	080009-EI and 090009-EI; reviewed and commented
			on Terry Jones and John Reed testimony in
			100009-EI
15	██████	██████	No contribution to 080009-EI testimony; Reviewed
16	██████	██████	LAR information in Raj Kundalkar testimony in
17	██████	██████	090009-EI; Reviewed Terry Jones testimony in
18	██████	██████	100009-EI
19	██████	██████	No contribution to 080009-EI or 100009-EI
20	██████	██████	testimony; Reviewed Raj Kundalkar testimony in
21	██████	██████	090009-EI
22	██████	██████	No contribution to 080009-EI testimony; reviewed
23	██████	██████	and commented on Raj Kundalkar and John Reed
			May and rebuttal testimony in 090009-EI; reviewed
			and commented on Terry Jones and John Reed
			testimony and reviewed Winnie Powers, Nils Diaz
			and Steve Sim testimony in 100009-EI
24	██████	██████	Reviewed and commented on Steve Hale and Bill
25	██████	██████	Labbe testimony in 080009-EI; reviewed and
26	██████	██████	commented on Raj Kundalkar testimony in
			090009-EI and Terry Jones testimony in 100009-EI

Chronology

33 [REDACTED] and [REDACTED] became aware of the other concerns in [REDACTED] letter
34 shortly after FPL's receipt of [REDACTED] letter on February 19, 2010, in late February or early
35 March 2010.

1 [REDACTED] and [REDACTED] were made aware of the issues when they were interviewed by
2 Concentric in connection with Concentric's investigation in early April. [REDACTED] interfaced
3 with [REDACTED] throughout the project. [REDACTED] became aware of [REDACTED] letter on
4 April 13, 2010, when he was contacted by Concentric for an interview in connection with
5 Concentric's investigation. [REDACTED] does not share [REDACTED] concerns.

6 The remainder of the employees listed above (which consists of current EPU Managers and EPU
7 Directors, in addition to the current and former EPU vice presidents) were unaware of the other
8 concerns expressed by [REDACTED] prior to being contacted for the purpose of responding to this
9 discovery request. Such discussions occurred between August 2, 2010 and August 13, 2010.

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Q. In reference to the concerns discussed by [REDACTED] in his February 19, 2010 complaint letter, provide the chronology of when, if at all, any FPL sponsored witnesses in Docket Numbers 080009-EI, 090009-EI, and 100009-EI first became aware of any of the items of concern discussed by [REDACTED] in his complaint letter. In responding to the is interrogatory, include a description of the nature of the communication and each witness's responsibility within FPL to address the items of concern discussed by [REDACTED]

A.

	1	2	3
	Witness Name, Docket	Nature of Communication	Responsibility to Address Items of Concern
7	[REDACTED]	Discussion for purpose of responding	None
8	080009-EI	to this discovery request	
9	[REDACTED]	Discussion for purpose of responding	None
10	080009-EI	to this discovery request	
11	[REDACTED]	Discussion for purpose of responding	Please see below
12	080009-EI	to this discovery request	
13	[REDACTED]	Interfaced with [REDACTED] regularly	Please see below
14	090009-EI	throughout 2009; became aware of letter when contacted by Concentric in connection with its investigation on April 13, 2010	
15	[REDACTED]	Discussion for purpose of responding	None
16	080009-EI,	to this discovery request	
17	090009-EI,		
18	100009-EI		
19	[REDACTED]	Briefed on topic by the Law	None
20	080009-EI,	Department in late May, 2010	
21	090009-EI,		
22	100009-EI		
23	[REDACTED]	Contacted by FPL to conduct	None
24	080009-EI,	investigation and was provided letter	
25	090009-EI,	on March 10, 2010	
26	100009-EI		
27	[REDACTED]	Reviewed draft testimony of John	None
28	090009-EI,	Reed, which mentions investigation	
29	100009-EI	and report, in late April, 2010	

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1	1	2	3
2	100009-EI	Notified of letter in late February or early March, 2010	Please see below
3	100009-EI	Discussion for purpose of responding to this discovery request	None
4	100009-EI	Discussion for purpose of responding to this discovery request	None
5	100009-EI	Discussion for purpose of responding to this discovery request	None
6	100009-EI	Discussion for purpose of responding to this discovery request	None

Chronology

7 FPL BPU management was aware that FPL's feasibility study did not encompass all potential
8 project scope, that BPU project scope was changing and would continue to change, and that these
9 facts could affect the total project cost, prior to February 19, 2010.

10 [REDACTED] became aware of the other concerns shortly after FPL's receipt of [REDACTED] letter, in
11 late February or early March, 2010, and currently has overall responsibility for the BPU project.

12 Mr. Reed was aware of the items discussed by [REDACTED] upon being contacted by FPL for the
13 purpose of conducting an investigation and developing a report, on March 10, 2010.

14 [REDACTED] was interviewed by Concentric on April 9, 2010, so was aware of the items of concern to
15 the extent disclosed through that interview. [REDACTED] interfaced with [REDACTED] throughout
16 the project. [REDACTED] became aware of [REDACTED] letter on April 13, 2010, when he was
17 contacted by Concentric in connection with its investigation. [REDACTED] similarly interfaced
18 regularly with [REDACTED] but became aware of [REDACTED] letter on August 12, 2010 when
19 contacted for the purpose of responding to this discovery request. These are the only witnesses that
20 would have had any responsibility regarding the concerns raised by [REDACTED]. However, by the
21 time [REDACTED] letter was received by FPL, [REDACTED] had left FPL, and [REDACTED] retired
22 shortly thereafter but before [REDACTED] submitted his letter.

23 [REDACTED] was aware of the issues in late April 2010, only to the extent they are discussed in Mr.
24 Reed's May 3, 2010 testimony. [REDACTED] was briefed on the topic in late May, 2010. The
25 remainder of FPL's witnesses were unaware of the concerns prior to being contacted for the purpose
26 of responding to this discovery request. Such discussions occurred between August 2, 2010 and
27 August 13, 2010.

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Q.

1 In reference to the concerns discussed by [REDACTED] in his February 19, 2010 complaint letter, if
2 FPL management was not aware of any of the concerns discussed in the [REDACTED] complaint letter
3 prior to February 19, 2010, please explain why. Include in your response whether FPL believes
4 its managers should have been aware prior to February 19, 2010 and FPL's basis for its position.

A.

5 FPL EPU management was aware that FPL's feasibility study did not encompass all potential
6 project scope, that EPU project scope was changing and would continue to change, and that
7 these facts could affect the total project cost, prior to February 19, 2010. FPL executive
8 management was also aware of these facts prior to February 19, 2010, as they were
9 communicated by EPU management through the regular Executive Steering Committee meetings
10 and presentations.

11 The prior [REDACTED] and other EPU management continued to
12 work with various cost figures and estimates throughout 2009 as part of the project management
13 and cost estimation process. When preliminary figures had been further refined and challenged,
14 they were discussed with executive management. As discussed in the response letters of [REDACTED]
15 [REDACTED] and [REDACTED] attached to the Concentric [REDACTED] investigation Report, the cost estimates
16 had not yet been fully validated as of September 8, 2010.

17 FPL EPU and executive management viewed (and still views) the above process as the normal
18 progression of scope identification and cost projection development that is inherent in a large,
19 complex project such as the EPU. Executive management was not aware of [REDACTED]
20 concerns until receipt of his letter on February 19, 2010.

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Q.

1 Did FPL disclose a copy of the [REDACTED] complaint letter to the PSC or any of the PSC's audit staff
2 during the first three months of 2010? If not, explain why not. If disclosure was made, describe
3 the nature and circumstance of the communication, the date, and to whom FPL first provided a
4 copy of the [REDACTED] complaint letter.

A.

5 FPL disclosed the existence of the letter and the fact that an investigation had been initiated in
6 the fourth month of 2010. A brief chronology of events is below.

- 7 • Toward the end February 2010, FPL received the letter and determined that it should
8 consider conducting an investigation into the issues [REDACTED] raised.
- 9 • In March 2010, it was determined that Concentric Energy Advisors should conduct a
10 separate investigation to examine the issues [REDACTED] raised. FPL provided the letter to
11 Concentric Energy Advisors for the purpose of conducting such an investigation.
- 12 • On April 30, 2010, FPL informed audit staff that an employee letter had been received
13 and that an investigation had been initiated, which would culminate in a report. This was
14 communicated verbally during a meeting at FPL's Juno Beach office during which time
15 FPL allowed audit staff to review its testimony in advance of the May 3, 2010 filing date,
16 at audit staff's request. The existence of the employee letter was also disclosed in the
17 May 3, 2010 written testimony of John Reed, which staff reviewed at that April 30th
18 meeting, and which states that Concentric was conducting an investigation of the
19 concerns in the letter, and that Concentric would develop a report. When Concentric
20 completed its investigation and finalized its report, FPL provided audit staff with a copy
21 of the report (on June 22, 2010), which included a copy of [REDACTED] letter as an
22 attachment.

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Q.

1 Did FPL disclose a copy of the [REDACTED] complaint letter to anyone outside of FPL management
2 prior to releasing a copy to the PSC? If disclosure was made, describe the nature and
3 circumstance of the communication, the date, and each person/entity to whom FPL provided a
4 copy of the [REDACTED] complaint letter prior to providing a copy to the PSC.

A.

5 Yes. The letter was provided to the Carlton Fields law firm on February 26, 2010 and was
6 provided to Concentric Energy Advisors on March 10, 2010 for the purpose of determining an
7 appropriate investigation into [REDACTED] concerns.

Q.

1 Regarding FPL's internal responses to the concerns discussed in the [REDACTED] complaint letter,
2 provide a chronological summary listing FPL management actions and responses to each of the
3 concerns discussed in the [REDACTED] complaint letter. Include in your response all closed
4 actions/reviews, all open actions/reviews, and all pending actions/reviews and the estimated
5 number of months to close each open or pending action/review and list all impacted dockets.

A.

6 To determine whether any of [REDACTED] concerns were valid, FPL responded by first
7 determining that an investigation should be initiated and the appropriate entity to conduct such
8 an investigation. On March 10, 2010, FPL contacted Concentric Energy Advisors to discuss
9 performing an investigation and subsequently retained Concentric to perform the investigation.
10 Concentric's work was not complete until the issuance of its final report on June 21, 2010.

11 FPL responded to the recommendations provided by Concentric in its reports. All but two of
12 Concentric's recommendations, which are discussed further below, have been implemented and
13 are closed. Those recommendations are as follows:

Recommendations for Improvements Related to the NCRC:

1. *Concentric recommends that the process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.*
2. *Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.*
3. *The NCRC docket team has included and continues to include a number of first time witness or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Law and Regulatory Affairs Department continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.*

4. *As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs and Law Departments. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented*

Recommendations for Improvements Related to FPL's Internal Distribution of Cost Estimates:

1. *To ensure that FPL and the EPU Project team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to a company program for anonymously notifying superiors in the event of a concern with project reporting.*
2. *To the extent that a performance indicator (e.g., green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g. budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced the indicator.*
3. *FPL should consider changing the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate 2009 was a positive development, the reporting relationship of the EPU Project Controls Director may be improved by including either a solid or dotted line outside of the EPU Projects. This could improve the independence of the Project Controls Director and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.*
4. *FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. In addition, the EPU Project has established a revised cost estimate range which was used in the Company's feasibility analysis and provided to the FL PSC on May 1, 2010. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget,*

forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

- 5. To the extent CRs are utilized to document potential budget or cost estimate challenges, the CR closure process should be revised to prevent closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action times must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.*
- 6. FPL should continue to maintain EPU Project staffing as high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.*
- 7. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.*
- 8. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct.*
- 9. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.*
- 10. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.*

The two open actions are for FPL and the FL PSC Staff to revisit the issue of intra/inter-cycle document production and for FPL to consider an adjustment to the reporting relationship of the

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EPU Project Controls Director. FPL is open to exploring the topic of intra/inter-cycle document production with Commission staff and other parties and is currently considering whether the reporting relationship of the EPU Project Controls Director should be further changed.

All of FPL's dockets that are set for hearing now and in the future will be affected by implementation of the recommendation to provide witnesses with written instructions on ensuring the accuracy of pre-filed testimony at the time of a hearing. (Such instructions were previously provided verbally or in writing.) The remainder of the recommendations only affect the nuclear cost recovery docket on a going forward basis.

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Q.

1 Regarding FPL's internal responses to the concerns discussed in the [REDACTED] complaint letter,
2 identify each FPL management action/review and response to each of the concerns discussed in
3 the [REDACTED] complaint letter that impacted FPL's responses to PSC audit staff data requests
4 numbers EPU 1.2b, h; 1.3a; 1.4b,c,f; 1.15a,b; and 1.16a,b in Docket Number 100009-EI. Include
5 in your response all closed, open and pending FPL actions/reviews identified in response to
6 interrogatory 25 above.

A.

7 With respect to FPL's internal responses and whether those responses are closed, open, or
8 pending, please see FPL's response to No. 25.

9 FPL responded to the above-identified data requests on the following dates:

10 1.2b – January 11, 2010
11 1.2h – January 29, 2010
12 1.3a – February 1, 2010
13 1.4b, c, f – January 29, 2010
14 1.15a, b – January 11, 2010
15 1.16a, b – February 1, 2010

16 Because each of FPL's responses were provided before receiving the [REDACTED] letter on February
17 19, 2010, and before responding with an investigation and the implementation of Concentric's
18 recommendations, none of FPL's data request responses were affected by the [REDACTED] letter or
19 FPL's response to the letter. Moreover, these data requests were responded to by members of
20 the EPU project team, who had access to all relevant project information, including the
21 information referenced by [REDACTED] in his letter, at the time the responses were provided to
22 audit staff.

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Q.

1 Did FPL provide a copy of or disclose the existence of a draft or final copy of the [REDACTED]
2 Investigation Report to the PSC or any of the PSC's audit staff during the first six months of
3 2010? If not, explain why not. If disclosure was made, describe the nature and circumstance of
4 the communication, the date, and to whom FPL first provided a copy of the [REDACTED] Investigation
5 Report.

A.

6 Yes. On April 30, 2010, FPL informed audit staff that an employee letter had been received and
7 that an investigation had been initiated, which would culminate in a report. This was
8 communicated verbally during a meeting at FPL's Juno Beach office during which time FPL
9 allowed audit staff to review its testimony in advance of the May 3, 2010 filing date, at audit
10 staff's request. It was also disclosed in the May 3, 2010 written testimony of John Reed, which
11 staff reviewed at that meeting, and which states that Concentric was conducting an investigation,
12 and that Concentric would develop a report. When Concentric completed its investigation and
13 finalized its report, FPL provided audit staff with a copy of the report (on June 22, 2010), which
14 included a copy of [REDACTED] letter as an attachment.

15 On May 7, 2010, audit staff issued data request No. 8.3, which requested a copy of the [REDACTED]
16 Investigation Report. FPL responded, stating that it would provide a copy of the report when it
17 was completed. The final [REDACTED] Investigation Report was provided upon completion, on June
18 22, 2010, as a supplemental response to data request No. 8.3. FPL also informed Staff that John
19 Reed was available for further discussion on the topic of the Concentric investigation and his
20 report.

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Q.

1 Did FPL provide a copy of or disclose the existence of the [REDACTED] Investigation Report to anyone
2 outside of FPL management prior to releasing a copy to the PSC? If disclosure was made,
3 describe the nature and circumstance of the communication, the date, and each person/entity to
4 whom FPL provided a copy of the [REDACTED] Investigation Report prior to providing a copy to the
5 PSC.

A.

6 No. FPL has disclosed the [REDACTED] Investigation Report to the Office of Public Counsel (made
7 available in response to a production of documents request on June 22, 2010, the same day it was
8 provided to audit staff) and the Southern Alliance for Clean Energy (made available in response
9 to a request to review documents produced to other parties on August 11, 2010).

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Q.

Please provide the chronology of when, if at all, any FPL sponsored witnesses in Docket Numbers 080009-EI, 090009-EI, and 100009-EI, if any, first became aware of any development of the [REDACTED] Investigation Report or of all or any portion of the contents of the [REDACTED] Investigation Report. Include in your response a description of the nature of the communication, any witness's responsibility in the development and/or editing of drafts of the [REDACTED] Investigation Report, and identify the scope of any witness's contributions to the development and editing of any drafts of the [REDACTED] Investigation Report.

A.

Witness Name, Docket	Nature of Communication	Responsibility in Development and/or Editing and Scope of Contributions
8 [REDACTED] 9 080009-EI	Discussion for purpose of responding to this discovery request	None
10 [REDACTED] 11 080009-EI	Discussion for purpose of responding to this discovery request	None
12 [REDACTED] 13 080009-EI	Discussion for purpose of responding to this discovery request	None
14 [REDACTED] 15 090009-EI	Became aware of the development of the report when contacted by Concentric in connection with its investigation on April 13, 2010	None
16 [REDACTED] 17 080009-EI, 18 090009-EI, 19 100009-EI	Discussion for purpose of responding to this discovery request	None
20 [REDACTED] 21 080009-EI, 22 090009-EI, 23 100009-EI	Briefed on topic by the Law Department in late May, 2010	None
John Reed,	Contacted by FPL to conduct	Primary responsibility for

1	080009-EI,	investigation on March 10,	development, drafting, and
2	090009-EI,	2010; conducted investigation	editing
3	100009-EI	and drafted report with	
		assistance from other	
		Concentric personnel	
4	[REDACTED]	Reviewed draft testimony of	None
5	090009-EI,	John Reed, which mentions	
6	100009-EI	investigation and report, in late	
		April, 2010.	
7	[REDACTED]	Notified shortly after FPL	None. Provided
8	100009-EI	retained Concentric to conduct	comments/suggestions
		the investigation and prepare a	(Concentric retained
		report, in March, 2010	discretion to accept or
			reject) and provided a
			management response that
			is attached to the report
9	Nils Diaz,	Discussion for purpose of	None
10	100009-EI	responding to this discovery	
		request	
11	[REDACTED]	Discussion for purpose of	None
12	100009-EI	responding to this discovery	
		request	

13 Mr. Reed was aware of the development of the report upon being retained by FPL for the
14 purpose of conducting an investigation and developing a report. Mr. Reed had primary
15 drafting responsibility for the report, with assistance from other Concentric personnel.

16 [REDACTED] became aware of the development of the report shortly after FPL retained
17 Concentric to conduct the investigation and prepare a report, in March, 2010. He provided
18 comments and suggestions on the report, but Concentric ultimately had the sole discretion
19 whether to accept or reject such comments and suggestions. [REDACTED] became aware of
20 the development of the report in April, 2010 when he was contacted by Concentric for an
21 interview in connection with the investigation.

22 [REDACTED] became aware of the development of the report in late April, 2010, by reviewing
23 Mr. Reed's draft testimony, which discusses the investigation and the report. [REDACTED]
24 was briefed on the topic in late May, 2010. The remainder of FPL's witnesses were unaware
25 of the development of the report prior to being contacted for the purpose of responding to
26 this discovery request. Such discussions occurred between August 2, 2010 and August 13,
27 2010 time frame.

28 No witnesses had any responsibility in the development and/or editing of the report or any
29 drafts, which were prepared independently by Concentric. [REDACTED] provided comments
30 and suggestions that were either accepted or rejected by Concentric, at Concentric's sole
31 discretion.

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Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 30
Page 1 of 1

Q.

1 Please provide the chronology of all drafts of the [REDACTED] Investigation Report. Include in your
2 response the name of each contributing editor and his or her position within FPL management, if
3 any, and the scope of their work-production for each draft of the [REDACTED] Investigation Report.

A.

4 Please see the below list of drafts. Please see also FPL's response to audit staff's data request
5 10.7a (attached) for a chronology of Concentric's investigation, which includes a chronology of
6 drafts provided to FPL. FPL notes that not every draft listed below was provided to FPL; rather,
7 most are internal Concentric drafts. As noted on the attached chronology, drafts were provided
8 to FPL on April 22, 2010; May 4, 2010; May 10, 2010; and May 12, 2010.

9 There were no contributing editors from FPL. A few FPL employees provided comments and or
10 suggestions on the report, which were either accepted or rejected by Concentric. The acceptance
11 or rejection of comments was solely within the discretion of Mr. Reed.

12 The below document identifiers represent dates, though the first document appears to contain a
13 typographical error (by referencing 2009):

14 v4122009doc
15 v04132010doc
16 v04142010doc
17 v04152010doc
18 v04202010doc
19 v04212010 JJR
20 v04212010doc
21 v04222010doc
22 [REDACTED] Investigation Report REDLINED 4.22
23 Concentric [REDACTED] Investigation DRAFT report v04222010
24 v04282010doc
25 v0542010clean
26 v0542010redline
27 v0542010doc
28 v05052010redline
29 v05102010clean
30 v05102010redline
31 DRAFT [REDACTED] investigation report V5122010
32 v05122010clean
33 v05122010redline to 05102010

18

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Date	Description
2/19/2010	Letter Sent to Mr. Lewis Hay, Chairman & CEO of FPL Group.
2/26/2010	Letter sent to [REDACTED] determine if allegations related to separate investigation being conducted by [REDACTED] January 4, 2010 anonymous letter filed in Docket No. 080677-EI).
3/4/2010	[REDACTED] interviewed by [REDACTED]. FPL was notified by [REDACTED] that the [REDACTED] allegations were not within the scope of the separate investigation.
3/10/2010	FPL called Concentric to discuss [REDACTED] letter.
3/10/2010	Call with FPL & Concentric to discuss scope of work and letter.
3/15/2010	Concentric Energy Advisors retained by [REDACTED] FPL to investigate allegations in the [REDACTED] letter.
3/17/2010	Concentric interviews of [REDACTED]
3/18/2010	Concentric meeting with [REDACTED]
3/25/2010	1st set of Concentric Data Requests sent to FPL.
3/26/2010	Responses to Concentric Data Requests 1, 3 received.
3/29/2010	2nd set of Concentric Data Requests sent to FPL.
3/30/2010	3rd set of Concentric Data Requests sent to FPL.
3/30/2010	Responses to Concentric Data Requests 7, 8 received.
3/31/2010	4th set of Concentric Data Requests sent to FPL.
3/31/2010	Response to Concentric Data Request 9 received.
4/1/2010	Responses to Concentric Data Requests 4, 5 received.
4/1/2010	Concentric interviews with [REDACTED]
4/2/2010	Concentric interviews with [REDACTED] and [REDACTED]
4/5/2010	Call with Concentric & FPL to discuss Concentric interviews and progress to date.
4/5/2010	5th set of Concentric Data Requests sent to FPL.
4/6/2010	6th set of Concentric Data Requests sent to FPL.
4/6/2010	Responses to Concentric Data Requests 12, 13 received.
4/7/2010	Response to Concentric Data Request 7 received.
4/8/2010	Response to Concentric Data Request 2 received.
4/9/2010	Concentric phone interviews with [REDACTED] and [REDACTED]
4/9/2010	Concentric discussion with [REDACTED] re: his conversation with [REDACTED]

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EPU DR 10-7 a
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Attachment 1
Page 2 of 3

Date	Description
4/12/2010	Concentric phone interview with [REDACTED]
4/13/2010	Concentric phone interview with [REDACTED]
4/14/2010	7th set of concentric Data Requests sent to FPL.
4/16/2010	Response to Concentric Data Request 14 received.
4/19/2010	Supplemental response to Concentric Data Request 2 received.
4/19/2010	Responses to Concentric Data Requests 15, 16 received.
4/22/2010	Draft of Concentric [REDACTED] Investigation Report provided to FPL.
4/27/2010	Meeting with Concentric & FPL to discuss draft Concentric [REDACTED] Investigation Report.
4/28/2010	Call with Concentric & FPL to discuss draft Concentric [REDACTED] Investigation Report and Mr. Reed's May 3rd Testimony.
5/3/2010	Required submittal date for Mr. Reed's May 3rd Testimony.
5/3/2010	Meeting with Concentric & FPL to discuss draft Concentric [REDACTED] Investigation Report.
5/4/2010	Draft of Concentric [REDACTED] Investigation Report provided to FPL.
5/4/2010	Meeting with Concentric & FPL to discuss draft Concentric [REDACTED] Investigation Report.
5/10/2010	Draft of Concentric [REDACTED] Investigation Report provided to FPL.
5/11/2010	FPL meeting to discuss draft report
5/12/2010	Draft of Concentric [REDACTED] Investigation Report provided to FPL.
5/13/2010	Call with FPL & Concentric to discuss report status. Concentric told report was being reviewed by FPL's executive management and decision regarding management responses would be forthcoming.
5/14/2010	FPL discussion of draft report
5/15/2010	Target date to submit Concentric [REDACTED] Investigation Report.
5/26/2010	FPL call to Concentric to note FPL had prepared management responses to Concentric [REDACTED] Investigation Report.
5/27/2010	FPL provided management response authored by [REDACTED] to Concentric.
6/2/2010	FPL provided management response authored by [REDACTED] to Concentric.
6/3/2010	Call with FPL & Concentric to discuss FPL's management responses.
6/8/2010	Call with [REDACTED] & Concentric to discuss Concentric [REDACTED] Investigation Report.

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EPU DR 10-7 a
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Florida Power & Light Company
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<u>Date</u>	<u>Description</u>
6/8/2010	FPL meeting to discuss draft report
6/10/2010	FPL meeting to discuss draft report
6/15/2010	FPL meeting to discuss draft report
6/21/2010	FPL meeting to discuss draft report; FPL and Concentric conference call to discuss draft report; Final report provided to FPL.

EPU ICDR 10

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Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 31
Page 1 of 1

Q.

1 Please provide the chronology of when, if at all, FPL management considered supplementing the
2 May 1, 2009, testimony of [REDACTED] to address the concerns that were eventually
3 discussed in the February 19, 2010 [REDACTED] complaint letter and the [REDACTED] Investigation Report.
4 Include in your response a listing of all FPL management that participated in that consideration,
5 and explain why FPL did not supplement the May 2009 testimony. Include in your response all
6 data or analyses that FPL considered not timely available and all other substantive information
7 that FPL did not have or could not have reasonably known prior to the date of the 2009 Docket
8 No 090009-EI hearing.

A.

9 The May 1, 2009 testimony of [REDACTED] states "As would be expected, the Company
10 continues to evaluate the costs associated with this project." Indeed, this evaluation continued
11 through September 2009, and continues to this date. However, as explained in the management
12 responses to the Concentric [REDACTED] Investigation Report, given the amount of activity occurring
13 during the balance of 2009 (and beyond) to review and challenge the cost estimate, consider
14 alternatives, and present the results to senior management for approval, the cost estimate
15 (forecasts), mainly involving the latter part of the project, were not sufficiently firm to
16 communicate outside the company. FPL acknowledges that Mr. Reed's report reaches a
17 different conclusion.

18 As explained in the management response letters of [REDACTED] and [REDACTED] to the Concentric
19 Report, FPL had been provided cost estimates from its EPC vendor that had not been fully vetted
20 or challenged. As late as July 25, 2009, the vendor had agreed that there were opportunities to
21 adjust their estimates downward and would strive to do so. Additionally, FPL was considering
22 alternatives to the EPC vendor which would have the potential to significantly change the cost
23 estimates that had been provided. Given the amount of activity occurring in May through
24 December 2009 (and beyond) to review and challenge the cost estimates and consider
25 alternatives, the cost estimates in FPL's possession were not accepted by senior management and
26 not sufficiently firm for reporting outside of the company.

27 FPL is committed to providing current and accurate information to the Commission and its Staff,
28 so that the Commission can fulfill its jurisdictional responsibilities. As discussed in FPL's
29 response to Interrogatory No. 25, FPL has implemented all but two of Concentric's
30 recommendations to date.

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Florida Power & Light Company
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Staff's Seventh Set of Interrogatories
Interrogatory No. 32
Page 1 of 1

Q.

1 If FPL management did not consider supplementing the May 1, 2009 testimony of [REDACTED]
2 [REDACTED] to address the concerns from the February 19, 2010 [REDACTED] complaint letter and the
3 [REDACTED] investigation Report, explain why. Include in your response all data or analyses that FPL
4 considered not timely available and all other substantive information that FPL did not have or
5 could not have reasonably known prior to the date of the 2009
6 Docket No. 090009-EI hearing.

A.

7 Please see FPL's response to No. 31.

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Florida Power & Light Company
Docket No. 100008-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 33
Page 1 of 1

Q.

Please describe any efforts FPL made during the timeframe May through September 2009 to reassess the estimated cost and budget for the EPU projects at St. Lucie and Turkey Point.

A.

During the timeframe of May through December 2009, and continuing today, the EPU Project Team took extensive measures to reassess the scope and the estimated cost and budgets for the EPU project, also taking into account a projected higher level of output. Although design engineering was in the early stages and the project was still identifying new scope, the team assessed the further potential scope growth, risks and contracts. The project team assessed alternative execution approaches from changing the EPC vendor to self-performing or accelerating design engineering. FPL reassessed original and new project scope through a detailed line-by-line review and evaluated the potential downstream effects on resetting the LAR review clock. It also evaluated the implementation outage sequencing and scope optimization which would ultimately minimize outage overlaps.

[REDACTED]

Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 34
Page 1 of 1

Q.

Please provide a chronology of all FPL management actions, if any, prior to the date of the 2009 Docket No. 090009-EI hearing specifically directed at ensuring the PSC was provided with the best available EPU project cost estimates and related information.

Include in your response the name of the manager involved, his or her position, and that person's contribution to FPL management's effort in providing the information. If there was no management review process of the testimony and evidence provided to the PSC, explain why not.

A.

All testimony that is developed and sponsored with respect to a witness is thoroughly reviewed and fact-checked within the relevant business unit. Witnesses are ultimately responsible for the content of their testimony. Additionally, all witnesses are requested to review their testimony prior to the date of the hearing so that FPL can provide parties with advance notice of any corrections to testimony by filing errata sheets. This process helps ensure the accuracy of FPL's testimony prior to hearing. Errata for several witnesses, including [REDACTED], were provided in the 090009-EI docket.

With respect to the EPU testimony, the EPU team utilizes a "Blue Sheet" sign off process to ensure appropriate management personnel have reviewed and approved the information being provided to the Commission. The "Blue Sheet" is typically signed by at least four project personnel cognizant of the information being provided, including the designated FPL Witness. This process is modeled after the "Blue Sheet" process FPL uses for submittals to the Nuclear Regulatory Commission. This process was employed in Docket No. 090009-EI and Docket No. 100009-EI.

**Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 35
Page 1 of 1**

Q.

In the normal course of business, does FPL prepare EPU project budgets and estimates that FPL management does not consider appropriate to include in its testimony in the Nuclear Cost Recovery Clause? If so, explain why FPL feels it is not appropriate to include in testimony.

A.

Yes. The EPU budget is approved once a year, but actual expenses and updated estimates are prepared monthly and reported on monthly cash flow charts. It would be unwieldy to include every iteration (i.e., every month) of the project cost estimates in testimony. Business documents reflecting cost estimate variations over the course of the year, such as executive management presentations and monthly cash flow charts, are provided in discovery (see, e.g., FPL's response to OPC's First Request for Production of Documents No. 17 in Docket No. 100009-EI).

[REDACTED]

Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 36
Page 1 of 1

Q.
In the normal course of business, does FPL prepare Turkey Point 6 and 7 project budgets and estimates that FPL management does not consider appropriate to include in its testimony in the Nuclear Cost Recovery Clause? If so, explain why FPL feels it is not appropriate to include in testimony.

A.
Yes. FPL routinely monitors future activities associated with the Turkey Point 6 & 7 project and would revise the forward estimate as necessary if actual expenditures are expected to depart from the budget. It would be unwieldy to include every iteration of the project cost estimates in testimony. Business documents reflecting the cost variations over the course of the year, such as executive management presentations and monthly cash flow reports, are provided in discovery (see, e.g., FPL's response to OPC's First Request for Production of Documents No. 4).

**Florida Power & Light Company
Docket No. 100009-EI
Staff's Seventh Set of Interrogatories
Interrogatory No. 37
Page 1 of 1**

Q.

At the September 9, 2009 meeting amongst FPL senior management regarding the EPU costs, describe the nature of the meeting and include the nature of any new project estimates or budgets that were adopted or approved and how these estimates or budgets were intended to be used.

A.

The September 9, 2009 meeting was a regularly scheduled Executive Steering Committee meeting for the EPU project, which typically occurs every month. The meeting provided the status of license amendment engineering analysis, design engineering status, status of scope review, EPC alternatives, and challenges associated with the project. There were no new project estimates or budgets adopted or approved at that meeting.

Q.

Explain the timing of the September 9, 2009 meeting and action in relation to the September 8, 2009 presentation by [REDACTED] of testimony at the FPSC NCRC hearing. Include in your explanation whether the September 9, 2009 meeting was a regularly-held or periodic meeting, whether the meeting was a special meeting to review the EPU budget costs, and list the dates and times of other similar meetings of this type held during 2009.

A.

The September 9, 2009 meeting was a regularly held, monthly Executive Steering Committee meeting to discuss the status of the EPU project and any emerging issues. Costs and budgets are routinely addressed in these meetings.

The dates of the Executive Steering Committee meetings in 2009 were:

January 27, 2009	June 23, 2009	November 12, 2009
February 24, 2009	July 25, 2009	December 28, 2009
March 27, 2009	September 9, 2009	
April 24, 2009	September 28, 2009	
May 9, 2009	October 23, 2009	

The new EPU management team was assigned effective August 1, 2010. As a result, the regularly scheduled August meeting was held in early September to facilitate the management transition.

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Florida Power & Light Company
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Staff's Seventh Set of Interrogatories
Interrogatory No. 44
Page 1 of 1

Q.

The following interrogatories 39- 44 are in reference to Pressure Discrepancies discussed on page 34 of Commission staffs Review of FPL 's Project Management Internal Controls for Nuclear Plant Uprate and Construction Projects, dated July 2010.

What was the cost of the turbine upgrade contract prior to the contract change?

A.

The cost of the Turkey Point turbine upgrade contract is \$ [REDACTED] as provided on line 20 of Schedule AE-7A filed on May 3, 2010. The PTN turbine upgrade contract price has not changed. The redacted amount is confidential and will be made available by FPL for review and inspection by Staff at FPL's Tallahassee Office at 215 South Monroe Street, Suite 810, Tallahassee, Florida, during regular business hours, 8 a.m. to 5 p.m., Monday through Friday, upon reasonable notice to FPL's counsel.

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POD 21

POD 21
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CONFIDENTIAL

From: Sam Eaton
To: John Reed
Subject: FW: Per our discussion
Date: Wednesday, March 10, 2010 10:03:07 AM
Attachments: 20100310100408496.pdf

Samuel G. Eaton
Project Manager
Concentric Energy Advisors



293 Boston Post Road West, Suite 500
Marlborough, MA 01752
Direct: (508) 263-6233
Mobile: (617) 970-2383
Email: SEaton@CEAdvisors.com

The contents of this message, together with any attachments, are intended only for the use of the individual or entity to which they are addressed and may contain information that is legally privileged, confidential and exempt from disclosure. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this message, or any attachment, is strictly prohibited. If you have received this message in error, please notify the original sender immediately by telephone or by return email and delete this message, along with any attachments, from your computer.

From: Cohen, Tiffany Cordes [mailto:TIFFANY.COHEN@fpl.com]
Sent: Wednesday, March 10, 2010 9:57 AM
To: Sam Eaton
Subject: Per our discussion

①

CONFIDENTIAL

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

1 I am writing to you with my concerns about cost performance in Nuclear Projects and Extended
2 Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team,
3 I am being cited as one of many targets in the failure of EPU in 2009.

4 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
5 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by the
6 [REDACTED] I would have to assume the EPU responsibility as well
7 as my current role. In January 2009 I filled both positions reporting to [REDACTED] I had over
8 100 people (contractors and FPL) reporting to me at five sites and a [REDACTED]
9 group. From July 2009, which is when I left EPU, until late November 2009, I reported again to
10 [REDACTED] While reporting to [REDACTED], he told me a number of things he thought I was
11 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
12 his appreciation for my support while working for him.

13 In my review I am accused of not providing adequate information or forecasting for both the EPU
14 Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a
15 Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project
16 standpoint, all projects were on target or explained in variances. I do not believe any cited issues
17 were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team
18 developed extensive project indicators in February of 2009 and patterned them after those used to
19 support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These
20 indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The
21 original indicators are still on the EPU SharePoint website for you to view. The issues affecting
22 project performance for EPU were the fact that the EPU Project Teams could not support updates
23 of the indicators due to continuing baseline reviews and scope additions that were not previously
24 identified. The scoping study and budget estimates were completed by the Shaw Company and
25 were commissioned by the [REDACTED] and completed before I joined the Project. These
26 estimates were not adequate and Sr. Management continued changing philosophy on what was to
27 be included and not included in these estimates. As a result there was no Project baseline
28 established and overall Project performance was very poor. The [REDACTED] would
29 complain about having poor performance indicators however [REDACTED] we could not
30 deliver a positive message if there was none to deliver. The situation continued to worsen
31 through the spring of 2009. Project Managers and Engineers were not correcting issues and the
32 Sr. Managers would not accept the poor performance messages. The [REDACTED] was
33 told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team
34 continued to deliver this message along with poor weekly performance reviews. Finally in July
35 of 2009, Sr. Management decided it was time to inform Executive Managers of the poor
36 condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management
37 Team. My [REDACTED] group prepared detailed reviews that were presented to Mr. Jim Robo
38 in July 2009 on the poor condition of EPU.

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1 At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast
2 \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
3 Current Forecast \$909MM with a negative variance of (\$160MM). [REDACTED]
4 [REDACTED]. These
5 numbers clearly show the gravity of BPU negative performance. To my knowledge, these
6 numbers have continued to worsen with the new Project Team to whom for PTN and PSL, the
7 Team does not have a clear idea of what the final costs will be.

8 I am concerned about how BPL will report these findings at the upcoming PSC hearings. Any
9 information from BPU other than which was presented to Management last summer will be a
10 manipulation of the truth. Current reporting for PTN and PSL does not contain information
11 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
12 Sr. Project Team.

13 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
14 current estimates for PTN and PSL, they were stated in November 2009 as being the original
15 Shaw estimates. Currently the numbers are in review. [REDACTED]
16 [REDACTED] That's almost 2
17 times the original Shaw budget estimate.

18 My team delivered the correct message to Sr. Management. Sr. Management did not want to
19 accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in
20 my entire career having worked in Project Controls for some 30 years. My former positions
21 before coming to BPL were with ARCS Corporation, Burlingame, CA where I was Project
22 Controls Consultant/Manager for NASA in Houston working with the Program Management
23 Division of the International Space Station. Also with ARCS, I was a Project Consultant for the
24 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
25 where I was part of a Project Team that earned the DOR Excellence award for Defense Systems.
26 For the record, my Team told the truth about the BPU financial condition and that truth did not
27 meet BPL expectations.

28 Finally, I know this letter comes at a time when BPL has ordered the investigation of employee
29 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
30 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
31 negative employee review. I have copied my supervisor and human resources.

32 Thank you for taking the time to read this letter.

33 [REDACTED]

34 [REDACTED]

35 [REDACTED]

36 Co: [REDACTED]

37 Co: [REDACTED]

3

CONFIDENTIAL



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420
Law Department

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March 15, 2010

John Reed
Chief Executive Officer
Concentric Energy Advisors
293 Boston Post Road West
Suite 500
Marlborough, MA 01752

Re: Independent Investigation of February 19, 2010 Correspondence to Mr. Lewis Hay, FPL
Group Chairman and CEO

Dear Mr. Reed:

The purpose of this letter is to request that your company conduct an independent factual investigation with respect to the statements and subject matter contained in the referenced correspondence, a copy of which is attached, with the exception of matters pertaining to the employee performance review of the author of the correspondence.

The engagement should be handled subject to the terms and conditions of the consulting services agreement amendment that applies to your company's work for FPL through December 31, 2010, and billed to FPL separately from other work performed under that amendment.

Please direct any requests for support or information required to support your work to me, and report the results of your investigation to me. I would appreciate it if you would sign and return a copy of this letter to me acknowledging agreement to perform the above-referenced scope of work subject to the terms stated herein.

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8



Enclosure

ACCEPTED AS OF _____, 2010

Concentric Energy Advisors, Inc.

By: _____

Its: _____

(4)

an FPL Group company

FPL 152889
NCR-10



FPL

An FPL Group Company
Recycled Paper



5

CONFIDENTIAL

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

1 I am writing to you with my concerns about cost performance in Nuclear Projects and Extended
2 Power Uprate (EPU) in 2009. With the exodus of the entire Sr EPU Project Management Team,
3 I am being asked as one of many targets in the failure of EPU in 2009.

4 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
5 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by the
6 [REDACTED] I would have to assume the EPU responsibility as well
7 as my current roll. In January 2009 I filled both positions reporting to [REDACTED] I had over
8 100 people (contractors and FPL) reporting to me at five sites and a [REDACTED]
9 group. From July 2009, which is when I left EPU, until late November 2009, I reported again to
10 [REDACTED] While reporting to [REDACTED] he told me a number of things he thought I was
11 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
12 his appreciation for my support while working for him.

13 In my review I am accused of not providing adequate information or forecasting for both the EPU
14 Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a
15 Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project
16 standpoint, all projects were on target or explained in variances. I do not believe any cited issues
17 were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team
18 developed extensive project indicators in February of 2009 and patterned them after those used to
19 support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These
20 indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The
21 original indicators are still on the EPU SharePoint website for your review. The issues affecting
22 project performance for EPU were the fact that the EPU Project Teams could not support update
23 of the indicators due to continuing baseline reviews and scope additions that were not previously
24 identified. The scoping study and budget estimates were completed by the Shaw Company and
25 were commissioned by the [REDACTED] and completed before I joined the Project. These
26 estimates were not adequate and Sr. Management continued changing philosophy on what was to
27 be included and not included in these estimates. As a result there was no Project baseline
28 established and overall Project performance was very poor. The [REDACTED] would
29 complain about having poor performance indicators however [REDACTED] we could not
30 deliver a positive message if there was none to deliver. The situation continued to worsen
31 through the spring of 2009. Project Managers and Engineers were not controlling issues and the
32 Sr. Managers would not accept the poor performance messages. The [REDACTED] was
33 told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team
34 continued to deliver this message along with poor weekly performance reviews. Finally in July
35 of 2009, Sr. Management decided it was time to inform Executive Managers of the poor
36 condition of EPU which necessitated the replacement of the entire EPU Project Sr. Management
37 Team. My [REDACTED] group prepared detailed reviews that were presented to Mr. Jim Robo
38 in late July 2009 on the poor condition of EPU.

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FPL 152841
NCR-10

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1 At the time, the cost overflow for PSL was: Original Budget \$656MM, Current Forecast
2 \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
3 Current Forecast \$909MM with a negative variance of (\$160MM). For PBN: Original Budget
4 was \$357MM, Current Forecast \$497MM with a negative variance of (\$140MM). These
5 numbers clearly show the gravity of BPU negative performance. To my knowledge, these
6 numbers have continued to worsen with the new Project Team to where for PTN and PSL, the
7 Team does not have a clear idea of what the final costs will be.

8 I am concerned about how PPL will report these findings at the upcoming PSC hearings. Any
9 information from BPU other than which was presented to Management last summer will be a
10 manipulation of the truth. Current reporting for PTN and PSL does not contain information
11 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
12 Sr. Project Team.

13 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
14 current estimates for PTN and PSL, they were stated in November 2009 as being the original
15 Shaw estimates. Currently the numbers are in review. For PBN, the estimate was stated in
16 December 2009 as being \$552MM and currently I believe it is over \$600MM. That's almost 2
17 times the original Shaw budget estimate.

18 My team delivered the correct message to Sr. Management. Sr. Management did not want to
19 accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in
20 my entire career having worked in Project Controls for some 30 years. My former positions
21 before coming to PPL were with ARBS Corporation, Burlingame, CA where I was Project
22 Controls Consultant/Manager for NASA in Houston working with the Program Management
23 Division of the International Space Station. Also with ARBS, I was a Project Consultant for the
24 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
25 where I was part of a Project Team that earned the DOE Excellence award for Defense Systems.
26 For the record, my Team told the truth about the BPU financial condition and that truth did not
27 meet PPL expectations.

28 Finally, I know this letter comes at a time when PPL has ordered the investigation of employee
29 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
30 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
31 negative employee review. I have copied my supervisor and human resources.

32 Thank you for taking the time to read this letter.

33

34

35

36 Co:

37 Co:

POD 22

pod 22
152893

**Florida Power & Light Company
Docket No. 100009-EI
Staff's Fourth Request for Production of Documents
Request No. 22
Page 1 of 1**

Q.

Please provide copies of all written communication described in response to Interrogatory 23.

A.

Please see pages 19-21 of the May, 3, 2010 testimony of John Reed filed in this docket.

POD 23

POD 23

153786- N/C

152960- 2961 C

Florida Power & Light Company
Docket No. 100009-EI
Staff's Fourth Request for Production of Documents
Request No. 23
Page 1 of 1

Q.

Please provide copies of all written communication described in response to Interrogatory 24.

A.

Please see FPL's communications with Concentric Energy Advisors provided in response to Staff's Fourth Request for Production of Documents Nos. 21 and 27, as well as the attached.

1

[REDACTED]
From: [REDACTED]
Sent: Wednesday, July 07, 2010 11:20 AM
To: [REDACTED]
Subject: FW: RE:

For DR 10-7.a timeline.

From: Ianno, Jr., Joseph [mailto:jiano@carltonfields.com]
Sent: Wednesday, July 07, 2010 10:33 AM
To: [REDACTED]
Cc: Calli, Paul A.
Subject: RE:

Hi [REDACTED]

I We received the letter by email on February 26, 2010. [REDACTED] was interviewed by Paul Calli and Adam Schwartz on March 4, 2010 at 10:00 a.m.

Please let me know if you need anything further.

Joe

CARLTON FIELDS
ATTORNEYS AT LAW

Joseph Ianno, Jr.
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vcad

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(2)

/ From: [redacted] [mailto:[redacted]@fpl.com]
Sent: Tuesday, July 06, 2010 5:27 PM
To: Ianno, Jr., Joseph
Subject:

Joe - hope all is well.

2 Can you tell me the date that your firm received the [redacted] allegation letter dated February 19, 2010 and the date of your firm's interview with him? Thanks.

3 [redacted]
Vice President & General Counsel - Nuclear
Florida Power & Light Company
700 Universe Blvd.
Juno Beach, Florida 33408
Telephone 561-691-7126
Facsimile 561-691-7135

4 [redacted]
5 [redacted]

This transmission is intended to be delivered only to the named addressee(s) and may contain information that is confidential and/or legally privileged. If this information is received by anyone other than the named addressee(s), the recipient should immediately notify the sender by e-mail and by telephone at 561-691-7126 and permanently delete the original and any copy, including any printout of the information. In no event shall this material be read, used, copied, reproduced, stored, or retained by anyone other than the named addressee(s), except with the express consent of the sender.

(3)

POD 24

POD 24 ML

152846

Florida Power & Light Company
Docket No. 100009-EI
Staff's Fourth Request for Production of Documents
Request No. 24
Page 1 of 1

Q.

Provide copies of all written actions or reviews or minutes of meetings described in response to Interrogatory 25.

A.

A copy of the written actions are provided in the final Concentric Investigation Report, provided in response to Staff's 4th Request for Production of Documents Nos. 25 and 29, as well as in FPL's response to Interrogatory No. 25.

POD 25

POD 25
152896-2948

Florida Power & Light Company
Docket No. 100009-EI
Staff's Fourth Request for Production of Documents
Request No. 25
Page 1 of 1

Q.

Please provide copies of all written communication described in response to interrogatory 27.

A.

Please see pages 19-21 of the May, 3, 2010 testimony of John Reed filed in this docket. Please see also FPL's responses to audit data request 8-3 and 8-3 supplemental, attached.

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**FPL 152896
NCR-10**

**Florida Power & Light Company
Docket No. 100009-EI
Staff's Internal Controls EPU
Request No. 8.3 EPU
Page 1 of 1**

Q. Please provide a copy of the Concentric investigation of EPU, to be completed in May 2010, when it is available.

A.
The report will be provided as soon as completed.

(2)

ICDR 8.3 EPU

010479

Florida Power & Light Company
Docket No. 100009-EI
Staff's Internal Controls EPU
Request No. 8.3 Supplemental
Page 1 of 1

Q.

Please provide a copy of the Concentric investigation of EPU, to be completed in May 2010, when it is available.

A.

Please see attached.

(3)

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FPL 152898
NCR-10



1 [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

June 21, 2010

4

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EXHIBITS

2	Exhibit 1:	[REDACTED] Letter
3	Exhibit 2:	Concentric's Engagement Letter
4	Exhibit 3:	Concentric's Project List for FPL
5	Exhibit 4:	Concentric's Data Requests log
6	Exhibit 5:	Documents Relied Upon
7	Exhibit 6:	Interlineated [REDACTED] Letter
8	Exhibit 7:	[REDACTED] Email of March 19, 2010
9	Exhibit 8:	Chronology
10	Exhibit 9:	Staff's 5 th Interrogatory No. 53

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Executive Summary

1 This report is the result of an approximately two month long investigation undertaken by Concentric
2 Energy Advisors at the request of Florida Power & Light's Law Department. Our investigation was
3 triggered by a letter that was sent to FPL Group's CEO from a [REDACTED]
4 within the nuclear division of FPL. This letter made several allegations relating to senior
5 management's performance regarding the cost estimation and project controls functions of the
6 Company's Extended Power Uprate projects, and raised concerns about the timeliness and reliability
7 of FPL's internal and external reporting of EPU-related information.

Our investigation has focused on two separate sets of issues stemming from the letter and our subsequent information gathering process: 1) whether FPL's decision to continue pursuing the EPU Project in 2009 was prudent, and whether the costs that have been incurred for this project were all prudently incurred, and 2) what policies, procedures or practices within FPL's EPU Project may need to be revised or reinforced to address the concerns raised in this letter.

Our investigation has included 13 interviews and the review, or re-review, of thousands of pages of documentation produced by the EPU Project in 2008, 2009, and 2010. We have concluded that:

1. FPL's decision to continue pursuing the EPU Project in 2009 was prudent and was expected to be beneficial to FPL's customers; FPL properly considered an updated cost estimate in its updated feasibility analysis in July 2009, which reinforced the conclusion that significant benefits were expected from the Project.
2. All of FPL's expenditures on the EPU Project have been prudently incurred.
3. Certain information provided by FPL in the 2009 NCRC was out-of-date and did not represent the best information available at that time; FPL is currently taking steps that Concentric believes will address this concern for the future.
4. The EPU Project management did not consistently follow certain procedures that were intended to govern this project in 2009; in addition, the Project's senior management in the first half of 2009 was slow to respond to concerns that were raised regarding the Project's cost estimates; these issues are currently being addressed by the senior management team that was installed in the second half of 2009.
5. FPL should consider taking certain actions that are discussed in the body of this report to strengthen the Project Controls organization and to better ensure compliance with existing procedures.



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I. Introduction

1 On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group,
 2 Inc ("FPL Group") received a letter from [REDACTED] Letter", an
 3 employee within the [REDACTED] of Florida Power & Light Company ("FPL").¹ The
 4 [REDACTED] Letter included concerns about the "cost performance in Nuclear Projects and Extended
 5 Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's
 6 executive management and the Florida Public Service Commission ("FLPSC")

7 Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by
 8 FPL's Law and Regulatory Affairs Departments on March 10, 2010. A copy of the letter is attached
 9 as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by
 10 FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims
 11 and matters set forth in the [REDACTED] Letter.² A copy of Concentric's engagement letter is included as
 12 Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's
 13 Law Department, and specifically to [REDACTED]
 14 All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly,
 15 Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]

16 Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters
 17 related to the performance review of [REDACTED] and all other human resources related matters.
 18 Concentric understands that these matters are being and will continue to be handled internally by
 19 FPL's Human Resources Department.

20 The remainder of our report is organized into eight sections. Section II presents a summary of
 21 Concentric's work plan that was used to perform this investigation. Section III includes a summary
 22 response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter.
 23 Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between
 24 January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to
 25 proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey
 26 Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section,
 27 Concentric has focused its attention in this matter on the nuclear units in Florida due to the state
 28 regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's
 29 investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and
 30 2009.³ A review of Concentric's findings related to the flow of information from FPL to the FL
 31 PSC and its staff ("FLPSC Staff") can be found in Section VII. Similarly, a review of the flow of
 32 information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and
 33 specific recommendations can be found in Section IX. These recommendations should be read in
 34 conjunction with the pre-filed direct testimony of Mr. John J. Reed, filed with the Florida Public
 Service Commission on March 1st and May 3rd in Docket 100009-EI.

35 1 [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]
 36 2 Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010
 37 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
 38 3 FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.



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II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

A. Overview of Scope

1 Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter
2 included a factual review of the events between August 2007 and March 31, 2010. Concentric then
3 sought to determine how this set of events supported or contradicted the allegations contained in
4 the [REDACTED] letter and affected the distribution of information within FPL and to the FL PSC. Finally
5 we have provided our recommendations for improvements that will help prevent similar issues from
6 occurring in the future.

7 As outlined below, the assertions outlined in the [REDACTED] Letter largely fall within two categories: 1)
8 the prudence of FPL's actions and the distribution of information to the FL PSC and; 2) the internal
9 distribution of EPU Project-related information.

B. Sources of information

10 Concentric's investigation into this matter relied upon two primary pathways for information. First,
11 Concentric submitted a number of requests for documentation to FPL in order to deepen our
12 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details
13 provided to us in the interviews described below. A log of Concentric's document requests can be
14 found in Exhibit 4.

15 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews
16 were conducted in person at the offices of FPL or at an off-site location, depending on the location
17 of the interviewee. The remaining five interviews were conducted via telephone. All of
18 Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected
19 specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our
20 prior interviews, and Concentric's understanding of the EPU Project organization. Concentric
21 considers the names of the individuals we interviewed to be confidential. Prior to beginning each
22 interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with
23 each interviewee. This review included a specific discussion of each employee's "responsibility to
24 report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any
25 other violation or suspected violation of this Code."⁴ Similarly, Concentric reiterated the Company's
26 non-retaliation commitment outlined in the Code.⁵ At the conclusion of each interview, the
27 interviewees were given an opportunity to raise any additional concerns they may have had.

28 The information Concentric relied upon in this investigation was supplemented by Concentric's
29 existing knowledge of the EPU Projects' organization and activities.

30 ⁴ FPL Group, Inc, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

31 ⁵ Ibid.

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C. Independence

1 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter,
2 Concentric maintained our independence from FPL's Law and Regulatory Affairs Departments.
3 Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own,
4 and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL
5 did not place any constraints on Concentric's access to current and former employees. Lastly,
6 Concentric was not constrained by budget or schedule expectations on the part of FPL.

7 Concentric's findings in this matter are based upon our review of original sources. Concentric did
8 not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and
9 verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous
10 documents produced by the EPU Project team whenever possible. The documents relied upon as
11 part of this investigation are presented in Exhibit 5.

D. Report Organization

12 Concentric's report is divided into two major categories. First our report addresses those items
13 which are directly related to the FL PSC and prudence of FPL's decisions and actions. Second,
14 Concentric has reviewed and addressed the development and distribution of information within
15 FPL. Concentric notes this division is necessary to differentiate those matters which may affect
16 FPL's recovery of costs and interaction with the FL PSC, from those matters which represent best
17 practices in the development and distribution of information within FPL.

18 Sections III and IV of the report provide factual backgrounds for both categories of this report.
19 Sections V through VIII address the matters related to the FL PSC and the prudence of FPL's
20 decisions and actions. Finally, Sections IX and X address FPL's development and internal
21 distribution of information relating to the EPU Project forecast.

E. Key questions

22 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified three
23 key questions which are related to the prudence of FPL's actions. These key questions are intended
24 to determine whether any imprudent costs were passed onto FPL's customers, or if FPL did provide
25 relevant information from the FL PSC.

- 26 1. Did FPL make the correct decision to proceed with the EPU Projects in 2009 in light of the
27 best information available at the time decision was made? This question is a threshold issue
28 for assuring prudent conduct on the part of FPL.
- 29 2. Were *any* costs incurred that should not be passed on to FPL's customers on the grounds of
30 imprudent decision-making?
- 31 3. Was the information provided to the FL PSC and the interveners in each of the NCRC
32 dockets accurate, consistent, timely and reliable?

33 Concentric also identified two key questions which relate to the internal development and
34 distribution of EPU Project-related information. These key questions are intended to determine if
35 FPL's executive management were informed as to the direction of the EPU Project.



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1. Was the information flowing from the EPU Projects to FPL's executive management accurate, timely, consistent, and reliable?
2. What policies, processes, and procedures, if any, need to be reviewed as a result of Concentric's findings?

III. Response to [REDACTED] Letter

Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report.

As can be seen in Exhibit 6, most of the factual assertions raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the ongoing changes in the overall project scope. However, Concentric believes the evolving scope of the EPU Projects to have been the predictable result of the regulatory and engineering factors which are inherent in any complex nuclear retrofit project.

Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁶ and the PSL Annual Project Cash Flow Report⁷, confirmed [REDACTED] assertion. However, all of the Executive Steering Committee ("ESC") presentations since July 25, 2009, and specifically in November 2009, used the updated cost forecast.⁸

Concentric also found evidence which indicates the [REDACTED] and the [REDACTED] were alerted to the potential for underestimated costs at PSL as early as April 2008.⁹ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast.

Overall, Concentric found [REDACTED] to be credible. The basis of this finding includes Concentric's interview with [REDACTED] the fact that [REDACTED] chose to send his letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a strong background within his function. [REDACTED] employment history includes the previous positions noted in the [REDACTED] Letter¹⁰ and many years of prior project controls employment as a contractor at FPL's PTN site, as well as other nuclear facilities in the US. FPL had enough confidence in [REDACTED] capabilities to

⁶ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁷ Annual Cash Flow, PSL EPU Project, October 2009.

⁸ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

⁹ CR 2008-11443, April 3, 2008.

¹⁰ [REDACTED] Letter, p. 2.

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1 give him responsibility for multiple major projects and a staff of approximately 100 people.¹¹ While
2 [REDACTED] was not aware of all of the developments and documents relating to the preparation and
3 presentation of cost estimates and his knowledge of the information flow for the EPU Projects
4 ceased when he left the Project in July, 2009, his letter is largely factually accurate.¹²

IV. Chronology of Events

5 A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology,
6 including the major events relevant to Concentric's review are highlighted below. This chronology
7 was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing
8 of certain EPU Project activities. The summary presented below should not be used as a substitute
9 for a review of the entire chronology presented in Exhibit 8.

A. Chronology

10 The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine
11 a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the
12 components which would require replacement to operate PSL and PTN at the uprated conditions.¹³
13 Concentric understands, as originally proposed, the EPU Projects were expected to commence
14 operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades
15 Power Park Determination of Need in 2007.¹⁴ FPL filed for a Determination of Need for the EPU
16 Projects on September 17, 2007.¹⁵

17 In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to
18 confirm or reject the results of this analysis. Concentric understands from our interviews that these
19 studies generally confirmed the FPL scoping analysis, but some discrepancies related to the
20 replacement or refurbishment of certain components existed for Turkey Point. The initial cost
21 estimate included a contingency allocation of approximately 45%.¹⁶

22 In April 2008, the EPU Project team assigned to PSL (the "PSL Project Team") identified the
23 potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team
24 initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study
25 may not have captured the full spectrum of modifications necessary" for the uprate.¹⁷ In response
26 to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to
27 the CR.¹⁸ The High Risk Mitigation Plan included a list of actions which were required to be

28 ¹¹ Ibid.

29 ¹² Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on
30 March 19, 2010 of potential retaliation against him by his supervisor. A copy of this email is attached as Exhibit 7.
31 Concentric reported this email to FPL's Law Department. It is Concentric's understanding this matter was
32 addressed by the FPL Human Resources ("HR") Department.

33 ¹³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for
34 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-BI, September 17, 2007.

35 ¹⁴ Florida Public Service Commission, Order No. PSC-08-0021-FOF-BI, January 7, 2008.

36 ¹⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for
37 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-BI, September 17, 2007.

38 ¹⁶ Ibid.

39 ¹⁷ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

40 ¹⁸ Ibid., p. 8.



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1 completed by the EPU Project team including preparation and submission of a revised cost estimate
2 to the [REDACTED], among other items. The High Risk Mitigation Plan was signed by the
3 [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric does
4 not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a
5 copy of the revised cost estimate described in the High Risk Mitigation Plan, but was told that this
6 document could not be located, nor could its existence be confirmed.¹⁹

7 Throughout the period from August 2008 to November 2008, the PSL trend register indicated a
8 potential for underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU
9 Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²⁰ This compares
10 to the scoping analysis assumption of \$225MM.²¹

11 In December 2008, the PSL Project Team again identified the potential to exceed the original
12 forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast
13 for PSL was prepared and provided to the EPU Project management at that time. EPU Project
14 management, however, requested that the PSL Project Controls group further refine and develop
15 the revised forecast.

16 CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project
17 is a major change for PSL and should have a change management plan in place. In addition, CR-
18 2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained
19 within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-
20 2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change
21 management plan.²²

22 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
23 attended by the EPU Project management team and reportedly included [REDACTED] who was
24 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
25 this time EPU Senior Management was presented with a forecast of approximately \$785 MM for
26 PSL, an increase of approximately \$129 million over the then current budget.²³ It was reported to
27 Concentric that the [REDACTED] and the [REDACTED] responded with a number of
28 questions related to the basis for the revised forecast and requested additional refinement of the
29 forecast.

30 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
31 performance relative to this revised forecast. However, the PTN Project Team was instructed by
32 the [REDACTED] to revise the initial reports, to measure cost performance relative
33 to the original project baseline because the revised estimate still had to be "validated," and because
34 an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the
35 PTN EPU Project."²⁴

36 ¹⁹ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents
37 required to close out this High Risk Mitigation Plan could not be located.

38 ²⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

39 ²¹ Ibid.

40 ²² CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

41 ²³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

42 ²⁴ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.



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1 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
 2 before the FL PSC.²⁵ In this testimony, the [REDACTED] stated "The EPU Projects are
 3 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
 4 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
 5 Docket 080009-EI."²⁶ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
 6 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.²⁷

8 At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel
 9 EPC estimates had increased to a level in excess of Bechtel's indicative bid.²⁸ The ESC is charged
 10 with corporate governance of the EPU Project, and includes FPL's President, Chief Nuclear Officer,
 11 Chief Financial Officer, FPL Group's President, and several others. This increase was reported to
 12 be the result of higher than expected projections of field non-manual and manual labor hours.²⁹
 13 Similarly, the current EPU estimates were reported to include redundant project management and
 14 oversight costs which the EPU Project management team believed may be able to be eliminated to
 15 reduce the EPC vendor's forecast.³⁰ Finally, it was reported that the EPU scope had grown larger
 16 than the indicative bid presented in November 2008. The EPU Project management team noted
 17 that the current estimates were based on preliminary design information, and that the project was in
 18 the process of refining new "level 1" estimates.³¹ A target completion date of June 30, 2009 for the
 19 new "level 1" estimates was presented to the ESC at this meeting.³²

20 Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU
 21 Modification Scope Review for both PTN and PSL.³³ The results of these reviews were reported on
 22 June 16, 2009 and recommended the elimination of a substantial number of modifications as not
 23 necessary to operate in an uprated condition.³⁴

24 The subsequent ESC meeting was held on June 23, 2009.³⁵ In this presentation, the EPU senior
 25 management team noted that the EPU Projects were completing "level 2" estimates and reiterated
 26 the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.³⁶ This
 27 presentation was relatively short and precipitated a much more detailed cost review in July 2009.

28 During the intervening period between the June and July 2009 ESC presentations, the EPU Project
 29 team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL
 30 and PTN project. Concurrently, a decision to replace the EPU senior management team was made.
 31 As a result FPL's executive team recruited four employees for the EPU Project team including a new
 32 [REDACTED] and the

33 ²⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

34 ²⁶ Ibid. at pp. 2-3.

35 ²⁷ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the
 Period January - December 2010, May 1, 2009.

36 ²⁸ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

37 ²⁹ Ibid., p. 14.

38 ³⁰ Ibid.

39 ³¹ Ibid., p. 15.

40 ³² Ibid., p. 18.

41 ³³ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

42 ³⁴ Ibid.

43 ³⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

44 ³⁶ Ibid., p. 12.



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1 [REDACTED] These individuals were selected and recruited from within FPL
2 between the end of June 2009 and July 25, 2009.

3 At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and
4 the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was
5 revised upward by approximately \$161 million from \$749 million to \$910 million.³⁷ Similarly, the
6 PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.³⁸
7 The slides which presented this information to the ESC noted that the "current budget" was being
8 increased to the "current forecast."³⁹ Simultaneously, the ESC was advised that the May 1, 2009
9 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised
10 feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁰ These
11 revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects. FPL
12 has reported that the ESC assigned additional action items related to the revised forecast to the EPU
13 Project Management Team. These action items included continued negotiations to reduce Bechtel's
14 costs.

15 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to FPL's
16 Nuclear Projects Department.⁴¹

17 No ESC meeting was held in August 2009, but both EPU Projects produced a cash flow report. In
18 the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast
19 that had been presented to executive management on July 25, 2009.⁴² In contrast, the PSL Annual
20 Project Cash Flow report was reviewed, the budget performance indicator was changed to red, and
21 the total project cost summary presented on this report continued to be shown as "under review."⁴³

22 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
23 [REDACTED] testified that should he be asked the same questions contained within his
24 pre-filed, direct testimony his answers would remain the same.⁴⁴

25 On September 9, 2009, the ESC was presented with a newly revised forecast that further increased
26 the cost the EPU Projects by approximately \$104 MM total for both sites.⁴⁵ This presentation stated
27 that approximately 30% of the total project costs have "high certainty."⁴⁶

28 At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the
29 projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁴⁷ In
30 addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁴⁸ A
31 footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of

32 ³⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

33 ³⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

34 ³⁹ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

35 ⁴⁰ Ibid., p. 50.

36 ⁴¹ [REDACTED] Letter.

37 ⁴² Total Project Cash Flow, PTN EPU Project 2009, August 2009.

38 ⁴³ Annual Cash Flow, PSL EPU Project, August 1, 2009.

39 ⁴⁴ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

40 ⁴⁵ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

41 ⁴⁶ Ibid., p. 9.

42 ⁴⁷ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

43 ⁴⁸ Ibid., p. 6.

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1 PSL Unit 2.⁴⁹ The remaining values shown in this presentation are depicted as the full cost of the
2 EPU Projects regardless of ownership.

3 Also in October, PSL produced two different Annual Project Cash Flow Reports with different
4 budget performance indicators and different total project cost summaries. The first of these reports
5 is dated October 1, 2009.⁵⁰ This report includes a red performance indicator and the total project
6 cost summary is listed as "under review". The second report is dated October 2009. The budget
7 performance indicator in this report is listed as yellow and the total project cost summary is changed
8 to \$651 million.⁵¹ No one with whom Concentric spoke could explain the difference or the reason
9 for the two reports.

B. Key Conclusions from Chronology

10 Concentric has developed the following conclusions which are relevant to the three key questions
11 noted in Section II to be relevant to the prudence of FPL's management decisions and the two key
12 questions related to the information development and distribution within FPL:

- 13 • The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed
14 with the EPU Projects in 2007.
- 15 • The EPU senior project management was alerted to the potential for the forecast to increase as
16 early as April 2008 through CR-2008-11443.
- 17 • The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as
18 December 2008 and a more refined version of this analysis in February 2009.
- 19 • The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of
20 providing a detailed, line-by-line review of the changes to the forecast.
- 21 • As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the
22 revised forecast and projected incremental output.
- 23 • The [REDACTED] was aware of and had assisted in the presentation of a revised cost
24 estimate to FPL's executive managers on July 25, 2009.

V. FPL's Decision to Proceed with the EPUs

25 In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned
26 with two items. First is whether the decision to proceed with the project was prudent based on the
27 expected economic and other benefits to FPL's customers. That question is addressed below.
28 Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently
29 incurred. This question is addressed in Section VI.

30 The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of
31 FPL's preliminary scoping analysis which predicted, at a high level, which plant components would
32 require replacement or modification to support the increased output of the plants.⁵² As was

33 ⁴⁹ Ibid., pp. 6, 18.

34 ⁵⁰ Annual Cash Flow, PSL EPU Project, October 1, 2009.

35 ⁵¹ Annual Cash Flow, PSL EPU Project, October 2009.

36 ⁵² Shaw Stone & Webster, Inc., *Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study*,
37 February 2008 and Shaw Stone & Webster, Inc., *St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate*
38 *Scoping Study*, February 2008.



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necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵³ In addition to the estimated cost to complete the EPU Projects, this analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Virtually all interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008. Following a conclusion as to how much awareness of the revised forecast could have improved in the "best case scenario," Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that roughly contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁵⁴

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁵⁵ Advanced awareness of the increased cost estimate in the best case scenario would not have altered FPL's decision to proceed with the EPU Projects. Further, Concentric notes that prudence is defined by a range of reasonable actions, not by perfect or even significantly above average performance. Thus, EPU Senior Management did not act imprudently by presenting the revised forecast to the ESC in July 2009 rather than February 2009.

⁵³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁵⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁵⁵ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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VI. The Review and Approval of EPU Costs in the NCRC

1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation
2 process and the incurrence of specific costs. The former is the projection of future costs without
3 the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's
4 review and involves the actual expenditure of company and customer dollars or the commitment to
5 do so at a later date.

6 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within
7 the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive
8 management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of
9 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
10 our interview with [REDACTED]

11 Similarly, Concentric found no indications of costs that were the result of imprudent decisions or
12 actions on the part of FPL's management. This conclusion was reinforced by all interviewees.
13 When asked whether they were aware of any costs that should not be passed along, the unanimous
14 answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be
15 what they [are]" and his concerns are related to what information would be presented to the FL
16 PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by
17 the FL PSC on the basis of imprudent decision-making.

VII. The Flow of Information to the FL PSC

A. Scope of Inquiry

18 The chronology of events presented in Section IV of this report led Concentric to focus on the 2009
19 NCRC proceedings⁵⁶ in order to assess whether the information presented by FPL in those
20 proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and
21 consistent with the standards expected for testimony before, and submissions made to, a regulatory
22 agency. This includes ensuring that approved changes to the project forecast were clearly
23 communicated to the FL PSC in a timely manner.

24 There were three separate sets of activities in the 2009 NCRC proceedings in which information
25 about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2)
26 production of documents and answering of interrogatories in the discovery processes, and 3)
27 testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was
28 submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and
29 interrogatories were responded to from January, 2009 through the hearing; the hearings on these
30 issues were held on September 8, 2009.⁵⁷ Since an important element of this investigation has been
31 about the timeliness of internal and external information flow, we have chosen to examine FPL's
32 actions in the three separate timeframes discussed above.

33 ⁵⁶ FL PSC Docket No. 090009-EI.

34 ⁵⁷ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony related to 2008 costs. Given Concentric's
35 conclusions in Section VI, the testimony is not addressed in this section.

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B. Pre-filed Testimony

1 FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

2 [REDACTED]
3 [REDACTED]
4 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁰, and
5 [REDACTED]

6 The issues within the scope of this investigation, i.e., the projected cost to completion, schedule, and
7 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶², and the
8 exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁶³
9 Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the
10 prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions
11 on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's
12 incurred costs and the 2009-2010 projected costs.⁶⁴ She did not offer any estimate of the projected
13 costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has
14 focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

15 The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following
16 statements:

17 *"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits*
18 *of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1*
19 *& 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁶⁵

20 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in*
21 *Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be*
22 *cost effective when compared to the addition of other generation alternatives."*⁶⁶

23 *"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally*
24 *filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise*
25 *the total non-binding cost estimate provided last May in Docket 080009-EI. As would be*
26 *expected, the Company continues to evaluate the costs associated with this project. As activities such*
27 *as final engineering analyses and design, associated NRC requirements and reviews, and*
28 *construction planning are more clearly defined, the Company will make any necessary revisions to the*

29 ⁵⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009. [REDACTED] left the EPU Project
30 in July, 2009, and left FPL in January, 2010.

31 ⁵⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

32 ⁶⁰ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

33 ⁶¹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

34 ⁶² Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

35 ⁶³ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

36 ⁶⁴ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

37 ⁶⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

38 ⁶⁶ Ibid., pp. 2-3.

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original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.⁶⁷

1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED]
2 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along
3 with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁶⁸

4 As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had
5 transpired:

- 6 • A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the
7 validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁶⁹
8 and that [REDACTED] continued to use in May 2009⁷⁰
- 9 • The PSL EPU trend reports for August 2008 through November 2008 had raised
10 concerns about substantial underestimation of the PSL project costs⁷¹
- 11 • On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN
12 EPUs had increased by \$37 million; this higher value was used in the Bechtel
13 contract
- 14 • In early December, 2008 the EPU's Project Controls Group identified that the May
15 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- 16 • A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08
17 Condition Report was a "missed opportunity"⁷²
- 18 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by
19 Project Controls and the PSL site that their forecast for PSL was \$129 million above
20 the May, 2008 estimate⁷³
- 21 • By March 26, 2009 the PTN site team had also concluded that the cost estimate
22 should be raised above the May 2008 estimate; a decision was made to not use the
23 higher cost estimate because it was considered "preliminary"⁷⁴
- 24 • [REDACTED] participated in developing a presentation in late April/early May 2009
25 informing the ESC that while Bechtel had estimated higher costs, the forecasts for
26 PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost
27 status is shown as "green."⁷⁵

28 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1,
29 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate
30 was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had

31 ⁶⁷ Ibid., p. 24.

32 ⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

33 ⁶⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for
34 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

35 ⁷⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
36 Saint Lucie, July 25, 2009.

37 ⁷¹ PSL Trend Register

38 ⁷² CR 2008-37753, "Additional Information," December 10, 2008, p.1.

39 ⁷³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

40 ⁷⁴ Email from [REDACTED] to anonymous recipient, March 26, 2009.

41 ⁷⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

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1 an increase been approved. What [REDACTED] had reported to the ESC was consistent with what
2 his Direct Testimony reported to the PLPSC. Additionally, Schedule TOR-7 appropriately
3 indicated the Company continued to evaluate the costs of the EPU Projects.

C. Interrogatory Responses and Production of Documents

4 Concentric requested, received and reviewed all documents produced and interrogatory responses
5 submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost
6 effectiveness. Our review led us to follow up on one interrogatory response, submitted in response
7 to Staff's Fifth Set, No. 53, for further analysis.⁷⁶ This interrogatory response, which is attached as
8 Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of
9 Section 366.93(5) P.S., which requires an annual comparison of the budgeted and actual costs as
10 compared to the estimated in-service cost of nuclear projects. The response, which was submitted
11 on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of
12 budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a
13 "snapshot" of a continuous process.⁷⁷

14 Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU
15 Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious
16 challenge to meeting the existing budget.⁷⁸ On June 3, 2009, Bechtel submitted a "P50" (mean
17 value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁷⁹ On June 23,
18 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁰, and the ESC instructed him to
19 prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting.
20 This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly
21 working seven days a week for a month and was presented to the ESC at an all-day, Saturday
22 meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was
23 replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively
24 participated in the July 25, 2009 presentation. That presentation established new cost estimates for
25 the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁸¹ Therefore,
26 Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date
27 by August 17, 2009.

28 However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current
29 or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and
30 responsive, even though the document referred to was out-of-date. The respondent answered the
31 question in a forthright fashion based on all of the information known to this person at the time.

72 ⁷⁶ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

31 ⁷⁷ *Ibid.*

34 ⁷⁸ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

35 ⁷⁹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

36 ⁸⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

37 ⁸¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
38 Saint Lucie, July 25, 2009.

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D. Testimony at Hearing

1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
 2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL:⁸²

3 BY [REDACTED]

4 Q. If I asked you the same questions contained in your prefled direct testimony, would your
 5 answers be the same?

6 A. Yes, they would be.

7 [REDACTED] FPL asks that the prefled direct testimony be inserted into the record as
 8 though read.

9 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed
 10 testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of
 11 September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his
 12 pre-filed testimony, and updating his prefled testimony to reflect his new title and responsibilities
 13 with FPL.

14 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost
 15 projections for the EPU Projects, and had presented these new estimates to several senior FPL and
 16 contractor personnel on July 25, 2009.⁸³ The new estimates for PSL were caveated as still being "at
 17 the conceptual level"⁸⁴ (as were the May, 2008 estimates⁸⁵) and the comment was made that the full
 18 scope was still not known. However, the new values were clearly labeled as the "Current Forecast,"
 19 and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being
 20 increased to the "Current Forecast."⁸⁶ The July 25, 2009 presentation offers an extensive
 21 perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned
 22 from this experience.⁸⁷ Concentric also notes that the ESC was explicitly advised that the new cost
 23 estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the
 24 FL PSC and that several new economic feasibility analyses had been performed, which updated
 25 those analyses that had been submitted to the FL PSC eleven weeks earlier.⁸⁸ The new feasibility
 26 analyses continued to show that the projects were beneficial to customers, although less so than in
 27 the May 1, 2009 filing.⁸⁹

28 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
 29 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
 30 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented revised

31 ⁸² Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

32 ⁸³ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

33 ⁸⁴ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

34 ⁸⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for
 35 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

36 ⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
 37 Saint Lucie, July 25, 2009.

38 ⁸⁷ Ibid., pp. 38-40 and pp. 51-52, respectively.

39 ⁸⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

40 ⁸⁹ Ibid., p. 50.

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1 cost estimates to the ESC, and the EPU Project management team had begun relying on the revised
2 cost estimates. Our opinion in this regard is also supported by the statements of nearly all of the
3 EPU Project personnel we interviewed (other than the two EPU Project personnel that participated
4 in the decision to not update the testimony).

5 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-
6 filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
7 validity of many unapproved scope changes and manpower estimates, and that they were no better
8 than a "guess" with little support. He also indicated that he does not recall any discussion with
9 regard to whether the updated estimate should be presented to the FL PSC.

10 Concentric agrees that the new cost estimates were based on only partially completed engineering
11 and design information, and that they were still subject to revision as new information became
12 available. However, that is always the case with a construction program such as the EPU Project,
13 and continues to be the case today. These facts do not support the continued use of information
14 that was based on even earlier conceptual designs and out-of-date manpower and material estimates
15 and which did not take into account executed major contracts. The new estimates were the product
16 of more than a dozen people working extended hours for a month and had been reviewed by every
17 level of management in the EPU organization. They reflected far more knowledge about the scope
18 of the EPU Projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost
19 estimates that were based on more recent data and manpower estimates that reflected the revised
20 scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the
21 executives of FPL in charge of EPU governance (and who were responsible for approving budget
22 changes for the projects) as the best "line-by-line" estimates available at the time, were materially
23 different from the 2008 estimates, and have continued to serve as the reference point for all
24 subsequent revisions to the cost estimates, including those that were submitted to the FL PSC in
25 May 2010. In short, while the July 25, 2009 and subsequent cost forecasts are and were preliminary,
26 they represented the best information available at that time, were relied upon by FPL, and were
27 more advanced than the 2007/2008 cost projections.

28 The documents we have reviewed, and our interviews, indicate that there was considerable
29 uncertainty among the project staff in September 2009 as to whether the new cost estimates were
30 approved or not, and internal reports were inconsistent in their use or non-use of the updated
31 forecast (see Section VIII for additional details). The EPU staff had experienced significant
32 turnover and was also undergoing a major reorganization at that time, which appears to have
33 contributed to the lack of clarity on this point.

34 Concentric's discussions with Company personnel have also indicated that the fact that the updated
35 feasibility analyses presented to the ESC on July 25, 2009 confirmed that the projects still offered
36 significant value to customers may also have been a consideration in the decision to not update [REDACTED]
37 [REDACTED] testimony. While Concentric agrees that the new analyses confirmed the conclusions in
38 [REDACTED] testimony, we believe that a \$300 million, or 27%, increase in the projected cost of
39 the EPU Project should have been discussed in the live testimony on September 8, 2009.

40 Concentric found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of
41 the EPU Projects, had any knowledge that updated cost estimates were presented to the ESC. It is
42 our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored
43 by [REDACTED] and [REDACTED] was not in the EPU organization or the Nuclear Division of FPL.



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VIII. Recommendations for Improvements Related to the NCRC

Concentric's investigation into this matter has produced the below recommendation for process improvement. These recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC.

1. Concentric recommends that the process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.
2. Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Law and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs and Law Departments. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented.

IX. Information Development and Distribution within FPL

The below discussion relates specifically to FPL's internal distribution of EPU Project-related information and forecast. In Concentric's view, the below discussion should not be misconstrued to determine the prudence of FPL's decision making processes and therefore should not impact the recovery of costs through the NCRC.

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPIs have identified three which are relevant to the reporting of revisions to the cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management

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1 Program. For purposes of our review of these instructions, Concentric has segmented our review
2 into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

3 As early as April 2008, the EPU management team was made aware of concerns about the adequacy
4 of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel
5 contract was awarded in November 2008 and were brought to the attention of the EPU senior
6 management in December 2008 and February 2009. By February 2009 the EPU Project Controls
7 employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129
8 million cost increase for PSL. The revised estimate was within 2% of the values presented to the
9 ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff
10 was directed to discontinue use of this estimate until management had reviewed it further.
11 Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its
12 cost estimates, all of which were substantially higher than its indicative bid and higher than the
13 estimate developed as part of the Shaw scoping analysis.

14 These events followed the publication of EPPI-300 on March 4, 2008. This project instruction
15 established a formal process for identifying and tracking potential changes to the initial project
16 budget. EPPI-300 describes the purpose of the trend program as follows:

17 "This document shall be used for scope changes to Capital and O&M sub-projects
18 within the EPU Project. Changes to the approved budget will be made using the
19 approved Scope Change/Trend Notice form (SCN/TN) which shall become part of
20 the budget records."²⁰

21 These potential changes were divided into scope changes (i.e., additional plant modifications) or
22 trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300
23 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be
24 completed to request changes to the project forecast. The SCN/TN was then routed to the [REDACTED]
25 [REDACTED] for approval. The process for addressing scope changes is similar, but requires additional
26 review of the potential scope change to ensure it is necessary for the EPU Projects. Once an
27 SCN/TN is initiated, EPPI-300 requires the EPU Project Cost Engineer to establish a tracking
28 number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for
29 indicating the potential schedule impact. Once this information is added to the SCN/TN, it is
30 routed to the EPU Project team member with the appropriate approval authority for the potential
31 cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget
32 and all future project reports.²¹

33 Concentric requested the EPU Projects' Trend Registers and all SCN/TNs since January 1, 2008
34 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of
35 the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that
36 the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and
37 conscientiously maintained Trend Register was maintained between summer 2008 and at least June
38 2009. However, it appears that the process for reviewing and approving trends was not

39 ²⁰ EPPI-300, Project Change Control, Pg 3, Rev 00.

40 ²¹ Ibid at 4-6.

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1 appropriately implemented at PSL. Many of the same trends were identified each month without
2 resolution or incorporation into the budget. As an example, in nearly every month between August
3 2008 and June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged
4 between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during
5 this period. Similarly, the PSL Project Team did not prepare SCN/TN forms for trends that were
6 included on the trend register. For PTN, it would appear that the trend register was kept up to date
7 during this period and some of the trends or scope changes were outstanding for several months.

8 Finally, many potential scope changes or trends appear to have been captured on the Risk Register,
9 which, as discussed below was not synchronized with the project forecast, rather than the Trend
10 Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation"
11 plan, but does not appear to have been included on the trend register. Thus potential scope changes
12 or trends were not adequately reflected within the forecast. Concentric also noted that prior to July
13 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for
14 nearly every form.

15 EPPI-320 provides the project instruction for cost estimating, including the development and
16 inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This
17 instruction was established in March 2008 and remains in effect today. Specifically, this instruction
18 states that "estimates should include project risks, uncertainties, and contingency. These should be
19 documented along with the methods for determining the percentage of risk and the amount of
20 money associated with the contingency." EPPI-320 also indicates that it is supplemental to the
21 Nuclear Projects Department Instruction - 304 ("NPDI-304").

22 FPL has defined the contingency as "an amount added to an estimate to allow for additional costs
23 that experience shows will likely be required. This may be derived either through statistical analysis
24 of past project costs, or by applying experience gained on similar projects."²² NPDI-304 provides
25 additional guidance on the development of contingencies and states:

26 4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency,
27 Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or
28 definitive estimates a 5-10% contingency. The exact percentage is determined on a
29 case by case basis.

30 The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to
31 have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label
32 the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it
33 referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat
34 overall forecast trend and was not based upon project risk. As a result, the contingency was
35 depleted month-by-month, the Risk Register was never synchronized with the project forecast and
36 the EPU Projects no longer maintained a level of contingency that is consistent with FPL's
37 guidelines. In other words, the EPU senior management used the initial contingency as an
38 "allowance" that was to be used to meet increases in scope or cost rather than a value which reflects
39 the risk remaining in the project, including those identified by the Risk Registers. This practice was
40 acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the
41 statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope

42 ²² NPDI-304, Estimate Preparation, Pg 9, Rev 0.

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allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used as prescribed by EPPI-340. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.⁹³

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance to fund scope changes, rather than maintaining the contingency at a level that appropriately reflects the risk to the cost forecast. Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

⁹³ EPU lessons learned PPL from April 2010.

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"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

Concentric notes that issues of the project contingencies, risk register, and the relationship of each to the cost projections are being addressed by the work soon to be completed by High Bridge. Furthermore, on May 1, 2010 FPL filed an updated cost estimate range and feasibility analysis with the FL PSC. This updated cost estimate range included increased allowances for undefined scope and risk. It is our understanding that EPU management considers its current approach to be an interim solution until the High Bridge results have been received and reviewed, and that the High Bridge results will be used to compare against FPL's current cost estimate range.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not adequately comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009. It is clear that the process required for releasing funds from the contingency was not followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget or cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."⁹¹

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with some incorrect or out-of-date information. These problems persisted after July 25, 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. However, post-July 25, 2009, the correct and updated information was available in the EPU Project's presentations to the ESC. We also received reports from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. These accounts are difficult to verify, but they do not represent a single account or example. In addition, Concentric has received some documentation to corroborate these accounts. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

⁹¹ Ibid.

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X. Recommendations for Improvements Related to FPL's Internal Distribution of Cost Estimates

Concentric's investigation into FPL's internal distribution of EPU Project-related Information produced the below list of recommendations for process improvements. Many of these recommendations are intended to improve the distribution of information within FPL, and the NCRC docket team. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. In those instances, we are stating the recommendation to demonstrate that all of the issues raised in this report are being, or have been, adequately addressed.

1. To ensure that FPL and the EPU Project team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to a company program for anonymously notifying superiors in the event of a concern with project reporting.
2. To the extent that a performance indicator (e.g., green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator.
3. FPL should consider changing the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate in 2009 was a positive development, the reporting relationship of the EPU Project Controls Director may be improved by including either a solid or dotted line outside of the EPU Projects. This could improve the independence of the Project Controls Director and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.
4. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. In addition, the EPU Project has established a revised cost estimate range which was used in the Company's feasibility analysis and provided to the FL PSC on May 1, 2010. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget, forecast or

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estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

5. To the extent CRs are utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.
6. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
7. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
8. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct.
9. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
10. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.

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February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

I am writing to you with my concerns about cost performance in Nuclear Projects and Extended Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I am being cited as one of many targets in the failure of EPU in 2009.

As a brief history, I was hired as [redacted] in May 2008 by [redacted]. In December of 2008 my counterpart for EPU was released. I was told by me [redacted] would have to assume the EPU responsibility as well as my current role. In January 2009 I filled both positions reporting to [redacted] and over 100 people (contractors and EPL) reporting to me at five sites and a group. From July 2009, which is when I left EPU, until late November 2009, I reported again to [redacted]. While reporting to [redacted] he told me a number of times he thought I was doing a good job. During the time I worked for [redacted] he took me to dinner and expressed his appreciation for my support while working for him.

In my review I am accused of not providing adequate information or forecasting for both the EPU Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project standpoint, all projects were on target or explained in variances. I do not believe any cited issues were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team developed extensive project indicators in February of 2009 and patterned them after those used to support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These indicators were approved by the Project Team and presented to [redacted] in March 2009. The original indicators are still on the EPU SharePoint website for you to view. The issues affecting project performance for EPU were the fact that the EPU Project Teams could not support updates of the indicators due to continuing baseline revisions and scope additions that were not previously identified. The scoping study and budget estimates were completed by the Shaw Company and were commissioned by the [redacted] and completed before I joined the Project. These estimates were not adequate and Sr. Management continued changing philosophy on what was to be included and not included in these estimates. As a result there was no Project baseline established and overall Project performance was very poor. The [redacted] would complain about having poor performance indicators however no [redacted] we could not deliver a positive message if there was none to deliver. The situation continued to worsen through the spring of 2009. Project Managers and Engineers were not correcting issues and the Sr. Managers would not accept the poor performance messages. The [redacted] was told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team continued to deliver this message along with poor weekly performance reviews. Finally in July of 2009, Sr. Management decided it was time to inform Executive Managers of the poor condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management Team. My [redacted] group prepared detailed reviews that were presented to Mr. Jim Robo late in July 2009 on the poor condition of EPU.

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1 At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast
2 \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
3 Current Forecast \$909MM with a negative variance of (\$160MM). [REDACTED]

4 [REDACTED] these
5 numbers clearly show the gravity of BPU negative performance. To my knowledge, these
6 numbers have continued to worsen with the new Project Team to whom for PTN and PSL, the
7 Team does not have a clear idea of what the final costs will be.

8 I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any
9 information from BPU other than which was presented to Management last summer will be a
10 manipulation of the truth. Current reporting for PTN and PSL does not contain information
11 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
12 Sr. Project Team.

13 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
14 current estimates for PTN and PSL, they were stated in November 2009 as being the original
15 Shaw estimates. Currently the numbers are in review. For PBN, the estimate was stated in
16 [REDACTED]
17 [REDACTED]

18 My team delivered the correct message to Sr. Management. Sr. Management did not want to.
19 except the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in
20 my entire career having worked in Project Controls for some 30 years. My former positions
21 before coming to FPL were with ARBS Corporation, Burlingame, CA where I was Project
22 Controls Consultant/Manager for NASA in Houston working with the Program Management
23 Division of the International Space Station. Also with ARBS, I was a Project Consultant for the
24 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
25 where I was part of a Project Team that earned the DOE Excellence award for Defense Systems.
26 For the record, my Team told the truth about the BPU financial condition and that truth did not
27 meet FPL expectations.

28 Finally, I know this letter comes at a time when FPL has ordered the investigation of employee
29 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
30 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
31 negative employee review. I have copied my supervisor and human resources.

32 Thank you for taking the time to read this letter.

33 [REDACTED]
34 [REDACTED]
35 [REDACTED]
36 [REDACTED]
37 [REDACTED]

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NCR-10

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Exhibit 2: Engagement Letter



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420
Law Department

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March 15, 2010

John Reed
Chief Executive Officer
Concentric Energy Advisors
293 Boston Post Road West
Suite 500
Marlborough, MA 01752

Re: Independent Investigation of February 19, 2010 Correspondence to Mr. Lewis Hay, FPL
Group Chairman and CEO

Dear Mr. Reed:

The purpose of this letter is to request that your company conduct an independent factual investigation with respect to the statements and subject matter contained in the referenced correspondence, a copy of which is attached, with the exception of matters pertaining to the employee performance review of the author of the correspondence.

The engagement should be handled subject to the terms and conditions of the consulting services agreement amendment that applies to your company's work for FPL through December 31, 2010, and billed to FPL separately from other work performed under that amendment.

Please direct any requests for support or information required to support your work to me, and report the results of your investigation to me. I would appreciate it if you would sign and return a copy of this letter to me acknowledging agreement to perform the above-referenced scope of work subject to the terms stated herein.

4

Enclosure

ACCEPTED AS OF March 15, 2010

Concentric Energy Advisors, Inc.

By:

Its: CEO



an FPL Group company

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Exhibit 3: Previous Concentric Projects for FPL

Project List for Florida Power and Light

NAME	START DATE	DESCRIPTION
FPL Regulatory Advisory	4/1/2005	Witness training to help FPL prepare for the cross-examination phase of their rate case
FPL New Nuclear Filings	7/25/2007	Provided Florida Power & Light Company with regulatory support services and expert testimony associated with its Need Study filed with the Florida Public Service Commission and follow-on support as needed at the NRC
FPL New Nuclear Cost Recovery Clause Filing	4/12/2008	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Rate Proceedings Support/Benchmarking	4/22/2008	Retained as a consulting expert in anticipation of possible future FPL rate proceedings
FPL Renewable Portfolio Standard	12/31/2008	Assisted FPL with an assessment of various mechanisms that have been developed both nationally and internationally to promote renewable technologies
FPL 2009 New Nuclear Cost Recovery Clause Filing	1/1/2009	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Securitization Testimony	1/15/2009	Provided testimony commenting on state issuance of securitization bonds for new nuclear plants.
FP&L 2010 Nuclear Cost Recovery Clause Filing	1/1/2010	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management, and cost estimation practices.

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Exhibit 4 - Concentric Data Requests

Request #	Request	Received
1	All data request responses or production of documents related to the EPU Projects from Docket 090009-EL including those related to the testimonies of [REDACTED] & [REDACTED]	3/26/2010
2	A list of all FPL employees or contractors working on the EPU or related projects who were involuntarily terminated, reassigned or transferred between July 2008 and today, including a list of the reasons for each employee's or contractor's involuntary termination, reassignment or transfer. This list should include the reasons for the involuntary termination of [REDACTED]	4/8/2010 4/19/10 (Contractors)
3	Any employee concerns or condition reports issued between July 2008 and today, and related to the EPU cost estimate or schedule, and all employee letters to FPL employees or Board members expressing concerns or allegations pertaining to the FPCS nuclear cost recovery proceedings.	3/26/2010
4	All executive management reports, briefings or presentations related to the EPU since December 28, 2009.	4/1/2010
5	All EPU MOPRs since 1/1/2010	4/1/2010
6	A list of the EPU employees or contractors and the dates of all training on the FPL Code of Conduct and Employee Concerns Program. Please include all materials used during this training.	
7	Would it be possible to get a copy of CR-2008-11443? This was referenced in CR-2008-37753	3/30/2010
8	The last page of this document includes a document entitled "High Risk Mitigation Plan". That document includes a list of 6 mitigation actions, responsibility for completing those actions and a due date for each action. Would it be possible to find each of the documents that were developed in response to mitigation actions and determine when each mitigation action was completed?	3/30/2010
9	With regard to the attached 2009 DR response, would it be possible to get the amounts that are redacted from the table on Pg. 2-3	3/31/2010
4/6/2010	calculations for all AFUDC amounts (i.e., ~\$350, \$370, \$200 MM, etc) presented to FPL's executive management between January 1", 2009 and today.	

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Exhibit 4 - Concentric Data Requests

Request #	Request	Received
4/6/2010	1 the lessons learned documented in the July 25, 2 2009 Executive Steering Committee 3 presentations. These lessons learned can be 4 found on pages 51-52 of the PTN presentation 5 and pages 38-40 of the PSL presentation. This is 6 written confirmation of a request given to [REDACTED] 7 orally.	4/7/2010
4/6/2010	8 Please confirm whether there was an August 9 Executive Steering Committee 10 meeting/presentation. If there was, please 11 provide a copy of the presentation or report used 12 during the meeting.	4/6/2010
4/6/2010	13 PSL EPU Sensitivity Analysis from February, 14 2009 from [REDACTED]	4/6/2010

(35)

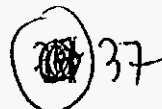
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Exhibit 5: Documents Relied Upon

1. Annual Cash Flow, PSL EPU Project, August 1, 2009
2. Annual Cash Flow, PSL EPU Project, October 1, 2009
3. Annual Cash Flow, PSL EPU Project, October 2009
4. CR 2008-11443, April 3, 2008
5. CR 2008-37753, December 10, 2008
6. Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009
7. Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009
8. Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009
9. Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009
10. Email from [REDACTED] to anonymous recipient, March 26, 2009:
11. Email from [REDACTED] dated March 19, 2010, to James Poppell, John Reed, Sam Eaton, re: For your consideration
12. Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009.
13. Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010
14. EPPI-300, Project Change Control, Rev 00
15. EPU lessons learned PPL from April 2010
16. Extended Power Uprates, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009
17. Extended Power Uprates, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009
18. Extended Power Uprates, Executive Steering Committee, St. Lucie and Turkey Point September 9, 2009
19. Extended Power Uprates, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009
20. Extended Power Uprates, Executive Steering Committee, St. Lucie and Turkey Point, November 13, 2009
21. Extended Power Uprates, Project Update, Saint Lucie, July 25, 2009
22. Extended Power Uprates, Project Update, Turkey Point, July 25, 2009
23. FL PSC Docket 080009-EI In Re: Nuclear Cost Recovery Clause
24. FL PSC Docket 090009-EI, In Re: Nuclear Cost Recovery Clause
25. FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010
26. Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009
27. Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January – December 2010, May 1, 2009
28. Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007
29. Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008
30. [REDACTED] Letter
31. Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM
32. NPDI-304, Estimate Preparation, Rev 0

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Exhibit 5: Documents Relied Upon

- 1 33. PSL EPU Modification Scope Review dated June 16, 2009
- 2 34. PTN EPU Scope Review dated June 2009
- 3 35. Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No.
- 4 53
- 5 36. Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power
- 6 Uprate Scoping Study, February 2008
- 7 37. Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power
- 8 Uprate Scoping Study, February 2008
- 9 38. Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February
- 10 17, 2009
- 11 39. Total Project Cash Flow, PTN EPU Project 2009, May 31, 2009
- 12 40. Total Project Cash Flow, PTN EPU Project 2009, August 2009
- 13 41. Total Project Cash flow, PTN EPU Project 2009, November 2009
- 14 42. Transcript of Direct Examination of [REDACTED] September 8, 2009



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Exhibit 6: [REDACTED] Letter, Interlineated

2 February 19, 2010

3 Mr. Lewis Hay
4 Florida Power and Light
5 FPL Group Chairman and CEO
6 700 Universe Blvd.
7 Juno Beach, FL 33408

8 Dear Mr. Hay:

9 I am writing to you with my concerns about cost performance in Nuclear Projects and Extended
10 Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I
11 am being cited as one of many targets in the failure of EPU in 2009.

12 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
13 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by the
14 [REDACTED] would have to assume the EPU responsibility as well
15 as my current roll. In January 2009 I filled both positions reporting to [REDACTED] I had over
16 100 people (contractors and FPL) reporting to me at five sites and a Corporate Project Controls
17 group. From July 2009, which is when I left EPU, until November 2009, I reported again to
18 [REDACTED] While reporting to [REDACTED] he told me a number of times he thought I was
19 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
20 his appreciation for my support while working for him.

21 In my review I am accused of not providing adequate information or forecasting for both the EPU
22 Project and Nuclear Projects in 2009.

23 *Concentric has found no reason to dispute any of the assertions above. Concentric's*
24 *scope of work does not include any issues related to the employee's performance*
25 *appraisal. It is our understanding that FPL has independently initiated corrective*
26 *action regarding [REDACTED] review. See Section I of the report.*

27 To my knowledge there was never a major issue with a Monthly Variance Report or a Site Project
28 Status Report for Nuclear Projects. From a Project standpoint, all projects were on target or
29 explained in variances. I do not believe any cited issues were a result of a Project Controls
30 shortcoming. For Power Uprate, my Project Controls Team developed extensive project
31 indicators in February of 2009 and patterned them after those used to support the "Big Dig"
32 Boston Artery. These indicators included Earned Value Metrics. These indicators were approved
33 by the Project Team and presented to [REDACTED] in March 2009. The original indicators are still
34 on the EPU SharePoint website for you to view. The issues effecting project performance for
35 EPU were the fact that the EPU Project Teams could not support update of the indicators due to
36 continuing baseline reviews and scope additions that were not previously identified.

37 *Concentric generally concurs with these assertions; while we raise concerns regarding*
38 *certain procedures within the Project Controls group, we do not believe that the EPU's*
39 *Project Controls personnel or work product is or has been deficient. Concentric agrees*
40 *that prior to July, 2009 the ongoing baseline reviews and scope additions were the*
41 *principal drivers of cost uncertainty. See Section IV of the report.*

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Exhibit 6: [REDACTED] Letter, Interlineated

2 The scoping study and budget estimates were completed by the Shaw Company and were
3 commissioned by the VP of Power Uprate and completed before I joined the Project.

4 Concentric note: Shaw's scoping estimates were completed in February 2008. [REDACTED]
5 [REDACTED] joined FPL in May 2008 and the EPU Project in January 2009.

6 These estimates were not adequate and Sr. Management continued changing philosophy on what
7 was to be included and not included in these estimates. As a result there was no Project baseline
8 established and overall Project performance was very poor. The [REDACTED] would
9 complain about having poor performance indicators however as Project Controls, we could not
10 deliver a positive message if there was none to deliver. The situation continued to worsen
11 through the spring of 2009. Project Managers and Engineers were not correcting issues and the
12 Sr. Managers would not accept the poor performance messages.

13 With the benefit of hindsight, it is clear that the Shaw analysis did not include all of
14 the scope required for the uprates; however, Concentric has not developed an
15 opinion as to whether it was reliable or adequate when it was prepared. Concentric
16 did find evidence of concerns with the study's completeness shortly after it was
17 prepared (see Report Section IV) and of frequent scope changes throughout the
18 history of the EPU project. We view these scope changes as the predictable result
19 of more detailed engineering analyses, which were the principal cause of the poor
20 performance indicators.

21 Our interviews provided credible evidence that prior to July, 2009 EPU senior project
22 management was slow to respond when presented with revised cost forecasts and
23 concerns about the reliability of the Shaw study. See Report Section VIII.

24 The [REDACTED] was told in late 2008 before I was assigned to EPU that the projects
25 were in trouble.

26 Concentric was able to confirm through the course of its interviews, that the [REDACTED]
27 [REDACTED] was alerted to the potential for increased cost estimates at PSL &
28 PTN in late 2008. In addition, Concentric noted and reviewed two PSL Condition
29 Reports from 2008 which indicated the potential for additional scope and cost
30 challenges. See Section IV of the report.

31 My Team continued to deliver this message along with poor weekly performance reviews.
32 Finally, in July of 2009, Sr. Management decided it was time to inform Executive Managers of
33 the poor condition of EPU which precipitated the replacement of the entire EPU Project Sr.
34 Management Team.

35 Concentric has confirmed that the Project Controls group continued to present EPU
36 senior management with documented concerns about the project's cost forecast in
37 the first few months of 2009 (see Section IV of the report) This information, after
38 being briefly raised in the June, 2009 ESC meeting, was presented in detail to the
39 ESC in July, 2009. It is also Concentric's understanding that during the time period
40 between June and July 2009, executive management made the decision to change
41 much of the EPU senior project management.

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Exhibit 6: [REDACTED] Letter, Interlineated

2 My Project Controls group prepared detailed reviews that were presented to Mr. Jim Robo late in
3 July 2009 on the poor condition of EPU.

4 *The July 25, 2009 ESC presentations presented detailed cost reviews. Concentric's*
5 *interviews confirmed the attendance of [REDACTED] Jim Robo, [REDACTED]*
6 *[REDACTED] and representatives from Bechtel, amongst*
7 *others. See Section IV of the report.*

8 At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast
9 \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
10 Current Forecast \$909MM with a negative variance of (\$160MM).

11 *Concentric has confirmed these values. See Section IV of the report.*

12 ~~These numbers clearly show the gravity of EPU negative performance. To my~~
13 ~~knowledge, these numbers have continued to worsen with the new Project Team to where for~~
14 ~~PTN and PSL, the Team does not have a clear idea of what the final costs will be.~~

15 *Concentric's scope of work focused on the Florida EPU projects, not Point Beach in*
16 *Wisconsin. Following the July 25, 2009 ESC presentations, the EPU project team*
17 *has reported additional cost escalation at PTN & PSL in ESC presentations. The*
18 *forecast as of December 2009 was \$831 MM for PSL and \$1012 MM for PTN. The*
19 *current forecast for both PTN & PSL remain under review pending a third party cost*
20 *analysis for PTN U3. See Report Section VIII.*

22 I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any
23 information from EPU other than which was presented to Management last summer will be a
24 manipulation of the truth, Current reporting for PTN and PSL does not contain information
25 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
26 Sr. Project Team.

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Exhibit 6: [REDACTED] Letter, Interlineated

2 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
3 current estimates for PTN and PSL, they were stated in November 2009 as being the original
4 Shaw estimates. Currently the numbers are in review.

5 [REDACTED] stated that his concerns about reporting to the PSC were generated by
6 his review of the November PSL Annual Project Cash Flow and PTN Total Project
7 Cash Flow reports. Concentric has reviewed the reports cited by [REDACTED] and
8 has determined that he is correct that they incorrectly relied upon the original need
9 determination cost estimates. These inaccuracies were corrected on a going forward
10 basis prior to this investigation commencing. [REDACTED] did not seem aware of the
11 post-July 2009 ESC presentations or the revised cost forecast presented therein.
12 Concentric has confirmed that the correct information about the post-July 2009
13 status of the cost estimates, including the July ESC presentations attached by [REDACTED]
14 to his letter, was provided by FPL to the PSC staff as part of its review for the
15 2010 NCR. See Section IV of the report.

16 For PBN, the estimate was slated in December 2009 as being \$552MM and currently I believe it
17 is over \$600MM. That's almost 2 times the original Shaw budget estimate.

18 My team delivered the correct message to Sr. Management. Sr. Management did not want to
19 accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in
20 my entire career having worked in Project Controls for some 30 years. My former positions
21 before coming to FPL were with ARES Corporation, Burlingame, CA where I was Project
22 Controls Consultant/Manager for NASA in Houston working with the Program Management
23 Division of the International Space Station. Also with ARES, I was a Project Consultant for the
24 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
25 where I was part of a Project Team that earned the DOE Excellence award for Defense Systems.
26 For the record, my Team told the truth about the EPU financial condition and that truth did not
27 meet FPL expectations.

28 Finally, I know this letter comes at a time when FPL has ordered the investigation of employee
29 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
30 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
31 negative employee review. I have copied my supervisor and human resources.

32 Thank you for taking the time to read this letter.

33 [REDACTED]
34 [REDACTED]

35 Co: [REDACTED]
36 Co: [REDACTED]

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Exhibit 7: March 19, 2010 [REDACTED] Email

Sam Eaton

1 From: [REDACTED]
2 Sent: Friday, March 19, 2010 8:21 AM
3 To: [REDACTED]
4 Cc: John Reed; Sam Eaton
5 Subject: For your consideration
6 Importance: High

7 [REDACTED]

8 In my opinion, my relationship with [REDACTED] is becoming increasingly strained. I don't feel I have a success path
9 to developing a professional relationship with him that can benefit FPL. He has been cordial in public but in the one-on-
10 one closed door "touch base" session we had yesterday he continued to tell me how dissatisfied he is with my
11 performance. He has not put me on a formal A-PIP that I'm aware of (as I discussed with you) however, he has given me
12 exercises (with changing verbal expectations) that makes me suspect he thinks he's established me in the program. I
13 feel, especially with [REDACTED] early departure yesterday, that I am the next target for elimination from [REDACTED]
14 organization. He told me in private that he does not intend being fired as his predecessors for poor performance and he
15 will not let a few "stupid" people affect his management effectiveness.

16 I feel it's time for me to develop an exit strategy from FPL. I need to discuss this with you at our next meeting since I still
17 have financial commitments from when I was hired. I need to minimize my financial exposure in leaving the company.
18 Also, as a part of my own professional attitude, I want to make sure there is an adequate turnover for someone chosen
19 to be my successor.

20 Thank you in advance for your help with this and I look forward to speaking with you soon. Hopefully we can have this
21 discussion early next week.

22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/08	Shaw Scoping Studies completed for PTN & PSL.	Shaw BOP Scoping Studies for PTN & PSL, 2/2008
4/3/08	CR 2008-11443 initiated: "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary ..." [REDACTED] notified; High Risk Mitigation Plan developed; no follow-up reports found in file.	CR 2008-11443
5/08	[REDACTED] hired as [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews
5/15/08	EPC costs for PTN EPU estimated to be \$225.2MM, based on Shaw estimates; included in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
8/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$84 MM with the note "Potential significant overrun-detailed proposal evaluation required."	PSL Trend Register
9/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$138 MM with the note [REDACTED] forecast based upon current contract scoping strategy."	PSL Trend Register
10/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$139 MM with the note [REDACTED] forecast."	PSL Trend Register
10/15/08	EPC costs for PTN EPU estimated to be \$212.9MM, based on Bechtel indicative staffing.	7/25/09 ESC Briefing, PTN, p. 26
11/08	PSL EPC trend would increase budget from \$74 MM to \$138 MM with the note [REDACTED] Forecast."	PSL Trend Register
11/7/08	EPC costs for PTN EPU now forecast to be \$262MM vs. \$225MM in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
11/22/08	[REDACTED] leaves project.	[REDACTED] Letter dated February 19, 2010; Interviews; EPU_Movement Out Of EPU Since July 2008.XLS
12/1/08	PSL project controls identifies potential cost overrun following award of Bechtel EPC agreement. Preliminary forecast provided to EPU senior project management.	Interview
12/10/08	CR 2008-37753 initiated: PSL EPU should have Change Management Plan developed and documented; CR 2008-11443 raised issue but was closed with no additional activity traced; "missed opportunity".	CR 2008-37753
1/1/09	[REDACTED] assumes additional role of [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/09	PSL EPC trend would increase budget from \$95 MM to \$234 MM with note "Forecast based upon all data received from Bechtel to date-additional clarification will follow with agreements on target prices."	PSL Trend Register
2/17/09	Meeting of [REDACTED] to discuss changes to the PSL forecast. Draft analysis indicates PSL cost estimate is \$785 MM, \$134MM above scoping estimate.	SUMMARY CASHFLOW EPU TOTAL 090217 REVIEWED.XLS
2/28/09	[REDACTED] resigns for performance issues.	Interview; EPU_Movement of out EPU Project Since July 2009.XLS
3/2009	PSL EPC trend would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon most recent data received from Bechtel. Bechtel to provide total project forecast by 5/15/2009."	PSL Trend Register
3/26/09	[REDACTED] asked to remove preliminary forecast from PTN EPU Site Monthly Cost Report and to replace the preliminary forecast with the original need determination forecast until the preliminary forecast is more certain. Interviews indicate [REDACTED] was not satisfied with this outcome.	Interviews; Email from [REDACTED] dated March 26, 2009.
4/30/09	Last date of documents typically provided to FL PSC Internal Controls auditors.	Interview
5/09	PSL EPC trend would increase EPC budget from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to date-Additional efforts underway to reduce forecast."	PSL Trend Register
5/09	ESC advised that Bechtel estimate is greater than bid; cost forecasts for PSL (\$682MM) and PTN (\$770MM) remain unchanged; cost indicators for PSL are all green; cost indicators for PTN are mixed red and green.	5/09 ESC Briefing, pp. 3, 4, 27, 28
5/1/09	[REDACTED] resigns from EPU project.	Interview; EPU_Movement Out of EPU Since July 2009.XLS

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
5/1/09	<p>pre-filed direct testimony submitted to PSL. States "The EPU projects are progressing on schedule and within budget" and "At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EL." Sponsors Schedule TOR-7 which includes \$1.4 B project costs or \$1.7 B in-service costs. States this represents the current estimated in-service costs. FPL also submitted the pre-filed, direct testimony of [REDACTED]</p> <p>[REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.</p>	Pre-Filed Direct Testimony of [REDACTED] Pg 2, Appendix I, Pg. 104
5/1/09	PSL Annual Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as under review.	PSL Annual Cash Flow Report, 5/1/2009
5/31/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable." Total Project Cost Summary listed as \$747 MM.	PTN Total Project Cash Flow Report, 5/31/2009
Late May 09	Work on revised PTN & PSL cost forecast begins following 2-3 weeks of intensive review of PBN forecast and re-estimation.	Interview
6/09	PSL EPC trend. Would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to Date-Additional Efforts Underway to Reduce Forecast."	PSL Trend Register
6/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 6/2009
6/09	PTN EPU Scope Review. Recommended deleting steam generator FP replacement, replacement of No.1-4 feedwater heaters, replacement of 1 SFP HX, exciter rewinds, and SDV replacement from EPU scope. Downsized 1 new SFP HX.	PTN EPU Scope Review, June 2009

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
6/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 6/1/2009
6/3/09	Bechtel submits P50 forecast for PTN EPC costs at \$333.6MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
6/17/09	PSL EPU Modification Scope Review. Recommended deleting U1 exciter rewind, No. 5 feedwater heater, repowering condensate pump C, purchase of one circulating water pump rotating assembling and refurbishment of others, and DEH constant pressure pumps from EPU scope. Limited pneumatic controls replacement.	6/17/09 PSL EPU Modification Scope Review
6/23/09	ESC advised that Bechtel estimate is greater than indicative bid, but that PSL and PTN cost estimates remain unchanged at \$682MM and \$770MM; SNE (contingency) has declined from \$182MM to \$14MM for PSL and from \$204MM to \$28MM for PTN.	6/23/09 ESC Briefing, pp. 3, 4
7/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 7/2009
7/1/09	Bechtel submits revised P50 cost forecast for PTN at \$337.3MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
7/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 7/1/2009
7/14/09	Bechtel reduces P50 cost forecast for PTN to \$277.5MM as result of scope reductions.	7/25/09 ESC Briefing, PTN, p. 26
7/20/09	[REDACTED] Letter dated February 19, 2010 transferred back to Nuclear Projects Organization.	
7/20/09	[REDACTED] announced for EPU Project.	Interviews;
7/25/09	ESC advised that PSL EPU cost forecast is now \$796.0MM, up 21.3% from 5/08 original estimate.	7/25/09 ESC Briefing, PSL, p.8

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
7/25/09	ESC advised that Needs filing is based on \$651MM PSL cost estimate vs. current estimate of \$796MM; ESC also informed that CVPRR is still highly positive.	7/25/09 ESC Briefing, PSI, pp. 44, 50
7/25/09	ESC briefed that PTN 3&4 uprates are now targeted to have LAR submittals delayed by 10 months, outage durations targeted have increased by 112 to 160 days, and in-service dates have slipped by 1 month (U-3) and 2 months (U-4); while outage durations are to be approved by [REDACTED] longer durations have been included in business model.	7/25/09 ESC Briefing, PTN, p. 3
7/25/09	ESC briefed that current cost estimates for PTN EPU have increased by 21.4% from \$749.2MM to \$909.7MM; risk register not synchronized with cost estimate, and carries EV of \$147.1MM.	7/25/09 ESC Briefing, PTN, p. 5
8/2009	PTN Total Project Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary changed to \$750MM.	PTN Total Project Cash Flow Report, 8/2009
8/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Annual Project Cash Flow Report, 8/1/2009
8/17/09	FPL answers Staff Interrogatory 3-53 with reference to Schedule TOR-7. States "the cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time."	Staff Interrogatory 3-53.
9/2009	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary remains \$750MM.	PTN Total Project Cash Flow Report, 9/2009

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Exhibit 8: Chronology

1	2	3
DATE	EVENT	SOURCE
9/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Total Project Cash Flow Report, 9/2009
9/8/09	FLPSC Hearings in Tallahassee, FL. [REDACTED] confirms that the same answers contained within his pre-filed direct testimony would be given today if he was asked the same questions.	Electronic transcript of hearing in Docket 090009-EI, Vol 2, Pg 209
9/9/09	ESC advised that cost estimate has increased by \$144MM (\$1.85B vs. \$1.71B) since last ESC briefing 6 weeks earlier; PSL is now at \$831.2MM and PTN is at \$1019MM; risk and contingency components have supplanted scope not defined as budget category.	9/9/09 ESC Briefing, p. 4, 9
10/1/09	There are two PSL October 2009 Annual Project Cash Flow Reports with different budget performance indicators. PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review". The second PSL Annual Project Cash Flow Report includes yellow performance indicator in one and red in another. Notes: "Preliminary engineering analyses are identifying additional project scope. Engineering is evaluating options and budget impacts." Total Project Summary is changed to \$651MM.	PSL Annual Project Cash Flow Report, 10/1/2009, PSL Annual Project Cash Flow Report, 10/2009
10/09	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Preliminary engineering analysis are identifying additional project scope." Total Project Cost Summary remains \$750MM.	PTN Total Project Cost Summary, 10/2009.
10/22/09	ESC advised that cost forecast is unchanged at \$1.843B; contingency (balancing variable) has decreased by \$12MM; AFUDC estimate has been revised downwards by \$200MM, and now reflects only FPL share (all other costs presented are full plant cost); total EPU cost estimate at \$2.078B, with transmission and AFUDC; cost per kW is roughly same as needs filing.	10/22/09 ESC Briefing, p. 3

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
10/22/09	ESC given tables for PSL and PTN where "Total Project Cost Summary" uses original 5/08 cost estimates not current estimates; indicator for budget is yellow, but should have been red per report owner.	10/22/09 ESC Briefing, pp. 30, 31; interview notes
11/2009	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include yellow performance indicator for budget performance and the Total Project Cost Summaries are the original 5/08 Need Determination values.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 11/2009
11/13/09	ESC advised that cost forecast remains unchanged at \$1.843B; contingency has been reduced by \$7.7MM.	11/13/09 ESC Briefing, p. 3
11/13/09	ESC presented with tables for PSL and PTN where total project cost shown is 5/08 estimate, not current estimate; budget forecast indicator is shown as yellow, but should have been red per report owner.	11/13/09 ESC Briefing, pp. 40, 41; interview notes.
12/09	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include red performance indicator for budget performance and the Total Project Cost Summaries are listed as under review.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 12/2009
12/5/09	former [REDACTED] resigns as a result of performance issues.	Interview; RPU Movement of out EPU Project Since July 2009.XLS
12/8/09	High Bridge Associates retained to provide 3rd party estimate of PTN U3.	FPL Purchase Order 00127777, 12/08/09
12/28/09	ESC provided with tables for PSL and PTN where project cost summary shows 5/08 estimates, not current estimates, and budget forecast indicator is mistakenly shown as yellow, not red. However, in balance of the report, the current cost forecast is \$1.843B; cost contingency category has been eliminated and "scope not defined" ("SND") has been re-established; SND has decreased by \$4.8MM; Support of Point Beach is placing additional strain on PSL and PTN resources; LAR analysis is driving scope/cost increases.	12/28/09 ESC Briefing, pp. 2, 5, 8, 13, 18, 19
1/15/10	Annual cash flow slides for ESC presentation modified to clearly state what relates to the total project forecast and the annual forecast.	1/15/10 ESC Briefing
1/21/10	Risk register for PTN increased by \$9.5MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab
2/8/10	Risk register for PTN increased by \$10.1MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/15/10	February 2010 ESC Presentation presents a white annual budget indicator for PSL and a green annual budget indicator for PTN. Total project cost are listed as under review.	2/15/10 ESC Briefing
2/19/10	Letter sent by [REDACTED] to Lewis Hay.	[REDACTED] Letter dated February 19,
2/23/10	[REDACTED] Briefing indicates three PTN U3 fall outage modification shave the potential to exceed the 35 days allotted to this outage.	2/23/10 [REDACTED] Update, p. 15
2/23/10	[REDACTED] Briefing states no "significant change in total weighted risk cost."	2/23/10 [REDACTED] Update, pp. 19-22
2/23/10	PTN main steam pressure drop concern identified to [REDACTED]. No recovery cost provided.	2/23/10 PTN Main Steam Pressure Drop and Reduce Turbine Inlet Pressure presentation
3/1/10	[REDACTED] Update states "no significant change in total weighted risk cost."	3/1/10 [REDACTED] Update, pp. 19-22
3/4/10	Risk register for PTN increased by \$42.7MM, due primarily to potential for increased staffing; equal reduction in contingency. Project is working to complete 29 pre-outage modifications to expedite workload.	PTN risk register, 3/4/10, changes tab
3/10/10	Concentric's receipt of [REDACTED] letter dated February 10, 2010.	Email from [REDACTED] to Samuel Eaton dated March 10, 2010
3/18/10	March 2010 ESC briefing cancelled.	3/19/10 ESC briefing
3/22/10	[REDACTED] Updates indicated \$30.2MM added to risk register for PTN main steam pressure loss recovery. Additional \$28MM & \$9MM added to risk register for additional PTN Field Non Manual ("FNM") support and startup and testing. Update later indicates High Bridge Associates believes FNM may be undervalued. PSL annual budget performance indicator changed to yellow.	3/22/10 [REDACTED] Update, pp. 3, 13-14, 32
3/29/10	Additional \$14.1MM added to PTN risk summary (weighted). \$13.8MM relates to additional LLW disposal due to previous S/G tube leaks. Note that this is in addition to \$11.2 MM already in budget.	3/29/10 [REDACTED] Update, p. 19
4/8/10	[REDACTED] Update indicates LAR reevaluation may require addition of check valve to mitigate PTN main steam pressure drop. Cost increase is listed as \$5MM. Risk register is updated with \$19.1MM of weighted risk costs include \$5MM for main steam check valve.	4/8/10 [REDACTED] Update, pp. 3, 21

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FPL 152945
NCR-10

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Exhibit 9: Response to Staff DR 5-53

Florida Power & Light Company
Docket No. 090008-EI
Staff's Fifth Set of Interrogatories
Interrogatory No. 63
Page 1 of 1

Q.

Section 366.93(5) F.S., states: The utility shall report to the commission annually the budgeted and actual costs as compared to the estimated inservice cost of the nuclear or integrated gasification combined cycle power plant provided by the utility pursuant to s. 403.519(4), until the commercial operation of the nuclear or integrated gasification combined cycle power plant. The utility shall provide such information on an annual basis following the final order by the commission approving the determination of need for the nuclear or integrated gasification combined cycle power plant, with the understanding that some costs may be higher than estimated and other costs may be lower.

Please provide a listing of each analysis you believe is contemplated by Section 366.93(5) F.S. and should be included in a utility's annual NCRC filings. Include in your response estimates of the cost and time required to prepare each listed analysis.

A.

Section 366.93(5) requires the annual reporting of the actual and budgeted costs to complete the project as compared to the estimated in service cost provided pursuant to 403.519(4), F.S. FPL provides this information in Page 464 of the annual FERC Form 1 filing. It is FPL's understanding that the FPSC developed Page 464 (contained within the FPSC section of FERC Form 1) to satisfy the requirement of this statute. Additionally, FPL includes this information as part of its Nuclear Cost Recovery filing as TOR-7. These filings satisfy the requirement of Section 366.93(5).

The cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time. This is a data gathering exercise which utilizes the output of existing processes that would be performed regardless of this reporting requirement. It takes professionals throughout the FPL organization several weeks of work to gather and prepare this information.

51

June 21, 2010

I have completed a review of the report entitled [REDACTED] Investigation Report" prepared by Concentric Energy Advisors (CEA). While I agree with many of the recommendations, there is one area of the report in particular that I believe warrants clarification: the assertion in section D that "a 300M, or 27% increase in the projected cost of the [Extended Power Uprate] project should have been discussed in the live testimony of Sept. 8, 2009." On the surface, the timeline presented seems to support this as a reasonable conclusion. However, the investigative report does not reflect the series of discussions that occurred between various members of executive management between the time of the award of the Engineering, Procurement, and Construction (EPC) contract to Bechtel Power Corporation (Bechtel) and the Florida Public Service Commission (FPSC) hearing on EPU project cost recovery in September 2009.

In summary, it was well known that Bechtel has a reputation for taking narrow views of contracts, excluding legitimate scope, and generally being difficult to work with after having won a bid as the low cost bidder. Indeed, FPL Group had previous experience with this type of business practice on the Marcus Hook project several years before awarding the EPU EPC contract to Bechtel. Prior to awarding the EPU EPC contract, senior FPL management had extensive discussions on this point, and were prepared to "push back" if and when we observed the pattern. Not surprisingly, following the contract award Bechtel in late 2008 and through the winter of 2009, FPL began to receive forecasts for both Turkey Point and St. Lucie that reflected significant increases in costs for the projects. While there was acknowledgement that as detailed engineering proceeded, there would be additional scope, and therefore cost, there were also indications that there were opportunities to eliminate scope and reduce costs as well, that simply were not being acted upon. The interactions between FPL and the major vendors on the EPU project continued during the first half of 2009 with little progress made on reducing costs, with the major focus being on Bechtel.

This culminated in the July 26, 2009 meeting discussed in the CEA report. During that meeting, which included FPL executive management (including myself) and Bechtel executive management, along with staff from both organizations, there was a principal focus on cost. During the meeting, there was an acknowledgement that there were, in fact, opportunities to eliminate costs that had not been acted upon, and some anecdotal examples were discussed. In summary, the meeting ended with Bechtel agreeing at FPL's request to dedicate resources in conjunction with FPL to identify and eliminate unnecessary costs, including duplicative overhead. It was agreed that the team would report its results following completion to FPL EPU management, which in turn would be provided to FPL executive management.

52

June 21, 2010

1 I have reviewed the [REDACTED] Investigation Report prepared by Concentric Energy
2 Advisors (CEA). In my view, the CEA Report provides only a limited perspective from a
3 project controls standpoint. The CEA Report is incomplete because it does not provide
4 my perspective as the incoming [REDACTED]
5 [REDACTED] particularly in the July-September 2009 timeframe. The following provides that
6 perspective.

In the summer of 2009, I had concerns about the total EPU project cost forecast.

- First, the scope of the project was continuing to change based on the progress of the engineering analysis required to support the Nuclear Regulatory Commission (NRC) license amendment requests (LAR) and the design engineering that was just beginning. As a point of comparison, at this time (one year later), only one LAR for one of the four FPL units has been submitted to NRC and design engineering is only approximately 13 percent complete.
- Second, the more significant driver causing the project controls organization to forecast a higher cost to EPU senior management was information provided by Bechtel Power Corporation (Bechtel) in regards to their forecast of the necessary resources to staff, manage, and implement the uprates. At this time, senior FPL management had significant concerns about the accuracy of the Bechtel forecast.

The EPU senior management team reported to the Executive Steering Committee (ESC) that it had evaluated what it would cost to self-perform the uprate for a given site and compared this estimate to the Bechtel forecast. The EPU senior management team determined that the Bechtel estimate was significantly higher in comparison. This position taken by the EPU management team was the catalyst for the detailed review conducted and presented to the ESC on July 25, 2009. During that meeting it was evident that Bechtel senior management and EPU senior management were very far apart on the resources required based on the current scope, to engineer, procure, and implement the EPU projects. Senior management considered the Bechtel position to be a "no risk" proposition for Bechtel and, accordingly, believed the Bechtel estimate to be unreasonably conservative. As a result, senior management did not accept Bechtel's position and the higher forecast.

FPL senior management then directed the EPU management team to take a number of actions, including potential removal of Bechtel from all or a portion of the project; consideration of other engineering, procurement, and construction (EPC) vendors to perform all or part of the work; and pursuit of a strategy to resolve the delta between FPL and Bechtel. FPL senior management also reemphasized its expectation that the EPU team was to continue to challenge the scope of the project.


During August-September 2009, the EPU management team's priorities were to reorganize the EPU project team and structure, conduct an orderly transition, and

evaluate options to leverage the Company's position relative to Bechtel. During this time, my direct reports and I initiated a number of activities. One initiative was the engagement of URS/Washington Group (URS) as to their availability and capability in regards to EPU's. URS wanted to know if FPL intended to terminate Bechtel's role in the project. The EPU management team told URS that although FPL was not happy with Bechtel, no conclusions had been reached with regard to staying with Bechtel, switching to self-perform all or part of the work, or switching to a different EPC contractor in whole or in part.

I requested and received a proposal from URS as to the scope and cost for an independent estimate for the EPU project. At this same time the EPU senior team reviewed the capability of a number of independent organizations that could provide a "bottom up" cost estimate and risk analysis for major projects. The purpose was to bring a range to the project estimate, quantify the risk, and validate and or leverage the Bechtel input into the total project estimate. In parallel with the aforementioned activities, the EPU management team was working with Bechtel to eliminate any redundancy and identify opportunities to streamline the project to reduce the Bechtel estimate. Ultimately, the option of changing vendors was eliminated due to a number of factors (e.g., demobilization and start-up costs, schedule impacts, organizational distractions).

Given this factual backdrop, when reading the CEA report it should be considered that during September and October 2009, there was activity ongoing to review, challenge, and consider alternatives to Bechtel's project cost forecast, and to develop alternatives to Bechtel as the EPC contractor.

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POD 26

POD 26 N/C

152949-2452

Florida Power & Light Company
Docket No. 100009-EI
OPC's Third Request for Production of Documents
Interrogatory No. 35
Page 1 of 1

Q.

If not previously provided, provide a copy of all nuclear cost recovery related internal and external audits and reviews, including all work papers, completed in 2009 and 2010 during this proceeding.

A.

Nuclear cost recovery related internal and external audits and reviews completed in 2009 and 2010 are as follows:

- Internal Audits of 2008 costs completed in 2009 - See FPL's response to OPC's Production of Documents Request No. 8
- Internal Audits of 2009 costs completed in 2010 - The documents provided in response to this request are confidential and will be made available for inspection at FPL's Tallahassee Office at 215 South Monroe Street, Suite 810, Tallahassee, Florida, during regular business hours, 8 a.m. to 5 p.m., Monday through Friday, upon reasonable notice to FPL's counsel.
- Florida Public Service Commission staff audits - See FPL's responses to OPC's Production of Documents Request No. 42 and No. 45.
- Concentric 2008 and 2009 reviews - See FPL's response to OPC's 2nd Production of Documents Request No. 28, as well as FPL's responses to OPC's 3rd Production of Documents Request No. 40 and No. 41. Workpapers for Concentric's work in 2010 are attached.
- Concentric also conducted a separate investigation at the request of FPL. Concentric's report and work papers associated with this investigation are confidential and will be made available for inspection at FPL's Tallahassee Office at 215 South Monroe Street, Suite 810, Tallahassee, Florida, during regular business hours, 8 a.m. to 5 p.m., Monday through Friday, upon reasonable notice to FPL's counsel. Please note that Concentric has not provided FPL with any documents from its interviews into this matter which would allow individual employees to be identified. Concentric considers the identity of those individuals to be confidential and believes it is necessary to take appropriate steps to protect the identity of those individuals.

Cano, Jessica

From: Jamie Whitlock [jwhitlock@enviroattorney.com]
Sent: Wednesday, August 11, 2010 4:13 PM
To: Cano, Jessica
Cc: jjacobs50@comcast.net
Subject: RE: Docket 100009-EI

Jessica:

Per our phone conversation this a.m., Mr. Leon Jacobs will come in the morning, around 9:00 a.m., to look at documents that FPL has provided in discovery.

SACE appreciates the courtesy.


Let me know if you have any questions/concerns.

Thanks,

Jamie

James S. Whitlock
Gary A. Davis & Associates
61 North Andrews Avenue
PO Box 649
Hot Springs, NC 28743
P: (828) 622-0044
F: (828) 622-7610
www.enviroattorney.com

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From: Cano, Jessica [mailto:Jessica.Cano@fpl.com]
Sent: Wednesday, August 11, 2010 10:01 AM
To: Jamie Whitlock
Subject: RE: Docket 100009-EI

Jamie,

Pursuant to the Florida Rules of Civil Procedure, all parties must be served with responses to Interrogatory requests from any party (Rule 1.340). That is why all parties are copied on FPL's responses to Interrogatories.

However, the same is not true for requests for production of documents. FPL is only required to provide responses to requests for PODs to the requesting party (Rule 1.350) and to the Commission Staff (per Order No. PSC-10-0115-PCO-EI). If party wishes to review a document provided in response to another party's POD request (i.e., if SACE wants to review a document FPL produced to OPC), that party must issue a request for production of that document. This process is consistently adhered to in all FPL matters before the Commission.

The only documents SACE has issued discovery for are the following:

1. All documents identified/produced by FPL as responsive to Staff's 1st Request for Production of Documents (Nos. 1-7) to FPL.
2. All documents identified/produced by FPL as responsive to Staff's 2nd Request for Production of Documents (Nos. 8-11) to FPL.
3. All documents identified/produced by FPL as responsive to the Office of Public Counsel's 1st Request for Production of Documents (Nos. 1-20) to FPL.
4. All documents identified/produced by FPL as responsive to the Office of Public Counsel's 2nd Request for Production of Documents (Nos. 21-32) to FPL.

Accordingly, SACE will have access to these documents through the end of tomorrow, which is the discovery cut-off date pursuant to Order No. PSC-10-0115-PCO-EI. These documents are available for you to review today or tomorrow, should you wish to do so.

Sincerely,

Jessica A. Cano
Principal Attorney

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408
(561) 304-5226

From: Jamie Whitlock [mailto:jwhitlock@enviroattorney.com]
Sent: Tuesday, August 10, 2010 6:16 PM
To: Cano, Jessica
Cc: ljacobs50@comcast.net
Subject: Docket 100009-EI

Jessica:

SACE would like to review documents that FPL has produced in discovery in the above referenced docket.

Please advise on times acceptable to FPL for this to happen. Obviously, it needs to be the end of this week or first thing next week with the hearing so close.

Thanks.

Jamie

(3)

James S. Whitlock
Gary A. Davis & Associates
61 North Andrews Avenue
PO Box 649
Hot Springs, NC 28743
P: (828) 622-0044
F: (828) 622-7610
www.enviroattorney.com

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POD 27

POD 27 - C
152953-2959



Florida Power & Light Company, P. O. Box 14800, Juno Beach, FL 33408-0420
Law Department



March 15, 2010

John Reed
Chief Executive Officer
Concentric Energy Advisors
293 Boston Post Road West
Suite 500
Marlborough, MA 01752

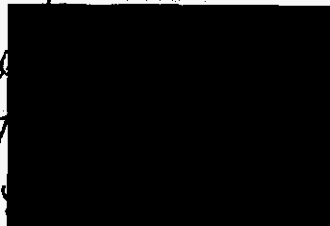
Re: Independent Investigation of February 19, 2010 Correspondence to Mr. Lewis Hay, FPL
Group Chairman and CEO

Dear Mr. Reed:

The purpose of this letter is to request that your company conduct an independent factual investigation with respect to the statements and subject matter contained in the referenced correspondence, a copy of which is attached, with the exception of matters pertaining to the employee performance review of the author of the correspondence.

The engagement should be handled subject to the terms and conditions of the consulting services agreement amendment that applies to your company's work for FPL through December 31, 2010, and billed to FPL separately from other work performed under that amendment.

Please direct any requests for support or information required to support your work to me, and report the results of your investigation to me. I would appreciate it if you would sign and return a copy of this letter to me acknowledging agreement to perform the above-referenced scope of work subject to the terms stated herein.



Enclosure

ACCEPTED AS OF _____, 2010

Concentric Energy Advisors, Inc.

By: _____

Its: _____

(1)

an FPL Group company

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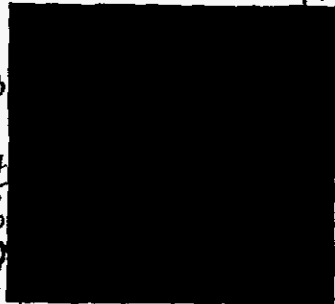
FPL 152954
NCR-10



FPL

SAFETY GROUP COMPANY
HITCHHIKER

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CONFIDENTIAL

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

1 I am writing to you with my concerns about cost performance in Nuclear Projects and Extended
2 Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team,
3 I am being cited as one of many targets in the failure of EPU in 2009.

4 As a brief history, I was hired as [REDACTED] May 2008 by [REDACTED]
5 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by me
6 [REDACTED] would have to assume the EPU responsibility as well
7 as my current roll. In January 2009 I filled both positions reporting to [REDACTED] I had over
8 100 people (contractors and EPL) reporting to me at five sites and [REDACTED]
9 [REDACTED] from July 2009, which is when I left EPU, until late November 2009, I reported again to
10 [REDACTED] While reporting to [REDACTED] he told me a number of times he thought I was
11 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
12 his appreciation for my support while working for him.

13 In my review I am accused of not providing adequate information or forecasting for both the EPU
14 Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a
15 Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project
16 standpoint, all projects were on target or explained in variances. I do not believe any cited issues
17 were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team
18 developed extensive project indicators in February of 2009 and patterned them after those used to
19 support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These
20 indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The
21 original indicators are still on the EPU SharePoint website for you to view. The issues affecting
22 project performance for EPU were the fact that the EPU Project Teams could not support update
23 of the indicators due to continuing baseline reviews and scope additions that were not previously
24 identified. The scoping study and budget estimates were completed by the Shaw Company and
25 were commissioned by the [REDACTED] and completed before I joined the Project. These
26 estimates were not adequate and Sr. Management continued changing philosophy on what was to
27 be included and not included in those estimates. As a result there was no Project baseline
28 established and overall Project performance was very poor. The [REDACTED] would
29 complain about having poor performance indicators however [REDACTED] we could not
30 deliver a positive message if there was none to deliver. The situation continued to worsen
31 through the spring of 2009. Project Managers and Engineers were not correcting issues and the
32 Sr. Managers would not accept the poor performance messages. The [REDACTED] was
33 told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team
34 continued to deliver this message along with poor weekly performance reviews. Finally in July
35 of 2009, Sr. Management decided it was time to inform Executive Managers of the poor
36 condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management
37 Team. My [REDACTED] group prepared detailed reviews that were presented to Mr. Jim Robo
38 into in July 2009 on the poor condition of EPU.

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1 At the time, the cost overflow for PSL was: Original Budget \$656MM, Current Forecast
2 \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
3 Current Forecast \$909MM with a negative variance of (\$160MM). For [REDACTED] These
4 [REDACTED] numbers clearly show the gravity of BPU negative performance. To my knowledge, these
5 numbers have continued to worsen with the new Project Team to where for PTN and PSL, the
6 Team does not have a clear idea of what the final costs will be.

7 I am concerned about how PPL will report these findings at the upcoming PSC hearings. Any
8 information from BPU other than which was presented to Management last summer will be a
9 manipulation of the truth. Current reporting for PTN and PSL does not contain information
10 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
11 Sr. Project Team.

12 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
13 current estimates for PTN and PSL, they were stated in November 2009 as being the original
14 Shaw estimates. Currently the numbers are in review. For PBN, the estimate was stated in
15 December 2009 as being \$552MM and currently I believe it is over \$600MM. That's almost 2
16 times the original Shaw budget estimate.

17 My team delivered the correct message to Sr. Management. Sr. Management did not want to
18 accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in
19 my entire career having worked in Project Controls for some 30 years. My former positions
20 before coming to PPL were with ARBS Corporation, Burlingame, CA where I was Project
21 Controls Consultant/Manager for NASA in Houston working with the Program Management
22 Division of the International Space Station. Also with ARBS, I was a Project Consultant for the
23 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
24 where I was part of a Project Team that earned the DOE Excellence award for Defense Systems.
25 For the record, my Team told the truth about the BPU financial condition and that truth did not
26 meet PPL expectations.

27 Finally, I know this letter comes at a time when PPL has ordered the investigation of employee
28 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
29 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
30 negative employee review. I have copied my supervisor and human resources.

31 Thank you for taking the time to read this letter.

32 [REDACTED]
33 [REDACTED]
34 [REDACTED]
35 [REDACTED]
36 [REDACTED]
37 [REDACTED]

CONFIDENTIAL

From: Sam Eaton
To: John Reed
Subject: FW: Per our discussion
Date: Wednesday, March 10, 2010 10:03:07 AM
Attachments: 20100310100408496.pdf

Samuel G. Eaton
Project Manager
Concentric Energy Advisors



293 Boston Post Road West, Suite 500
Marlborough, MA 01752
Direct: (508)263-6233
Mobile: (617)970-2383
Email: SEaton@CEAdvisors.com

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From: Cohen, Tiffany Cordes [mailto:TIFFANY.COHEN@fpl.com]
Sent: Wednesday, March 10, 2010 9:57 AM
To: Sam Eaton
Subject: Per our discussion

(5)

FPL 152957
NCR-10

CONFIDENTIAL

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

1 I am writing to you with my concerns about cost performance in Nuclear Projects and Extended
2 Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team,
3 I am being cited as one of many targets in the failure of EPU in 2009.

4 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
5 [REDACTED]. In December of 2008 my counterpart for EPU was released. I was told by the
6 [REDACTED] I would have to assume the EPU responsibility as well
7 as my current role. In January 2009 I filled both positions reporting to [REDACTED] I had over
8 100 people (contractors and EPL) reporting to me at five sites and a [REDACTED]
9 group. From July 2009, which is when I left EPU, until late November 2009, I reported again to
10 [REDACTED]. While reporting to [REDACTED] he told me a number of times he thought I was
11 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
12 his appreciation for my support while working for him.

13 In my review I am accused of not providing adequate information or forecasting for both the EPU
14 Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a
15 Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project
16 standpoint, all projects were on target or explained in variances. I do not believe any cited issues
17 were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team
18 developed extensive project indicators in February of 2009 and patterned them after those used to
19 support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These
20 indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The
21 original indicators are still on the EPU SharePoint website for you to view. The issues affecting
22 project performance for EPU were the fact that the EPU Project Teams could not support updates
23 of the indicators due to continuing baseline reviews and scope adjustments that were not previously
24 identified. The scoping study and budget estimates were completed by the Shaw Company and
25 were commissioned by the [REDACTED] and completed before I joined the Project. These
26 estimates were not adequate and Sr. Management continued changing philosophy on what was to
27 be included and not included in these estimates. As a result there was no Project baseline
28 established and overall Project performance was very poor. The [REDACTED] would
29 complain about having poor performance indicators however no [REDACTED] we could not
30 deliver a positive message if there was none to deliver. The situation continued to worsen
31 through the spring of 2009. Project Managers and Engineers were not correcting issues and the
32 Sr. Managers would not accept the poor performance messages. The [REDACTED] was
33 told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team
34 continued to deliver this message along with poor weekly performance reviews. Finally in July
35 of 2009, Sr. Management decided it was time to inform Executive Managers of the poor
36 condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management
37 Team. My [REDACTED] group prepared detailed reviews that were presented to Mr. Jim Robo
38 into in July 2009 on the poor condition of EPU.

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1 At the time, the cost overflow for PSL was: Original Budget \$656MM, Current Forecast
2 \$725MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM,
3 Current Forecast \$909MM with a negative variance of (\$160MM).

4 [REDACTED] These
5 numbers clearly show the gravity of the negative performance. To my knowledge, these
6 numbers have continued to worsen with the new Project Team to where for PTN and PSL, the
7 Team does not have a clear idea of what the final costs will be.

8 I am concerned about how PPL will report these findings at the upcoming PSC hearings. Any
9 information from BPL other than what was presented to Management last summer will be a
10 manipulation of the truth. Current reporting for PTN and PSL does not contain information
11 showing there is serious trouble with these Projects. The trouble was enough to replace the entire
12 Sr. Project Team.

13 Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate
14 current estimates for PTN and PSL, they were stated in November 2009 as being the original
15 Shaw estimates. Currently the numbers are in review.
16 [REDACTED] That's almost 2
17 times the original Shaw budget estimate.

18 My team delivered the correct message to Sr. Management. Sr. Management did not want to
19 accept the message. My Plant Evaluation for 2009 is the only poor evaluation I've ever had in
20 my entire career having worked in Project Controls for some 30 years. My former positions
21 before coming to BPL were with ARBS Corporation, Burlingame, CA where I was Project
22 Controls Consultant/Manager for NASA in Houston working with the Program Management
23 Division of the International Space Station. Also with ARBS, I was a Project Consultant for the
24 DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory
25 where I was part of a Project Team that earned the DOE Excellence Award for Defense Systems.
26 For the record, my Team told the truth about the BPL financial condition and that truth did not
27 meet PPL expectations.

28 Finally, I know this letter comes at a time when PPL has ordered the investigation of employee
29 concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those
30 letters. I only seek to express my concern about upcoming PSC hearings and my unjustified
31 negative employee review. I have copied my supervisor and human resources.

32 Thank you for taking the time to read this letter.

33 [REDACTED]

34 [REDACTED]

35 [REDACTED]

36 Col [REDACTED]

37 Col [REDACTED]

PDD 28

PDD 28 ^{1/2}C
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**Florida Power & Light Company
Docket No. 100009-EI
Staff's Fourth Request for Production of Documents
Request No. 28
Page 1 of 1**

Q.

Please provide copies of all drafts of the Martin Investigation Report that were prepared or edited by any FPL sponsored witness in the Nuclear Cost Recovery dockets as described in FPL's response to interrogatory 29.

A.

FPL has no such drafts.

PDD 29

152462-2986

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FPL 152962
NCR-10



1 [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

CONFIDENTIAL - DRAFT

May XX, 2010

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I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the [REDACTED] of Florida Power & Light Company ("FPL").¹ The Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FLPSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010². A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter³. A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department. It should be noted that, following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor⁴. Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 3. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter. Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and

¹ [REDACTED] title as of the date of the Martin Letter is Senior Nuclear Project Manager.

² Email from [REDACTED] to [REDACTED] dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.

³ Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

⁴ Email from [REDACTED] dated March 19, 2010, to James Poppell, John Reed, Sam Eaton, re: For your consideration.

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1 Turkey Point ("PTN") Nuclear Power plants ("EPU projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁵. A review of Concentric's findings related to the flow of information from FPL to the FL PSC and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

II. Concentric Overview and Workplan

Concentric is a third-party, management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 4. Concentric's work plan for this investigation is provided below.

A. Overview of Scope

- 2 Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and December 31, 2009. Concentric then sought to determine how this set of events supported or contradicted the allegations contained
3 in the [REDACTED] letter and impacted the flow of information within FPL and to the FL PSC. Finally we have provided our recommendations for improvements that will help prevent future, similar occurrences.

B. Sources of information

- 4 Concentric's investigation into this matter relied upon two pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 5.

- 5 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric elected specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any

⁵ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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actual or suspected fraud, and any other violation or suspected violation of this Code.”⁶ Similarly, Concentric reiterated the Company’s non-retaliation commitment outlined in the Code⁷. At the conclusion of each interview, the interviewees were given an opportunity to review any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric’s existing knowledge of the EPU projects organization.

C. Independence

- 1 Throughout Concentric’s investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL’s Legal and Regulatory Affairs departments.
- 2 Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees or contractors. To this end, FPL did not place any constraints on Concentric’s access to current and former employees. Lastly, Concentric was not materially constrained by budget or schedule expectations on the part of FPL.

Concentric’s findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and
3 verified assertions made in the [REDACTED] Letter and Concentric’s interviews with contemporaneous documents produced by the EPU project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 6.

D. Key questions

- 4 Concentric’s review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are intended to determine whether any imprudent costs were passed onto FPL’s customers or if FPL intentionally withheld information from the FL PSC.

Foremost amongst Concentric’s key questions is whether FPL has made the correct decision to proceed with the EPU projects in light of the best information available at the time decision was made. This question is a threshold issue for assuring prudent conduct on the part of FPL. Secondly, Concentric noted a need to determine if *any* costs were incurred that should not be passed on to FPL’s customers on the grounds of imprudent decision-making. Third, we examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why. Similarly, Concentric sought to determine if the information flowing from the EPU projects to FPL’s executive management was accurate, timely, consistent and reliable, and if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

⁶ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁷ Ibid.

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1 III. Summary Level Response to [REDACTED] Letter

- 2 Exhibit 7 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level
3 observations that resulted from our investigation of the allegations contained therein. In addition,
4 each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of
5 the [REDACTED] Letter and Concentric's report.

6 As can be seen in Exhibit 7, a number of the allegations raised in the [REDACTED] Letter were shown to
7 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED]
8 statements related to the timing of the initial scoping studies by Shaw and the repeated changes in
9 the overall project scope. However, Concentric believes the shifting scope of the EPU projects to
10 have been the predictable result of the evolving design which is inherent in any complex project.

- 11 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to
12 support his assertion that as of November 2009, the EPU projects were continuing to measure their
13 cost performance relative to the original 2007 cost estimates. These reports, the November PTN
14 Total Project Cash Flow Report⁸ and the PSL Annual Project Cash Flow Report⁹, confirmed [REDACTED]
15 [REDACTED] assertion. Concentric did note, however, that the November Executive Steering
Committee ("ESC") presentation provided the updated cost forecast¹⁰.

Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for
the PTN & PSL EPU projects. As shown on Pg. 3 of Exhibit 7, Concentric has found evidence
16 which indicates the [REDACTED] and the [REDACTED] were alerted to the potential
17 for cost over-runs at PSL as early as April 2008.¹¹ A similar opportunity was noted in December,
2008 when these individuals were presented with a preliminary revised forecast for PSL. This
followed the award of an engineering, procurement and construction ("EPC") contract for the EPU
projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to
continue refining their forecast until February 2009 when it was reviewed again by the EPU senior
management. As noted in Section IV, the preliminary forecast in February 2009 was within
approximately \$11 million, or 2%¹², of the forecast ultimately provided to FPL's management in July
2009¹³.

- 18 Overall, Concentric has found [REDACTED] to be credible. The basis of this finding includes
19 Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this letter on a non-
20 anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover,
21 Concentric believes [REDACTED] is a capable project controls employee with a strong background
22 within his function. [REDACTED] employment history includes the previous positions noted in the
23 [REDACTED] Letter¹⁴ and many years of prior project controls employment as a contractor at FPL's PTN
site, as well as other nuclear facilities in the US. It is important to note that FPL had enough
24 confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of
25

⁸ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁹ Annual Cash Flow, PSL EPU Project, October 2009.

¹⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

¹¹ CR 2008-11443, April 3, 2008.

¹² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

¹⁴ [REDACTED] Letter, p. 2.

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1 approximately 100 people¹⁵. While it may be fair to say that [REDACTED] was not always aware of
2 every aspect of the EPU projects, it would not be fair to characterize [REDACTED] as under- or poorly
qualified for his position.

IV. Chronology of Events

A chronology of the EPU projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU project activities. This chronology should not be viewed as a comprehensive history of the EPU projects.

A. Chronology

The EPU projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions¹⁶. Concentric understands, as originally proposed, the EPU projects were expected to commence operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007¹⁷. FPL filed for a Determination of Need for the EPU projects on September 17, 2007.¹⁸

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally did confirm the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%¹⁹.

In April 2008, soon after the completion of the Shaw scoping studies, the EPU project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary," for the uprate²⁰. In response to this CR, the EPU project team developed a "High Risk Mitigation Plan" which was attached to the CR²¹. The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU project team
3 including preparation and submission of a revised cost estimate to the [REDACTED] among
4 other items. The High Risk Mitigation Plan was executed by the [REDACTED] and the
5 [REDACTED] but not the [REDACTED]. Concentric was unable to independently determine if this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the

¹⁵ Ibid.

¹⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁷ Florida Public Service Commission, Order No. PSC-08-0021-FOI-EI, January 7, 2008.

¹⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁹ Ibid.

²⁰ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²¹ Ibid., p. 8.

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revised cost estimate described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.²²

On November 7, 2008 the EPU projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU²³. This compares to a scoping analysis assumption of \$225MM²⁴.

In December 2008, the PSL Project Team team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU project management at that time. The EPU project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concludes that there was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²⁵

1 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
2 attended by the EPU project management team and reportedly included [REDACTED] who was
3 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
PSL, an increase of approximately \$129 million over the then current budget²⁶. This was
approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁷. It
was reported to Concentric that the [REDACTED] and the [REDACTED] responded
with a number of questions related to the basis for the revised forecast and requested additional
refinement of the estimate.

4 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
performance relative to this revised forecast. However, the PTN Project Team was requested by the
5 [REDACTED] to revise the initial reports, to measure cost performance relative to
the original project baseline because the revised estimate still had to be "validated," and because and
"extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
PTN EPU project."²⁸ Concentric was told that the [REDACTED] was not satisfied with these
instructions, but chose to comply with the instructions from his superiors nonetheless.

6 In April 2009, the EPU project management began a detailed cost review of the unregulated Point
Beach EPU project. This review included the sequestration of the EPU project management team
at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED]

²² The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁴ Ibid.

²⁵ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

²⁶ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁷ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

7 ²⁸ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

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1 [REDACTED] resigned from his position, and it is reported that a similar detailed cost review was begun
2 for the PSL and PTN EPU projects. The [REDACTED] was replaced on May 1, 2009.

3 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
4 before the FL PSC²⁹. In this testimony, the [REDACTED] stated "The EPU projects are
progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
Docket 080009-EI."³⁰ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]

5 [REDACTED]
6 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³¹

At the end of May 2009, the EPU project management team reported to the ESC that the Bechtel EPC estimates had increased to a level in excess of Bechtel's indicative bid³². This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours³³. Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU project management team believed could be eliminated to reduce the EPC vendor's forecast³⁴. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU project management team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates³⁵. A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³⁶.

Following the May 2009 ESC presentation, the EPU project management team undertook an EPU Modification Scope Review for both PTN and PSL.³⁷ The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁸

The subsequent ESC meeting was held on June 23, 2009³⁹. In this presentation, the EPU senior management team noted that the EPU projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008⁴⁰. This presentation was relatively short and precipitated the more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU project team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited three new employees for the EPU project team including

7 ²⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

³⁰ Ibid at pp. 2-3.

³¹ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

³² Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

³³ Ibid., p. 14.

³⁴ Ibid.

³⁵ Ibid., p. 15.

³⁶ Ibid., p. 18.

³⁷ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁸ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴⁰ Ibid., p. 12.

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1 a new [REDACTED] an [REDACTED] and the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million⁴¹. Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million⁴². The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast"⁴³. Simultaneously, the ESC was advised that the current 2009 NCRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009⁴⁴. These revised feasibility scenarios did confirm the continued cost effectiveness of the EPU projects.

No ESC meeting was held in August. Nonetheless, both EPU projects did produce a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009⁴⁵. In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review"⁴⁶.

2 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
3 [REDACTED] took the stand and indicated that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same⁴⁷.

The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU projects by approximately \$104 MM total for both sites⁴⁸. This presentation stated that approximately 30% of the total project costs have "high certainty"⁴⁹.

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project was unchanged, but the contingency had decreased by approximately \$12 million⁵⁰. In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million⁵¹. A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁵². Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU projects regardless of ownership.

⁴¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴³ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁴ Ibid., p. 50.

⁴⁵ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴⁶ Annual Cash Flow, PSL EPU Project, August 1, 2009.

4 47 Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

⁴⁸ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁴⁹ Ibid., p. 9.

⁵⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

⁵¹ Ibid., p. 6.

⁵² Ibid., pp. 6, 18.

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Also in October, PSL produced two Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009⁵³. This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million⁵⁴. No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the five key questions noted in Section II:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU projects in 2007.
- The EPU senior project management was alerted to the potential for costs to exceed as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the cost estimate.
- As of July 25, 2009, FPL believed the EPU projects continued to be economic based on the revised cost estimates and projected incremental output.
- The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate to FPL's executive managers as of September 8, 2010, the date on which he presented his direct testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPUs

In determining whether EPU project costs were prudently incurred, the FL PSC is concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is described below. Second, the FL PSC will be concerned with whether the EPU project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets 090009-EI and 100009-EI⁵⁵ the result of prudent decisions by FPL's management? This question is addressed in Section VI.

The initial decision to proceed with the EPU projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁶ As was

⁵³ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵⁴ Annual Cash Flow, PSL EPU Project, October 2009.

⁵⁵ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010

⁵⁶ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

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necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU projects⁵⁷. This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU projects and the duration of the outages, in addition to the estimated cost to complete the EPU projects. To the extent the resource portfolio that included the EPU projects was projected to be cheaper to operate than the generating portfolio absent the EPU projects, it was deemed the EPU projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU projects in 2008 or again in 2009?

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009⁵⁸.

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU project team to further align it to the EPU senior management's objectives for the EPU projects. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this conclusion.

Following a conclusion as to how much awareness of the revised cost estimate could have improved, Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007⁵⁹.

As noted above, FPL's decision to proceed with the EPU projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates the EPU projects continued to be economic, although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁶⁰ Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU projects.

⁵⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁵⁸ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁵⁹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁶⁰ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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VI. The Pass-Through of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involved the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU projects and more specifically the reporting of revised cost estimates to FPL's executive
3 management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of
4 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
5 our interview with [REDACTED]

6 Similarly, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by every interviewee with whom Concentric spoke. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

Concentric has, however, found evidence that suggests concerns with the approval reporting of revisions of the cost estimate. These documents and the concerns are described within Sections VII and VIII below.

VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁶¹ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project estimate were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁶² Since an important element of this investigation has been

⁶¹ FPSC Docket No. 090009-EI.

⁶² FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

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about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁶³
- 2 [REDACTED] FPL⁶⁴
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁵, and [REDACTED] FPL⁶⁶

4 The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule and
 5 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁷, and the
 6 exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁸.
 7 Mr. Reed's testimony related to nuclear project controls, procedures, policies and practices, and the
 8 prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions
 9 on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's
 10 incurred costs and the 2009-2010 projected costs⁶⁹. She did not offer any estimate of the projected
 11 costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has
 12 focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

13 The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following
 14 statements:

*"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁷⁰

15 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED], the uprate project continues to be cost effective when compared to the addition of other generation alternatives."*⁷¹

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the

10 ⁶³ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

11 ⁶⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

12 ⁶⁵ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

13 ⁶⁶ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

14 ⁶⁷ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

15 ⁶⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

16 ⁶⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁷⁰ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

⁷¹ *Ibid.*, pp. 2-3.

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original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.”⁷²

- 1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED]
2 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project⁷³.

As of May 1, 2009 (the date the prefled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁴
3 and that [REDACTED] continued to use in May 2009⁷⁵
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had increased by \$37 million; this higher value is used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08 Condition Report was a “missed opportunity”⁷⁶
- 4 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their current cost estimate for PSL is \$129 million above the May, 2008 estimate⁷⁷
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision is made to not use the higher cost estimate because it was considered “preliminary”⁷⁸
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, his cost estimates for PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as “green.”⁷⁹

As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate
6 was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had
7 an increase been approved. What [REDACTED] reported to the ESC was consistent with what his Direct Testimony reports to FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU projects.

⁷² Ibid., p. 24.

8 ⁷³ Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁴ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁷⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷⁶ CR 2008-37753, “Additional Information,” December 10, 2008, p.1.

⁷⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, “PSL EPU Project Total,” February 17, 2009.

9 ⁷⁸ Email from [REDACTED] to anonymous recipient, March 26, 2009.

⁷⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

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C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all of the productions of documents and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule or cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis⁸⁰. This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and describes that it is a "snapshot" of a continuous process.⁸¹

Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a serious challenge to meeting the existing budget⁸². On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁸³. On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁴, and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several people reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May 2008 estimates⁸⁵. Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009.

However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

4 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
5 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁶:

⁸⁰ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁸¹ Ibid.

⁸² Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁸³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁴ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

6 ⁸⁶ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

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1 BY [REDACTED]

Q. If I asked you the same questions contained in your prefled direct testimony, would your answers be the same?

A. Yes, they would be.

2 [REDACTED] FPL asks that the prefled direct testimony be inserted into the record as though read.

3 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of
4 September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefled testimony to reflect his new title and responsibilities with FPL.

5 Also relevant is that as of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009⁸⁷. The new estimates for PSL were caveated as still being "at the conceptual level"⁸⁸ (as were the May, 2008 estimates⁸⁹) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁹⁰ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience⁹¹. Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC, and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁹² The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing⁹³.

6 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
7 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
8 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented revised cost estimates to the ESC. Our opinion in this regard is also supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony), and is strongly held by many of those we interviewed.

⁸⁷ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁹⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹¹ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁹² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁹³ Ibid., p. 50.

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1 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many unapproved scope changes and manpower estimates, and that they were a no better than a "guess" with little support. He also indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FL PSC.

Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a fast-tracked construction program and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates. The new estimates were the product of more than a dozen people working extended hours for a month and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on far more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in May 2010.

2 Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
3 sponsored by [REDACTED], and [REDACTED] was not in the EPU organization or the nuclear division of FPL.

Concentric also did not find evidence to demonstrate that there was a widespread plan to intentionally keep updated information from being provided to the NCRC parties. The documents we have reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff in September 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

As described in Section IV, the initial EPU project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPI's have identified three which are relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management

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Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

"This document shall be used for scope changes to Capital and O&M sub-projects within the EPU project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records."⁹⁴

1
2
3
4/ These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the [REDACTED] for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU projects. Once an SCN/TN is initiated, EPPI-300 requires the [REDACTED] to establish a tracking number and the potential budget impact of the SCN/TN. The [REDACTED] is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU project team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports⁹⁵.

Concentric requested the EPU projects' Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not

⁹⁴ EPPI-300, Project Change Control, Pg 3, Rev 00

⁹⁵ Ibid at 4-6

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appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trends ranged between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. For PTN, it would appear that the trend register was not as conscientiously maintained during this period and some of the trends or scope changes were outstanding for several months.

Finally, many potential scope changes or trends appear to have been captured on the Risk Register, which, as discussed below was not synchronized with the project forecast, rather than the Trend Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹⁶ NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management viewed the initial contingency as a static "allowance" that was to be used to meet increases in scope or cost rather than a dynamic value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for

⁹⁶ NPDI-304, Estimate Preparation, Pg 9, Rev 0

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emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used in this manner. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁹⁷.

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for view and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU project continues to use the contingency allowance for scope changes. While this is not prohibited by the current revision of EPPI-300, Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

⁹⁷ EPU lessons learned PPL from April 2010.

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"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

The EPU senior management team does still have opportunities for improvement. Specifically, the current EPU management team has explicitly linked the risk registers to the cost estimate through the line item of "risk", but the link between the level of risk remaining in the project and contingency or scope not defined has yet to be established. The new EPU management team is addressing this issue through the retention of High Bridge Associates to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency. That work is not yet complete, and the contingency continues to be the balancing variable in the EPU cost estimate as of March 2010. This has led to the contingency being at an unduly low level.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU project did not fully comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009, and has yet to achieve widespread compliance today. It is clear that the process required for releasing funds from the contingency has not been followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget and cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."⁹⁸

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persist in 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

⁹⁸ Ibid.

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IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a list of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU projects' since July 2009 may have already addressed these recommendations. Nonetheless, we believe the importance of these changes should continue to be stressed by the EPU project team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC on a timely basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs departments continue to provide explicit instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs departments should assume these individuals may not have a full understanding of the regulatory process and the implications of their testimony. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with an obligation or duty to educate oneself on matters related to this subject matter or expertise regardless of whether this falls within one's day-to-day responsibilities.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees is a representative from FPL's Regulatory Affairs department. Given the importance and scale of the EPU projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs department should attend each future ESC presentation.
5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU project team should establish and implement explicit report

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owners (by report). In addition, FPL and the EPU project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled off of the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

6. To the extent that a performance indicator relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (i.e., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator. Concentric's interviews also noted that individuals within the EPU project team were uncertain as to what was represented by each performance indicator. Providing the underlying calculation used develop that performance indicator will help clarify the purpose of the performance indicator.
7. FPL should consider changing the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate is a positive development, the reporting relationship of the EPU Project Controls Director should include either a solid or dotted line outside of the EPU Projects. This will help prevent any undue influence on the Project Controls Director and his staff. As an alternative, FPL could consider forming a separate Project Controls department, similar to the Integrated Supply Chain department. This separate Project Controls department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group. Concentric notes that future, large scale projects could benefit from a set of uniform and consistent project controls that incorporate best practices from across the organization.
8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that has been assigned to High Bridge in its current independent review of the project cost estimate. The EPU projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month(i.e., not annual). This process should be used for both scope additions or deletions and changes in the expected cost of approved project scope as a result of material or component cost escalation, increased manpower requirements or other factors. This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.
9. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a

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CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location for the remainder of the EPU projects. Concentric notes that this change may already be implemented within the current EPU action item list.

10. High Bridge Associates, or another independent third party, should be retained to complete an engineering-based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
11. FPL should continue to maintain EPU project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
12. The EPU project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU projects and document that the proper level of oversight is being provided to the EPU projects.
13. The results of this investigation should be provided to the [REDACTED] for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization.
14. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
15. Concentric and the EPU project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, obtain management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges. Concentric would anticipate that the current [REDACTED] the [REDACTED] and the [REDACTED] would be invited to attend this meeting.

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| [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

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May XX, 2010

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EXHIBITS

2	Exhibit 1:	[REDACTED] Letter
	Exhibit 2:	Concentric's Engagement Letter
	Exhibit 3:	Concentric's Project List for FPL
	Exhibit 4:	Concentric's Data Requests log
	Exhibit 5:	Documents Relied Upon
3	Exhibit 6:	Interlineated [REDACTED] Letter
4	Exhibit 7:	[REDACTED] Email of March 19, 2010
	Exhibit 8:	Chronology
	Exhibit 9:	Staff's 5 th Interrogatory No. 53

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Executive Summary

This report is the result of an approximately two month long investigation undertaken by Concentric Energy Advisors at the request of Florida Power & Light's Law Department. Our investigation was triggered by a letter that was sent to FPL Group's CEO from a [REDACTED] within the nuclear division of FPL. This letter made several allegations relating to senior management's performance regarding the cost estimation and project controls functions of the Company's Extended Power Uprate projects, and raised concerns about the timeliness and reliability of FPL's internal and external reporting of EPU-related information.

Our investigation has focused on two separate sets of issues stemming from the letter and our subsequent information gathering process: 1) whether FPL's decision to continue pursuing the EPU Project in 2009 was prudent, and whether the costs that have been incurred for this project were all prudently incurred, and 2) what policies, procedures or practices within FPL's EPU Project may need to be revised or reinforced to address the concerns raised in this letter.

Our investigation has included 13 interviews and the review, or re-review, of thousands of pages of documentation produced by the EPU Project in 2008, 2009, and 2010. We have concluded that:

1. FPL's decision to continue pursuing the EPU Project in 2009 was prudent and was expected to be beneficial to FPL's customers; FPL properly considered an updated cost estimate in its updated feasibility analysis in July 2009, which reinforced the conclusion that significant benefits were expected from the Project.
2. All of FPL's expenditures on the EPU Project have been prudently incurred.
3. Certain information provided by FPL in the 2009 NCRC was out-of-date and did not represent the best information available at that time; FPL is currently taking steps that Concentric believes will address this concern for the future.
4. The EPU Project management did not consistently follow certain procedures that were intended to govern this project in 2009; in addition, the Project's senior management in the first half of 2009 was slow to respond to concerns that were raised regarding the Project's cost estimates; these issues are currently being addressed by the senior management team that was installed in the second half of 2009.
5. FPL should consider taking certain actions that are discussed in the body of this report to strengthen the Project Controls organization and to better ensure compliance with existing procedures.

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I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ The [REDACTED] Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FLPSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Law and Regulatory Affairs Departments on March 10, 2010. A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.² A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Law Department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]. Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resources related matters. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources Department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter. Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey Point ("TPN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and 2009.³ A review of Concentric's findings related to the flow of information from FPL to the FL PSC and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including

¹ [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED].
² Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
³ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

A. Overview of Scope

- 1 Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and March 31, 2010. Concentric then sought to determine how this set of events supported or contradicted the allegations contained in the [REDACTED] letter and affected the distribution of information within FPL and to the FL PSC. Finally we have provided our recommendations for improvements that will help prevent similar issues from occurring in the future.
- 2
- 3 As outlined below, the assertions outlined in the [REDACTED] Letter largely fall within two categories: 1) the prudence of FPL's actions and the distribution of information to the FL PSC and; 2) the internal distribution of EPU Project-related information.

B. Sources of information

- Concentric's investigation into this matter relied upon two primary pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our
- 4 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 4.

- Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected
- 5 specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU Project organization. Concentric considers the names of the individuals we interviewed to be confidential. Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspected violation of this Code."⁴ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code.⁵ At the conclusion of each interview, the interviewees were given an opportunity to raise any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects' organization and activities.

C. Independence

- 6 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL's Law and Regulatory Affairs Departments.

⁴ FPL Group, Inc, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁵ Ibid.

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- 1 Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL did not place any constraints on Concentric's access to current and former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

- 2 Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 5.

D. Report Organization

Concentric's report is divided into two major categories. First our report addresses those items which are directly related to the FL PSC and prudence of FPL's decisions and actions. Second, Concentric has reviewed and addressed the development and distribution of information within FPL. Concentric notes this division is necessary to differentiate those matters which may affect FPL's recovery of costs and interaction with the FL PSC, from those matters which represent best practices in the development and distribution of information within FPL.

Sections III and IV of the report provide factual backgrounds for both categories of this report. Sections V through VIII address the matters related to the FL PSC and the prudence of FPL's decisions and actions. Finally, Sections IX and X address FPL's development and internal distribution of information relating to the EPU Project forecast.

E. Key questions

- 3 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified three key questions which are related to the prudence of FPL's actions. These key questions are intended to determine whether any imprudent costs were passed onto FPL's customers, or if FPL did provide relevant information from the FL PSC.
1. Did FPL make the correct decision to proceed with the EPU Projects in 2009 in light of the best information available at the time decision was made? This question is a threshold issue for assuring prudent conduct on the part of FPL.
 2. Were *any* costs incurred that should not be passed on to FPL's customers on the grounds of imprudent decision-making?
 3. Was the information provided to the FL PSC and the interveners in each of the NCRC dockets accurate, consistent, timely and reliable?

Concentric also identified two key questions which relate to the internal development and distribution of EPU Project-related information. These key questions are intended to determine if FPL's executive management were informed as to the direction of the EPU Project.

1. Was the information flowing from the EPU Projects to FPL's executive management accurate, timely, consistent, and reliable?
2. What policies, processes, and procedures, if any, need to be reviewed as a result of Concentric's findings?

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(III. Response to [REDACTED] Letter

- 2 Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report.
- 3 As can be seen in Exhibit 6, most of the factual assertions raised in the [REDACTED] Letter were shown to
4 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the ongoing changes in the overall project scope. However, Concentric believes the evolving scope of the EPU Projects to have been the predictable result of the regulatory and engineering factors which are inherent in any complex nuclear retrofit project.
- 5 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁶ and the PSL Annual Project Cash Flow Report⁷, confirmed [REDACTED]
6 [REDACTED] assertion. However, all of the Executive Steering Committee ("ESC") presentations since July 25, 2009, and specifically in November 2009, used the updated cost forecast.⁸
- 7 Concentric also found evidence which indicates the [REDACTED] and the [REDACTED]
8 [REDACTED] were alerted to the potential for underestimated costs at PSL as early as April 2008.⁹ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast.
- 9 Overall, Concentric found [REDACTED] to be credible. The basis of this finding includes Concentric's
10 interview with [REDACTED], the fact that [REDACTED] chose to send his letter on a non-anonymous
11 basis, and the supporting documentation produced or cited by [REDACTED]. Moreover, Concentric
12 believes [REDACTED] is a capable project controls employee with a strong background within his
13 function. [REDACTED] employment history includes the previous positions noted in the [REDACTED] Letter¹⁰ and many years of prior project controls employment as a contractor at FPL's PTN site, as
14 well as other nuclear facilities in the US. FPL had enough confidence in [REDACTED]'s capabilities to give him responsibility for multiple major projects and a staff of approximately 100 people.¹¹ While
15 [REDACTED] was not aware of all of the developments and documents relating to the preparation and

⁶ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁷ Annual Cash Flow, PSL EPU Project, October 2009.

⁸ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

⁹ CR 2008-11443, April 3, 2008.

16 ¹⁰ [REDACTED] Letter, p. 2.

¹¹ Ibid.

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presentation of cost estimates and his knowledge of the information flow for the EPU Projects ceased when he left the Project in July, 2009, his letter is largely factually accurate.¹²

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. The summary presented below should not be used as a substitute for a review of the entire chronology presented in Exhibit 8.

A. Chronology

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions.¹³ Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007.¹⁴ FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁵

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally confirmed the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%.¹⁶

In April 2008, the EPU Project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary" for the uprate.¹⁷ In response to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to the CR.¹⁸ The High Risk Mitigation Plan included a list of actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED] among other items. The High Risk Mitigation Plan was signed by the

2 [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric does

3 ¹² Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation against him by his supervisor. A copy of this email is attached as Exhibit 7. Concentric reported this email to FPL's Law Department. It is Concentric's understanding this matter was addressed by the FPL Human Resources ("HR") Department.

¹³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁴ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁶ Ibid.

¹⁷ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

¹⁸ Ibid., p. 8.

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not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the revised cost estimate described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.¹⁹

Throughout the period from August 2008 to November 2008, the PSL trend register indicated a potential for underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²⁰ This compares to the scoping analysis assumption of \$225MM.²¹

In December 2008, the PSL Project Team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project management at that time. EPU Project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change management plan.²²

1 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
2 attended by the EPU Project management team and reportedly included [REDACTED] who was
3 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
this time EPU Senior Management was presented with a forecast of approximately \$785 MM for
PSL, an increase of approximately \$129 million over the then current budget.²³ It was reported to
Concentric that the [REDACTED] and the [REDACTED] responded with a number of
questions related to the basis for the revised forecast and requested additional refinement of the
forecast.

4 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
performance relative to this revised forecast. However, the PTN Project Team was instructed by
the [REDACTED] to revise the initial reports, to measure cost performance relative
to the original project baseline because the revised estimate still had to be "validated," and because
an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the
PTN EPU Project."²⁴

5 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
6 before the F.L. PSC.²⁵ In this testimony, the [REDACTED] stated "The EPU Projects are

¹⁹ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²¹ Ibid.

²² CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

²³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁴ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

²⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

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progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in

1 Docket 080009-EI."²⁶ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
2 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.²⁷
3 [REDACTED]

At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel EPC estimates had increased to a level in excess of Bechtel's indicative bid.²⁸ The ESC is charged with corporate governance of the EPU Project, and includes [REDACTED]

4 [REDACTED], FPL Group's President, and several others. This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours.²⁹ Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU Project management team believed may be able to be eliminated to reduce the EPC vendor's forecast.³⁰ Finally, it was reported that the EPU scope had grown larger than the indicative bid presented in November 2008. The EPU Project management team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates.³¹ A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting.³²

Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU Modification Scope Review for both PTN and PSL.³³ The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁴

The subsequent ESC meeting was held on June 23, 2009.³⁵ In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.³⁶ This presentation was relatively short and precipitated a much more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made.

5 As a result FPL's executive team recruited four employees for the EPU Project team including a new
6 [REDACTED] an [REDACTED] an [REDACTED] and the
[REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

²⁶ Ibid. at pp. 2-3.

²⁷ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

²⁸ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

²⁹ Ibid., p. 14.

³⁰ Ibid.

³¹ Ibid., p. 15.

³² Ibid., p. 18.

³³ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁴ Ibid.

³⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

³⁶ Ibid., p. 12.

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At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million.³⁷ Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.³⁸ The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast."³⁹ Simultaneously, the ESC was advised that the May 1, 2009 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁰ These revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects. FPL has reported that the ESC assigned additional action items related to the revised forecast to the EPU Project Management Team. These action items included continued negotiations to reduce Bechtel's costs.

- 1 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to FPL's Nuclear Projects Department.⁴¹

No ESC meeting was held in August 2009, but both EPU Projects produced a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009.⁴² In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to red, and the total project cost summary presented on this report continued to be shown as "under review."⁴³

- 2 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
3 [REDACTED] testified that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.⁴⁴

On September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM total for both sites.⁴⁵ This presentation stated that approximately 30% of the total project costs have "high certainty."⁴⁶

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁴⁷ In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁴⁸ A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of

³⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

³⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

³⁹ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁰ Ibid. p. 50.

4 [REDACTED] Letter.

⁴² Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴³ Annual Cash Flow, PSL EPU Project, August 1, 2009.

5 [REDACTED] Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

⁴⁵ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁴⁶ Ibid., p. 9.

⁴⁷ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

⁴⁸ Ibid., p. 6.

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PSL Unit 2.⁴⁹ The remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two different Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009.⁵⁰ This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million.⁵¹ No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the three key questions noted in Section II to be relevant to the prudence of FPL's management decisions and the two key questions related to the information development and distribution within FPL:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for the forecast to increase as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the forecast.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised forecast and projected incremental output.
- The [REDACTED] was aware of and had assisted in the presentation of a revised cost estimate to FPL's executive managers on July 25, 2009.

V. FPL's Decision to Proceed with the EPUs

In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is addressed below. Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently incurred. This question is addressed in Section VI.

The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵² As was

⁴⁹ Ibid., pp. 6, 18.

⁵⁰ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵¹ Annual Cash Flow, PSL EPU Project, October 2009.

⁵² Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

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necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵³ In addition to the estimated cost to complete the EPU Projects, this analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Virtually all interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008. Following a conclusion as to how much awareness of the revised forecast could have improved in the "best case scenario," Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that roughly contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁵⁴

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁵⁵ Advanced awareness of the increased cost estimate in the best case scenario would not have altered FPL's decision to proceed with the EPU Projects. Further, Concentric notes that prudence is defined by a range of reasonable actions, not by perfect or even significantly above average performance. Thus, EPU Senior Management did not act imprudently by presenting the revised forecast to the ESC in July 2009 rather than February 2009.

⁵³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁵⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁵⁵ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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VI. The Review and Approval of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involves the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during our interview with [REDACTED]
- 3
4
5

6 Similarly, Concentric found no indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by all interviewees. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

VII. The Flow of Information to the FL PSC

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁵⁶ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project forecast were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁵⁷ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

⁵⁶ FL PSC Docket No. 090009-FL.

⁵⁷ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony related to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

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B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁵⁸
- 2 [REDACTED] FPL⁵⁹
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁰, and [REDACTED] FPL⁶¹

The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule, and cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶², and the exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁶³ Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs.⁶⁴ She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused on the testimony of [REDACTED], and, to a lesser extent, [REDACTED]

The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following statements:

"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."⁶⁵

"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."⁶⁶

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the

⁵⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009. Mr. Kundalkar left the EPU Project in July, 2009, and left FPL in January, 2010.

⁵⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁰ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

⁶¹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶² Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶³ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

⁶⁶ Ibid., pp. 2-3.

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original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.⁶⁷

- 1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED]
2 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁶⁸

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- 3 • A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁶⁹ and that [REDACTED] continued to use in May 2009⁷⁰
- The PSL EPU trend reports for August 2008 through November 2008 had raised concerns about substantial underestimation of the PSL project costs⁷¹
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had increased by \$37 million; this higher value was used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷²
- 4 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their forecast for PSL was \$129 million above the May, 2008 estimate⁷³
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision was made to not use the higher cost estimate because it was considered "preliminary"⁷⁴
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, the forecasts for PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as "green."⁷⁵

6 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had

⁶⁷ Ibid., p. 24.

7 ⁶⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁶⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁷⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷¹ PSL Trend Register

⁷² CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁷³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

8 ⁷⁴ Email from [REDACTED] to anonymous recipient, March 26, 2009.

⁷⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

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an increase been approved. What [REDACTED] had reported to the ESC was consistent with what his Direct Testimony reported to FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU Projects.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all documents produced and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis.⁷⁶ This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which requires an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a "snapshot" of a continuous process.⁷⁷

Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious challenge to meeting the existing budget.⁷⁸ On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁷⁹ On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁰, and the ESC instructed him to prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting. 3 This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was 4 replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁸¹ Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009.

However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

⁷⁶ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁷⁷ Ibid.

⁷⁸ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁷⁹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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D. Testimony at Hearing

- ① As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
 2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸²:

3 BY [REDACTED]

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

A. Yes, they would be.

- 4 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

5 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed
 6 testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL.

- 7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU Projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009.⁸³ The new estimates for PSL were caveated as still being "at the conceptual level"⁸⁴ (as were the May, 2008 estimates⁸⁵) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁸⁶ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience.⁸⁷ Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁸⁸ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing.⁸⁹

- 8 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
 9 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
 16 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented revised

11 ⁸² Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

⁸³ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁴ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁷ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁸⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁸⁹ Ibid., p. 50.

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cost estimates to the ESC, and the EPU Project management team had begun relying on the revised cost estimates. Our opinion in this regard is also supported by the statements of nearly all of the EPU Project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony).

- 1 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many unapproved scope changes and manpower estimates, and that they were a no better than a "guess" with little support. He also indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FL PSC.

- Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a construction program such as the EPU Project, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates and which did not take into account executed major contracts. The new estimates were the product of more than a dozen people working extended hours for a month and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU Projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that were submitted to the FL PSC in May 2010. In short, while the July 25, 2009 and subsequent cost forecasts are and were preliminary, they represented the best information available at that time, were relied upon by FPL, and were more advanced than the 2007/2008 cost projections. Concentric's discussions with Company personnel have indicated that the fact that the updated feasibility analyses presented to the ESC on July 25, 2009 confirmed that the projects still offered significant value to customers may also have been an consideration in the decision to not update [REDACTED] testimony. While Concentric agrees that the new analyses confirmed the conclusions in [REDACTED] testimony, we believe that a \$300 million, or 27%, increase in the projected cost of the EPU Project should have been discussed in the live testimony on September 8, 2009.

The documents we have reviewed, and our interviews, also indicate that there was considerable uncertainty among the project staff in September 2009 as to whether the new cost estimates were approved or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

- 4/ Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU Projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the Nuclear Division of FPL.

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VIII. Recommendations for Improvements Related to the NCRC

Concentric's investigation into this matter has produced the below recommendation for process improvement. These recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC.

1. Concentric recommends that the process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.
2. Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Law and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs Department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented.

IX. Information Development and Distribution within FPL

The below discussion relates specifically to FPL's internal distribution of EPU Project-related information and forecast. In Concentric's view, the below discussion should not be misconstrued to determine the prudence of FPL's decision making processes and therefore should not impact the recovery of costs through the NCRC.

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPIs have identified three which are relevant to the reporting of revisions to the cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

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A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

“This document shall be used for scope changes to Capital and O&M sub-projects within the EPU Project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records.”⁹⁰

These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal “Trend Register” and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the EPU Director for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU Projects. Once an SCN/TN is initiated, EPPI-300 requires the EPU Project Cost Engineer to establish a tracking number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU Project team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports.⁹¹

Concentric requested the EPU Projects’ Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged

⁹⁰ EPPI-300, Project Change Control, Pg 3, Rev 00.

⁹¹ Ibid at 4-6.

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between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. Similarly, the PSL Project Team did not prepare SCN/TN forms for trends that were included on the trend register. For PTN, it would appear that the trend register was kept up to date during this period and some of the trends or scope changes were outstanding for several months.

Finally, many potential scope changes or trends appear to have been captured on the Risk Register, which, as discussed below was not synchronized with the project forecast, rather than the Trend Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹² NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU Projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management used the initial contingency as an "allowance" that was to be used to meet increases in scope or cost rather than a value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

⁹² NPDI-304, Estimate Preparation, Pg 9, Rev 0.

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EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used as prescribed by EPPI-340. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.⁹³

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance to fund scope changes, rather than maintaining the contingency at a level that appropriately reflects the risk to the cost forecast. Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

⁹³ EPU lessons learned PPL from April 2010.

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Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

Concentric notes that issues of the project contingencies, risk register, and the relationship of each to the cost projections are being addressed by the work soon to be completed by High Bridge. Furthermore, on May 1, 2010 FPL filed an updated cost estimate range and feasibility analysis with the FL PSC. This updated cost estimate range included increased allowances for undefined scope and risk. It is our understanding that EPU management considers its current approach to be an interim solution until the High Bridge results have been received and reviewed, and that the High Bridge results will be used to compare against FPL's current cost estimate range.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not adequately comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009. It is clear that the process required for releasing funds from the contingency was not followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget or cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."⁹⁴

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with some incorrect or out-of-date information. These problems persisted after July 25, 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. However, post-July 25, 2009, the correct and updated information was available in the EPU Project's presentations to the ESC. We also received reports from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. These accounts are difficult to verify, but they do not represent a single account or example. In addition, Concentric has received some documentation to corroborate these accounts. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

⁹⁴ Ibid.

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X. Recommendations for Improvements Related to FPL's Internal Distribution of Cost Estimates

Concentric's investigation into FPL's internal distribution of EPU Project-related Information produced the below list of recommendations for process improvements. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. In those instances, we are stating the recommendation to demonstrate that all of the issues raised in this report are being, or have been, adequately addressed.

1. To ensure that FPL and the EPU Project team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to a company program for anonymously notifying superiors in the event of a concern with project reporting.
2. To the extent that a performance indicator (e.g. green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator.
3. ¹ FPL should consider changing the reporting relationship of the EPU Project Controls ² Director. While the change in reporting from the EPU Project Director to the Vice ³ President of Power Uprate in 2009 was a positive development, the reporting relationship of ⁴ the EPU Project Controls Director may be improved by including either a solid or dotted ⁵ line outside of the EPU Projects. This could improve the independence of the Project ⁶ Controls Director and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.
4. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. In addition, the EPU Project has established a revised cost estimate range which was used in the Company's feasibility analysis and provided to the FL PSC on May 1, 2010. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget, forecast or

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estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

5. To the extent CRs are utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the *risk mitigation* plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.
6. High Bridge Associates, or another independent *third party*, should be retained to complete an engineering-based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project *forecasts* and to enhance the certainty of future forecasts.
7. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
8. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
9. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct.
10. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
11. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

I am writing to you with my concerns about cost performance in Nuclear Projects and Extended Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I am being cited as one of many targets in the failure of EPU in 2009.

As a brief history, I was hired as [REDACTED] in May 2008 by Mr. [REDACTED]. In December of 2008 my counterpart for EPU was released. I was told by the [REDACTED], I would have to assume the EPU responsibility as well as my current roll. In January 2009 I filled both positions reporting to [REDACTED]. I had over 100 people (contractors and FPL) reporting to me at five sites and a Corporate Project Controls group. From July 2009, which is when I left EPU, until late November 2009, I reported again to [REDACTED]. While reporting to [REDACTED], he told me a number of times he thought I was doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed his appreciation for my support while working for him.

In my review I am accused of not providing adequate information or forecasting for both the EPU Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project standpoint, all projects were on target or explained in variances. I do not believe any cited issues were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team developed extensive project indicators in February of 2009 and patterned them after those used to support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The original indicators are still on the EPU SharePoint website for you to view. The issues affecting project performance for EPU were the fact that the EPU Project Teams could not support update of the indicators due to continuing baseline reviews and scope additions that were not previously identified. The scoping study and budget estimates were completed by the Shaw Company and were commissioned by the [REDACTED] and completed before I joined the Project. These estimates were not adequate and Sr. Management continued changing philosophy on what was to be included and not included in these estimates. As a result there was no Project baseline established and overall Project performance was very poor. The [REDACTED] would complain about having poor performance indicators however as Project Controls, we could not deliver a positive message if there was none to deliver. The situation continued to worsen through the spring of 2009. Project Managers and Engineers were not correcting issues and the Sr. Managers would not accept the poor performance messages. The [REDACTED] was told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team continued to deliver this message along with poor weekly performance reviews. Finally in July of 2009, Sr. Management decided it was time to inform Executive Managers of the poor condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management Team. My Project Controls group prepared detailed reviews that were presented to Mr. Jim Robo late in July 2009 on the poor condition of EPU.

At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM, Current Forecast \$909MM with a negative variance of (\$160MM). [REDACTED]. These numbers clearly show the gravity of EPU negative performance. To my knowledge, these numbers have continued to worsen with the new Project Team to where for PTN and PSL, the Team does not have a clear idea of what the final costs will be.

I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any information from EPU other than which was presented to Management last summer will be a manipulation of the truth. Current reporting for PTN and PSL does not contain information showing there is serious trouble with these Projects. The trouble was enough to replace the entire Sr. Project Team.

Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate current estimates for PTN and PSL, they were stated in November 2009 as being the original Shaw estimates. Currently the numbers are in review. [REDACTED]. That's almost 2 times the original Shaw budget estimate.

My team delivered the correct message to Sr. Management. Sr. Management did not want to accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in my entire career having worked in Project Controls for some 30 years. My former positions before coming to FPL were with ARBS Corporation, Burlingame, CA where I was Project Controls Consultant/Manager for NASA in Houston working with the Program Management Division of the International Space Station. Also with ARBS, I was a Project Consultant for the DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory where I was part of a Project Team that earned the DOE Excellence award for Defense Systems. For the record, my Team told the truth about the EPU financial condition and that truth did not meet FPL expectations.

Finally, I know this letter comes at a time when FPL has ordered the investigation of employee concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those letters. I only seek to express my concern about upcoming PSC hearings and my unjustified negative employee review. I have copied my supervisor and human resources.

Thank you for taking the time to read this letter.

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Co: [REDACTED]
Co: [REDACTED]

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Exhibit 2: Engagement Letter

FPL 153015
NCR-10



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420
Law Department



March 15, 2010

John Reed
Chief Executive Officer
Concentric Energy Advisors
293 Boston Post Road West
Suite 500
Marlborough, MA 01752

Re: Independent Investigation of February 19, 2010 Correspondence to Mr. Lewis Hay, FPL
Group Chairman and CEO

Dear Mr. Reed:

The purpose of this letter is to request that your company conduct an independent factual investigation with respect to the statements and subject matter contained in the referenced correspondence, a copy of which is attached, with the exception of matters pertaining to the employee performance review of the author of the correspondence.

The engagement should be handled subject to the terms and conditions of the consulting services agreement amendment that applies to your company's work for FPL through December 31, 2010, and billed to FPL separately from other work performed under that amendment.

Please direct any requests for support or information required to support your work to me, and report the results of your investigation to me. I would appreciate it if you would sign and return a copy of this letter to me acknowledging agreement to perform the above-referenced scope of work subject to the terms stated herein.

Sincerely yours,



6
7
Enclosure

ACCEPTED AS OF March 15, 2010

Concentric Energy Advisors, Inc.

By: 

Its: CEO

an FPL Group company

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FPL 153016
NCR-10

Exhibit 3: March 19, 2010 [REDACTED] Email

1

Sam Eaton

2 From: [REDACTED]
3 Sent: Friday, March 19, 2010 8:21 AM
4 To: [REDACTED]
Cc: [REDACTED]; John Reed; Sam Eaton
Subject: For your consideration

Importance: High

5 [REDACTED]

6 In my opinion, my relationship with [REDACTED] is becoming increasingly strained. I don't feel I have a success path to developing a professional relationship with him that can benefit FPL. He has been cordial in public but in the one-on-one closed door "touch base" session we had yesterday he continued to tell me how dissatisfied he is with my performance. He has not put me on a formal A-PIP that I'm aware of (as I discussed with you) however, he has given me exercises (with changing verbal expectations) that makes me suspect he thinks he's established me in the program. I
7 feel, especially with [REDACTED] early departure yesterday, that I am the next target for elimination from [REDACTED] organization. He told me in private that he does not intend being fired as his predecessors for poor performance and he will not let a few "stupid" people affect his management effectiveness.

I feel it's time for me to develop an exit strategy from FPL. I need to discuss this with you at our next meeting since I still have financial commitments from when I was hired. I need to minimize my financial exposure in leaving the company. Also, as a part of my own professional attitude, I want to make sure there is an adequate turnover for someone chosen to be my successor.

Thank you in advance for your help with this and I look forward to speaking with you soon. Hopefully we can have this discussion early next week.

8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]

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Exhibit 4: Previous Concentric Projects for FPL

Project List for Florida Power and Light

NAME	START DATE	DESCRIPTION
FPL Regulatory Advisory	4/1/2005	Witness training to help FPL prepare for the cross- examination phase of their rate case
FPL New Nuclear Filings	7/25/2007	Provided Florida Power & Light Company with regulatory support services and expert testimony associated with its Need Study filed with the Florida Public Service Commission and follow-on support as needed at the NRC
FPL New Nuclear Cost Recovery Clause Filing	4/12/2008	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Rate Proceedings Support/Benchmarking	4/22/2008	Retained as a consulting expert in anticipation of possible future FPL rate proceedings
FPL Renewable Portfolio Standard	12/31/2008	Assisted FPL with an assessment of various mechanisms that have been developed both nationally and internationally to promote renewable technologies
FPL 2009 New Nuclear Cost Recovery Clause Filing	1/1/2009	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Securitization Testimony	1/15/2009	Provided testimony commenting on state issuance of securitization bonds for new nuclear plants.
FP&L 2010 Nuclear Cost Recovery Clause Filing	1/1/2010	Prepared expert testimony on behalf of FPL to support the reasonableness of their poeject management, risk management, and ocst estimation practices.

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Exhibit 5 - Concentric Data Requests

Request #	Request	Received
1	All data request responses or production of documents related to the EPU Projects from Docket 090009-EI, including those related to the testimonies of [REDACTED]	3/26/2010
2	A list of all FPL employees or contractors working on the EPU or related projects who were involuntarily terminated, reassigned or transferred between July 2008 and today, including a list of the reasons for each employee's or contractor's involuntary termination, reassignment or transfer. This list should include the reasons for the involuntary termination of [REDACTED]	4/8/2010 4/19/10 (Contractors)
3	Any employee concerns or condition reports issued between July 2008 and today, and related to the EPU cost estimate or schedule, and all employee letters to FPL employees or Board members expressing concerns or allegations pertaining to the FPCS nuclear cost recovery proceedings.	3/26/2010
4	All executive management reports, briefings or presentations related to the EPU since December 28, 2009.	4/1/2010
5	All EPU MOPRs since 1/1/2010	4/1/2010
6	A list of the EPU employees or contractors and the dates of all training on the FPL Code of Conduct and Employee Concerns Program. Please include all materials used during this training.	
7	Would it be possible to get a copy of CR-2008-11443? This was referenced in CR-2008-37753	3/30/2010
8	The last page of this document includes a document entitled "High Risk Mitigation Plan". That document includes a list of 6 mitigation actions, responsibility for completing those actions and a due date for each action. Would it be possible to find each of the documents that were developed in response to mitigation actions and determine when each mitigation action was completed?	3/30/2010
9	With regard to the attached 2009 DR response, would it be possible to get the amounts that are redacted from the table on Pg. 2-3	3/31/2010
4/6/2010	calculations for all AFUDC amounts (i.e., ~\$350, \$370, \$200 MM, etc) presented to FPL's executive management between January 1 st , 2009 and today.	

Exhibit 5 - Concentric Data Requests

Request #	Request	Received
4/6/2010	the lessons learned documented in the July 25, 2009 Executive Steering Committee presentations. These lessons learned can be found on pages 51-52 of the PTN presentation and pages 38-40 of the PSL presentation. This is written confirmation of a request given to [REDACTED] orally.	4/7/2010
4/6/2010	Please confirm whether there was an August Executive Steering Committee meeting/presentation. If there was, please provide a copy of the presentation or report used during the meeting.	4/6/2010
4/6/2010	PSL EPU Sensitivity Analysis from February, 2009 from [REDACTED]	4/6/2010

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Exhibit 6: Documents Relied Upon

1. Annual Cash Flow, PSL EPU Project, August 1, 2009
2. Annual Cash Flow, PSL EPU Project, October 1, 2009
3. Annual Cash Flow, PSL EPU Project, October 2009
4. CR 2008-11443, April 3, 2008
5. CR 2008-37753, December 10, 2008
6. Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009
- 1 7. Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009
- 2 8. Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009
- 3 9. Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009
- 4 10. Email from Mr. [REDACTED] to anonymous recipient, March 26, 2009:
- 5 11. Email from Mr. [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, [REDACTED], re:
For your consideration
- 6 12. Email from [REDACTED]
- 7 [REDACTED] dated March 10, 2009.
- 8 13. Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of
February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO,
March 15, 2010
14. EPPI-300, Project Change Control, Rev 00
15. EPU lessons learned PPL from April 2010
16. Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey
Point, May 1, 2009
17. Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey
Point, June 23, 2009
18. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point
September 9, 2009
19. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point,
October 22, 2009
20. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point,
November 13, 2009
21. Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009
22. Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009
23. FL PSC Docket 080009-EI In Re: Nuclear Cost Recovery Clause
24. FL PSC Docket 090009-EI, In Re: Nuclear Cost Recovery Clause
25. FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010
26. Florida Power & Light Company, Code of Business Conduct and Ethics, most recently
revised October 16, 2009
27. Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost
Recovery Amount for the Period January – December 2010, May 1, 2009
28. Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical
Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI,
September 17, 2007
29. Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008
- 9 30. [REDACTED] Letter
31. Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM
32. NPDI-304, Estimate Preparation, Rev 0

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Exhibit 6: Documents Relied Upon

33. PSL EPU Modification Scope Review dated June 16, 2009
34. PTN EPU Scope Review dated June 2009
35. Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53
36. Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008
37. Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power uprate Scoping Study, February 2008
38. Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009
39. Total Project Cash Flow, PTN EPU Project 2009, May 31, 2009
40. Total Project Cash Flow, PTN EPU Project 2009, August 2009
41. Total Project Cash flow, PTN EPU Project 2009, November 2009
42. Transcript of Direct Examination of [REDACTED] September 8, 2009

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Exhibit 6: [REDACTED] Letter, Interlineated

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

I am writing to you with my concerns about cost performance in Nuclear Projects and Extended Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I am being cited as one of many targets in the failure of EPU in 2009.

2 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
3 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by the
4 [REDACTED] I would have to assume the EPU responsibility as well
5 as my current roll. In January 2009 I filled both positions reporting to [REDACTED] I had over
100 people (contractors and FPL) reporting to me at five sites and a Corporate Project Controls
group. From July 2009, which is when I left EPU, until November 2009, I reported again to
6 [REDACTED] While reporting to [REDACTED], he told me a number of times he thought I was
7 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
his appreciation for my support while working for him.

In my review I am accused of not providing adequate information or forecasting for both the EPU Project and Nuclear Projects in 2009.

8 *Concentric has found no reason to dispute any of the assertions above. Concentric's scope of work does not include any issues related to the employee's performance appraisal. It is our understanding that FPL has independently initiated corrective action regarding [REDACTED]'s review. See Section I of the report.*

9 To my knowledge there was never a major issue with a Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project standpoint, all projects were on target or explained in variances. I do not believe any cited issues were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team developed extensive project indicators in February of 2009 and patterned them after those used to support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The original indicators are still on the EPU SharePoint website for you to view. The issues effecting project performance for EPU were the fact that the EPU Project Teams could not support update of the indicators due to continuing baseline reviews and scope additions that were not previously identified.

Concentric generally concurs with these assertions; while we raise concerns regarding certain procedures within the Project Controls group, we do not believe that the EPU's Project Controls personnel or work product is or has been deficient. Concentric agrees that prior to July, 2009 the ongoing baseline reviews and scope additions were the principal drivers of cost uncertainty. See Section IV of the report.

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Exhibit 6: [REDACTED] Letter, Interlineated

1

The scoping study and budget estimates were completed by the Shaw Company and were commissioned by the [REDACTED] and completed before I joined the Project.

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Concentric note: Shaw's scoping estimates were completed in February 2008. [REDACTED] joined FPL in May 2008 and the EPU Project in January 2009.

5

These estimates were not adequate and Sr. Management continued changing philosophy on what was to be included and not included in these estimates. As a result there was no Project baseline established and overall Project performance was very poor. The [REDACTED] would complain about having poor performance indicators however as Project Controls, we could not deliver a positive message if there was none to deliver. The situation continued to worsen through the spring of 2009. Project Managers and Engineers were not correcting issues and the Sr. Managers would not accept the poor performance messages.

With the benefit of hindsight, it is clear that the Shaw analysis did not include all of the scope required for the uprates; however, Concentric has not developed an opinion as to whether it was reliable or adequate when it was prepared. Concentric did find evidence of concerns with the study's completeness shortly after it was prepared (see Report Section IV) and of frequent scope changes throughout the history of the EPU project. We view these scope changes as the predictable result of more detailed engineering analyses, which were the principal cause of the poor performance indicators.

Our interviews provided credible evidence that prior to July, 2009 EPU senior project management was slow to respond when presented with revised cost forecasts and concerns about the reliability of the Shaw study. See Report Section VIII.

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The [REDACTED] was told in late 2008 before I was assigned to EPU that the projects were in trouble.

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Concentric was able to confirm through the course of its interviews, that the [REDACTED] was alerted to the potential for cost over-runs at PSL & PTN in late 2008. In addition, Concentric noted and reviewed two PSL Condition Reports from 2008 which indicated the potential for additional scope and cost challenges. See Section IV of the report.

My Team continued to deliver this message along with poor weekly performance reviews. Finally, in July of 2009, Sr. Management decided it was time to inform Executive Managers of the poor condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management Team.

Concentric has confirmed that the Project Controls group continued to present EPU senior management with documented concerns about the project's cost forecast in the first few months of 2009 (see Section IV of the report) This information, after being briefly raised in the June, 2009 ESC meeting, was presented in detail to the ESC in July, 2009. It is also Concentric's understanding that during the time period between June and July 2009, executive management made the decision to change much of the EPU senior project management.

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Exhibit 6: [REDACTED] Letter, Interlineated

My Project Controls group prepared detailed reviews that were presented to Mr. Jim Robo late in July 2009 on the poor condition of EPU.

2
3

The July 25, 2009 ESC presentations presented detailed cost reviews. Concentric's interviews confirmed the attendance of [REDACTED] Jim Robo, [REDACTED] and representatives from Bechtel, amongst others. See Section IV of the report.

At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM, Current Forecast \$909MM with a negative variance of (\$160MM).

Concentric has confirmed these values. See Section IV of the report.

[REDACTED]
([REDACTED]). These numbers clearly show the gravity of EPU negative performance. To my knowledge, these numbers have continued to worsen with the new Project Team to where for PTN and PSL, the Team does not have a clear idea of what the final costs will be.

Concentric's scope of work focused on the Florida EPU projects, not Point Beach in Wisconsin. Following the July 25, 2009 ESC presentations, the EPU project team has reported additional cost escalation at PTN & PSL in ESC presentations. The forecast as of December 2009 was \$831 MM for PSL and \$1012 MM for PTN. The current forecast for both PTN & PSL remain under review pending a third party cost analysis for PTN U3. See Report Section VIII.

I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any information from EPU other than which was presented to Management last summer will be a manipulation of the truth. Current reporting for PTN and PSL does not contain information showing there is serious trouble with these Projects. The trouble was enough to replace the entire Sr. Project Team.

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Exhibit 6: [REDACTED] Letter, Interlineated

Enclosed with this letter are the presentations given to Mr. Robo last July. If you investigate current estimates for PTN and PSL, they were stated in November 2009 as being the original Shaw estimates. Currently the numbers are in review.

2 [REDACTED] stated that his concerns about reporting to the PSC were generated by
3 his review of the November PSL Annual Project Cash Flow and PTN Total Project
4 Cash Flow reports. Concentric has reviewed the reports cited by [REDACTED] and
5 has determined that he is correct that they incorrectly relied upon the original need
6 determination cost estimates. These inaccuracies were corrected on a going forward
basis prior to this investigation commencing. [REDACTED] did not seem aware of the
post-July 2009 ESC presentations or the revised cost forecast presented therein.
Concentric has confirmed that the correct information about the post-July 2009
status of the cost estimates, including the July ESC presentations attached by [REDACTED]
to his letter, was provided by FPL to the PSC staff as part of its review for the
2010 NCRC. See Section IV of the report.

7 [REDACTED]
8 [REDACTED] That's almost 2 times the original Shaw budget estimate.

My team delivered the correct message to Sr. Management. Sr. Management did not want to accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in my entire career having worked in Project Controls for some 30 years. My former positions before coming to FPL were with ARES Corporation, Burlingame, CA where I was Project Controls Consultant/Manager for NASA in Houston working with the Program Management Division of the International Space Station. Also with ARES, I was a Project Consultant for the DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory where I was part of a Project Team that earned the DOE Excellence award for Defense Systems. For the record, my Team told the truth about the EPU financial condition and that truth did not meet FPL expectations.

Finally, I know this letter comes at a time when FPL has ordered the investigation of employee concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those letters. I only seek to express my concern about upcoming PSC hearings and my unjustified negative employee review. I have copied my supervisor and human resources.

Thank you for taking the time to read this letter.

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/08	Shaw Scoping Studies completed for PTN & PSL.	Shaw BOP Scoping Studies for PTN & PSL, 2/2008
4/3/08	CR 2008-11443 initiated: "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary ..." [REDACTED] notified; High Risk Mitigation Plan developed; no follow-up reports found in file.	CR 2008-11443
5/08	[REDACTED] hired as [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews
5/15/08	EPC costs for PTN EPU estimated to be \$225.2MM, based on Shaw estimates; included in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
8/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$84 MM with the note "Potential significant overrun-detailed proposal evaluation required."	PSL Trend Register
9/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$138 MM with the note [REDACTED] forecast based upon current contract scoping strategy."	PSL Trend Register
10/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$139 MM with the note [REDACTED] forecast."	PSL Trend Register
10/15/08	EPC costs for PTN EPU estimated to be \$212.9MM, based on Bechtel indicative staffing.	7/25/09 ESC Briefing, PTN, p. 26
11/08	PSL EPC trend would increase budget from \$74 MM to \$138 MM with the note [REDACTED] Forecast."	PSL Trend Register
11/7/08	EPC costs for PTN EPU now forecast to be \$262MM vs. \$225MM in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
11/22/08	[REDACTED] leaves project.	[REDACTED] Letter dated February 19, 2010; Interviews; EPU_Movement Out Of EPU Since July 2008.XLS
12/1/08	PSL project controls identifies potential cost overrun following award of Bechtel EPC agreement. Preliminary forecast provided to EPU senior project management.	Interview
12/10/08	CR 2008-37753 initiated: PSL EPU should have Change Management Plan developed and documented; CR 2008-11443 raised issue but was closed with no additional activity traced; "missed opportunity".	CR 2008-37753
1/1/09	[REDACTED] assumes additional role of [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/09	PSL EPC trend would increase budget from \$95 MM to \$234 MM with note "Forecast based upon all data received from Bechtel to date-additional clarification will follow with agreements on target prices."	PSL Trend Register
2/17/09	Meeting of [REDACTED] to discuss changes to the PSL forecast. Draft analysis indicates PSL cost estimate is \$785 MM, \$134MM above scoping estimate.	SUMMARY CASHFLOW EPU TOTAL 090217 REVIEWED.XLS
2/28/09	[REDACTED] resigns for performance issues.	Interview; EPU_Movement of out EPU Project Since July 2009.XLS
3/2009	PSL EPC trend would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon most recent data received from Bechtel. Bechtel to provide total project forecast by 5/15/2009."	PSL Trend Register
3/26/09	[REDACTED] asked to remove preliminary forecast from PTN EPU Site Monthly Cost Report and to replace the preliminary forecast with the original need determination forecast until the preliminary forecast is more certain. Interviews indicate [REDACTED] was not satisfied with this outcome.	Interviews; Email from [REDACTED] dated March 26, 2009.
4/30/09	Last date of documents typically provided to FL PSC Internal Controls auditors.	Interview
5/09	PSL EPC trend would increase EPC budget from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to date-Additional efforts underway to reduce forecast."	PSL Trend Register
5/09	ESC advised that Bechtel estimate is greater than bid; cost forecasts for PSL (\$682MM) and PTN (\$770MM) remain unchanged; cost indicators for PSL are all green; cost indicators for PTN are mixed red and green.	5/09 ESC Briefing, pp. 3, 4, 27, 28
5/1/09	[REDACTED] resigns from EPU project.	Interview; EPU_Movement Out of EPU Since July 2009.XLS

Column 1

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
5/1/09	<p>re-filed direct testimony submitted to FL PSC. States "The EPU projects are progressing on schedule and within budget" and "At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI." Sponsors Schedule TOR-7 which includes \$1.4 B project costs or \$1.7 B in-service costs. States this represents the current estimated in-service costs. FPL also submitted the pre-filed, direct testimony of [REDACTED]</p> <p>[REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.</p>	<p>Pre-Filed Direct Testimony of [REDACTED] [REDACTED] Pg 2, Appendix I, Pg. 104</p>
5/1/09	PSL Annual Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as under review.	PSL Annual Cash Flow Report, 5/1/2009
5/31/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable." Total Project Cost Summary listed as \$747 MM.	PTN Total Project Cash Flow Report, 5/31/2009
Late May 09	Work on revised PTN & PSL cost forecast begins following 2-3 weeks of intensive review of PBN forecast and re-estimation.	Interview
6/09	PSL EPC trend. Would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to Date-Additional Efforts Underway to Reduce Forecast."	PSL Trend Register
6/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 6/2009
6/09	PTN EPU Scope Review. Recommended deleting steam generator FP replacement, replacement of No.1-4 feedwater heaters, replacement of 1 SFP HX, exciter rewinds, and SDV replacement from EPU scope. Downsized 1 new SFP HX.	PTN EPU Scope Review, June 2009

column 1

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
6/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 6/1/2009
6/3/09	Bechtel submits P50 forecast for PTN EPC costs at \$333.6MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
6/17/09	PSL EPU Modification Scope Review. Recommended deleting U1 exciter rewind, No. 5 feedwater heater, repowering condensate pump C, purchase of one circulating water pump rotating assembling and refurbishment of others, and DEH constant pressure pumps from EPU scope. Limited pneumatic controls replacement.	6/17/09 PSL EPU Modification Scope Review
6/23/09	ESC advised that Bechtel estimate is greater than indicative bid, but that PSL and PTN cost estimates remain unchanged at \$682MM and \$770MM; SNE (contingency) has declined from \$182MM to \$14MM for PSL and from \$204MM to \$28MM for PTN.	6/23/09 ESC Briefing, pp. 3, 4
7/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 7/2009
7/1/09	Bechtel submits revised P50 cost forecast for PTN at \$337.3MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
7/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 7/1/2009
7/14/09	Bechtel reduces P50 cost forecast for PTN to \$277.5MM as result of scope reductions.	7/25/09 ESC Briefing, PTN, p. 26
7/20/09	[REDACTED] transferred back to Nuclear Projects Organization.	[REDACTED] Letter dated February 19, 2010
7/20/09	New [REDACTED] announced for EPU Project.	Interviews;
7/25/09	ESC advised that PSL EPU cost forecast is now \$796.0MM, up 21.3% from 5/08 original estimate.	7/25/09 ESC Briefing, PSL, p.8

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
7/25/09	ESC advised that Needs filing is based on \$651MM PSL cost estimate vs. current estimate of \$796MM; ESC also informed that CVPRR is still highly positive.	7/25/09 ESC Briefing, PSL, pp. 44, 50
7/25/09	ESC briefed that PTN 3&4 uprates are now targeted to have LAR submittals delayed by 10 months, outage durations targeted have increased by 112 to 160 days, and in-service dates have slipped by 1 month (U-3) and 2 months (U-4); while outage durations are to be approved by CNO, longer durations have been included in business model.	7/25/09 ESC Briefing, PTN, p. 3
7/25/09	ESC briefed that current cost estimates for PTN EPU have increased by 21.4% from \$749.2MM to \$909.7MM; risk register not synchronized with cost estimate, and carries EV of \$147.1MM.	7/25/09 ESC Briefing, PTN, p. 5
8/2009	PTN Total Project Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary changed to \$750MM.	PTN Total Project Cash Flow Report, 8/2009
8/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Annual Project Cash Flow Report, 8/1/2009
8/17/09	FPL answers Staff Interrogatory 3-53 with reference to Schedule TOR-7. States "the cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time."	Staff Interrogatory 3-53.
9/2009	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary remains \$750MM.	PTN Total Project Cash Flow Report, 9/2009

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
9/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Total Project Cash Flow Report, 9/2009
9/8/09	FL PSC Hearings in Tallahassee, FL. [REDACTED] confirms that the same answers contained within his pre-filed direct testimony would be given today if he was asked the same questions.	Electronic transcript of hearing in Docket 090009-EI, Vol 2, Pg 209
9/9/09	ESC advised that cost estimate has increased by \$144MM (\$1.85B vs. \$1.71B) since last ESC briefing 6 weeks earlier; PSL is now at \$831.2MM and PTN is at \$1019MM; risk and contingency components have supplanted scope not defined as budget category.	9/9/09 ESC Briefing, p. 4, 9
10/1/09	There are two PSL October 2009 Annual Project Cash Flow Reports with different budget performance indicators. PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review". The second PSL Annual Project Cash Flow Report includes yellow performance indicator in one and red in another. Notes: "Preliminary engineering analyses are identifying additional project scope. Engineering is evaluating options and budget impacts." Total Project Summary is changed to \$651MM.	PSL Annual Project Cash Flow Report, 10/1/2009, PSL Annual Project Cash Flow Report, 10/2009
10/09	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Preliminary engineering analysis are indentifying additional project scope." Total Project Cost Summary remains \$750MM.	PTN Total Project Cost Summary, 10/2009.
10/22/09	ESC advised that cost forecast is unchanged at \$1.843B; contingency (balancing variable) has decreased by \$12MM; AFUDC estimate has been revised downwards by \$200MM, and now reflects only FPL share (all other costs presented are full plant cost); total EPU cost estimate at \$2.078B, with transmission and AFUDC; cost per kW is roughly same as needs filing.	10/22/09 ESC Briefing, p. 3

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
10/22/09	ESC given tables for PSL and PTN where "Total Project Cost Summary" uses original 5/08 cost estimates not current estimates; indicator for budget is yellow, but should have been red per report owner.	10/22/09 ESC Briefing, pp. 30, 31; interview notes
11/2009	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include yellow performance indicator for budget performance and the Total Project Cost Summaries are the original 5/08 Need Determination values.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 11/2009
11/13/09	ESC advised that cost forecast remains unchanged at \$1.843B; contingency has been reduced by \$7.7MM.	11/13/09 ESC Briefing, p. 3
11/13/09	ESC presented with tables for PSL and PTN where total project cost shown is 5/08 estimate, not current estimate; budget forecast indicator is shown as yellow, but should have been red per report owner.	11/13/09 ESC Briefing, pp. 40, 41; interview notes.
12/09	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include red performance indicator for budget performance and the Total Project Cost Summaries are listed as under review.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 12/2009
12/5/09	former [REDACTED] resigns as a result of performance issues.	Interview; EPU_Movement of out EPU Project Since July 2009.XLS
12/8/09	High Bridge Associates retained to provide 3rd party estimate of PTN U3.	FPL Purchase Order 00127777, 12/08/09
12/28/09	ESC provided with tables for PSL and PTN where project cost summary shows 5/08 estimates, not current estimates, and budget forecast indicator is mistakenly shown as yellow, not red. However, in balance of the report, the current cost forecast is \$1.843B; cost contingency category has been eliminated and "scope not defined" ("SND") has been re-established; SND has decreased by \$4.8MM; Support of Point Beach is placing additional strain on PSL and PTN resources; LAR analysis is driving scope/cost increases.	12/28/09 ESC Briefing, pp. 2, 5, 8, 13, 18, 19
1/15/10	Annual cash flow slides for ESC presentation modified to clearly state what relates to the total project forecast and the annual forecast.	1/15/10 ESC Briefing
1/21/10	Risk register for PTN increased by \$9.5MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab
2/8/10	Risk register for PTN increased by \$10.1MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/15/10	February 2010 ESC Presentation presents a white annual budget indicator for PSL and a green annual budget indicator for PTN. Total project cost are listed as under review.	2/15/10 ESC Briefing
2/19/10	Letter sent by [REDACTED] to Lewis Hay.	[REDACTED] Letter dated February 19,
2/23/10	[REDACTED] Briefing indicates three PTN U3 fall outage modification shave the potential to exceed the 35 days allotted to this outage.	2/23/10 [REDACTED] Update, p. 15
2/23/10	[REDACTED] Briefing states no "significant change in total weighted risk cost."	2/23/10 [REDACTED] Update, pp. 19-22
2/23/10	PTN main steam pressure drop concern identified to [REDACTED]. No recovery cost provided.	2/23/10 PTN Main Steam Pressure Drop and Reduce Turbine Inlet Pressure presentation
3/1/10	[REDACTED] Update states "no significant change in total weighted risk cost."	3/1/10 [REDACTED] Update, pp. 19-22
3/4/10	Risk register for PTN increased by \$42.7MM, due primarily to potential for increased staffing; equal reduction in contingency. Project is working to complete 29 pre-outage modifications to expedite workload.	PTN risk register, 3/4/10, changes tab
3/10/10	Concentric's receipt of [REDACTED] letter dated February 10, 2010.	Email from [REDACTED] to Samuel Eaton dated March 10, 2010
3/18/10	March 2010 ESC briefing cancelled.	3/19/10 ESC briefing
3/22/10	[REDACTED] Updates indicated \$30.2MM added to risk register for PTN main steam pressure loss recovery. Additional \$28MM & \$9MM added to risk register for additional PTN Field Non Manual ("FNM") support and startup and testing. Update later indicates High Bridge Associates believes FNM may be undervalued. PSL annual budget performance indicator changed to yellow.	3/22/10 [REDACTED] Update, pp. 3, 13-14, 32
3/29/10	Additional \$14.1MM added to PTN risk summary (weighted). \$13.8MM relates to additional LLW disposal due to previous S/G tube leaks. Note that this is in addition to \$11.2 MM already in budget.	3/29/10 [REDACTED] Update, p. 19
4/8/10	[REDACTED] Update indicates LAR reevaluation may require addition of check value to mitigate PTN main steam pressure drop. Cost increase is listed as \$5MM. Risk register is updated with \$19.1MM of weighted risk costs include \$5MM for main steam check valve.	4/8/10 [REDACTED] Update, pp. 3, 21

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Q.

Section 366.93(5) F.S., states: The utility shall report to the commission annually the budgeted and actual costs as compared to the estimated inservice cost of the nuclear or integrated gasification combined cycle power plant provided by the utility pursuant to s. 403.519(4), until the commercial operation of the nuclear or integrated gasification combined cycle power plant. The utility shall provide such information on an annual basis following the final order by the commission approving the determination of need for the nuclear or integrated gasification combined cycle power plant, with the understanding that some costs may be higher than estimated and other costs may be lower.

Please provide a listing of each analysis you believe is contemplated by Section 366.93(5) F.S. and should be included in a utility's annual NCRC filings. Include in your response estimates of the cost and time required to prepare each listed analysis.

A.

Section 366.93(5) requires the annual reporting of the actual and budgeted costs to complete the project as compared to the estimated in service cost provided pursuant to 403.519(4), F.S. FPL provides this information in Page 464 of the annual FERC Form 1 filing. It is FPL's understanding that the FPSC developed Page 464 (contained within the FPSC section of FERC Form 1) to satisfy the requirement of this statute. Additionally, FPL includes this information as part of its Nuclear Cost Recovery filing as TOR-7. These filings satisfy the requirement of Section 366.93(5).

The cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time. This is a data gathering exercise which utilizes the output of existing processes that would be performed regardless of this reporting requirement. It takes professionals throughout the FPL organization several weeks of work to gather and prepare this information.

153035-3059



1 [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

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May XX, 2010

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I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from Mr. [REDACTED] Letter", an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ The Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FLPSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Law and Regulatory Affairs Departments on March 10, 2010.² A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.³ A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Law Department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resources related matters. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources Department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter. Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and 2009.⁴ A review of Concentric's findings related to the flow of information from FPL to the FL PSC and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

¹ [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]

² Email from [REDACTED] to [REDACTED] dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.

³ Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

⁴ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

A. Overview of Scope

- 1 Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and March 31, 2010. Concentric then sought to determine how this set of events supported or contradicted the allegations contained in
- 2 the [REDACTED] letter and affected the flow of information within FPL and to the FL PSC. Finally we have provided our recommendations for improvements that will help prevent similar issues from occurring in the future .

B. Sources of information

- 3 Concentric's investigation into this matter relied upon two pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 4.

- Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected
- 4 specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspected violation of this Code."⁵ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code.⁶ At the conclusion of each interview, the interviewees were given an opportunity to raise any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects' organization and activities.

⁵ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁶ Ibid.

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C. Independence

- 1 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL's Legal and Regulatory Affairs Departments.
- 2 Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL did not place any constraints on Concentric's access to current and former employees. Lastly, Concentric was not materially constrained by budget or schedule expectations on the part of FPL.

3 Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 5.

D. Key questions

- 4 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are intended to determine whether any imprudent costs were passed onto FPL's customers or if FPL, intentionally withheld information from the FL PSC.
 1. Foremost amongst Concentric's key questions is whether FPL has made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. This question is a threshold issue for assuring prudent conduct on the part of FPL.
 2. Concentric noted a need to determine if *any* costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision-making.
 3. We examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why.
 4. Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent, and reliable, and if not, what allowed this to occur and why.
 5. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

III. Summary Level Response to Martin Letter

- 5 Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the [REDACTED] Letter and Concentric's report.
- 6
- 7 As can be seen in Exhibit 6, a number of the factual assertions raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED]
- 8 [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU
- 9

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Projects to have been the predictable result of the evolving design which is inherent in any complex project.

- 1 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were inappropriately continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN 'Total Project Cash Flow Report'⁷ and the PSL Annual Project Cash Flow Report⁸,
2 confirmed [REDACTED] assertion. Concentric did note, however, that the Executive Steering Committee ("ESC") presentations since July 25, 2009, in November 2009 and after 2009 all did use the updated cost forecast.⁹

Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 6, Concentric has found evidence which indicates the VP of Power Uprate and the VP of Implementation were alerted to the potential underestimated costs at PSL as early as April 2008.¹⁰ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast, and was within approximately \$11 million, or 2%¹¹, of the forecast ultimately provided to FPL's management in July 2009.¹²

- 3 Overall, Concentric has found [REDACTED] to be credible. The basis of this finding includes
4 Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this letter on a non-
5 anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover,
6 Concentric believes [REDACTED] is a capable project controls employee with a strong background
7 within his function. [REDACTED] employment history includes the previous positions noted in the
8 [REDACTED] Letter¹³ and many years of prior project controls employment as a contractor at FPL's PTN
9 site, as well as other nuclear facilities in the US. It is important to note that FPL had enough
10 confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of
11 approximately 100 people.¹⁴ While [REDACTED] was not aware of all of the developments relating to
12 the preparation of cost estimates and his knowledge of the information flow for the EPU Projects
ceased when he left the Project in July, 2009, his letter is essentially factually accurate.

- 11 It should be noted that, following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation against him by his supervisor.¹⁵ A copy of this email is attached as Exhibit 7. Concentric reported this email to FPL's

⁷ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁸ Annual Cash Flow, PSL EPU Project, October 2009.

⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

¹⁰ CR 2008-11443, April 3, 2008.

¹¹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

¹³ Martin Letter, p. 2.

¹⁴ Ibid.

12 ¹⁵ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, [REDACTED] re: For your consideration.

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Law Department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources ("HR") Department.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. The summary presented below should not be used as a substitute for a review of the entire chronology presented in Exhibit 8.

A. Chronology

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions.¹⁶ Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007.¹⁷ FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁸

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally confirmed the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%.¹⁹

In April 2008, soon after the completion of the Shaw scoping studies, the EPU Project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary" for the uprate.²⁰ In response to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to the CR.²¹ The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team

- 1 including preparation and submission of a revised cost estimate to the [REDACTED], among
- 2 other items. The High Risk Mitigation Plan was signed by the [REDACTED] and the [REDACTED]
- 3 [REDACTED], but not the [REDACTED]. Concentric does not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the revised cost estimate

¹⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁷ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁹ Ibid.

²⁰ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²¹ Ibid., p. 8.

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described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.²²

Throughout the period from August 2008 to November 2008, the PSL trend register indicated a potential for significant underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²³ This compares to the scoping analysis assumption of \$225MM.²⁴

In December 2008, the PSL Project Team again identified the potential to significantly exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project management at that time. EPU Project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change management plan.²⁵

1 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
2 attended by the EPU Project management team and reportedly included [REDACTED] who was
3 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
this time EPU Senior Management was presented with a forecast of approximately \$785 MM for
PSL, an increase of approximately \$129 million over the then current budget.²⁶ This was
approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009.²⁷ It
was reported to Concentric that the [REDACTED] and the [REDACTED] responded
with a number of questions related to the basis for the revised forecast and requested additional
refinement of the forecast.

4 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
performance relative to this revised forecast. However, the PTN Project Team was instructed by
the [REDACTED] to revise the initial reports, to measure cost performance relative
to the original project baseline because the revised estimate still had to be "validated," and because
an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the
PTN EPU Project."²⁸ Concentric was told that the PTN Site Director was not satisfied with these
instructions, but chose to comply with the instructions from his superiors nonetheless.

²² The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁴ Ibid.

²⁵ CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

²⁶ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁷ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

5 ²⁸ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

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In April 2009, the EPU Project management team began a detailed cost review of NextEra's Point Beach EPU Project. This review included the sequestration of the EPU Project management team at Point Beach for a period of two to three weeks in April. Upon their return, the EPU Project Director resigned from his position, and it is reported that a similar detailed cost review was begun for the PSL and PTN EPU Projects. The EPU Project Director was replaced on May 1, 2009.

- 1 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
- 2 before the FL PSC.²⁹ In this testimony, the [REDACTED] stated "The EPU Projects are progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI."³⁰ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
- 3 [REDACTED]
- 4 [REDACTED]; and Mr. John J. Reed, Chairman and CEO of Concentric.³¹

At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel EPC estimates had increased to a level significantly in excess of Bechtel's indicative bid.³² This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours.³³ Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU Project management team believed may be able to be eliminated to reduce the EPC vendor's forecast.³⁴ Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project management team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates.³⁵ A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting.³⁶

Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU Modification Scope Review for both PTN and PSL.³⁷ The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁸

The subsequent ESC meeting was held on June 23, 2009.³⁹ In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.⁴⁰ This presentation was relatively short and precipitated a much more detailed cost review in July 2009.

5 ²⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

³⁰ Ibid. at pp. 2-3.

³¹ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

³² Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

³³ Ibid., p. 14.

³⁴ Ibid.

³⁵ Ibid., p. 15.

³⁶ Ibid., p. 18.

³⁷ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁸ Ibid.

³⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴⁰ Ibid., p. 12.

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During the intervening period between the June and July 2009 ESC presentations, the EPU Project team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited four new employees for the EPU Project team including a
1 new [REDACTED] an [REDACTED], an [REDACTED] and
2 the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million.⁴¹ Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.⁴² The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast."⁴³ Simultaneously, the ESC was advised that the May 1, 2009 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁴ These revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects.

3 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to FPL's Nuclear Projects Department.⁴⁵

No ESC meeting was held in August 2009. Nonetheless, both EPU Projects produced a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009.⁴⁶ In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review."⁴⁷

4 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
5 [REDACTED] testified that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.⁴⁸

The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM total for both sites.⁴⁹ This presentation stated that approximately 30% of the total project costs have "high certainty."⁵⁰

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁵¹ In

⁴¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴³ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁴ Ibid. p. 50.

⁴⁵ Martin Letter.

⁴⁶ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴⁷ Annual Cash Flow, PSL EPU Project, August 1, 2009.

6 ⁴⁸ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

⁴⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁵⁰ Ibid., p. 9.

⁵¹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

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addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁵² A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2.⁵³ Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two different Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009.⁵⁴ This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million.⁵⁵ No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the five key questions noted in Section II:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for the forecast to increase as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the forecast.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised forecast and projected incremental output.
- 1 • The [REDACTED] was aware of and had assisted in the presentation of a revised cost estimate to FPL's executive managers on July 25, 2009.

V. FPL's Decision to Proceed with the EPUs

In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is described below. Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking review and approval in dockets 090009-EI and 100009-EI⁵⁶ the result of prudent decisions by FPL's management? This question is addressed in Section VI.

⁵² Ibid., p. 6.

⁵³ Ibid., pp. 6, 18.

⁵⁴ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵⁵ Annual Cash Flow, PSL EPU Project, October 2009.

⁵⁶ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010.

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The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁷ As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵⁸ This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009.⁵⁹

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all interviewees agreed with this conclusion.

Following a conclusion as to how much awareness of the revised forecast could have improved, Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁶⁰

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed

⁵⁷ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

⁵⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁵⁹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁶⁰ Extended Power Uprates, Project Update, Turkey Point, July 25, 2009 and Extended Power Uprates, Project Update, Saint Lucie, July 25, 2009.

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the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁶¹ Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU Projects.

VI. The Review and Approval of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involves the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive
- 3 management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of
- 4 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
- 5 our interview with [REDACTED]

Similarly, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by all interviewees. When asked whether they were aware of any costs that should not be passed along, the unanimous

6 answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

VII. The Flow of Information to the FL PSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁶² in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project estimate were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and

⁶¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

⁶² FL PSC Docket No. 090009-EL.

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interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁶³ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁶⁴
- 2 [REDACTED], FPL⁶⁵
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁶, and [REDACTED] FPL⁶⁷

The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule, and cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁸, and the exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁶⁹ Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs.⁷⁰ She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused on the testimony of [REDACTED], and, to a lesser extent, [REDACTED]

The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following statements:

*"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁷¹

*"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."*⁷²

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise

⁶³ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

⁶⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009. [REDACTED] left the EPU Project in July, 2009, and left FPL in January, 2010.

⁶⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁶ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

⁶⁷ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁷⁰ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁷¹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

⁷² Ibid., pp. 2-3.

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*the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010."*⁷³

- 1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED]
2 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁷⁴

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁵
- 3 and that [REDACTED] continued to use in May 2009⁷⁶
- The PSL EPU trend reports for August 2008 through November 2008 had raised concerns about substantial underestimation of the PSL project costs.⁷⁷
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had increased by \$37 million; this higher value was used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷⁸
- 4) • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their forecast for PSL was \$129 million above the May, 2008 estimate⁷⁹
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision was made to not use the higher cost estimate because it was considered "preliminary"⁸⁰
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, the forecasts for

6 ⁷³ Ibid., p. 24.

⁷⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁷⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷⁷ PSL Trend Register

⁷⁸ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁷⁹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

7 ⁸⁰ Email from [REDACTED] to anonymous recipient, March 26, 2009.

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PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as "green."⁸¹

As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had an increase been approved. What [REDACTED] had reported to the ESC was consistent with what his Direct Testimony reported to FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU Projects.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all documents produced and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis.⁸² This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which requires an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a "snapshot" of a continuous process.⁸³

Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious challenge to meeting the existing budget.⁸⁴ On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁸⁵ On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁶, and the ESC instructed him to prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁸⁷ Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009.

However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and

⁸¹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

⁸² Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁸³ Ibid.

⁸⁴ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁸⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁶ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

- 1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
- 2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁸:

3 BY [REDACTED]

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

A. Yes, they would be.

4 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

5 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL.

7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU Projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009.⁸⁹ The new estimates for PSL were caveated as still being "at the conceptual level"⁹⁰ (as were the May, 2008 estimates⁹¹) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁹² The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience.⁹³ Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁹⁴ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing.⁹⁵

88 Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

89 Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

90 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

91 Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EL, September 17, 2007.

92 Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

93 Ibid., pp. 38-40 and pp. 51-52, respectively.

94 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

95 Ibid., p. 50.

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1 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
2 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
3 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented and
relied on revised cost estimates to the ESC. Our opinion in this regard is also supported by the
statements of nearly all of the EPU Project personnel we interviewed (other than the two individuals
that participated in the decision to not update the testimony), and is strongly held by many of those
we interviewed.

4 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-
filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
validity of many unapproved scope changes and manpower estimates, and that they were a no better
than a "guess" with little support. He also indicated that he does not recall any discussion with
regard to whether the updated estimate should be presented to the FL PSC.

Concentric agrees that the new cost estimates were based on only partially completed engineering
and design information, and that they were still subject to revision as new information became
available. However, that is always the case with a fast-tracked construction program and continues
to be the case today. These facts do not support the continued use of information that was based
on even earlier conceptual designs and out-of-date manpower and material estimates. The new
estimates were the product of more than a dozen people working extended hours for a month and
had been reviewed by every level of management in the EPU organization. They reflected far more
knowledge about the scope of the EPU Projects than had been used in the 2007-2008 Shaw scoping
analysis, materials cost estimates that were based on far more recent data and manpower estimates
that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they
were presented to the executives of FPL in charge of EPU governance (and who were responsible
for approving budget changes for the projects) as the best "line-by-line" estimates available at the
time, were materially different from the 2008 estimates, and have continued to serve as the reference
point for all subsequent revisions to the cost estimates, including those that were submitted to the
FL PSC in May 2010. In short, while the July 25, 2009 and subsequent cost forecasts are and were
preliminary, they represented the best information available at that time, were relied upon by FPL,
and were substantially more advanced than the 2007/2008 cost projections. It is also worth noting
that all of the post-July 25, 2009 cost forecast revisions have been increases that were built upon the
July 25, 2009 forecast.

5 Concentric has found no evidence to suggest that [REDACTED], FPL's witness on the cost effectiveness
of the EPU Projects, had any knowledge that updated cost estimates had been presented to the
ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
6 sponsored by [REDACTED], and [REDACTED] was not in the EPU organization or the nuclear division
of FPL.

7 Concentric's discussions with Company personnel have indicated that the fact that the updated
feasibility analyses presented to the ESC on July 25, 2009 confirmed that the projects still offered
significant value to customers may also have been an consideration in the decision to not update [REDACTED]
8 [REDACTED] testimony. While Concentric agrees that the new analyses confirmed the conclusions in
9 [REDACTED] testimony, we believe that a \$300 million, of 27%, increase in the projected cost of
the projects warranted disclosure. The documents we have reviewed, and our interviews, also
indicate that there was considerable uncertainty among the project staff in September 2009 as to
whether the new cost estimates were "official" or not, and internal reports were inconsistent in their

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use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPIs have identified three which are relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

"This document shall be used for scope changes to Capital and O&M sub-projects within the EPU Project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records."⁹⁶

These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the EPU Director for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU Projects. Once an

⁹⁶ EPPI-300, Project Change Control, Pg 3, Rev 00.

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- 1 SCN/TN is initiated, EPPI-300 requires the [REDACTED] to establish a tracking
- 2 number and the potential budget impact of the SCN/TN. The [REDACTED] is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU Project team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports.⁹⁷

Concentric requested the EPU Projects' Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. For PTN, it would appear that the trend register was not as conscientiously maintained during this period and some of the trends or scope changes were outstanding for several months.

- Finally, many potential scope changes or trends appear to have been captured on the Risk Register, which, as discussed below was not synchronized with the project forecast, rather than the Trend Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July
- 3 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹⁸ NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

⁹⁷ Ibid at 4-6.

⁹⁸ NPDI-304, Estimate Preparation, Pg 9, Rev 0.

The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU Projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management used the initial contingency as an "allowance" that was to be used to meet increases in scope or cost rather than a value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used as prescribed by EPPI-340. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.⁹⁹

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of

⁹⁹ EPU lessons learned PPL from April 2010.

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each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance to fund scope changes, rather than maintaining the contingency at a level that appropriately reflects the risk to the cost forecast. Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

Concentric also notes that issues of the project contingencies, risk register, and the relationship of each to the cost projections are being addressed by the work soon to be completed by High Bridge. It is our understanding that EPU management considers its current approach to be an interim one until the High Bridge results have been received and reviewed.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not adequately comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009. It is clear that the process required for releasing funds from the contingency was not followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget or cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."¹⁰⁰

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persisted after July 25, 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals

¹⁰⁰ Ibid.

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were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a list of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. In those instances, we are stating the recommendation to demonstrate that all of the issues raised in this report are, or have been, adequately addressed.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the NCRC team, including regulatory affairs and other witnesses, as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.
2. Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs Department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented.
5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU Project team should establish and implement explicit report

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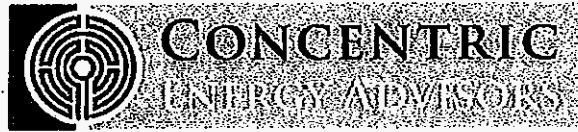
owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

6. To the extent that a performance indicator (e.g. green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator.
7. 1 FPL should consider changing the reporting relationship of the [REDACTED]
2 [REDACTED] While the change in reporting from the [REDACTED] to the [REDACTED]
3 [REDACTED] was a positive development, the reporting relationship of
4 the [REDACTED] may be improved by including either a solid or dotted
5 line outside of the EPU Projects. This could improve the independence of the [REDACTED]
6 [REDACTED] and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.
8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.
9. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.

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10. High Bridge Associates, or another independent third party, should be retained to complete an engineering-based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
12. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
13. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct.
14. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
15. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.

153060-153112



| [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

June 21, 2010

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EXHIBITS

- 2 Exhibit 1: [REDACTED] Letter
 Exhibit 2: Concentric's Engagement Letter
 Exhibit 3: Concentric's Project List for FPL
 Exhibit 4: Concentric's Data Requests log
 Exhibit 5: Documents Relied Upon
 3 Exhibit 6: Interlineated [REDACTED] Letter
 4 Exhibit 7: [REDACTED] Email of March 19, 2010
 Exhibit 8: Chronology
 Exhibit 9: Staff's 5th Interrogatory No. 53

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Executive Summary

This report is the result of an approximately two month long investigation undertaken by Concentric Energy Advisors at the request of Florida Power & Light's Law Department. Our investigation was triggered by a letter that was sent to FPL Group's CEO from a senior project controls manager within the nuclear division of FPL. This letter made several allegations relating to senior management's performance regarding the cost estimation and project controls functions of the Company's Extended Power Uprate projects, and raised concerns about the timeliness and reliability of FPL's internal and external reporting of EPU-related information.

Our investigation has focused on two separate sets of issues stemming from the letter and our subsequent information gathering process: 1) whether FPL's decision to continue pursuing the EPU Project in 2009 was prudent, and whether the costs that have been incurred for this project were all prudently incurred, and 2) what policies, procedures or practices within FPL's EPU Project may need to be revised or reinforced to address the concerns raised in this letter.

Our investigation has included 13 interviews and the review, or re-review, of thousands of pages of documentation produced by the EPU Project in 2008, 2009, and 2010. We have concluded that:

1. FPL's decision to continue pursuing the EPU Project in 2009 was prudent and was expected to be beneficial to FPL's customers; FPL properly considered an updated cost estimate in its updated feasibility analysis in July 2009, which reinforced the conclusion that significant benefits were expected from the Project.
2. All of FPL's expenditures on the EPU Project have been prudently incurred.
3. Certain information provided by FPL in the 2009 NCRC was out-of-date and did not represent the best information available at that time; FPL is currently taking steps that Concentric believes will address this concern for the future.
4. The EPU Project management did not consistently follow certain procedures that were intended to govern this project in 2009; in addition, the Project's senior management in the first half of 2009 was slow to respond to concerns that were raised regarding the Project's cost estimates; these issues are currently being addressed by the senior management team that was installed in the second half of 2009.
5. FPL should consider taking certain actions that are discussed in the body of this report to strengthen the Project Controls organization and to better ensure compliance with existing procedures.

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I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ The Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FL PSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Law and Regulatory Affairs Departments on March 10, 2010. A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.² A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Law Department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]. Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resources related matters. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources Department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter. Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and 2009.³ A review of Concentric's findings related to the flow of information from FPL to the FL PSC and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX. These recommendations should be read in conjunction with the pre-filed direct testimony of Mr. John J. Reed, filed with the Florida Public Service Commission on March 1st and May 3rd in Docket 100009-EI.

¹ [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]

² Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

³ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

A. Overview of Scope

- 1 Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and March 31, 2010. Concentric then sought to determine how this set of events supported or contradicted the allegations contained in the [REDACTED] letter and affected the distribution of information within FPL and to the FL PSC. Finally
- 2 we have provided our recommendations for improvements that will help prevent similar issues from occurring in the future.
- 3 As outlined below, the assertions outlined in the [REDACTED] Letter largely fall within two categories: 1) the prudence of FPL's actions and the distribution of information to the FL PSC and; 2) the internal distribution of EPU Project-related information.

B. Sources of information

- Concentric's investigation into this matter relied upon two primary pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our
- 4 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 4.

- Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected
- 5 specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU Project organization. Concentric considers the names of the individuals we interviewed to be confidential. Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspected violation of this Code."⁴ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code.⁵ At the conclusion of each interview, the interviewees were given an opportunity to raise any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects' organization and activities.

⁴ FPL Group, Inc, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁵ Ibid.

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C. Independence

- 1 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL's Law and Regulatory Affairs Departments.
- 2 Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL did not place any constraints on Concentric's access to current and former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

- 3 Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 5.

D. Report Organization

Concentric's report is divided into two major categories. First our report addresses those items which are directly related to the FL PSC and prudence of FPL's decisions and actions. Second, Concentric has reviewed and addressed the development and distribution of information within FPL. Concentric notes this division is necessary to differentiate those matters which may affect FPL's recovery of costs and interaction with the FL PSC, from those matters which represent best practices in the development and distribution of information within FPL.

Sections III and IV of the report provide factual backgrounds for both categories of this report. Sections V through VIII address the matters related to the FL PSC and the prudence of FPL's decisions and actions. Finally, Sections IX and X address FPL's development and internal distribution of information relating to the EPU Project forecast.

E. Key questions

- 4 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified three key questions which are related to the prudence of FPL's actions. These key questions are intended to determine whether any imprudent costs were passed onto FPL's customers, or if FPL did provide relevant information from the FL PSC.

1. Did FPL make the correct decision to proceed with the EPU Projects in 2009 in light of the best information available at the time decision was made? This question is a threshold issue for assuring prudent conduct on the part of FPL.
2. Were *any* costs incurred that should not be passed on to FPL's customers on the grounds of imprudent decision-making?
3. Was the information provided to the FL PSC and the interveners in each of the NCRC dockets accurate, consistent, timely and reliable?

Concentric also identified two key questions which relate to the internal development and distribution of EPU Project-related information. These key questions are intended to determine if FPL's executive management were informed as to the direction of the EPU Project.

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1. Was the information flowing from the EPU Projects to FPL's executive management accurate, timely, consistent, and reliable?
2. What policies, processes, and procedures, if any, need to be reviewed as a result of Concentric's findings?

III. Response to [REDACTED] Letter

- 2 Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report.
- 3 As can be seen in Exhibit 6, most of the factual assertions raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the ongoing changes in the overall project scope. However, Concentric believes the evolving scope of the EPU Projects to have been the predictable result of the regulatory and engineering factors which are inherent in any complex nuclear retrofit project.
- 5 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN 'Total Project Cash Flow Report'⁶ and the PSL Annual Project Cash Flow Report⁷, confirmed [REDACTED] 6 [REDACTED] assertion. However, all of the Executive Steering Committee ("ESC") presentations since July 25, 2009, and specifically in November 2009, used the updated cost forecast.⁸
- 8 Concentric also found evidence which indicates the [REDACTED] and the [REDACTED] 9 [REDACTED] were alerted to the potential for underestimated costs at PSL as early as April 2008.⁹ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast.
- 10 Overall, Concentric found [REDACTED] to be credible. The basis of this finding includes Concentric's 11 interview with [REDACTED], the fact that [REDACTED] chose to send his letter on a non-anonymous 12 basis, and the supporting documentation produced or cited by [REDACTED]. Moreover, Concentric 13 believes [REDACTED] is a capable project controls employee with a strong background within his 14 function. [REDACTED] employment history includes the previous positions noted in the [REDACTED] Letter¹⁰ and many years of prior project controls employment as a contractor at FPL's PTN site, as 15 well as other nuclear facilities in the US. FPL had enough confidence in [REDACTED] capabilities to

⁶ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁷ Annual Cash Flow, PSL EPU Project, October 2009.

⁸ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

⁹ CR 2008-11443, April 3, 2008.

16 ¹⁰ [REDACTED] Letter, p. 2.

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give him responsibility for multiple major projects and a staff of approximately 100 people.¹¹ While [REDACTED] was not aware of all of the developments and documents relating to the preparation and presentation of cost estimates and his knowledge of the information flow for the EPU Projects ceased when he left the Project in July, 2009, his letter is largely factually accurate.¹²

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. The summary presented below should not be used as a substitute for a review of the entire chronology presented in Exhibit 8.

A. Chronology

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions.¹³ Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007.¹⁴ FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁵

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally confirmed the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%.¹⁶

In April 2008, the EPU Project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary" for the uprate.¹⁷ In response to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to the CR.¹⁸ The High Risk Mitigation Plan included a list of actions which were required to be

¹¹ Ibid.

¹² Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation against him by his supervisor. A copy of this email is attached as Exhibit 7. Concentric reported this email to FPL's Law Department. It is Concentric's understanding this matter was addressed by the FPL Human Resources ("HR") Department.

¹³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁴ Florida Public Service Commission, Order No. PSC-08-0021-POF-EI, January 7, 2008.

¹⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁶ Ibid.

¹⁷ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

¹⁸ Ibid., p. 8.

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completed by the EPU Project team including preparation and submission of a revised cost estimate to the EPU Project Director, among other items. The High Risk Mitigation Plan was signed by the [REDACTED] and the [REDACTED], but not the [REDACTED]. Concentric does not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the revised cost estimate described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.¹⁹

Throughout the period from August 2008 to November 2008, the PSL trend register indicated a potential for underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²⁰ This compares to the scoping analysis assumption of \$225MM.²¹

In December 2008, the PSL Project Team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project management at that time. EPU Project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change management plan.²²

2 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
3 attended by the EPU Project management team and reportedly included [REDACTED], who was
4 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
this time EPU Senior Management was presented with a forecast of approximately \$785 MM for
PSL, an increase of approximately \$129 million over the then current budget.²³ It was reported to
Concentric that the [REDACTED] and the [REDACTED] responded with a number of
questions related to the basis for the revised forecast and requested additional refinement of the
forecast.

5 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
performance relative to this revised forecast. However, the PTN Project Team was instructed by
the [REDACTED] to revise the initial reports, to measure cost performance relative
to the original project baseline because the revised estimate still had to be "validated," and because
an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the
PTN EPU Project."²⁴

¹⁹ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²¹ Ibid.

²² CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

²³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁴ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

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1 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
2 before the FL PSC.²⁵ In this testimony, the [REDACTED] stated "The EPU Projects are
progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
3 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
Docket 080009-EL."²⁶ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
4 [REDACTED] FPL; [REDACTED]; and Mr. John J. Reed, Chairman and CEO of Concentric.²⁷

5 At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel
EPC estimates had increased to a level in excess of Bechtel's indicative bid.²⁸ The ESC is charged
6 with corporate governance of the EPU Project, and includes FPL's [REDACTED]
[REDACTED] FPL Group's President, and several others. This increase was reported to
be the result of higher than expected projections of field non-manual and manual labor hours.²⁹
Similarly, the current EPU estimates were reported to include redundant project management and
oversight costs which the EPU Project management team believed may be able to be eliminated to
reduce the EPC vendor's forecast.³⁰ Finally, it was reported that the EPU scope had grown larger
than the indicative bid presented in November 2008. The EPU Project management team noted
that the current estimates were based on preliminary design information, and that the project was in
the process of refining new "level 1" estimates.³¹ A target completion date of June 30, 2009 for the
new "level 1" estimates was presented to the ESC at this meeting.³²

Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU
Modification Scope Review for both PTN and PSL.³³ The results of these reviews were reported on
June 16, 2009 and recommended the elimination of a substantial number of modifications as not
necessary to operate in an uprated condition.³⁴

The subsequent ESC meeting was held on June 23, 2009.³⁵ In this presentation, the EPU senior
management team noted that the EPU Projects were completing "level 2" estimates and reiterated
the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.³⁶ This
presentation was relatively short and precipitated a much more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project
team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL
and PTN project. Concurrently, a decision to replace the EPU senior management team was made.
As a result FPL's executive team recruited four employees for the EPU Project team including a new
7 [REDACTED], an [REDACTED], an [REDACTED], and the

8 ²⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

²⁶ Ibid. at pp. 2-3.

²⁷ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the
Period January - December 2010, May 1, 2009.

²⁸ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

²⁹ Ibid., p. 14.

³⁰ Ibid.

³¹ Ibid., p. 15.

³² Ibid., p. 18.

³³ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁴ Ibid.

³⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

³⁶ Ibid., p. 12.

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1 [REDACTED] These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million.³⁷ Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.³⁸ The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast."³⁹ Simultaneously, the ESC was advised that the May 1, 2009 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁰ These revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects. FPL has reported that the ESC assigned additional action items related to the revised forecast to the EPU Project Management Team. These action items included continued negotiations to reduce Bechtel's costs.

2 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to FPL's Nuclear Projects Department.⁴¹

No ESC meeting was held in August 2009, but both EPU Projects produced a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009.⁴² In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to red, and the total project cost summary presented on this report continued to be shown as "under review."⁴³

3 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
4 [REDACTED] testified that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.⁴⁴

On September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM total for both sites.⁴⁵ This presentation stated that approximately 30% of the total project costs have "high certainty."⁴⁶

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁴⁷ In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁴⁸ A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of

³⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

³⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

³⁹ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁰ Ibid. p. 50.

5 ⁴¹ [REDACTED] Letter.

⁴² Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴³ Annual Cash Flow, PSL EPU Project, August 1, 2009.

6 ⁴⁴ Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

⁴⁵ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁴⁶ Ibid., p. 9.

⁴⁷ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

⁴⁸ Ibid., p. 6.

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PSL Unit 2.⁴⁹ The remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two different Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009.⁵⁰ This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million.⁵¹ No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the three key questions noted in Section II to be relevant to the prudence of FPL's management decisions and the two key questions related to the information development and distribution within FPL:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for the forecast to increase as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the forecast.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised forecast and projected incremental output.
- The [REDACTED] was aware of and had assisted in the presentation of a revised cost estimate to FPL's executive managers on July 25, 2009.

V. FPL's Decision to Proceed with the EPUs

In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is addressed below. Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently incurred. This question is addressed in Section VI.

The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵² As was

⁴⁹ Ibid., pp. 6, 18.

⁵⁰ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵¹ Annual Cash Flow, PSL EPU Project, October 2009.

⁵² Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

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necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵³ In addition to the estimated cost to complete the EPU Projects, this analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Virtually all interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008. Following a conclusion as to how much awareness of the revised forecast could have improved in the "best case scenario," Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that roughly contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁵⁴

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁵⁵ Advanced awareness of the increased cost estimate in the best case scenario would not have altered FPL's decision to proceed with the EPU Projects. Further, Concentric notes that prudence is defined by a range of reasonable actions, not by perfect or even significantly above average performance. Thus, EPU Senior Management did not act imprudently by presenting the revised forecast to the ESC in July 2009 rather than February 2009.

⁵³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁵⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁵⁵ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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VI. The Review and Approval of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involves the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during our interview with [REDACTED]

6 Similarly, Concentric found no indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by all interviewees. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

VII. The Flow of Information to the FL PSC

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁵⁶ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project forecast were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁵⁷ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

⁵⁶ FL PSC Docket No. 090009-EI.

⁵⁷ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony related to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

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B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁵⁸
- 2 [REDACTED] FPL⁵⁹
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁰, and [REDACTED] FPL⁶¹

4 The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule, and
 5 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶², and the
 6 exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁶³
 7 Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the
 8 prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions
 9 on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's
 10 incurred costs and the 2009-2010 projected costs.⁶⁴ She did not offer any estimate of the projected
 11 costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has
 12 focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

13 The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following
 14 statements:

"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."⁶⁵

"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."⁶⁶

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the

10 ⁵⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009. [REDACTED] left the EPU Project in July, 2009, and left FPL in January, 2010.

11 ⁵⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁰ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

12 ⁶¹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

13 ⁶² Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

14 ⁶³ Direct Testimony of Steven Smith, Docket No. 090009-EI, May 1, 2009.

15 ⁶⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

16 ⁶⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

⁶⁶ *Ibid.*, pp. 2-3.

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original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.⁶⁷

1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁶⁸

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁶⁹ and that [REDACTED] continued to use in May 2009⁷⁰
- 3 • The PSL EPU trend reports for August 2008 through November 2008 had raised concerns about substantial underestimation of the PSL project costs⁷¹
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had increased by \$37 million; this higher value was used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷²
- 4 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their forecast for PSL was \$129 million above the May, 2008 estimate⁷³
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision was made to not use the higher cost estimate because it was considered "preliminary"⁷⁴
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, the forecasts for PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as "green."⁷⁵

6 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had

⁶⁷ Ibid., p. 24.

7 ⁶⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁶⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁷⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷¹ PSL Trend Register

⁷² CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁷³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

8 ⁷⁴ Email from [REDACTED] to anonymous recipient, March 26, 2009.

⁷⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

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1 an increase been approved. What [REDACTED] had reported to the ESC was consistent with what his Direct Testimony reported to the FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU Projects.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all documents produced and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis.⁷⁶ This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which requires an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a "snapshot" of a continuous process.⁷⁷

2 Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious challenge to meeting the existing budget.⁷⁸ On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁷⁹ On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁰, and the ESC instructed him to prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting. 3 This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁸¹ Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. 4

However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

⁷⁶ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁷⁷ Ibid.

⁷⁸ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁷⁹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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D. Testimony at Hearing

- 1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
 2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸²:

3 BY [REDACTED]:

Q. If I asked you the same questions contained in your prefled direct testimony, would your answers be the same?

A. Yes, they would be.

4 [REDACTED] FPL asks that the prefled direct testimony be inserted into the record as though read.

- 5 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED], remained truthful and accurate as of
 6 September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefled testimony to reflect his new title and responsibilities with FPL.

- 7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU Projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009.⁸³ The new estimates for PSL were caveated as still being "at the conceptual level"⁸⁴ (as were the May, 2008 estimates⁸⁵) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁸⁶ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience.⁸⁷ Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁸⁸ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing.⁸⁹

- 8 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
 9 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
 10 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented revised

11 ⁸² Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

⁸³ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁴ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-B1, September 17, 2007.

⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁷ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁸⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁸⁹ Ibid., p. 50.

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cost estimates to the ESC, and the EPU Project management team had begun relying on the revised cost estimates. Our opinion in this regard is also supported by the statements of nearly all of the EPU Project personnel we interviewed (other than the two EPU Project personnel that participated in the decision to not update the testimony).

1 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many unapproved scope changes and manpower estimates, and that they were no better than a "guess" with little support. He also indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FL PSC.

Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a construction program such as the EPU Project, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates and which did not take into account executed major contracts. The new estimates were the product of more than a dozen people working extended hours for a month and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU Projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that were submitted to the FL PSC in May 2010. In short, while the July 25, 2009 and subsequent cost forecasts are and were preliminary, they represented the best information available at that time, were relied upon by FPL, and were more advanced than the 2007/2008 cost projections.

The documents we have reviewed, and our interviews, indicate that there was considerable uncertainty among the project staff in September 2009 as to whether the new cost estimates were approved or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

Concentric's discussions with Company personnel have also indicated that the fact that the updated feasibility analyses presented to the ESC on July 25, 2009 confirmed that the projects still offered significant value to customers may also have been a consideration in the decision to not update [REDACTED] testimony. While Concentric agrees that the new analyses confirmed the conclusions in [REDACTED] testimony, we believe that a \$300 million, or 27%, increase in the projected cost of the EPU Project should have been discussed in the live testimony on September 8, 2009.

2
3
4
5
Concentric found no evidence to suggest that [REDACTED], FPL's witness on the cost effectiveness of the EPU Projects, had any knowledge that updated cost estimates were presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored by [REDACTED], and [REDACTED] was not in the EPU organization or the Nuclear Division of FPL.

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VIII. Recommendations for Improvements Related to the NCRC

Concentric's investigation into this matter has produced the below recommendation for process improvement. These recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC.

1. Concentric recommends that the process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.
2. Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Law and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs and Law Departments. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented.

IX. Information Development and Distribution within FPL

The below discussion relates specifically to FPL's internal distribution of EPU Project-related information and forecast. In Concentric's view, the below discussion should not be misconstrued to determine the prudence of FPL's decision making processes and therefore should not impact the recovery of costs through the NCRC.

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPI's have identified three which are relevant to the reporting of revisions to the cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management

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Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

"This document shall be used for scope changes to Capital and O&M sub-projects within the EPU Project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records."⁹⁰

These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the EPU Director for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU Projects. Once an SCN/TN is initiated, EPPI-300 requires the EPU Project Cost Engineer to establish a tracking number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU Project team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports.⁹¹

Concentric requested the EPU Projects' Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not

⁹⁰ EPPI-300, Project Change Control, Pg 3, Rev 00.

⁹¹ Ibid at 4-6.

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appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. Similarly, the PSL Project Team did not prepare SCN/TN forms for trends that were included on the trend register. For PTN, it would appear that the trend register was kept up to date during this period and some of the trends or scope changes were outstanding for several months.

Finally, many potential scope changes or trends appear to have been captured on the *Risk Register*, which, as discussed below was not synchronized with the project forecast, rather than the *Trend Register*. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."²² NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU Projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management used the initial contingency as an "allowance" that was to be used to meet increases in scope or cost rather than a value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope

²² NPDI-304, Estimate Preparation, Pg 9, Rev 0.

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allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used as prescribed by EPPI-340. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.⁹³

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance to fund scope changes, rather than maintaining the contingency at a level that appropriately reflects the risk to the cost forecast. Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

⁹³ EPU lessons learned PPL from April 2010.

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"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

Concentric notes that issues of the project contingencies, risk register, and the relationship of each to the cost projections are being addressed by the work soon to be completed by High Bridge. Furthermore, on May 1, 2010 FPL filed an updated cost estimate range and feasibility analysis with the FL PSC. This updated cost estimate range included increased allowances for undefined scope and risk. It is our understanding that EPU management considers its current approach to be an interim solution until the High Bridge results have been received and reviewed, and that the High Bridge results will be used to compare against FPL's current cost estimate range.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not adequately comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009. It is clear that the process required for releasing funds from the contingency was not followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget or cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."⁹⁴

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with some incorrect or out-of-date information. These problems persisted after July 25, 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. However, post-July 25, 2009, the correct and updated information was available in the EPU Project's presentations to the ESC. We also received reports from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. These accounts are difficult to verify, but they do not represent a single account or example. In addition, Concentric has received some documentation to corroborate these accounts. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

⁹⁴ Ibid.

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X. Recommendations for Improvements Related to FPL's Internal Distribution of Cost Estimates

Concentric's investigation into FPL's internal distribution of EPU Project-related Information produced the below list of recommendations for process improvements. Many of these recommendations are intended to improve the distribution of information within FPL, and the NCRC docket team. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. In those instances, we are stating the recommendation to demonstrate that all of the issues raised in this report are being, or have been, adequately addressed.

1. To ensure that FPL and the EPU Project team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to a company program for anonymously notifying superiors in the event of a concern with project reporting.
2. To the extent that a performance indicator (e.g., green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator.
3. ¹ FPL should consider changing the reporting relationship of the [REDACTED]
² [REDACTED] While the change in reporting from the [REDACTED] to the [REDACTED]
³ [REDACTED] as a positive development, the reporting relationship of
⁴ the [REDACTED] may be improved by including either a solid or dotted
⁵ line outside of the EPU Projects. This could improve the independence of the [REDACTED]
⁶ [REDACTED] and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.
4. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. In addition, the EPU Project has established a revised cost estimate range which was used in the Company's feasibility analysis and provided to the FL PSC on May 1, 2010. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget, forecast or

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estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

5. To the extent CRs are utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.
6. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
7. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
8. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct.
9. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
10. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.

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/ Exhibit 1 [REDACTED] Letter

February 19, 2010

Mr. Letys Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

I am writing to you with my concerns about cost performance in Nuclear Projects and Extended Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I am being cited as one of many targets in the failure of EPU in 2009.

2 As a brief history, I was hired as [REDACTED] in May 2008 by [REDACTED]
3 [REDACTED] In December of 2008 my counterpart for EPU was released. I was told by the
4 [REDACTED] I would have to assume the EPU responsibility as well
5 as my current roll. In January 2009 I filled both positions reporting to [REDACTED] I had over
100 people (contractors and EPL) reporting to me at five sites and a Corporate Project Controls
group. From July 2009, which is when I left EPU, until late November 2009, I reported again to
6 [REDACTED]. While reporting to [REDACTED] he told me a number of times he thought I was
7 doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
his appreciation for my support while working for him.

In my review I am accused of not providing adequate information or forecasting for both the EPU
Project and Nuclear Projects in 2009. To my knowledge there was never a major issue with a
Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project
standpoint, all projects were on target or explained in variances. I do not believe any cited issues
were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team
developed extensive project indicators in February of 2009 and patterned them after those used to
support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These
8 indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The
original indicators are still on the EPU SharePoint website for you to view. The issues affecting
project performance for EPU were the fact that the EPU Project Teams could not support update
of the indicators due to continuing baseline reviews and scope additions that were not previously
identified. The scoping study and budget estimates were completed by the Shaw Company and
9 were commissioned by the [REDACTED] and completed before I joined the Project. These
estimates were not adequate and Sr. Management continued changing philosophy on what was to
be included and not included in these estimates. As a result there was no Project baseline
10 established and overall Project performance was very poor. The [REDACTED] would
complain about having poor performance indicators however as Project Controls, we could not
deliver a positive message if there was none to deliver. The situation continued to worsen
through the spring of 2009. Project Managers and Engineers were not correcting issues and the
11 Sr. Managers would not accept the poor performance messages. [REDACTED] was
told in late 2008 before I was assigned to EPU that the projects were in trouble. My Team
continued to deliver this message along with poor weekly performance reviews. Finally in July
of 2009, Sr. Management decided it was time to inform Executive Managers of the poor
condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management
12 Team. My Project Controls group prepared detailed reviews that were presented to Mr. Jim Robo
late in July 2009 on the poor condition of EPU.

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/ Exhibit 1: [REDACTED] Letter

At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM, Current Forecast \$909MM with a negative variance of (\$160MM). [REDACTED]

[REDACTED] These numbers clearly show the gravity of BPU negative performance. To my knowledge, these numbers have continued to worsen with the new Project Team to where for PTN and PSL, the Team does not have a clear idea of what the final costs will be.

I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any information from BPU other than which was presented to Management last summer will be a manipulation of the truth. Current reporting for PTN and PSL does not contain information showing there is serious trouble with these Projects. The trouble was enough to replace the entire Sr. Project Team.

- 2 Enclosed with this letter are the presentations given to [REDACTED] last July. If you investigate current estimates for PTN and PSL, they were stated in November 2009 as being the original Shaw estimates. Currently the numbers are in review. [REDACTED] That's almost 2 times the original Shaw budget estimate.

My team delivered the correct message to Sr. Management. Sr. Management did not want to accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in my entire career having worked in Project Controls for some 30 years. My former positions before coming to FPL were with ARES Corporation, Burlingame, CA where I was Project Controls Consultant/Manager for NASA in Houston working with the Program Management Division of the International Space Station. Also with ARES, I was a Project Consultant for the DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory where I was part of a Project Team that earned the DOB Excellence award for Defense Systems. For the record, my Team told the truth about the BPU financial condition and that truth did not meet FPL expectations.

Finally, I know this letter comes at a time when FPL has ordered the investigation of employee concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those letters. I only seek to express my concern about upcoming PSC hearings and my unjustified negative employee review. I have copied my supervisor and human resources.

Thank you for taking the time to read this letter.

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NCR-10

Exhibit 2: Engagement Letter



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420
Law Department



March 15, 2010

John Reed
Chief Executive Officer
Concentric Energy Advisors
293 Boston Post Road West
Suite 500
Marlborough, MA 01752

Re: Independent Investigation of February 19, 2010 Correspondence to Mr. Lewis Hay, FPL
Group Chairman and CEO

Dear Mr. Reed:

The purpose of this letter is to request that your company conduct an independent factual investigation with respect to the statements and subject matter contained in the referenced correspondence, a copy of which is attached, with the exception of matters pertaining to the employee performance review of the author of the correspondence.

The engagement should be handled subject to the terms and conditions of the consulting services agreement amendment that applies to your company's work for FPL through December 31, 2010, and billed to FPL separately from other work performed under that amendment.

Please direct any requests for support or information required to support your work to me, and report the results of your investigation to me. I would appreciate it if you would sign and return a copy of this letter to me acknowledging agreement to perform the above-referenced scope of work subject to the terms stated herein.

Sincerely yours
A black rectangular redaction box covering the signature of the sender.

Enclosure

ACCEPTED AS OF March 15, 2010

Concentric Energy Advisors, Inc.

By: A handwritten signature, likely of John Reed, over a horizontal line.

Its: CEO

an FPL Group company

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Exhibit 3: Previous Concentric Projects for FPL

Project List for Florida Power and Light

NAME	START DATE	DESCRIPTION
FPL Regulatory Advisory	4/1/2005	Witness training to help FPL prepare for the cross-examination phase of their rate case
FPL New Nuclear Filings	7/25/2007	Provided Florida Power & Light Company with regulatory support services and expert testimony associated with its Need Study filed with the Florida Public Service Commission and follow-on support as needed at the NRC
FPL New Nuclear Cost Recovery Clause Filing	4/12/2008	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Rate Proceedings Support/Benchmarking	4/22/2008	Retained as a consulting expert in anticipation of possible future FPL rate proceedings
FPL Renewable Portfolio Standard	12/31/2008	Assisted FPL with an assessment of various mechanisms that have been developed both nationally and internationally to promote renewable technologies
FPL 2009 New Nuclear Cost Recovery Clause Filing	1/1/2009	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management and cost estimation practices.
FPL Securitization Testimony	1/15/2009	Provided testimony commenting on state issuance of securitization bonds for new nuclear plants.
FP&L 2010 Nuclear Cost Recovery Clause Filing	1/1/2010	Prepared expert testimony on behalf of FPL to support the reasonableness of their project management, risk management, and cost estimation practices.

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Exhibit 4 - Concentric Data Requests

Request #	Request	Received
7	Would it be possible to get a copy of CR-2008-11443? This was referenced in CR-2008-37753	3/30/2010
8	The last page of this document includes a document entitled "High Risk Mitigation Plan". That document includes a list of 6 mitigation actions, responsibility for completing those actions and a due date for each action. Would it be possible to find each of the documents that were developed in response to mitigation actions and determine when each mitigation action was completed?	3/30/2010
9	With regard to the attached 2009 DR response, would it be possible to get the amounts that are redacted from the table on Pg. 2-3	3/31/2010
10	Please provide the underlying AFUDC calculations for all AFUDC amounts (i.e., ~\$350, \$370, \$200 MM, etc) presented to FPL's executive management between January 1 st , 2009 and today.	
11	1 Please provide [REDACTED] response to each of the lessons learned documented in the July 25, 2009 Executive Steering Committee presentations. These lessons learned can be found on pages 51-52 of the PTN presentation and pages 38-40 of the PSL presentation. This is written confirmation of a request given to [REDACTED] orally. 2	4/7/2010
12	Please confirm whether there was an August Executive Steering Committee meeting/presentation. If there was, please provide a copy of the presentation or report used during the meeting.	4/6/2010
13	PSL EPU Sensitivity Analysis from February, 2009 from Byrden	4/6/2010
14	All revisions of EPPI-300 and confirmation that Rev. 5 is the current revisions	4/16/2010
15	All trend registers for the FL EPU Projects since 1/1/2008	4/19/2010
16	All Scope Change/Forecast Trend notices for the FL EPU Projects since 1/1/2008	4/19/2010

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Exhibit 5: Documents Relied Upon

1. Annual Cash Flow, PSL EPU Project, August 1, 2009
2. Annual Cash Flow, PSL EPU Project, October 1, 2009
3. Annual Cash Flow, PSL EPU Project, October 2009
4. CR 2008-11443, April 3, 2008
5. CR 2008-37753, December 10, 2008
6. Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009
7. Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009
8. Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009
9. Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009
10. Email from [REDACTED] to anonymous recipient, March 26, 2009:
11. Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration
12. Email from [REDACTED] Eaton, Project Manager, dated March 10, 2009.
13. Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010
14. EPPI-300, Project Change Control, Rev 00
15. EPU lessons learned PPL from April 2010
16. Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009
17. Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009
18. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point September 9, 2009
19. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009
20. Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, November 13, 2009
21. Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009
22. Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009
23. FL PSC Docket 080009-EI In Re: Nuclear Cost Recovery Clause
24. FL PSC Docket 090009-EI, In Re: Nuclear Cost Recovery Clause
25. FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010
26. Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009
27. Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009
28. Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007
29. Florida Public Service Commission, Order No. PSC-08-0021-POF-EI, January 7, 2008
30. [REDACTED] Letter
31. Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM
32. NPDI-304, Estimate Preparation, Rev 0

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Exhibit 5: Documents Relied Upon

33. PSL EPU Modification Scope Review dated June 16, 2009
34. PTN EPU Scope Review dated June 2009
35. Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53
36. Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008
37. Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power uprate Scoping Study, February 2008
38. Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009
39. Total Project Cash Flow, PTN EPU Project 2009, May 31, 2009
40. Total Project Cash Flow, PTN EPU Project 2009, August 2009
41. Total Project Cash flow, PTN EPU Project 2009, November 2009
42. Transcript of Direct Examination of [REDACTED], September 8, 2009

/ Exhibit 6: [REDACTED] CONFIDENTIAL
Letter, Interlineated

February 19, 2010

Mr. Lewis Hay
Florida Power and Light
FPL Group Chairman and CEO
700 Universe Blvd.
Juno Beach, FL 33408

Dear Mr. Hay:

I am writing to you with my concerns about cost performance in Nuclear Projects and Extended Power Uprate (EPU) in 2009. With the exodus of the entire Sr. EPU Project Management Team, I am being cited as one of many targets in the failure of EPU in 2009.

2 As a brief history, I was hired as [REDACTED] in May 2008 by Mr.
3 [REDACTED]. In December of 2008 my counterpart for EPU was released. I was told by the
4 [REDACTED] that I would have to assume the EPU responsibility as well
5 as my current roll. In January 2009 I filled both positions reporting to [REDACTED]. I had over
6 100 people (contractors and FPL) reporting to me at five sites and a Corporate Project Controls
7 group. From July 2009, which is when I left EPU, until November 2009, I reported again to
[REDACTED]. While reporting to [REDACTED] he told me a number of times he thought I was
doing a good job. During the time I worked for [REDACTED] he took me to dinner and expressed
his appreciation for my support while working for him.

In my review I am accused of not providing adequate information or forecasting for both the EPU Project and Nuclear Projects in 2009.

Concentric has found no reason to dispute any of the assertions above. Concentric's scope of work does not include any issues related to the employee's performance appraisal. It is our understanding that FPL has independently initiated corrective action regarding [REDACTED] review. See Section I of the report.

9 To my knowledge there was never a major issue with a Monthly Variance Report or a Site Project Status Report for Nuclear Projects. From a Project standpoint, all projects were on target or explained in variances. I do not believe any cited issues were a result of a Project Controls shortcoming. For Power Uprate, my Project Controls Team developed extensive project indicators in February of 2009 and patterned them after those used to support the "Big Dig" Boston Artery. These indicators included Earned Value Metrics. These indicators were approved by the Project Team and presented to [REDACTED] in March 2009. The original indicators are still on the EPU SharePoint website for you to view. The issues effecting project performance for EPU were the fact that the EPU Project Teams could not support update of the indicators due to continuing baseline reviews and scope additions that were not previously identified.

Concentric generally concurs with these assertions; while we raise concerns regarding certain procedures within the Project Controls group, we do not believe that the EPU's Project Controls personnel or work product is or has been deficient. Concentric agrees that prior to July, 2009 the ongoing baseline reviews and scope additions were the principal drivers of cost uncertainty. See Section IV of the report.

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Exhibit 6: [REDACTED] Letter, Interlineated

2 The scoping study and budget estimates were completed by the Shaw Company and were commissioned by the [REDACTED] and completed before I joined the Project.

3 Concentric note: Shaw's scoping estimates were completed in February 2008. [REDACTED]
4 [REDACTED] joined FPL in May 2008 and the EPU Project in January 2009.

5 These estimates were not adequate and Sr. Management continued changing philosophy on what was to be included and not included in these estimates. As a result there was no Project baseline established and overall Project performance was very poor. The [REDACTED] would complain about having poor performance indicators however as Project Controls, we could not deliver a positive message if there was none to deliver. The situation continued to worsen through the spring of 2009. Project Managers and Engineers were not correcting issues and the Sr. Managers would not accept the poor performance messages.

With the benefit of hindsight, it is clear that the Shaw analysis did not include all of the scope required for the uprates; however, Concentric has not developed an opinion as to whether it was reliable or adequate when it was prepared. Concentric did find evidence of concerns with the study's completeness shortly after it was prepared (see Report Section IV) and of frequent scope changes throughout the history of the EPU project. We view these scope changes as the predictable result of more detailed engineering analyses, which were the principal cause of the poor performance indicators.

Our interviews provided credible evidence that prior to July, 2009 EPU senior project management was slow to respond when presented with revised cost forecasts and concerns about the reliability of the Shaw study. See Report Section VIII.

6 The [REDACTED] was told in late 2008 before I was assigned to EPU that the projects were in trouble.

7 Concentric was able to confirm through the course of its interviews, that the [REDACTED] was alerted to the potential for increased cost estimates at PSL & PTN in late 2008. In addition, Concentric noted and reviewed two PSL Condition Reports from 2008 which indicated the potential for additional scope and cost challenges. See Section IV of the report.

My Team continued to deliver this message along with poor weekly performance reviews. Finally, in July of 2009, Sr. Management decided it was time to inform Executive Managers of the poor condition of EPU which precipitated the replacement of the entire EPU Project Sr. Management Team.

Concentric has confirmed that the Project Controls group continued to present EPU senior management with documented concerns about the project's cost forecast in the first few months of 2009 (see Section IV of the report) This information, after being briefly raised in the June, 2009 ESC meeting, was presented in detail to the ESC in July, 2009. It is also Concentric's understanding that during the time period between June and July 2009, executive management made the decision to change much of the EPU senior project management.

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Exhibit 6: [REDACTED] Letter, Interlineated

2 My Project Controls group prepared detailed reviews that were presented to [REDACTED] late in July 2009 on the poor condition of EPU.

3 The July 25, 2009 ESC presentations presented detailed cost reviews. Concentric's
4 interviews confirmed the attendance of [REDACTED] and representatives from Bechtel, amongst others. See Section IV of the report.

At the time, the cost overview for PSL was: Original Budget \$656MM, Current Forecast \$795MM showing a negative variance of (\$139MM). For PTN: Original Budget was \$749MM, Current Forecast \$909MM with a negative variance of (\$160MM).

Concentric has confirmed these values. See Section IV of the report.

For PBN: Original Budget was \$357MM, Current Forecast \$497MM with a negative variance of (\$140MM). These numbers clearly show the gravity of EPU negative performance. To my knowledge, these numbers have continued to worsen with the new Project Team to where for PTN and PSL, the Team does not have a clear idea of what the final costs will be.

Concentric's scope of work focused on the Florida EPU projects, not Point Beach in Wisconsin. Following the July 25, 2009 ESC presentations, the EPU project team has reported additional cost escalation at PTN & PSL in ESC presentations. The forecast as of December 2009 was \$831 MM for PSL and \$1012 MM for PTN. The current forecast for both PTN & PSL remain under review pending a third party cost analysis for PTN U3. See Report Section VIII.

I am concerned about how FPL will report these findings at the upcoming PSC hearings. Any information from EPU other than which was presented to Management last summer will be a manipulation of the truth. Current reporting for PTN and PSL does not contain information showing there is serious trouble with these Projects. The trouble was enough to replace the entire Sr. Project Team.

1 Exhibit 6: [REDACTED] CONFIDENTIAL
Letter, Interlineated

2 Enclosed with this letter are the presentations given to [REDACTED] last July. If you investigate current estimates for PTN and PSL, they were stated in November 2009 as being the original Shaw estimates. Currently the numbers are in review.

3 [REDACTED] stated that his concerns about reporting to the PSC were generated by his review of the November PSL Annual Project Cash Flow and PTN Total Project Cash Flow reports. Concentric has reviewed the reports cited by [REDACTED], and has determined that he is correct that they incorrectly relied upon the original need determination cost estimates. These inaccuracies were corrected on a going forward basis prior to this investigation commencing. [REDACTED] did not seem aware of the post-July 2009 ESC presentations or the revised cost forecast presented therein. Concentric has confirmed that the correct information about the post-July 2009 status of the cost estimates, including the July ESC presentations attached by [REDACTED] to his letter, was provided by FPL to the PSC staff as part of its review for the 2010 NCRC. See Section IV of the report.

For PBN, the estimate was stated in December 2009 as being \$552MM and currently I believe it is over \$600MM. That's almost 2 times the original Shaw budget estimate.

My team delivered the correct message to Sr. Management. Sr. Management did not want to accept the message. My Final Evaluation for 2009 is the only poor evaluation I've ever had in my entire career having worked in Project Controls for some 30 years. My former positions before coming to FPL were with ARES Corporation, Burlingame, CA where I was Project Controls Consultant/Manager for NASA in Houston working with the Program Management Division of the International Space Station. Also with ARES, I was a Project Consultant for the DARHT Project (Dual Axis Radiographic Hydrotest Facility) at Los Alamos National Laboratory where I was part of a Project Team that earned the DOB Excellence award for Defense Systems. For the record, my Team told the truth about the EPU financial condition and that truth did not meet FPL expectations.

Finally, I know this letter comes at a time when FPL has ordered the investigation of employee concerns stemming from the Jan. 20th and Feb. 4th letters. I am in no way associated with those letters. I only seek to express my concern about upcoming PSC hearings and my unjustified negative employee review. I have copied my supervisor and human resources.

Thank you for taking the time to read this letter.

8 [REDACTED]
9 [REDACTED]

10 Co [REDACTED]
11 Co [REDACTED]

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FPL 153098

NCR-10

/ Exhibit 7: March 19, 2010 [REDACTED] Email

Sam Eaton

2 From: [REDACTED]
3 Sent: Friday, March 19, 2010 8:21 AM
4 To: Bryce, Mike
Cc: Poppell, James; John Reed; Sam Eaton
Subject: For your consideration

Importance: High

5 [REDACTED]

6 In my opinion, my relationship with [REDACTED] is becoming increasingly strained. I don't feel I have a success path to developing a professional relationship with him that can benefit FPL. He has been cordial in public but in the one-on-one closed door "touch base" session we had yesterday he continued to tell me how dissatisfied he is with my performance. He has not put me on a formal A-PIP that I'm aware of (as I discussed with you) however, he has given me exercises (with changing verbal expectations) that makes me suspect he thinks he's established me in the program. I
7 feel, especially with [REDACTED] early departure yesterday, that I am the next target for elimination from [REDACTED] organization. He told me in private that he does not intend being fired as his predecessors for poor performance and he will not let a few "stupid" people affect his management effectiveness.

I feel it's time for me to develop an exit strategy from FPL. I need to discuss this with you at our next meeting since I still have financial commitments from when I was hired. I need to minimize my financial exposure in leaving the company. Also, as a part of my own professional attitude, I want to make sure there is an adequate turnover for someone chosen to be my successor.

Thank you in advance for your help with this and I look forward to speaking with you soon. Hopefully we can have this discussion early next week.

8
9
10
11
12

[REDACTED]

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/08	Shaw Scoping Studies completed for PTN & PSL.	Shaw BOP Scoping Studies for PTN & PSL, 2/2008
4/3/08	CR 2008-11443 initiated: "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary ...". [REDACTED] notified; High Risk Mitigation Plan developed; no follow-up reports found in file.	CR 2008-11443
5/08	[REDACTED] hired as [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews
5/15/08	EPC costs for PTN EPU estimated to be \$225.2MM, based on Shaw estimates; included in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
8/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$84 MM with the note "Potential significant overrun-detailed proposal evaluation required."	PSL Trend Register
9/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$138 MM with the note "Bechem/Byrden forecast based upon current contract scoping strategy."	PSL Trend Register
10/08	PSL EPC trend would increase budget for EPC from \$74 MM to \$139 MM with the note "Bechem/Byrden forecast".	PSL Trend Register
10/15/08	EPC costs for PTN EPU estimated to be \$212.9MM, based on Bechtel indicative staffing.	7/25/09 ESC Briefing, PTN, p. 26
11/08	PSL EPC trend would increase budget from \$74 MM to \$138 MM with the note "Bechem/Byrden Forecast".	PSL Trend Register
11/7/08	EPC costs for PTN EPU now forecast to be \$262MM vs. \$225MM in scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
11/22/08	[REDACTED] leaves project.	[REDACTED] Letter dated February 19, 2010; Interviews; EPU_Movement Out Of EPU Since July 2008.XLS
12/1/08	PSL project controls identifies potential cost overrun following award of Bechtel EPC agreement. Preliminary forecast provided to EPU senior project management.	Interview
12/10/08	CR 2008-37753 initiated: PSL EPU should have Change Management Plan developed and documented; CR 2008-11443 raised issue but was closed with no additional activity traced; "missed opportunity".	CR 2008-37753
1/1/09	[REDACTED] Jr. assumes additional role of [REDACTED]	[REDACTED] Letter dated February 19, 2010; Interviews

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/09	PSL EPC trend would increase budget from \$95 MM to \$234 MM with note "Forecast based upon all data received from Bechtel to date-additional clarification will follow with agreements on target prices."	PSL Trend Register
2/17/09	Meeting of [REDACTED] to discuss changes to the PSL forecast. Draft analysis indicates PSL cost estimate is \$785 MM, \$134MM above scoping estimate.	SUMMARY CASHFLOW EPU TOTAL 090217 REVIEWED.XLS
2/28/09	[REDACTED] resigns for performance issues.	Interview; EPU_Movement of out EPU Project Since July 2009.XLS
3/2009	PSL EPC trend would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon most recent data received from Bechtel. Bechtel to provide total project forecast by 5/15/2009."	PSL Trend Register
3/26/09	[REDACTED] asked to remove preliminary forecast from PTN EPU Site Monthly Cost Report and to replace the preliminary forecast with the original need determination forecast until the preliminary forecast is more certain. Interviews indicate [REDACTED] was not satisfied with this outcome.	Interviews; Email from [REDACTED] dated March 26, 2009.
4/30/09	Last date of documents typically provided to FL PSC Internal Controls auditors.	Interview
5/09	PSL EPC trend would increase EPC budget from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to date-Additional efforts underway to reduce forecast."	PSL Trend Register
5/09	ESC advised that Bechtel estimate is greater than bid; cost forecasts for PSL (\$682MM) and PTN (\$770MM) remain unchanged; cost indicators for PSL are all green; cost indicators for PTN are mixed red and green.	5/09 ESC Briefing, pp. 3, 4, 27, 28
5/1/09	[REDACTED], resigns from EPU project.	Interview; EPU_Movement Out of EPU Since July 2009.XLS

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
5/1/09	<p>pre-filed direct testimony submitted to FL PSC. States "The EPU projects are progressing on schedule and within budget" and "At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EL. " Sponsors Schedule TOR-7 which includes \$1.4 B project costs or \$1.7 B in-service costs. States this represents the current estimated in-service costs. FPL also submitted the pre-filed, direct testimony of [REDACTED]</p> <p>[REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.</p>	<p>Pre-Filed Direct Testimony of [REDACTED] [REDACTED] Pg 2, Appendix I, Pg. 104</p>
5/1/09	PSL Annual Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as under review.	PSL Annual Cash Flow Report, 5/1/2009
5/31/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable." Total Project Cost Summary listed as \$747 MM.	PTN Total Project Cash Flow Report, 5/31/2009
Late May 09	Work on revised PTN & PSL cost forecast begins following 2-3 weeks of intensive review of PBN forecast and re-estimation.	Interview
6/09	PSL EPC trend. Would increase budget for EPC from \$95 MM to \$235 MM with note "Forecast based upon all data received from Bechtel to Date-Additional Efforts Underway to Reduce Forecast."	PSL Trend Register
6/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 6/2009
6/09	PTN EPU Scope Review. Recommended deleting steam generator FP replacement, replacement of No.1-4 feedwater heaters, replacement of 1 SFP HX, exciter rewinds, and SDV replacement from EPU scope. Downsized 1 new SFP HX.	PTN EPU Scope Review, June 2009

DATE	EVENT	SOURCE
6/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 6/1/2009
6/3/09	Bechtel submits P50 forecast for PTN EPC costs at \$333.6MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
6/17/09	PSL EPU Modification Scope Review. Recommended deleting U1 exciter rewind, No. 5 feedwater heater, repowering condensate pump C, purchase of one circulating water pump rotating assembling and refurbishment of others, and DEH constant pressure pumps from EPU scope. Limited pneumatic controls replacement.	6/17/09 PSL EPU Modification Scope Review
6/23/09	RSC advised that Bechtel estimate is greater than indicative bid, but that PSL and PTN cost estimates remain unchanged at \$682MM and \$770MM; SNE (contingency) has declined from \$182MM to \$14MM for PSL and from \$204MM to \$28MM for PTN.	6/23/09 ESC Briefing, pp. 3, 4
7/09	PTN Total Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional fund as applicable. Total Project Cost Summary listed as \$745MM.	PTN Total Project Cash Flow Report, 7/2009
7/1/09	Bechtel submits revised P50 cost forecast for PTN at \$337.3MM vs. \$225.2MM in 5/08 scoping analysis.	7/25/09 ESC Briefing, PTN, p. 26
7/1/09	PSL Annual Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Detail forecast at Completion is underway." Total Project Cost Summary listed as "In Review".	PSL Annual Cash Flow Report, 7/1/2009
7/14/09	Bechtel reduces P50 cost forecast for PTN to \$277.5MM as result of scope reductions.	7/25/09 ESC Briefing, PTN, p. 26
7/20/09	[REDACTED] transferred back to Nuclear Projects Organization.	[REDACTED] Letter dated February 19, 2010
7/20/09	New [REDACTED] and [REDACTED] announced for EPU Project.	Interviews;
7/25/09	ESC advised that PSL EPU cost forecast is now \$796.0MM, up 21.3% from 5/08 original estimate.	7/25/09 ESC Briefing, PSL, p.8

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
7/25/09	ESC advised that Needs filing is based on \$651MM PSL cost estimate vs. current estimate of \$796MM; ESC also informed that CVPRR is still highly positive.	7/25/09 ESC Briefing, PSL, pp. 44, 50
7/25/09	ESC briefed that PTN 3&4 uprates are now targeted to have LAR submittals delayed by 10 months, outage durations targeted have increased by 112 to 160 days, and in-service dates have slipped by 1 month (U-3) and 2 months (U-4); while outage durations are to be approved by CNO, longer durations have been included in business model.	7/25/09 ESC Briefing, PTN, p. 3
7/25/09	ESC briefed that current cost estimates for PTN EPU have increased by 21.4% from \$749.2MM to \$909.7MM; risk register not synchronized with cost estimate, and carries EV of \$147.1MM.	7/25/09 ESC Briefing, PTN, p. 5
8/2009	PTN Total Project Cash Flow Report includes green performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary changed to \$750MM.	PTN Total Project Cash Flow Report, 8/2009
8/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Annual Project Cash Flow Report, 8/1/2009
8/17/09	FPL answers Staff Interrogatory 3-53 with reference to Schedule TOR-7. States "the cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time."	Staff Interrogatory 3-53.
9/2009	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Cost status is based on the current approved Project funding. Status will be reset upon approval of additional funds as applicable." Total Project Cost Summary remains \$750MM.	PTN Total Project Cash Flow Report, 9/2009
9/1/09	PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review".	PSL Total Project Cash Flow Report, 9/2009

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
9/8/09	FL PSC Hearings in Tallahassee, FL. [REDACTED] confirms that the same answers contained within his pre-filed direct testimony would be given today if he was asked the same questions.	Electronic transcript of hearing in Docket 090009-EI, Vol 2, Pg 209
9/9/09	ESC advised that cost estimate has increased by \$144MM (\$1.85B vs. \$1.71B) since last ESC briefing 6 weeks earlier; PSL is now at \$831.2MM and PTN is at \$1019MM; risk and contingency components have supplanted scope not defined as budget category.	9/9/09 ESC Briefing, p. 4, 9
10/1/09	There are two PSL October 2009 Annual Project Cash Flow Reports with different budget performance indicators. PSL Annual Project Cash Flow Report includes red performance indicator for budget forecast. Notes: "Cost status is based on current approved project funding. Detail Forecast at Completion is underway." Total Project Cost Summary remains "under review". The second PSL Annual Project Cash Flow Report includes yellow performance indicator in one and red in another. Notes: "Preliminary engineering analyses are identifying additional project scope. Engineering is evaluating options and budget impacts." Total Project Summary is changed to \$651MM.	PSL Annual Project Cash Flow Report, 10/1/2009, PSL Annual Project Cash Flow Report, 10/2009
10/09	PTN Total Project Cash Flow Report includes yellow performance indicator for budget forecast. Notes: "Preliminary engineering analysis are identifying additional project scope." Total Project Cost Summary remains \$750MM.	PTN Total Project Cost Summary, 10/2009.
10/22/09	ESC advised that cost forecast is unchanged at \$1.843B; contingency (balancing variable) has decreased by \$12MM; AFUDC estimate has been revised downwards by \$200MM, and now reflects only FPL share (all other costs presented are full plant cost); total BPU cost estimate at \$2.078B, with transmission and AFUDC; cost per kW is roughly same as needs filing.	10/22/09 ESC Briefing, p. 3
10/22/09	ESC given tables for PSL and PTN where "Total Project Cost Summary" uses original 5/08 cost estimates not current estimates; indicator for budget is yellow, but should have been red per report owner.	10/22/09 ESC Briefing, pp. 30, 31; interview notes

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
11/2009	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include yellow performance indicator for budget performance and the Total Project Cost Summaries are the original 5/08 Need Determination values.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 11/2009
11/13/09	ESC advised that cost forecast remains unchanged at \$1.843B; contingency has been reduced by \$7.7MM.	11/13/09 ESC Briefing, p. 3
11/13/09	ESC presented with tables for PSL and PTN where total project cost shown is 5/08 estimate, not current estimate; budget forecast indicator is shown as yellow, but should have been red per report owner.	11/13/09 ESC Briefing, pp. 40, 41; interview notes.
12/09	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports include red performance indicator for budget performance and the Total Project Cost Summaries are listed as under review.	PTN Total Project Cash Flow and PSL Annual Cash Flow Reports, 12/2009
12/5/09	[REDACTED] resigns as a result of performance issues.	Interview; BPU Movement of out EPU Project Since July 2009.XLS
12/8/09	High Bridge Associates retained to provide 3rd party estimate of PTN U3.	FPL Purchase Order 00127777, 12/08/09
12/28/09	ESC provided with tables for PSL and PTN where project cost summary shows 5/08 estimates, not current estimates, and budget forecast indicator is mistakenly shown as yellow, not red. However, in balance of the report, the current cost forecast is \$1.843B; cost contingency category has been eliminated and "scope not defined" ("SND") has been re-established; SND has decreased by \$4.8MM; Support of Point Beach is placing additional strain on PSL and PTN resources; IAR analysis is driving scope/cost increases.	12/28/09 ESC Briefing, pp. 2, 5, 8, 13, 18, 19
1/15/10	Annual cash flow slides for ESC presentation modified to clearly state what relates to the total project forecast and the annual forecast.	1/15/10 ESC Briefing
1/21/10	Risk register for PTN increased by \$9.5MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab
2/8/10	Risk register for PTN increased by \$10.1MM, with equal reduction in contingency.	PTN risk register, 3/4/10, changes tab
2/15/10	February 2010 ESC Presentation presents a white annual budget indicator for PSL and a green annual budget indicator for PTN. Total project cost are listed as under review.	2/15/10 ESC Briefing
2/19/10	Letter sent by [REDACTED] to Lewis Hay.	[REDACTED] Letter dated February 19,

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Exhibit 8: Chronology

DATE	EVENT	SOURCE
2/23/10	CNO Briefing indicates three PTN U3 fall outage modification shave the potential to exceed the 35 days allotted to this outage.	2/23/10 CNO Update, p. 15
2/23/10	CNO Briefing states no "significant change in total weighted risk cost."	2/23/10 CNO Update, pp. 19-22
2/23/10	PTN main steam pressure drop concern identified to CNO. No recovery cost provided.	2/23/10 PTN Main Steam Pressure Drop and Reduce Turbine Inlet Pressure presentation
3/1/10	CNO Update states "no significant change in total weighted risk cost."	3/1/10 CNO Update, pp. 19-22
3/4/10	Risk register for PTN increased by \$42.7MM, due primarily to potential for increased staffing; equal reduction in contingency. Project is working to complete 29 pre-outage modifications to expedite workload.	PTN risk register, 3/4/10, changes tab
3/10/10	Concentric's receipt of [REDACTED] letter dated February 19, 2010.	Email from [REDACTED] to Samuel Eaton dated March 10, 2010
3/18/10	March 2010 ESC briefing cancelled.	3/19/10 ESC briefing
3/22/10	CNO Updates indicated \$30.2MM added to risk register for PTN main steam pressure loss recovery. Additional \$28MM & \$9MM added to risk register for additional PTN Field Non Manual ("FNM") support and startup and testing. Update later indicates High Bridge Associates believes FNM may be undervalued. PSL annual budget performance indicator changed to yellow.	3/22/10 CNO Update, pp. 3, 13-14, 32
3/29/10	Additional \$14.1MM added to PTN risk summary (weighted). \$13.8MM relates to additional LLW disposal due to previous S/G tube leaks. Note that this is in addition to \$11.2 MM already in budget.	3/29/10 CNO Update, p. 19
4/8/10	CNO Update indicates LAR reevaluation may require addition of check value to mitigate PTN main steam pressure drop. Cost increase is listed as \$5MM. Risk register is updated with \$19.1MM of weighted risk costs include \$5MM for main steam check valve.	4/8/10 CNO Update, pp. 3, 21

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Exhibit 9: Response to Staff DR 5-53

Florida Power & Light Company
Docket No. 090009-EI
Staff's Fifth Set of Interrogatories
Interrogatory No. 53
Page 1 of 1

Q.

Section 366.93(5) F.S., states: The utility shall report to the commission annually the budgeted and actual costs as compared to the estimated inservice cost of the nuclear or integrated gasification combined cycle power plant provided by the utility pursuant to s. 403.519(4), until the commercial operation of the nuclear or integrated gasification combined cycle power plant. The utility shall provide such information on an annual basis following the final order by the commission approving the determination of need for the nuclear or integrated gasification combined cycle power plant, with the understanding that some costs may be higher than estimated and other costs may be lower.

Please provide a listing of each analysis you believe is contemplated by Section 366.93(5) F.S. and should be included in a utility's annual NCRC filings. Include in your response estimates of the cost and time required to prepare each listed analysis.

A.

Section 366.93(5) requires the annual reporting of the actual and budgeted costs to complete the project as compared to the estimated in service cost provided pursuant to 403.519(4), F.S. FPL provides this information in Page 464 of the annual FERC Form 1 filing. It is FPL's understanding that the FPSC developed Page 464 (contained within the FPSC section of FERC Form 1) to satisfy the requirement of this statute. Additionally, FPL includes this information as part of its Nuclear Cost Recovery filing as TOR-7. These filings satisfy the requirement of Section 366.93(5).

The cost to complete each project is subject to constant consideration and revision, and will be subject to continuous analysis until each project is placed in service. For the reporting obligations described above, FPL takes a "snapshot" of this continuous process at a particular point in time. This is a data gathering exercise which utilizes the output of existing processes that would be performed regardless of this reporting requirement. It takes professionals throughout the FPL organization several weeks of work to gather and prepare this information.

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Florida Power & Light Company's Management Response to
1 [REDACTED] Investigation Final Report

June 21, 2010

1 I have completed a review of the report entitled [REDACTED] Investigation Report" prepared by Concentric Energy Advisors (CEA). While I agree with many of the recommendations, there is one area of the report in particular that I believe warrants clarification: the assertion in section D that "a 300M, or 27% increase in the projected cost of the [Extended Power Uprate] project should have been discussed in the live testimony of Sept. 8, 2009." On the surface, the timeline presented seems to support this as a reasonable conclusion. However, the investigative report does not reflect the series of discussions that occurred between various members of executive management between the time of the award of the Engineering, Procurement, and Construction (EPC) contract to Bechtel Power Corporation (Bechtel) and the Florida Public Service Commission (FPSC) hearing on EPU project cost recovery in September 2009.

In summary, it was well known that Bechtel has a reputation for taking narrow views of contracts, excluding legitimate scope, and generally being difficult to work with after having won a bid as the low cost bidder. Indeed, FPL Group had previous experience with this type of business practice on the Marcus Hook project several years before awarding the EPU EPC contract to Bechtel. Prior to awarding the EPU EPC contract, senior FPL management had extensive discussions on this point, and were prepared to "push back" if and when we observed the pattern. Not surprisingly, following the contract award Bechtel in late 2008 and through the winter of 2009, FPL began to receive forecasts for both Turkey Point and St. Lucie that reflected significant increases in costs for the projects. While there was acknowledgement that as detailed engineering proceeded, there would be additional scope, and therefore cost, there were also indications that there were opportunities to eliminate scope and reduce costs as well, that simply were not being acted upon. The interactions between FPL and the major vendors on the EPU project continued during the first half of 2009 with little progress made on reducing costs, with the major focus being on Bechtel.

This culminated in the July 26, 2009 meeting discussed in the CEA report. During that meeting, which included FPL executive management (including myself) and Bechtel executive management, along with staff from both organizations, there was a principal focus on cost. During the meeting, there was an acknowledgement that there were, in fact, opportunities to eliminate costs that had not been acted upon, and some anecdotal examples were discussed. In summary, the meeting ended with Bechtel agreeing at FPL's request to dedicate resources in conjunction with FPL to identify and eliminate unnecessary costs, including duplicative overhead. It was agreed that the team would report its results following completion to FPL EPU management, which in turn would be provided to FPL executive management.

The CEA report asserts that the new estimates developed after the EPC contract award to Bechtel were more reflective of current cost projections and should have been discussed in September 2009 at the FPSC hearings. While it is true that more was known about the ultimate scope in September 2009, the Bechtel cost projections had not been fully vetted or challenged by FPL, including executive management, at that time. In fact, Bechtel had already agreed during the July 25 meeting that opportunities existed to reduce scope and cost. Bechtel's track record at managing costs was not good and FPL had an obligation to fully understand and challenge each and every cost increase, line by line, before agreeing to the increased projections. This work had not been completed as of September 2009.

From my perspective, as of September 2009, Bechtel projected costs during the period of time in question were not fully validated, and the projections were not ripe for presentation to the FPSC knowing that more work remained to be completed. Therefore, I disagree with the assertion in the CEA report that FPL should have updated the project cost estimate during the September 2009 hearings before the FPSC.

1 [REDACTED]
2 [REDACTED]

June 21, 2010

2 I have reviewed the [REDACTED] Investigation Report prepared by Concentric Energy Advisors (CEA). In my view, the CEA Report provides only a limited perspective from a project controls standpoint. The CEA Report is incomplete because it does not provide my perspective as the incoming [REDACTED] (BPU) project, particularly in the July-September 2009 timeframe. The following provides that perspective.

In the summer of 2009, I had concerns about the total EPU project cost forecast.

- First, the scope of the project was continuing to change based on the progress of the engineering analysis required to support the Nuclear Regulatory Commission (NRC) license amendment requests (LAR) and the design engineering that was just beginning. As a point of comparison, at this time (one year later), only one LAR for one of the four FPL units has been submitted to NRC and design engineering is only approximately 13 percent complete.
- Second, the more significant driver causing the project controls organization to forecast a higher cost to EPU senior management was information provided by Bechtel Power Corporation (Bechtel) in regards to their forecast of the necessary resources to staff, manage, and implement the uprates. At this time, senior FPL management had significant concerns about the accuracy of the Bechtel forecast.

The EPU senior management team reported to the Executive Steering Committee (ESC) that it had evaluated what it would cost to self-perform the uprate for a given site and compared this estimate to the Bechtel forecast. The EPU senior management team determined that the Bechtel estimate was significantly higher in comparison. This position taken by the EPU management team was the catalyst for the detailed review conducted and presented to the ESC on July 25, 2009. During that meeting it was evident that Bechtel senior management and EPU senior management were very far apart on the resources required based on the current scope, to engineer, procure, and implement the EPU projects. Senior management considered the Bechtel position to be a "no risk" proposition for Bechtel and, accordingly, believed the Bechtel estimate to be unreasonably conservative. As a result, senior management did not accept Bechtel's position and the higher forecast.

FPL senior management then directed the EPU management team to take a number of actions, including potential removal of Bechtel from all or a portion of the project; consideration of other engineering, procurement, and construction (EPC) vendors to perform all or part of the work; and pursuit of a strategy to resolve the delta between FPL and Bechtel. FPL senior management also reemphasized its expectation that the EPU team was to continue to challenge the scope of the project.

During August-September 2009, the EPU management team's priorities were to reorganize the EPU project team and structure, conduct an orderly transition, and

evaluate options to leverage the Company's position relative to Bechtel. During this time, my direct reports and I initiated a number of activities. One initiative was the engagement of URS/Washington Group (URS) as to their availability and capability in regards to EPU's. URS wanted to know if FPL intended to terminate Bechtel's role in the project. The EPU management team told URS that although FPL was not happy with Bechtel, no conclusions had been reached with regard to staying with Bechtel, switching to self-perform all or part of the work, or switching to a different EPC contractor in whole or in part.

I requested and received a proposal from URS as to the scope and cost for an independent estimate for the EPU project. At this same time the EPU senior team reviewed the capability of a number of independent organizations that could provide a "bottom up" cost estimate and risk analysis for major projects. The purpose was to bring a range to the project estimate, quantify the risk, and validate and or leverage the Bechtel input into the total project estimate. In parallel with the aforementioned activities, the EPU management team was working with Bechtel to eliminate any redundancy and identify opportunities to streamline the project to reduce the Bechtel estimate. Ultimately, the option of changing vendors was eliminated due to a number of factors (e.g., demobilization and start-up costs, schedule impacts, organizational distractions).

Given this factual backdrop, when reading the CEA report it should be considered that during September and October 2009, there was activity ongoing to review, challenge, and consider alternatives to Bechtel's project cost forecast, and to develop alternatives to Bechtel as the EPC contractor.

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CONCENTRIC
INVESTIGATION SERVICES

/ [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

CONFIDENTIAL - DRAFT

May XX, 2010

CONFIDENTIAL - DRAFT

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I. Introduction

1 On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ The
2 [REDACTED] Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FLPSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Law and Regulatory Affairs Departments on March 10, 2010.² A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.³ A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's
4 Law Department, and specifically to [REDACTED].
5 All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly,
6 Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]

7 Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters
8 related to the performance review of [REDACTED] and all other human resources related matters. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources Department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary
9 response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter.
10 Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state
11 regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and 2009.⁵ A review of Concentric's findings related to the flow of information from FPL to the FLPSC and its staff ("FLPSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

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1 [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]
2 Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.
3 Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
4 FLPSC Dockets 080009-EI & 090009-FI, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

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A. Overview of Scope

- 1/ Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and March 31, 2010. Concentric then sought to determine how this set of events supported or contradicted the allegations contained in the [REDACTED] letter and affected the flow of information within FPL and to the FL PSC. Finally we have provided our recommendations for improvements that will help prevent similar issues from occurring in the future.

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B. Sources of information

- 3/ Concentric's investigation into this matter relied upon two pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 4.

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- 4/ Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

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Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspected violation of this Code."⁶ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code.⁷ At the conclusion of each interview, the interviewees were given an opportunity to raise any additional concerns they may have had.

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The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects' organization and activities.

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⁶ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁷ Ibid.

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C. Independence

- 1/ Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL's Legal and Regulatory Affairs Departments.
- 2/ Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL did not place any constraints on Concentric's access to current and former employees. Lastly, Concentric was not materially constrained by budget or schedule expectations on the part of FPL.

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- 3/ Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 5.

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D. Key questions

- 4/ Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are intended to determine whether any imprudent costs were passed onto FPL's customers or if FPL intentionally withheld information from the FL PSC.

1. Foremost amongst Concentric's key questions is whether FPL has made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. This question is a threshold issue for assuring prudent conduct on the part of FPL.
2. Concentric noted a need to determine if any costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision-making.
3. We examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why.
4. Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent, and reliable, and if not, what allowed this to occur and why.
5. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

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5 III. Summary Level Response to [REDACTED] Letter

- 6/ Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the [REDACTED] Letter and Concentric's report.

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- 8/ As can be seen in Exhibit 6, a number of the factual assertions raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms Mr. [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU

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Projects to have been the predictable result of the evolving design which is inherent in any complex project.

- 1/ Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were inappropriately continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁸ and the PSL Annual Project Cash Flow Report⁹, confirmed [REDACTED] assertion. Concentric did note, however, that the Executive Steering Committee ("ESC") presentations since July 25, 2009, in November 2009 and after 2009 all did use the updated cost forecast.¹⁰

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- 3 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 6, Concentric has found evidence which indicates the [REDACTED] were alerted to the potential underestimated costs at PSL as early as April 2008.¹¹ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast, and was within approximately \$11 million, or 2%¹², of the forecast ultimately provided to FPL's management in July 2009.¹³

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- 4 Overall, Concentric has found [REDACTED] to be credible. The basis of this finding includes
5 Concentric's interview with [REDACTED] the fact that [REDACTED] chose to send this letter on a non-
6 anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover,
7 Concentric believes [REDACTED] is a capable project controls employee with a strong background
8 within his function. [REDACTED] employment history includes the previous positions noted in the
9 [REDACTED] letter¹⁴ and many years of prior project controls employment as a contractor at FPL's PTN
10 site, as well as other nuclear facilities in the US. It is important to note that FPL had enough
11 confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of
12 approximately 100 people.¹⁵ While [REDACTED] was not aware of all of the developments relating to
13 the preparation of cost estimates and his knowledge of the information flow for the EPU Projects
ceased when he left the Project in July, 2009, his letter is essentially factually accurate.

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Deleted: every aspect of the EPU projects, it would not be fair to characterize [REDACTED] as under- or poorly qualified for his position.

- 12 It should be noted that, following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation against him by his supervisor.¹⁶ A copy of this email is attached as Exhibit 7. Concentric reported this email to FPL's

⁸ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁹ Annual Cash flow, PSL EPU Project, October 2009.

¹⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

¹¹ CR 2008-11443, April 3, 2008.

¹² Summary Cash flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

¹⁴ [REDACTED] letter, p. 2.

¹⁵ Ibid.

¹⁶ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

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Law Department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources ("HR") Department.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. The summary presented below should not be used as a substitute for a review of the entire chronology presented in Exhibit 8.

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A. Chronology

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions.¹⁷ Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007.¹⁸ FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁹

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In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally confirmed the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%.²⁰

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In April 2008, soon after the completion of the Shaw scoping studies, the EPU Project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary" for the uprate.²¹ In response to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to the CR.²² The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED], among other items. The High Risk Mitigation Plan was signed by the [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric does not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the revised cost estimate

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¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁸ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

²⁰ Ibid.

²¹ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²² Ibid., p. 8.

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described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.²³

Throughout the period from August 2008 to November 2008, the PSL trend register indicated a potential for significant underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²⁴ This compares to the scoping analysis assumption of \$225MM.²⁵

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In December 2008, the PSL Project Team again identified the potential to significantly exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project management at that time. EPU Project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

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CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change management plan.²⁶

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1 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
2 attended by the EPU Project management team and reportedly included [REDACTED] who was
3 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
this time EPU Senior Management was presented with a forecast of approximately \$785 MM for
PSL, an increase of approximately \$129 million over the then current budget.²⁷ This was
approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009.²⁸ It
was reported to Concentric that the [REDACTED] and the [REDACTED] responded
with a number of questions related to the basis for the revised forecast and requested additional
refinement of the forecast.

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4 A similar exercise was undertaken for PTN in March 2009, and PTN began to report its
performance relative to this revised forecast. However, the PTN Project Team was instructed by
the [REDACTED] to revise the initial reports, to measure cost performance relative
to the original project baseline because the revised estimate still had to be "validated," and because
an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the
PTN EPU Project."²⁹ Concentric was told that the PTN Site Director was not satisfied with these
instructions, but chose to comply with the instructions from his superiors nonetheless.

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²³ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁵ Ibid.

²⁶ CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

²⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁸ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

²⁹ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

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In April 2009, the EPU Project management team began a detailed cost review of NextEra's Point Beach EPU Project. This review included the sequestration of the EPU Project management team at Point Beach for a period of two to three weeks in April. Upon their return, the EPU Project Director resigned from his position, and it is reported that a similar detailed cost review was begun for the PSL and PIN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

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2 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
3 before the FJ. PSC.³⁰ In this testimony, the [REDACTED] stated "The EPU Projects are
progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
4 Docket 080009-EI."³¹ At the same time, FPL submitted the pre-filed, direct testimonies of
5 [REDACTED] FPL;
6 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³²

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At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel EPC estimates had increased to a level significantly in excess of Bechtel's indicative bid.³³ This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours.³⁴ Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU Project management team believed may be able to be eliminated to reduce the EPC vendor's forecast.³⁵ Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project management team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates.³⁶ A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting.³⁷

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Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU Modification Scope Review for both PIN and PSL.³⁸ The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁹

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The subsequent ESC meeting was held on June 23, 2009.⁴⁰ In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.⁴¹ This presentation was relatively short and precipitated a much more detailed cost review in July 2009.

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7 ³⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

³¹ Ibid. at pp. 2-3.

³² Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

³³ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

³⁴ Ibid., p. 14.

³⁵ Ibid.

³⁶ Ibid., p. 15.

³⁷ Ibid., p. 18.

³⁸ PIN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ Ibid.

⁴⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴¹ Ibid., p. 12.

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During the intervening period between the June and July 2009 ESC presentations, the EPU Project team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made.

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As a result EPL's executive team recruited four new employees for the EPU Project team including a new [REDACTED], an [REDACTED], an [REDACTED] and the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

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At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million.⁴² Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.⁴³ The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast."⁴⁴ Simultaneously, the ESC was advised that the May 1, 2009 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁵ These revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects.

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3 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to EPL's Nuclear Projects Department.⁴⁶

No ESC meeting was held in August 2009. Nonetheless, both EPU Projects produced a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009.⁴⁷ In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review."⁴⁸

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4 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED] testified that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.⁴⁹

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The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM total for both sites.⁵⁰ This presentation stated that approximately 30% of the total project costs have "high certainty."⁵¹

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At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁵² In

⁴² Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴⁴ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁵ Ibid., p. 50.

⁴⁶ [REDACTED] Letter.

⁴⁷ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴⁸ Annual Cash Flow, PSL EPU Project, August 1, 2009.

⁴⁹ Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

⁵⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁵¹ Ibid., p. 9.

⁵² Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

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addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁵³ A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2.⁵⁴ Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

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Also in October, PSL produced two different Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009.⁵⁵ This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million.⁵⁶ No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the five key questions noted in Section II:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for the forecast to increase as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the forecast.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised forecast and projected incremental output.
- The [REDACTED] was aware of and had assisted in the presentation of a revised cost estimate to FPL's executive managers on July 25, 2009.

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V. FPL's Decision to Proceed with the EPU's

In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is described below. Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking review and approval in dockets 090009-EI and 100009-EI⁵⁷ the result of prudent decisions by FPL's management? This question is addressed in Section VI.

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⁵³ Ibid, p. 6.

⁵⁴ Ibid, pp. 6, 18.

⁵⁵ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵⁶ Annual Cash Flow, PSL EPU Project, October 2009.

⁵⁷ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010.

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The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁸ As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵⁹ This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

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It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009.⁶⁰

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all interviewees agreed with this conclusion.

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Following a conclusion as to how much awareness of the revised forecast could have improved, Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁶¹

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As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed

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⁵⁸ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

⁵⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁶⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁶¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁶² Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU Projects.

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VI. The Review and Approval of EPU Costs in the NCRC

Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involves the actual expenditure of company and customer dollars or the commitment to do so at a later date.

The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during our interview with [REDACTED].

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Similarly, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by all interviewees. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

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VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁶³ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project estimate were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and

Deleted: <#>Concentric has, however, found evidence that suggests concerns with the approval reporting of revisions of the cost estimate. These documents and the concerns are described within Sections VII and VIII below.

⁶² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

⁶³ FL PSC Docket No. 090009-EL.

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interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁶⁴ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁶⁵
- 2 [REDACTED] FPL⁶⁶
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁷, and [REDACTED] FPL⁶⁸

4 The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule, and
5 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁹, and the
6 exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁷⁰
7 Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the
8 prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions
9 on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's
10 incurred costs and the 2009-2010 projected costs.⁷¹ She did not offer any estimate of the projected
11 costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has
12 focused on the testimony of [REDACTED], and, to a lesser extent, [REDACTED]

13 The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following
14 statements:

"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."⁷²

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15 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
16 Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be
17 cost effective when compared to the addition of other generation alternatives."⁷³*

*"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally
18 filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise*

⁶⁴ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

19 ⁶⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009. [REDACTED] left the EPU Project in July, 2009, and left FPL in January, 2010.

20 ⁶⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

21 ⁶⁷ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

22 ⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

23 ⁶⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

24 ⁷⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

25 ⁷¹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

26 ⁷² Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

⁷³ Ibid., pp. 2-3.

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the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.⁷⁴

¹ The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁷⁵

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁶ and that [REDACTED] continued to use in May 2009⁷⁷
- The PSL EPU trend reports for August 2008 through November 2008 had raised concerns about substantial underestimation of the PSL project costs.⁷⁸
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPU's had increased by \$37 million; this higher value was used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷⁹
- ⁴ • On February 17, 2009, [REDACTED] presented with an analysis prepared by Project Controls and the PSL site that their forecast for PSL was \$129 million above the May, 2008 estimate⁸⁰
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision was made to not use the higher cost estimate because it was considered "preliminary"⁸¹
- ⁵ • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, the forecasts for

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⁷⁴ Ibid, p. 24.

⁷⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-FI, September 17, 2007.

⁷⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷⁸ PSL Trend Register

⁷⁹ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁸⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁸¹ Email from [REDACTED] to anonymous recipient, March 26, 2009.

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PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as "green."⁸²

1
2 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had an increase been approved. What [REDACTED] had reported to the ESC was consistent with what his Direct Testimony reported to FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU Projects.

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C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all documents produced and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis.⁸³ This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which requires an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a "snapshot" of a continuous process.⁸⁴

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3 Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious challenge to meeting the existing budget.⁸⁵ On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁸⁶ On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁷, and the ESC instructed him to prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting. 4 This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁸⁸ Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009.

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However, the interrogatory only asked for a listing of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and

⁸² Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

⁸³ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁸⁴ Ibid.

⁸⁵ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁷ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁹:

3 BY [REDACTED]

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

A Yes, they would be.

4 [REDACTED]: FPL asks that the prefiled direct testimony be inserted into the record as though read.

5 The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL.

7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU Projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009.⁹⁰ The new estimates for PSL were caveated as still being "at the conceptual level"⁹¹ (as were the May, 2008 estimates⁹²) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁹³ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience.⁹⁴ Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC, and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁹⁵ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing.⁹⁶

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89 Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

90 Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

91 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

92 Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

93 Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

94 Ibid., pp. 38-40 and pp. 51-52, respectively.

95 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

96 Ibid., p. 50.

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1 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
2 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
3 and the testimony related to it, was out-of-date. By this time, [REDACTED] had presented and
relied on revised cost estimates to the ESC. Our opinion in this regard is also supported by the
statements of nearly all of the EPU Project personnel we interviewed (other than the two individuals
that participated in the decision to not update the testimony), and is strongly held by many of those
we interviewed.

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4 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-
filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
validity of many unapproved scope changes and manpower estimates, and that they were a no better
than a "guess" with little support. He also indicated that he does not recall any discussion with
regard to whether the updated estimate should be presented to the FL PSC.

Concentric agrees that the new cost estimates were based on only partially completed engineering
and design information, and that they were still subject to revision as new information became
available. However, that is always the case with a fast-tracked construction program and continues
to be the case today. These facts do not support the continued use of information that was based
on even earlier conceptual designs and out-of-date manpower and material estimates. The new
estimates were the product of more than a dozen people working extended hours for a month and
had been reviewed by every level of management in the EPU organization. They reflected far more
knowledge about the scope of the EPU Projects than had been used in the 2007-2008 Shaw scoping
analysis, materials cost estimates that were based on far more recent data and manpower estimates
that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they
were presented to the executives of FPL in charge of EPU governance (and who were responsible
for approving budget changes for the projects) as the best "line-by-line" estimates available at the
time, were materially different from the 2008 estimates, and have continued to serve as the reference
point for all subsequent revisions to the cost estimates, including those that were submitted to the
FPSC in May 2010. In short, while the July 25, 2009 and subsequent cost forecasts are and were
preliminary, they represented the best information available at that time, were relied upon by FPL,
and were substantially more advanced than the 2007/2008 cost projections. It is also worth noting
that all of the post-July 25, 2009 cost forecast revisions have been increases that were built upon the
July 25, 2009 forecast.

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5 Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness
of the EPU Projects, had any knowledge that updated cost estimates had been presented to the
ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
6 sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division
of FPL.

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7 Concentric's discussions with Company personnel have indicated that the fact that the updated
feasibility analyses presented to the ESC on July 25, 2009 confirmed that the projects still offered
significant value to customers may also have been an consideration in the decision to not update
8 [REDACTED] testimony. While Concentric agrees that the new analyses confirmed the conclusions in
[REDACTED] testimony, we believe that a \$300 million, or 27%, increase in the projected cost of
the projects warranted disclosure. The documents we have reviewed, and our interviews, also
indicate that there was considerable uncertainty among the project staff in September 2009 as to
whether the new cost estimates were "official" or not, and internal reports were inconsistent in their

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evidence to demonstrate that there was a
widespread plan to intentionally keep
updated information from being provided
to the NRC parties. [REDACTED]
actions were deliberate and involved
discussions with at least one other
individual. However, on a broader scale,

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use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPIs have identified three which are relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

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A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

"This document shall be used for scope changes to Capital and O&M sub-projects within the EPU Project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records."⁹⁷

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These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the [REDACTED] for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU Projects. Once an

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⁹⁷ EPPI-300, Project Change Control, Pg 3, Rev 00.

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/ SCN/TN is initiated, EPPI-300 requires the [REDACTED] to establish a tracking number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU Project team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports.⁹⁸

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Concentric requested the EPU Projects' Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. For PTN, it would appear that the trend register was not as conscientiously maintained during this period and some of the trends or scope changes were outstanding for several months.

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2 Finally, many potential scope changes or trends appear to have been captured on the Risk Register, which, as discussed below was not synchronized with the project forecast, rather than the Trend Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹⁹ NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

⁹⁸ Ibid at 4-6.

⁹⁹ NPDI-304, Estimate Preparation, Pg 9, Rev 0.

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The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU Projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management used the initial contingency as an "allowance" that was to be used to meet increases in scope or cost rather than a value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

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EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSI ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used as prescribed by EPPI-340. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

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With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.¹⁰⁰

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of

¹⁰⁰ EPU lessons learned PPL from April 2010.

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each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/IN forms. This revision changed the name of the form to explicitly include forecast variations. Similarly, the SCN/IN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance to fund scope changes, rather than maintaining the contingency at a level that appropriately reflects the risk to the cost forecast. Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

Concentric also notes that issues of the project contingencies, risk register, and the relationship of each to the cost projection are being addressed by the work soon to be completed by High Bridge. It is our understanding that EPU management considers its current approach to be an interim one until the High Bridge results have been received and reviewed.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not adequately comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009. It is clear that the process required for releasing funds from the contingency was not followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget or cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."¹⁰¹

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persisted after July 25, 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals

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Deleted: The EPU senior management team does still have opportunities for improvement. Specifically, the current EPU management team has explicitly linked the risk registers to the cost estimate through the line item of "risk", but the link between the level of risk remaining in the project and contingency or scope not defined has yet to be established. The new EPU management team is addressing this issue through the retention of High Bridge Associates to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency. That work is not yet complete, and the contingency continues to be the balancing variable in the EPU cost estimate as of March 2010. This has led to the contingency being at an unduly low level.

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were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a list of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. In those instances, we are stating the recommendation to demonstrate that all of the issues raised in this report are, or have been, adequately addressed.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the NCRC team, including regulatory affairs and other witnesses, as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC. Concentric has been informed that this change has already been implemented.
2. Similar to the recommendation above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents could enhance the FL PSC staff's understanding of the projects and how they are developing on an on-going basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. It is our understanding that the importance of updating one's pre-filed testimony and exhibits is an explicit part of the witness training program, which we believe should be conveyed through written instructions.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees in 2009 was a representative from FPL's Regulatory Affairs Department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation. It is our understanding that this change has recently been implemented.
5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU Project team should establish and implement explicit report

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Deleted: along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with an obligation or duty to educate oneself on matters related to this subject matter or expertise regardless of whether this falls within one's day-to-day responsibilities

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owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure that is analogous to the "blue sheet" sign-off procedure used for information sourced from outside the business unit. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

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6. To the extent that a performance indicator (e.g. green, yellow, red) relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator.

7. ¹FPL should consider changing the reporting relationship of the EPU Project Controls ²Director. While the change in reporting from the EPU Project Director to the Vice ³President of Power Uprate in 2009 was a positive development, the reporting relationship of ⁴the EPU Project Controls Director may be improved by including either a solid or dotted ⁵line outside of the EPU Projects. This could improve the independence of the Project ⁶Controls Director and his staff. Concentric notes that future, large scale projects could benefit from an independent project controls organization that incorporate best practices from across the organization.

Deleted: Concentric's interviews also noted that individuals within the EPU project team were uncertain as to what was represented by each performance indicator. Providing the underlying calculation used to develop that performance indicator will help clarify the purpose of the performance indicator.**Deleted:** is**Deleted:** should**Deleted:** include**Deleted:** will help prevent any undue influence on**Deleted:** As an alternative, FPL could consider forming a separate Project Controls department, similar to the Integrated Supply Chain department. This separate Project Controls department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group.**Deleted:** a set of uniform and consistent**Deleted:** has been assigned to**Deleted:** EPU project

8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that is being addressed by High Bridge in its current independent review of the project cost estimate. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should include a distribution checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

Deleted: This process should be used for both scope additions or deletions and changes in the expected cost of approved project scope as a result of material or component cost escalation, increased manpower requirements or other factors.**Deleted:** report

9. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location. Concentric notes that the EPU management team is already planning to address this change within the EPU action item list.

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10. High Bridge Associates, or another independent third party, should be retained to complete an engineering-based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports. Deleted: EPU project
12. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects. Deleted: EPU project
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13. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Our limited sample of interviews indicates that there are, or have been, concerns about the uniform adherence to the non-retaliation provision of the Code of Conduct. Deleted: Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization
14. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing new complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
15. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges. Deleted: EPU project
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/ [REDACTED] Investigation Report

Prepared for

Florida Power & Light Company

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May XX, 2010

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I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter"), an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ The Letter included concerns about the "cost performance in Nuclear Projects and Extended Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's executive management and the Florida Public Service Commission ("FLPSC")

Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Law and Regulatory Affairs Departments on March 10, 2010.² A copy of the letter is attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Law Department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.³ A copy of Concentric's engagement letter is included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Law Department, and specifically to [REDACTED]

All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED]

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resources related matters. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources Department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan that was used to perform this investigation. Section III includes a summary response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter. Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's St. Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation of FPL's activities in the Nuclear Cost Recovery Clause ("NCRC") dockets in 2008 and 2009.⁵ A review of Concentric's findings related to the flow of information from FPL to the FL PSC and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow of information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

- 12-1 [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]
- 13-2 Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.
- 14-3 Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
- ⁵ FL PSC Dockets 080009-EI & 090009-EL, In Re: Nuclear Cost Recovery Clause.

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Deleted: It should be noted that, following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor.⁴ Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 3. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

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II. Concentric Overview and Workplan

Concentric is a management and economic consulting firm based in Marlborough, MA. Concentric has previously been retained by FPL to provide regulatory support on a variety of matters including testimony before the FL PSC. A list of Concentric's prior work for FPL is provided in Exhibit 3. Concentric's work plan for this investigation is provided below.

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A. Overview of Scope

- 1/ Concentric's scope of work regarding the investigation of allegations contained in the [REDACTED] letter included a factual review of the events between August 2007 and March 31, 2010. Concentric then sought to determine how this set of events supported or contradicted the allegations contained in the [REDACTED] letter and affected the flow of information within FPL and to the FL PSC. Finally we have provided our recommendations for improvements that will help prevent similar issues from occurring in the future.

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B. Sources of information

- 3/ Concentric's investigation into this matter relied upon two pathways for information. First, Concentric submitted a number of requests for documentation to FPL in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document requests can be found in Exhibit 4.

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- 4/ Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location, depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15 and April 12. Concentric selected specific individuals to be interviewed based upon the allegations contained in the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

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Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspected violation of this Code."⁶ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code.⁷ At the conclusion of each interview, the interviewees were given an opportunity to raise any additional concerns they may have had.

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The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects' organization and activities.

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⁶ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.
⁷ Ibid.

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C. Independence

- 1/ Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained our independence from FPL's Legal and Regulatory Affairs Departments.
- 2/ Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees, or contractors. To this end, FPL did not place any constraints on Concentric's access to current and former employees. Lastly, Concentric was not materially constrained by budget or schedule expectations on the part of FPL.

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- 3/ Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 5.

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D. Key questions

- 4/ Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are intended to determine whether any imprudent costs were passed onto FPL's customers or if FPL intentionally withheld information from the FL PSC.

1. Foremost amongst Concentric's key questions is whether FPL has made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. This question is a threshold issue for assuring prudent conduct on the part of FPL.
2. Concentric noted a need to determine if *any* costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision-making.
3. We examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why.
4. Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent, and reliable, and if not, what allowed this to occur and why.
5. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

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III. Summary Level Response to Martin Letter

- 5/ Exhibit 6 presents a copy of the [REDACTED] Letter to which Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the [REDACTED] Letter and Concentric's report.

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- 7/ As can be seen in Exhibit 6, a number of the factual assertions raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms Mr. [REDACTED] statements related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU

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Projects to have been the predictable result of the evolving design which is inherent in any complex project.

- 1/ Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were inappropriately continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁸ and the PSL Annual Project Cash Flow Report⁹, confirmed [REDACTED] assertion. Concentric did note, however, that the Executive Steering Committee ("ESC") presentations since July 25, 2009, in November 2009 and after 2009 all did use the updated cost forecast.¹⁰

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- 3/ Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 6, Concentric has found evidence which indicates the [REDACTED] and the [REDACTED] were alerted to the potential underestimated costs at PSL as early as April 2008.¹¹ Similar opportunities were noted throughout the second half of 2008, and specifically in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the forecast presented in February 2009 was significantly higher than the 2008 forecast, and was within approximately \$11 million, or 2%¹², of the forecast ultimately provided to FPL's management in July 2009.¹³

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- 4/ Overall, Concentric has found [REDACTED] to be credible. The basis of this finding includes Concentric's interview with [REDACTED] the fact that [REDACTED] chose to send this letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a strong background within his function. [REDACTED] employment history includes the previous positions noted in the [REDACTED] Letter¹⁴ and many years of prior project controls employment as a contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of approximately 100 people.¹⁵ While [REDACTED] was not aware of all of the developments relating to the preparation of cost estimates and his knowledge of the information flow for the EPU Projects ceased when he left the Project in July, 2009, his letter is essentially factually accurate.

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- 12/ It should be noted that, following our interview with Mr. [REDACTED] on March 17, 2010, Mr. Martin notified Concentric and FPL via email on March 19, 2010 of potential retaliation against him by his supervisor.¹⁶ A copy of this email is attached as Exhibit 7. Concentric reported this email to FPL's

⁸ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁹ Annual Cash Flow, PSL EPU Project, October 2009.

¹⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5.

¹¹ CR 2008-11443, April 3, 2008.

¹² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

13/ ¹⁴ [REDACTED] Letter, p. 2.

¹⁵ Ibid.

14/ ¹⁶ Email from [REDACTED] dated March 12, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

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Law Department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources ("HR") Department.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 8. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. The summary presented below should not be used as a substitute for a review of the entire chronology presented in Exhibit 8.

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A. Chronology

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate PSL and PTN at the uprated conditions.¹⁷ Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but the schedule was advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007.¹⁸ FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁹

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In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally confirmed the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%.²⁰

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In April 2008, soon after the completion of the Shaw scoping studies, the EPU Project team assigned to PSL (the "PSL Project Team") identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, the PSL Project Team initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary" for the uprate.²¹ In response to this CR, the EPU Project team developed a "High Risk Mitigation Plan" which was attached to the CR.²² The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED] among other items. The High Risk Mitigation Plan was signed by the [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric does not believe that this High Risk Mitigation Plan was ever completed. Concentric also requested a copy of the revised cost estimate

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¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁸ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

²⁰ Ibid.

²¹ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²² Ibid., p. 8.

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described in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.²³

Throughout the period from August 2008 to November 2008, the PSL trend register indicated a potential for significant underestimation of the EPC costs for the PSL EPU. On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast of \$262MM for the PTN EPU.²⁴ This compares to the scoping analysis assumption of \$225MM.²⁵

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In December 2008, the PSL Project Team team again identified the potential to significantly exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project management at that time. EPU Project management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

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CR-2008-37753 was written by the PSL Project Team in December 2008 and noted the EPU Project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concluded that there was a "missed opportunity" to treat CR-2008-11443 as a change management plan.²⁶

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A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was attended by the EPU Project management team and reportedly included [REDACTED] who was appointed the EPU Project Controls Manager as of January 2009, and the PSL Project Team. At this time EPU Senior Management was presented with a forecast of approximately \$785 MM for PSL, an increase of approximately \$129 million over the then current budget.²⁷ This was approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009.²⁸ It was reported to Concentric that the [REDACTED] and the [REDACTED] responded with a number of questions related to the basis for the revised forecast and requested additional refinement of the forecast.

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A similar exercise was undertaken for PTN in March 2009, and PTN began to report its performance relative to this revised forecast. However, the PTN Project Team was instructed by the [REDACTED] to revise the initial reports, to measure cost performance relative to the original project baseline because the revised estimate still had to be "validated," and because an "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for the PTN EPU Project."²⁹ Concentric was told that the PTN Site Director was not satisfied with these instructions, but chose to comply with the instructions from his superiors nonetheless.

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²³ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁵ Ibid.

²⁶ CR 2008-37753, "Additional Information," December 10, 2008, p. 1.

²⁷ Summary Cash Flow EPU Total.090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁸ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

²⁹ Email of [REDACTED] to anonymous recipient, dated March 26, 2009.

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1 In April 2009, the EPU Project management team began a detailed cost review of NextEra's Point Beach EPU Project. This review included the sequestration of the EPU Project management team at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED] 2 [REDACTED] resigned from his position, and it is reported that a similar detailed cost review was begun for the PSL and PTN EPU Projects. The EPU Project Director was replaced on May 1, 2009.

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3 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI 4 before the FL PSC.³⁰ In this testimony, the [REDACTED] stated "The EPU Projects are progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in 5 Docket 080009-EI."³¹ At the same time, FPL submitted the pre-filed, direct testimonies of 6 [REDACTED] FPL; [REDACTED] 7 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³²

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At the end of May 2009, the EPU Project management team reported to the ESC that the Bechtel EPC estimates had increased to a level significantly in excess of Bechtel's indicative bid.³³ This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours.³⁴ Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU Project management team believed may be able to be eliminated to reduce the EPC vendor's forecast.³⁵ Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project management team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates.³⁶ A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting.³⁷

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Following the May 2009 ESC presentation, the EPU Project management team undertook an EPU Modification Scope Review for both PTN and PSL.³⁸ The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁹

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The subsequent ESC meeting was held on June 23, 2009.⁴⁰ In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008.⁴¹ This presentation was relatively short and precipitated a much more detailed cost review in July 2009.

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8 ³⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

³¹ Ibid. at pp. 2-3.

³² Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

³³ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p. 3.

³⁴ Ibid., p. 14.

³⁵ Ibid.

³⁶ Ibid., p. 15.

³⁷ Ibid., p. 18.

³⁸ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ Ibid.

⁴⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴¹ Ibid., p. 12.

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During the intervening period between the June and July 2009 ESC presentations, the EPU Project team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made.

As a result FPL's executive team recruited four new employees for the EPU Project team including a new [REDACTED], as [REDACTED], an [REDACTED] and the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

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At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million.⁴² Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million.⁴³ The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast."⁴⁴ Simultaneously, the ESC was advised that the May 1, 2009 NCRC feasibility filing had been based on included the original 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.⁴⁵ These revised feasibility scenarios confirmed the continued cost effectiveness of the EPU Projects.

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3 Following the July 25, 2009 ESC meeting, [REDACTED] left the EPU Project and returned to FPL's Nuclear Projects Department.⁴⁶

No ESC meeting was held in August 2009. Nonetheless, both EPU Projects produced a cash flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009.⁴⁷ In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review."⁴⁸

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4 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED] testified that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.⁴⁹

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The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM total for both sites.⁵⁰ This presentation stated that approximately 30% of the total project costs have "high certainty."⁵¹

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At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the projects was unchanged, but that the contingency had decreased by approximately \$12 million.⁵² In

⁴² Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴⁴ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁵ Ibid. p. 50.

6 ⁴⁶ Letter.

⁴⁷ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴⁸ Annual Cash Flow, PSL EPU Project, August 1, 2009.

7 ⁴⁹ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

⁵⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁵¹ Ibid., p. 9.

⁵² Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

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addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million.⁵³ A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2.⁵⁴ Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

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Also in October, PSL produced two different Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009.⁵⁵ This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million.⁵⁶ No one with whom Concentric spoke could explain the difference or the reason for the two reports.

B. Key Conclusions from Chronology

Concentric has developed the following conclusions which are relevant to the five key questions noted in Section II:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for the forecast to increase as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised forecast for PSL as early as December 2008 and a more refined version of this analysis in February 2009.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the forecast.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised forecast and projected incremental output.
- The [REDACTED] was aware of and had assisted in the presentation of a revised cost estimate to FPL's executive managers on July 25, 2009.

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V. FPL's Decision to Proceed with the EPUs

In determining whether EPU Project costs were prudently incurred, the FL PSC will be concerned with two items. First is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers. That question is described below. Second, the FL PSC will be concerned with whether the EPU Project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking review and approval in dockets 090009-EI and 100009-EI⁵⁷ the result of prudent decisions by FPL's management? This question is addressed in Section VI.

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⁵³ Ibid., p. 6.

⁵⁴ Ibid., pp. 6, 18.

⁵⁵ Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵⁶ Annual Cash Flow, PSL EPU Project, October 2009.

⁵⁷ FL PSC Docket 100009-131, FPL Notice of Intent to Retain Party Status, January 6, 2010.

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The initial decision to proceed with the EPU Projects was made in August 2007 on the basis of FPL's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁸ As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵⁹ This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would reporting of the revised forecast to FPL's Executive Management have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

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It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month timeframe is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009.⁶⁰

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU Project team to further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all interviewees agreed with this conclusion.

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Following a conclusion as to how much awareness of the revised forecast could have improved, Concentric evaluated whether this would have affected FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007.⁶¹

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As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed

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⁵⁸ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

⁵⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-B1, September 17, 2007.

⁶⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁶¹ Extended Power Uprates, Project Update, Turkey Point, July 25, 2009 and Extended Power Uprates, Project Update, Saint Lucie, July 25, 2009.

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the July 25, 2009 ESC presentation for PSL indicates that, when both the higher costs and greater output are considered, the EPU Projects continued to be economic, although approximately 14-59% less so, as compared to the information submitted on May 1, 2009 to the FL PSC.⁶² Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU Projects.

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VI. The Review and Approval of EPU Costs in the NCRC

Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involves the actual expenditure of company and customer dollars or the commitment to do so at a later date.

2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of 3 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during 4 our interview with [REDACTED] 5

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Similarly, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by all interviewees. When asked whether they were aware of any costs that should not be passed along, the unanimous 6 answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

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VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁶³ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was accurate and consistent with the standards expected for testimony before, and submissions made to, a regulatory agency. This includes ensuring that approved changes to the project estimate were clearly communicated to the FL PSC in a timely manner.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented: 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and

Deleted: <#> Concentric has, however, found evidence that suggests concerns with the approval reporting of revisions of the cost estimate. These documents and the concerns are described within Sections VII and VIII below.

⁶² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

⁶³ FL PSC Docket No. 090009-FI.

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interrogatories were responded to from January, 2009 through the hearings; the hearings on these issues were held on September 8, 2009.⁶⁴ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED] FPL⁶⁵
- 2 [REDACTED] FPL⁶⁶
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁷, and [REDACTED] FPL⁶⁸

The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule, and cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁹, and the exhibits sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses.⁷⁰ Mr. Reed's testimony related to nuclear project controls, procedures, policies, and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs.⁷¹ She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused on the testimony of [REDACTED], and, to a lesser extent [REDACTED]

8 The pre-filed Direct Testimony filed by [REDACTED] on May 1, 2009 included the following statements:

"The EPU Projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."⁷²

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9 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."⁷³*

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise

⁶⁴ Ibid. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

10 ⁶⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009. Mr. Kundalkar left the EPU Project in July, 2009, and left FPL in January, 2010.

11 ⁶⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁷ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

12 ⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

13 ⁶⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

14 ⁷⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

15 ⁷¹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

16 ⁷² Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

⁷³ Ibid., pp. 2-3.

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the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.⁷⁴

- 1 The TOR (True-Up to Original) schedules include Schedule TOR-7, which was sponsored by [REDACTED]
2 [REDACTED], and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.⁷⁵

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁶
3 and that [REDACTED] continued to use in May 2009⁷⁷
- The PSL EPU trend reports for August 2008 through November 2008 had raised concerns about substantial underestimation of the PSL project costs.⁷⁸
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- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had increased by \$37 million; this higher value was used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concluded that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷⁹
- 4 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their forecast for PSL was \$129 million above the May, 2008 estimate⁸⁰
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- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May 2008 estimate; a decision was made to not use the higher cost estimate because it was considered "preliminary"⁸¹
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, the forecasts for
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6 ⁷⁴ Ibid., p. 24.

⁷⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁷⁷ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁷⁸ PSL Trend Register

⁷⁹ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁸⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

7 ⁸¹ Email from [REDACTED] to anonymous recipient, March 26, 2009.
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PSL and PTN were unchanged from the May 2008 estimates; the Projects' cost status is shown as "green."⁶²

As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate was likely, as of May 1, 2009 [REDACTED] had not reported such an increase to the ESC nor had an increase been approved. What [REDACTED] had reported to the ESC was consistent with what his Direct Testimony reported to FL PSC. Additionally, Schedule TOR-7 appropriately indicated the Company continued to evaluate the costs of the EPU Projects.

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C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all documents produced and interrogatory responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis.⁶³ This interrogatory response, which is attached as Exhibit 9, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which requires an annual comparison of the budgeted and actual costs as compared to the estimated in-service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7 which contains the Company's annual comparison of budgeted and actual cost. Schedule TOR-7 was submitted on May 1, 2009, and is described as a "snapshot" of a continuous process.⁶⁴

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Between May 1, 2009 and August 17, 2009, major changes were made to the forecast for the EPU Projects. On May 31, 2009, the PTN EPU budget indicator was shown as red, indicating a serious challenge to meeting the existing budget.⁶⁵ On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate.⁶⁶ On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁶⁷, and the ESC instructed him to prepare a "line-by-line" updated forecast for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several staff reportedly working seven days a week for a month and was presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU Projects which were approximately 21% higher than the May 2008 estimates.⁶⁸ Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009.

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However, the interrogatory only asked for a listing of the responsive analyses, not for FPL's current or updated analyses. Concentric views the response to Staff 5-53 as being accurate, reliable, and

⁶² Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

⁶³ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁶⁴ Ibid.

⁶⁵ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁶⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁶⁷ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁶⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

- 1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁹:

3 BY [REDACTED]

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

A Yes, they would be.

4 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009. This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL.

7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU Projects, and had presented these new estimates to several senior FPL and contractor personnel on July 25, 2009.⁹⁰ The new estimates for PSL were caveated as still being "at the conceptual level"⁹¹ (as were the May, 2008 estimates⁹²) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁹³ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience.⁹⁴ Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FL PSC, and that several new economic feasibility analyses had been performed, which updated those analyses that had been submitted to the FL PSC eleven weeks earlier.⁹⁵ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing.⁹⁶

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89 Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

90 Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

91 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

92 Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EL, September 17, 2007.

93 Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

94 Ibid., pp. 38-40 and pp. 51-52, respectively.

95 Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

96 Ibid., p. 50.

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1 Based on the information presented above, Concentric has concluded that by the time [REDACTED]
2 [REDACTED] took the stand on September 8, 2009, the information presented on Schedule TOR-7,
3 and the testimony related to it, was out-of-date. By this time [REDACTED] had presented and
relied on revised cost estimates to the ESC. Our opinion in this regard is also supported by the
statements of nearly all of the EPU Project personnel we interviewed (other than the two individuals
that participated in the decision to not update the testimony), and is strongly held by many of those
we interviewed.

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4 In our interview with him, [REDACTED] defended the September 8, 2009 reaffirmation of his pre-
filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
validity of many unapproved scope changes and manpower estimates, and that they were a no better
than a "guess" with little support. He also indicated that he does not recall any discussion with
regard to whether the updated estimate should be presented to the FL PSC.

Concentric agrees that the new cost estimates were based on only partially completed engineering
and design information, and that they were still subject to revision as new information became
available. However, that is always the case with a fast-tracked construction program and continues
to be the case today. These facts do not support the continued use of information that was based
on even earlier conceptual designs and out-of-date manpower and material estimates. The new
estimates were the product of more than a dozen people working extended hours for a month and
had been reviewed by every level of management in the EPU organization. They reflected far more
knowledge about the scope of the EPU Projects than had been used in the 2007-2008 Shaw scoping
analysis, materials cost estimates that were based on far more recent data and manpower estimates
that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they
were presented to the executives of FPL in charge of EPU governance (and who were responsible
for approving budget changes for the projects) as the best "line-by-line" estimates available at the
time, were materially different from the 2008 estimates, and have continued to serve as the reference
point for all subsequent revisions to the cost estimates, including those that are being submitted to
the FPSC in May 2010. IN short, while the July 25, 2009 and subsequent cost forecasts are and were
preliminary, they represented the best information available at that time, were relied upon by FPL,
and were

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Concentric has found no evidence to suggest that Mr. Sim, FPL's witness on the cost effectiveness
of the EPU Projects, had any knowledge that updated cost estimates had been presented to the
ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division
of FPL.

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6 Concentric also did not find evidence to demonstrate that there was a widespread plan to
intentionally keep updated information from being provided to the NCRC parties. [REDACTED]
actions were deliberate and involved discussions with at least one other individual. However, on a
broader scale, the documents we have reviewed, and our interviews, indicate that there was
considerable uncertainty among the project staff in September 2009 as to whether the new cost
estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the
updated forecast (see Section VIII for additional details). The EPU staff had experienced significant
turnover and was also undergoing a major reorganization at that time, which appears to have
contributed to the lack of clarity on this point.

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VIII. Information Flow within FPL

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPI's have identified three which are relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

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A. Pre-July 25, 2009 Information Flow

As early as April 2008, the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November 2008 and were brought to the attention of the EPU senior management in December 2008 and February 2009. By February 2009 the EPU Project Controls employees had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate was within 2% of the values presented to the ESC in July 2009. Similar estimates had been developed for PTN by March 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

These events followed the publication of EPPI-300 on March 4, 2008. This project instruction established a formal process for identifying and tracking potential changes to the initial project budget. EPPI-300 describes the purpose of the trend program as follows:

"This document shall be used for scope changes to Capital and O&M sub-projects within the EPU Project. Changes to the approved budget will be made using the approved Scope Change/Trend Notice form (SCN/TN) which shall become part of the budget records."⁹⁷

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2 These potential changes were divided into scope changes (i.e., additional plant modifications) or trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN was then routed to the [REDACTED] for approval. The process for addressing scope changes is similar, but requires additional review of the potential scope change to ensure it is necessary for the EPU Projects. Once an SCN/TN is initiated, EPPI-300 requires the EPU Project Cost Engineer to establish a tracking number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for indicating the potential schedule impact. Once this information is added to the SCN/TN, it is routed to the EPU Project team member with the appropriate approval authority for the potential

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⁹⁷ EPPI-300, Project Change Control, Pg 3, Rev 00.

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cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget and all future project reports.⁹⁸

Concentric requested the EPU Projects' Trend Registers and all SCN/TNs since January 1, 2008 and received many, but not all, of the SCN/TNs prior to issuing our report. Based on our review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with this EPPI-300. For PSL, a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and at least June 2009. However, it appears that the process for reviewing and approving trends was not appropriately implemented at PSL. Many of the same trends were identified each month without resolution or incorporation into the budget. As an example, in nearly every month between August 2008 and June 2009 a trend was noted with regard to the EPC budget. These trends ranged between \$10 million and \$140 million. The EPC budget was only increased by \$20 million during this period. For PTN, it would appear that the trend register was not as conscientiously maintained during this period and some of the trends or scope changes were outstanding for several months.

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Finally, many potential scope changes or trends appear to have been captured on the Risk Register, which, as discussed below was not synchronized with the project forecast, rather than the Trend Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation" plan, but does not appear to have been included on the trend register. Thus potential scope changes or trends were not adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This instruction was established in March 2008 and remains in effect today. Specifically, this instruction states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining the percentage of risk and the amount of money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹⁹ NPDI-304 provides additional guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU Projects' cost estimates fit the criteria for a conceptual estimate in 2008 and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009 was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it

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⁹⁸ Ibid at 4-6.

⁹⁹ NPDI-304, Estimate Preparation, Pg 9, Rev 0.

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referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU Projects no longer maintained a level of contingency that is consistent with FPI's guidelines. In other words, the EPU senior management viewed the initial contingency as a static "allowance" that was to be used to meet increases in scope or cost rather than a dynamic value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

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EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact." The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather is an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSI ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used in this manner. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

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With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009.¹⁰⁰

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for review and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed

¹⁰⁰ EPU lessons learned PPL from April 2010.

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the name of the form to explicitly include forecast variations. Similarly, the SCN/TN forms being issued by the Project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance for scope changes. While this is not prohibited by the current revision of EPPI-300, Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

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"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

The EPU senior management team does still have opportunities for improvement. Specifically, the current EPU management team has explicitly linked the risk registers to the cost estimate through the line item of "risk", but the link between the level of risk remaining in the project and contingency or scope not defined has yet to be established. The new EPU management team is addressing this issue through the retention of High Bridge Associates to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency. That work is not yet complete, and the contingency continues to be the balancing variable in the EPU cost estimate as of March 2010. This has led to the contingency being at an unduly low level.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project team did not fully comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates and/or budget prior to July 2009, and has yet to achieve widespread compliance today. It is clear that the process required for releasing funds from the contingency has not been followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget and cost forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."¹⁰¹

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Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persist in 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we

¹⁰¹ Ibid.

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have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization and often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a list of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects since July 2009 may have already addressed these recommendations. Nonetheless, we believe the importance of these changes should continue to be stressed by the EPU Project team.

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1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit the issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC on a timely basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs Departments continue to provide explicit instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs Departments should assume these individuals may not have a full understanding of the regulatory process and the implications of their testimony. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with an obligation or duty to educate oneself on matters related to this subject matter or expertise regardless of whether this falls within one's day-to-day responsibilities.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees is a representative from FPL's

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Regulatory Affairs Department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs Department should attend each future ESC presentation.

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5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU Project team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled on the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

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6. To the extent that a performance indicator relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (e.g., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator. Concentric's interviews also noted that individuals within the EPU Project team were uncertain as to what was represented by each performance indicator. Providing the underlying calculation used to develop that performance indicator will help clarify the purpose of the performance indicator.

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7. ¹FPL should consider changing the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate is a positive development, the reporting relationship of the EPU Project Controls Director should include either a solid or dotted line outside of the EPU Projects. This will help prevent any undue influence on the Project Controls Director and his staff. As an alternative, FPL could consider forming a separate Project Controls Department, similar to the Integrated Supply Chain Department. This separate Project Controls Department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group. Concentric notes that future, large scale projects could benefit from a set of uniform and consistent project controls that incorporate best practices from across the organization.

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8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that has been assigned to High Bridge in its current independent review of the project cost estimate. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should be used for both scope additions or deletions and changes in the expected cost of approved project

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scope as a result of material or component cost escalation, increased manpower requirements or other factors. This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

9. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location for the remainder of the EPU Projects. Concentric notes that this change may already be implemented within the current EPU action item list.
10. High Bridge Associates, or another independent third party, should be retained to complete an engineering-based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
12. The EPU Project team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
13. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization.
14. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
15. Concentric and the EPU Project management team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings

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in this investigation, obtain management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.

- 1 Concentric would anticipate that the current Vice President of Power Uprate, the
- 2 Implementation Owner -- South, the Project Controls Director, each Site Director and the
- 3 Site Project Controls Supervisor would be invited to attend this meeting.

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FPL Investigation

I. Introduction (1-1.5 pp)

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the [REDACTED] of Florida Power & Light Company ("FPL"). Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010¹. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal Department on March 15, 2010 to conduct an independent, factual investigation of the claims and matters set forth in the [REDACTED] Letter. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's legal department, and more specifically to [REDACTED]. All data requests or requests for interviews were sent directly to [REDACTED] or his designee. Similarly, Concentric's findings and recommendations in this matter are being provided directly [REDACTED].

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of the author of the [REDACTED] Letter and all other human resource related matters including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's human Resources department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan which was used to review this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] letter. Section III presents a chronology of events related to the [REDACTED] letter and occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause dockets in 2009 & 2010². A review of Concentric's findings related to the flow information from FPL to the Florida Public Service Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

II. Concentric Work Plan (2 pp)
A. Sources of information

¹ Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009.

² NEED TO DEFINE NUCLEAR COST RECOVERY CLAUSE

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Concentric's investigation in to this matter relied upon two critical pathways for information. First Concentric submitted a number of requests for documentation to FPL, in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document request can be found in Exhibit [REDACTED]

Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric selected specific individuals to be interview based upon the allegations contained with the [REDACTED] Letter, our prior interviews, and Concentric's understanding of the EPU and Nuclear Projects organizations.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspect violation of this Code."³ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁴. At the conclusion of each interview, the interviewees were given an opportunity to review any additional concerns.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects organization. This knowledge was gained through three years of reviewing the project management processes of the EPU Projects for FPL as part of the annual Nuclear Cost Recovery Clause filings.

B. Independence

3 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees or contractors. To this end, FPL did not place any constraints on Concentric's access to information or current or former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

5 Concentric received the full support and cooperation of FPL's employees, contractors and certain former employees. Concentric would like to specifically thank [REDACTED] and her staff for their assistance in locating documents, and scheduling interviews with FPL's employees and contractors.

6 Finally, Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews

³ Florida Power & Light Company, Code of Business Conduct and Ethics, Most recently revised October 16, 2009, Pg. 2.

⁴ Ibid at 2

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with contemporaneous documents produced by the EPU Project team. The documents reviewed or relied upon as part of this investigation are presented in Exhibit [REDACTED]

C. Key questions

- 1 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified 5 key questions which must be answered by our review. The foremost amongst these questions relates to whether FPL has continuously made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. Secondly, Concentric noted a need to determine if any costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision making. Thirdly, Concentric noted a need to determine if the information provided to the FL PSC and interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric noted a need to determine what allowed this to occur and why. Similarly, Concentric noted need to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and if not, what allowed this to occur and why. Finally, Concentric noted that if any of the above questions were proven accurate, a need existed to determine which policies, processes, and procedures need to be addressed as a result of these findings. This review included any performance issues.
- 2 III. Summary Level Response to [REDACTED] Letter (2 pp plus exhibit)
- 3 Exhibit [REDACTED] presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its observations that result from our investigation of the allegations contained therein. These observations have been interlined into the letter so as to provide a response to each allegation raised within the [REDACTED] letter. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the [REDACTED] Letter and Concentric's report.
- 4
- 5
- 6 As can be seen in Exhibit XX, a number of the allegations raised in the [REDACTED] Letter were born out by Concentric's review of these matters. Specifically, Concentric has noted documentation which confirms [REDACTED] statement's related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scoping of the EPU Projects to be the predictable result of evolving design certainty which is inherent in any complex project.
- 7
- 8 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original May 2008 cost estimates. These reports, the PTN Total Project Cash Flow report and the PSL Annual Project Cash Flow Report, clearly illustrate [REDACTED] assumption. Nonetheless, Concentric did not that the November ESC presentations provided the updated cost forecast and these reports were corrected on a going forward basis after December 2009.
- 9
- 10

Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As noted on Pg. 3 of Exhibit XX, Concentric has found evidence which indicates the [REDACTED] and the [REDACTED] were alerted to the potential for cost over-runs at PSL as early as April 2008. A similar opportunity signal was noted in December 2009 when these individuals were presented with a preliminary forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU

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Projects to Bechtel. At this time, the PSI Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted below, this preliminary forecast in February 2009 was within approximately \$10 million of the forecast ultimately provided to FPL's management in July 2009.

- 1 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this
2 finding includes Concentric's interview with [REDACTED] the fact that [REDACTED] has chosen to send
3 this letter on a non-anonymous basis, and supporting documentation produced by [REDACTED] or
4 review separately by Concentric. Concentric's interview illustrated the motivation for [REDACTED]
5 letter. That is to say, throughout Concentric's interview of [REDACTED] made reference
6 to his relationship with his current and previous supervisors. Thus it is Concentric's conclusion that
7 the motivation for writing this letter comes primarily from [REDACTED] negative performance
8 assessment in 2009 and his deteriorating relationship with his existing supervisor.
- 9 Moreover, Concentric believes [REDACTED] to be capable project controls employee with a strong
10 background within his function. This employment history includes the previous positions noted in
11 [REDACTED] letter and as well as prior project controls employment as a contractor at FPL's PTN
12 site as well as other nuclear facilities in the US.
- 13 Concentric finds it important to note that following our interview with [REDACTED] on March 17,
14 2010 [REDACTED] notified Concentric and FPL of a potential retaliation claim via email on March 19,
15 2010. Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld
16 for confidentiality] organization. He told me in private that he does not intend being fired as his
17 predecessors for poor performance and he will not let a few 'stupid' people affect his management
18 effectiveness." A copy of this email is attached as Exhibit [REDACTED] Upon receipt of this email,
19 Concentric reported the email to FPL's legal department and specifically [REDACTED] It is
20 Concentric's understanding this matter is being addressed by FPL human resources department.

IV. Chronology of Events (5 pp plus exhibit)

A full chronology of the EPU Projects is presented in Exhibit XX. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to gain fuller understand of the ongoing dynamics of the EPU Projects and the precise timing of certain EPU-related activities. This chronology should not be view as a comprehensive history of the EPU Projects.

From our interviews, Concentric understands, as originally proposed, the EPU Projects were expected to come online post-2012, but were advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007. The EPU Projects began in 2007, at which time FPL undertook an initial scoping or feasibility to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate at the uprated conditions. In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally did confirm the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components did exists at Turkey Point. At this time cost forecast included a contingency allocation of approximately 45%.

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Soon after the completion of the Shaw scoping studies in February 2008, the PSL EPU project team identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL initiated Condition Report 2008-11443 which stated "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary," for the uprate. In response to this CR, the EPU Project Team developed a high risk mitigation plan which was attached to the condition report. The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED] amongst other items. The High Risk Mitigation Plan was executed by the [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric was unable to independently determine if this High Risk Mitigation Plan was completed. Concentric requested a copy of the revised cost estimate proscribed in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.

Later in 2008, the PSL Project Controls team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast was prepared and provided to the EPU Project Managers at this time. The EPU Project Managers, however, requested the PSL Project Controls group further refine and develop the revised forecast. A second meeting regarding this forecast occurred in February 2009. This meeting was attended by the EPU Project Management Team reportedly including [REDACTED] who was appointed the EPU Project Controls Manager as of January 2009, and the PSL Project Team. At this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for PSL or approximately \$10 million below what was ultimately presented to the ESC in July 2009. It was reported to Concentric that the EPU Project Management, more specifically the [REDACTED] responded with a number of questions related to the basis for the revised forecast and for additional refinement.

In the meantime, a similar exercise was undertaken for PTN in March 2009 and PTN developed a revised forecast and began to report its performance relative to this forecast. However, the PTN Project Team was requested by the [REDACTED] to revise the initial and any future reports to measure cost performance relative to the original project baseline due to the "preliminary" nature of the revised estimate.³ Concentric was told that [REDACTED] was not satisfied with these instructions, but chose to comply with the instructions from his superiors nonetheless.

In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point Beach EPU Project. This review included the sequestration of the EPU Project Management Team at Point Beach for a period of two to three weeks in late April. Upon their return, the current [REDACTED] resigned from his position and it is reported that a similar undertaking was begun for the PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

Also on May 1st the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI before the FL PSC. In this testimony, the [REDACTED] stated "The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants." Additionally, this pre-filed direct testimony stated "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-

¹³ Email of [REDACTED] to [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

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1/ EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."

At the end of May 2009, the EPU Project Management Team reported to the executive steering committee ("ESC") that the Bechtel EPC estimates had increased to a level in excess of Bechtel's indicative bid. This increase reported to be the result of high than expected projections of field non-manual and manual labor hours. Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which could be eliminated to reduce the EPC vendor's forecast. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project Management Team also noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates. A target completion date of June 30, 2009 for the new "level 1" estimates presented to the ESC.

Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification Scope Review for both PTN and PSL. The results of these reviews were presented to [REDACTED] on June 16, 2009 and recommended the elimination of a substantial scope of modifications as either unrelated to the EPUs or not necessary to operate in an uprated condition.⁶

The subsequent ESC presentation was held on June 23, 2009. In this presentation, the EPU senior management team notes that the EPU Projects are completing "level 2" estimates and reiterates the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008. Based upon our interviews, it is our understanding that this presentation was relatively short and precipitated the more detailed cost review in July.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. A decision to replace the EPU senior management team was also made at this time. As a result FPL's executive team recruited three new members for the EPU project team including a new [REDACTED] and the [REDACTED].
2
3 [REDACTED] These individuals were selected and recruited from within FPL between the end of June 2009 and July 23, 2009.

At the July 23, 2009 ESC presentation, the new EPU senior management team were introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million. Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million. The slides which presented this information to the ESC noted that the "current budget" was increased to the "current forecast". Simultaneously, the ESC was advised that the current 2009 NCRC feasibility analysis included the original May 2008 cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009.

No ESC meeting was held in August. Nonetheless, both EPU projects did produce a monthly cash flow report. In the case of PTN the Total Project Cash Flow report was not updated to reflect the revised forecast presented to executive management on July 25, 2009. In contrast, the PSL Annual

⁶ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

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Project Cash Flow report was reviewed and the total project cost summary reported on this report was changed to "under review".

1 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
2 [REDACTED] took the stand and indicated that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same.

3 The following day on September 9, 2009, and while the [REDACTED] took the stand to present rebuttal testimony, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 mm for both sites. This presentation further stated that the approximately 30% of the total project costs have "high certainty".

The October 2009 ESC presentation occurred on October 22nd during this meeting, the ESC was advised that the current forecast for the project is unchanged, but the contingency had decreased by approximately \$12 million. In addition, the AFUDC estimate was decreased to approximately by approximately \$ 150 million to \$200 million. A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2. Concentric notes that the remainder of the values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two Annual Project Cash Flow Reports with different budget performance indicators and different total project summaries. The first of these reports is dated October 1, 2009. This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million. No one with whom Concentric spoke could explain the difference or the reason for the two reports.

Key conclusions from chronology relevant to 5 key questions
[REDACTED]

V. Q1: Decision to Proceed (1.5 to 2 pp)

In determining whether EPU Project costs were prudently incurred the FL PSC will be concerned with two items. First, is whether the decision to proceed with the project is prudent based on the expected economic and other benefits to customers? That question is described in this section. Second, the FL PSC will be concerned with whether the project prudently or imprudently incurred costs. That is to say, are the costs for which FPL is seeking recovery in this docket the result of prudent or imprudent decisions by FPL's and the EPU Projects' management. This question is addressed in Section VI below.

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The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and Shaw's preliminary scoping analysis which projected, at a high level, which plant components would require replacement or modification to support the increased output of the plants. As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared FPL's portfolio of generating resources with and without the EPU Projects. To the extent the resource portfolio that included the EPU Projects projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in October 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU project team. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this conclusion.

It is Concentric's conclusion that "at-best", awareness of a revised forecast could have been improved by six months. Concentric believes the six month time frame is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in October 2008 and presented a revised cost estimate that was within \$10 million or less than 2 percent of the cost estimate that was provided to FPL's executive management on July 25, 2009⁷.

Following a conclusion as to when awareness of the revised cost estimate could have improved, Concentric evaluated whether this was likely to impact FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that additional output may be produced by the EPU Projects. Management's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relies upon the cost estimate as well as the expected incremental output of the facilities, and the commercial operations date of the EPU Projects amongst other items. Thus, advanced awareness of the increased cost estimate would not have impacted the projected incremental output or the projected commercial operations date of the EPU Projects. Thus, due to increase in the project output of the EPU Projects, the economic feasibility analysis was not substantially impacted by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic at the higher cost estimate presented during that meeting.⁸

Comment [SGE1]: We may need to add to our chronology the increase in the output?

VI. Q2: NCRC Pass Through of Expenditures (1 to 1.5 pp)

⁷ 'Summary CashFlow EPU Total 090217 Reviewed.X1.S'

⁸ PSL Extended Power Uprate, Project Update, July 25, 2009, Pg. 50.

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- 1 Concentric review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The later is more critical to the FL PSC's review and involved the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 Concentric's review of the [REDACTED] Letter raises concerns with regards to the cost estimate process within the EPU Projects and more specifically the reporting of threats or revisions to cost estimates to FPL's executive management and the FL PSC. As a result, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. Further this conclusion was reinforced by virtually interviewee with whom Concentric spoke. Indeed, Concentric explicitly asked this question of every interviewee and the response was unanimously "no".

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A. VII. The Flow of Information to the FPSC and Other NCRC Parties

B. Scope of Inquiry

A. The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings (FPSC Docket No. 090009-EI) in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with the standards expected for testimony before, and submissions made, to a regulatory agency.

B. There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing in; the hearing on these issues were held on September 8, 2009. Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate time frames discussed above.

C. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 1. [REDACTED]
- 2 2. [REDACTED]
- 3 3. Mr. John J. Reed, Chairman and CEO of Concentric, and
- 4 4. [REDACTED]

The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and cost-effectiveness of the EPU's, were presented in [REDACTED] direct testimony, and sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses. Mr. Reed's testimony related to nuclear project controls, procedures, policies and practices, and on the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPU's. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs. She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPU's. Therefore, our review has focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

9 [REDACTED] pre-filed Direct Testimony contains the following statements

"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants." (Page 2)

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1 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives." (PP. 2-3)

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010." (Page 24)

2 The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED], and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project.

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- 3 • A Condition Report dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 080009-EI and that [REDACTED] continued to use in May, 2009
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPUs had risen by \$37 million; this higher value is used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May, 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08 Condition Report was a "missed opportunity," and that the cost estimating should have had a Change Management program established
- 4 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their current cost estimate for PSL is \$129 million above the May, 2008 estimate
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised significantly above the May, 2008 estimate; a decision is made to not use the higher cost estimate
- 5 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel has estimated higher costs, his cost estimates for PSL and PTN are unchanged from the May, 2008 estimates; the Projects' cost status is shown as "green."

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As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate would be needed, [REDACTED] had not reported to the ESC that an increase was needed. On the contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony reports. While it is inherently a matter of judgment as to what constitutes "the whole truth" in statements to regulatory agencies, Concentric does not believe that [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct.

D. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all of the productions of documents and interrogatory responses submitted by FPL in Docket 090009-EI pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on only one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis. This interrogatory response, which is attached as Exhibit XX, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and actual costs as compared to the estimated in service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1, 2009, and describes that it is a "snapshot" of a continuous process.

Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for the EPU projects. On May 31, 2009, the PTN EPU budget indicator had been changed to red, indicating a serious problem meeting the existing budget. On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate. On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate, and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several people reportedly working seven days a week for a month, and presented to the ESC at an all-day Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was revamped, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May, 2008 estimates.

Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. However, the interrogatory only asked for a listing of the responsive analyses, not for FPL's current or updated analyses. In addition, the respondent to the interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates, nor of any source data or documents relating to this issue that were created after May 1, 2009. FPL's approach to complying with the Section 366.93(5) requirements was to perform a "snapshot" analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory Affairs staff nor the legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents until preparations began in December, 2009 for the 2010 NCRC proceedings.

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Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to her at the time.

E. Testimony at Hearing

1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September
2 8, 2009. At the hearing, the following exchange took place between [REDACTED] and
counsel for FPL:

3 [REDACTED]

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

A. Yes, they would be.

4 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though
read.

5 This followed [REDACTED] introducing some corrections to errata in his pre-filed
testimony, and updating his prefiled testimony to reflect his new title and responsibilities
with FPL. The exchange with counsel had the effect of asserting that all of the statements in
6 the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and
accurate as of September 8, 2009.

7 As of September 8, 2009, [REDACTED] had participated in the development of highly
detailed cost projections for the EPU projects, and had presented these new estimates to
dozens of senior FPL and contractor personnel on July 25, 2009. The new estimates were
caveated as still being "at the conceptual level" (as were the May, 2008 estimates) and the
comment was made that the full scope was still not known. However, the new values were
clearly labeled as the "Current Forecast," and the statement was clearly made that the
"Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."
The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the
May, 2008 estimates and the lessons that should be learned from this experience. Concentric
also notes that the ESC was explicitly advised that the new cost estimates were inconsistent
with the May, 2008 and May, 2009 data that had been presented to the FPSC, and that
several new economic feasibility analyses had been performed, which updated those which
had been submitted to the FPSC eleven weeks earlier. The new feasibility analyses
continued to show that the projects were beneficial to customers, although less so than in
the May 1, 2009 filing.

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1 [REDACTED] Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a fast-tracked construction program, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates. The new estimates were the product of more than a dozen people working extended hours for a month, and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on far more recent data, and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in May, 2010.

2 Concentric has concluded that by the time [REDACTED] took the stand, the information presented on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony), and is strongly held by some of them.

3 Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU projects, had any knowledge of the updated cost estimates. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division of FPL. In addition, Concentric has found no evidence to suggest that there was a widespread plan to purposefully keep updated information from being provided to the NCRC parties. [REDACTED] was no longer in the EPU organization at the time of his appearance and was not directly involved in its activities after July 25, 2009. In addition, there was considerable uncertainty within the project staff in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

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FPL INVESTIGATION

I. Introduction (1-1.5 pp)

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the [REDACTED] ("FPL"). Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010¹. Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent, factual investigation of the claims and matters set forth in the [REDACTED] Letter². Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED]. All data requests or requests for interviews were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of the author and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

The remainder of our report is organized into eight sections. Section II presents a summary of Concentric's work plan which was used to review this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] letter. Section III presents a chronology of key events related to the [REDACTED] Letter and occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010³. A review of Concentric's findings related to the flow information from FPL to the Florida Public Service Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

¹ Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009.

² Reference engagement letter.

³ FL PSC Dockets 080009 & 090009, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Work Plan (2 pp)

A. Sources of information

Concentric's investigation into this matter relied upon two critical pathways for information. First Concentric submitted a number of requests for documentation to FPL, in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document request can be found in Exhibit XX.

2 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric selected specific individuals to be interviewed based upon the allegations contained within the [REDACTED] Letter, our prior interviews, and Concentric understands that the EPU Projects organizations. Concentric is not providing a list of the names of the individuals we interviewed in order to protect the confidentiality of those individuals.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspect violation of this Code."⁴ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁵. At the conclusion of each interview, the interviewees were given an opportunity to review any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects organization. This knowledge was gained through three years of reviewing the project management processes of the EPU Projects for FPL as part of the annual Nuclear Cost Recovery Clause filings.

B. Independence

3 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees or contractors. To this end, FPL did not place any constraints on Concentric's access to information or current and former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

4 Finally, Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead,

⁴ Florida Power & Light Company, Code of Business Conduct and Ethics, Most recently revised October 16, 2009, Pg. 2.

⁵ Ibid at 2

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- 1 Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous documents produced by the EPU Project team, whenever possible. The documents relied upon as part of this investigation are presented in Exhibit [REDACTED]

C. Key questions

- 3 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified 5 key questions which must be answered by our review. These key questions are directly aimed at determining whether any imprudent costs were passed onto FPL's customers or FPL intended to intentionally withhold information from the FL PSC.

Foremost amongst Concentric's keys questions is whether FPL has continuously made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. Secondly, Concentric noted a need to determine if *any* costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision making. Third, was the information provided to the FL PSC and the interveners in each of the NCRC dockets accurate, consistent, timely and reliable? If not, Concentric sought to determine what allowed this to occur and why. Similarly, Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and if not, what allowed this to occur and why. Finally, Concentric noted that if any of the above questions were proven accurate, a need existed to determine which policies, processes, and procedures need to be addressed as a result of these findings.

4 III. Summary Level Response to [REDACTED] Letter (2 pp plus exhibit)

- 5 Exhibit [REDACTED] presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its observations that result from our investigation of the allegations contained therein. These observations have been interlineated into the letter so as to provide a response to each related

6 allegation raised within the [REDACTED] Letter. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the [REDACTED] Letter and Concentric's report.

8 As can be seen in Exhibit XX, a number of the allegations raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statement's related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to be the predictable result of evolving design certainty which is inherent in any complex project.

- 10 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁶ and the PSL Annual Project Cash Flow Report⁷, clearly illustrate

⁶ Cite report

⁷ Cite report

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1 [redacted] assertion. Concentric did note that the November ESC presentations provided the updated cost forecast⁸.

2 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit XX, Concentric has found evidence which indicates the [redacted] were alerted to the potential for cost over-runs at PSL as early as April 2008. A similar opportunity was noted in December 2009 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel. At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted below, this preliminary forecast in February 2009 was within approximately \$11 million, or 2%⁹, of the forecast ultimately provided to FPL's management in July 2009¹⁰.

3 Overall, Concentric has found [redacted] and his allegations to be credible. The basis of this finding includes Concentric's interview with [redacted] the fact that [redacted] has chosen to send this letter on a non-anonymous basis, and the supporting documentation produced or cited by [redacted].
4 Moreover, Concentric believes [redacted] is a capable project controls employee with a strong background within his function. [redacted] employment history includes the previous positions noted in the [redacted] Letter¹¹ and prior project controls employment as a contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note that FPL had enough confidence in [redacted] to give him responsibility for multiple major projects and approximately 100 direct reports¹². While it may be fair to say that [redacted] was not always aware every aspect of the EPU Projects, it would not be fair to characterize [redacted] as under- or poorly qualified for his position.

12 Concentric's interview of [redacted] illustrated the motivation for [redacted] letter. That is to say, [redacted] was not motivated by a desire to seek vengeance from his superiors. Instead, [redacted] appeared sincerely concerned with the accuracy and reliability of information being presented to FPL's executive management and the FL PSC. It would be fair to say that while [redacted] was upset with what he viewed as his unfair treatment in his performance assessment, this was not his motivation for corresponding with Mr. Hay.

16 Following our interview with [redacted] on March 17, 2010, [redacted] notified Concentric and FPL of a potential retaliation claim via email on March 19, 2010¹³. Specifically, [redacted] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email

⁸ Cite report and pg number

⁹ Cite Feb 2009 analysis

¹⁰ Cite July 25 2009 PSL ESC Presentation and Pg number

18 ¹¹ [redacted] Letter, Pg. 2

¹² Ibid at 2

19 ¹³ Cite [redacted] email dated March 19, 2010

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is attached as Exhibit XX. Concentric reported the email to FPL's Legal department and specifically [REDACTED]. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

IV. Chronology of Events (5 pp plus exhibit)

A chronology of the EPU Projects is presented in Exhibit XX. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Projects activities. This chronology should not be viewed as a comprehensive history of the EPU Projects.

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate at the uprated conditions¹⁴. Concentric understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007¹⁵.

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally did confirm the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components did exist at Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%¹⁶.

2 Soon after the completion of the Shaw scoping studies in February 2008, the PSL EPU project team identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL initiated Condition Report 2008-11443 which stated "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary," for the uprate¹⁷. In response to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to the condition report¹⁸. The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the EPU Project Director amongst other items. The High Risk Mitigation Plan was executed by the [REDACTED] and the [REDACTED], but not the [REDACTED]. Concentric was unable to independently determine if this High Risk Mitigation Plan was completed. Concentric requested a copy of the revised cost estimate proscribed in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.

¹⁴ Cite determination of need filing in 2007

¹⁵ Cite PSC order in this case.

¹⁶ Cite determination of need filing or July 25, 2009 ESC presentations

¹⁷ Cite CR

¹⁸ Ibid at ?

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Later in December 2008, the PSL Project Controls team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project Management at this time. The EPU Project Management, however, requested the PSL Project Controls group further refine and develop the revised forecast.

1 A second meeting to review this forecast occurred in February 2009. This meeting was attended by
2 the EPU Project Management Team reportedly including [REDACTED] who was appointed the [REDACTED]
3 [REDACTED] as of January 2009, and the PSL Project Team. At this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for PSL, an increase of approximately \$139 million over the then current budget¹⁹. This was also approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁰. It was reported to Concentric that the [REDACTED] and the [REDACTED] responded with a number of questions related to the basis for the revised forecast and requested additional refinement.

4 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
5 relative to this revised forecast. However, the PTN Project Team was requested by the [REDACTED] to revise the initial and any future reports to measure cost performance relative to the original project baseline due to the "preliminary" nature of the revised estimate.²¹
6 Concentric was told that the [REDACTED] was not satisfied with these instructions, but chose to comply with the instructions from his superiors nonetheless.

7 In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
8 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
9 at Point Beach for a period of two to three weeks in late April. Upon their return, the current [REDACTED] resigned from his position and it is reported that a similar undertaking was begun for the PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

10 Also on May 1st the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
11 before the FL PSC²². In this testimony, the [REDACTED] stated "The EPU projects are progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI."²³

At the end of May 2009, the EPU Project Management Team reported to the Executive Steering Committee ("ESC") that the Bechtel EPC estimates had increased to a level in excess of Bechtel's indicative bid²⁴. This increase was reported to be the result of higher than expected projections of field non-manual and manual labor hours²⁵. Similarly, the current EPU estimates were reported to

¹⁹ Cite Feb 2009 PSL Analysis

²⁰ Cite July 25, 2009 PSL ESC Presentation

12 ²¹ Email of [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

²² Cite RSK Pre-filed testimony.

²³ Ibid at ??

²⁴ Cite May 2009 ESC Presentation

²⁵ Ibid at ??

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include redundant project management and oversight costs which could be eliminated to reduce the EPC vendor's forecast²⁶. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project Management Team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates²⁷. A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC in this presentation²⁸.

Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification Scope Review for both PTN and PSL²⁹. The results of these reviews were presented to WHOM on June 16, 2009 and recommended the elimination of a substantial number of modifications as either unrelated to the EPU's or not necessary to operate in an uprated condition.³⁰

The subsequent ESC presentation was held on June 23, 2009³¹. In this presentation, the EPU senior management team notes that the EPU Projects are completing "level 2" estimates and reiterates the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008³². This presentation was relatively short and precipitated the more detailed cost review in July.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited three new employees for the EPU project team including a new [REDACTED] and the [REDACTED]

2 [REDACTED] These individuals were selected and recruited from within FPL between the end of June 2009 and July 23, 2009.

At the July 23, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million³³. Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million³⁴. The slides which presented this information to the ESC noted that the "current budget" was increased to the "current forecast"³⁵. Simultaneously, the ESC was advised that the current 2009 NCRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were

²⁶ Ibid at ??

²⁷ Ibid at ??

²⁸ Ibid at ??

²⁹ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁰ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³¹ Cite June 2009 ESC Presentation

³² Ibid at ??

³³ Cite July 23 PTN ESC Presentation Pg ??

³⁴ Cite July 23 PSL ESC Presentation, Pg??

³⁵ Ibid at ??-?? & PTN ESC Presentation Pg. ??-??

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presented based upon the current forecast as of July 25, 2009³⁶. These revised feasibility scenarios did confirm the continued cost effectiveness of the EPU Projects.

No ESC meeting was held in August. Nonetheless, both EPU projects did produce a monthly cash flow report. In the case of PTN the Total Project Cash Flow report was not updated to reflect the revised forecast presented to executive management on July 25, 2009³⁷. In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review"³⁸.

On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED] took the stand and indicated that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same³⁹.

The following day on September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁰. This presentation stated that approximately 30% of the total project costs have "high certainty"⁴¹.

The October 2009 ESC presentation occurred on October 22nd during this meeting, the ESC was advised that the current forecast for the project is unchanged, but the contingency had decreased by approximately \$12 million⁴². In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million⁴³. A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁴⁴. Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009⁴⁵. This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million⁴⁶. No one with whom Concentric spoke could explain the difference or the reason for the two reports.

³⁶Ibid at ??

³⁷ Cite August PTN Total Project Cash Flow report

³⁸ Cite August PSL Annual project Cash Flow report

³⁹ Cite hearing transcript

⁴⁰ Cite the September ESC presentation

⁴¹ Ibid at ??

⁴² Cite Oct 2009 ESC Presentation

⁴³ Ibid at ??

⁴⁴ Ibid at ??

⁴⁵ Cite October 1 2009 PSL Annual Project Cash Flow Report

⁴⁶ Cite October 2009 PSL Annual Project Cash Flow Report

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A. Key conclusions from chronology relevant to 5 key questions

[TO BE DEVELOPED BASED ON REMAINING SECTIONS]

V. **Q1: Decision to Proceed (1.5 to 2 pp)**

In determining whether EPU Project costs were prudently incurred the FL PSC will be concerned with two items. First, is whether the decision to proceed with the project is prudent based on the expected economic and other benefits to customers? That question is described below. Second, the FL PSC will be concerned with whether the project prudently or imprudently incurred costs. That is to say, are the costs for which FPL is seeking recovery in this docket the result of prudent or imprudent decisions by FPL's and the EPU Projects' management. This question is addressed in Section VI below.

The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants. As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects⁴⁷. This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU project team. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by six months. Concentric believes the six month time frame is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009⁴⁸.

⁴⁷ Cite EPU Determination of Need

⁴⁸ 'Summary CashFlow EPU Total 090217 Reviewed.XLS'

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Following a conclusion as to how much awareness of the revised cost estimate could have improved, Concentric evaluated whether this was likely to impact FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that additional output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007⁴⁹.

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relies upon the expected incremental output of the facilities as well as the expected cost, amongst other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially impacted by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic, although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁵⁰ Thus, advanced awareness of the increased cost estimate would not have impacted the projected incremental output or the projected commercial operations date of the EPU Projects.

VI. Q2: NCRC Pass Through of Expenditures (1 to 1.5 pp)

- 1/ Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involved the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2/ The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimate process within the EPU Projects and more specifically the reporting of threats or revisions to cost estimates to
- 3/ FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of an imprudent action by FPL. Concentric confirmed this understanding of the
- 4/ [REDACTED] Letter during our interview of [REDACTED]

Similarly, Concentric has not found indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by virtually every interviewee with whom Concentric spoke. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to flow of information to FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC.

Concentric has, however, found evidence that suggests problems with the reporting of threats to and revisions of the cost estimate. These documents and the concerns are described within section VII and VIII below.

⁴⁹ Cite July 25, 2009 PSC Presentations

⁵⁰ PSL Extended Power Uprate, Project Update, July 25, 2009, Pg. 50.

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VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings (FPSC Docket No. 090009-EI) in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with the standards expected for testimony before, and submissions made, to a regulatory agency.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing in; the hearings on these issues were held on September 8, 2009. Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate time frames discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED]
 - 2 [REDACTED]
 - 3 [REDACTED]
- Mr. John J. Reed, Chairman and CEO of Concentric⁵¹, and

4 The issues within the scope of this investigation, *i.e.*, the projected cost to completion, schedule and
5 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁵², and sponsored
6 by him, and that information was used in [REDACTED] cost-effectiveness analyses⁵³. Mr. Reed's
testimony related to nuclear project controls, procedures, policies and practices, and on the
prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions
on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's
incurred costs and the 2009-2010 projected costs⁵⁴. She did not offer any estimate of the projected

⁵¹ Cite testimony

⁵² Cite testimony

⁵³ Cite testimony

⁵⁴ Cite testimony

⁵⁵ Cite testimony

⁵⁶ Cite testimony

⁵⁷ Cite testimony

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costs to completion or opinions on the cost effectiveness of the EPU's. Therefore, our review has focused on the testimony of [REDACTED] and, to a lesser extent, Mr. Sim.

2 [REDACTED] pre-filed Direct Testimony contains the following statements

"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants." (Page 2)

Comment [SGE1]: Make footnotes

3 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives." (PP. 2-3)*

"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010." (Page 24)

4 The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project⁵⁸.

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 080009-EI and that [REDACTED] continued to use in May, 2009
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May, 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08 Condition Report was a "missed opportunity," and that the cost estimating should have had a Change Management program established
- 7 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their current cost estimate for PSL is \$129 million above the May, 2008 estimate

⁵⁸ Cite TOR 7

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- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised significantly above the May, 2008 estimate; a decision is made to not use the higher cost estimate
- / • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel has estimated higher costs, his cost estimates for PSL and PTN are unchanged from the May, 2008 estimates; the Projects' cost status is shown as "green."

2
3 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate would be needed [REDACTED] had not reported to the ESC that an increase was needed. On the contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony reports. While it is inherently a matter of judgment as to what constitutes "the whole truth" in statements to regulatory agencies, Concentric does not believe that [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all of the productions of documents and interrogatory responses submitted by FPL in Docket 090009-EI pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis⁵⁹. This interrogatory response, which is attached as Exhibit XX, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and actual costs as compared to the estimated in service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1, 2009, and describes that it is a "snapshot" of a continuous process.

Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for the EPU projects. On May 31, 2009, the PTN EPU budget indicator had been changed to red, indicating a serious challenge to meeting the existing budget⁶⁰. On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁶¹.
5 On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁶², and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC
6 meeting. This updated estimate was prepared at the direction of [REDACTED] by several people reportedly working seven days a week for a month, and presented to the ESC at an all-day Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was revamped, and [REDACTED] was reassigned to a position outside of the EPU, although he actively
7

⁵⁹ Cite response

⁶⁰ Add cite to May Total Project Cash Flow Report

⁶¹ Add cite to July 25, 2009 ESC presentation

⁶² Add cite to the June 23 2009 ESC Presentation

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participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May, 2008 estimates⁶³.

Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. In addition, the respondent to the interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates, nor of any source data or documents relating to this issue that were created after May 1, 2009. FPL's approach to complying with the Section 366.93(5) requirements was to perform a "snapshot" analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory Affairs staff nor the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents until preparations began in December, 2009 for the 2010 NCRC proceedings.

Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to her at the time.

D. Testimony at Hearing

1 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
2 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁶⁴:

3 BY [REDACTED]

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

A. Yes, they would be.

4 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

5 This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009.

7 As of September 8, 2009 [REDACTED] had participated in the development of highly detailed cost projections for the EPU projects, and had presented these new estimates to dozens of senior FPL and contractor personnel on July 25, 2009. The new estimates were caveated as still being "at the conceptual level⁶⁵" (as were the May, 2008 estimates⁶⁶) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast,"

⁶³ Add cite to July 2009 ESC presentations

⁶⁴ Add transcript citation

⁶⁵ Add cite to July 25 2009 meeting request

⁶⁶ Add cite

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and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁶⁷ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience⁶⁸. Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FPSC, and that several new economic feasibility analyses had been performed, which updated those which had been submitted to the FPSC eleven weeks earlier. The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing⁶⁹.

/ [REDACTED] has defended his September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many scope changes and manpower estimates, and that they were a no better than a "guess" with little support. He indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a fast-tracked construction program, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates. The new estimates were the product of more than a dozen people working extended hours for a month, and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on far more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in May, 2010.

2 Concentric has concluded that by the time [REDACTED] took the stand, the information presented on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony), and is strongly held by some of them.

3 Concentric has found no evidence to suggest that [REDACTED], FPL's witness on the cost effectiveness of the EPU projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
4 sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division of FPL.

⁶⁷ Add cite to both July presentations

⁶⁸ Ibid at ??

⁶⁹ PSI, FPSC Presentation Pg. 50

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Concentric has found no evidence to suggest that there was a widespread plan to purposefully keep updated information from being provided to the NCRC parties. [REDACTED] was no longer in the EPU organization at the time of his appearance and was not directly involved in its activities after July 25, 2009. In addition, there was considerable uncertainty within the project staff in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

Comment (SGE2): Consider changing word to confirm

2
Comment (SGE3): That he was the witness, did participate in the witness prep sessions with [REDACTED] and CSA (2, the outside consultant), and did attend the July 25th meeting. In addition, he was aware of all of the events that lead up to the July 25th presentation.

VIII. Information Flow within FPL

The chronology that Concentric has developed has raised several issues with regard to the information flow within the EPU project team and to broader audiences within FPL. For the purpose of reviewing these issues, we have segmented the chronology into the period preceding July 25, 2009 and that after it.

A. Pre-July 25, 2009 Information Flow

Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but not completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of EPU management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL, which is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PIN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁷⁰.

⁷⁰ EPU lessons learned PPL from April 2010

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NCR-10

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An issue that contributed to the delay in briefing the ESC on the likely cost increases was the EPU's treatment of the cost estimate contingency and the synchronization of the risk register.

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IX. Preliminary Recommendations for Improvements and Corrective Actions (4 pp)

Concentric investigation into this matter has produced a number of recommendations for process improvements and corrective actions. These recommendations are presented below. Each of these recommendations is being made to prevent the types of concerns raised by the [REDACTED] Letter.

1. One of the issues identified by Concentric's investigation into this matter is the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses including [REDACTED] and Mr. Reed. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team.
2. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions. As FPL is aware, past and present NCRC witnesses have limited prior experience as a witness before the FL PSC. As a result, these individuals may not have full understanding of the regulatory process and the implications of their testimony. Thus witness training should include an explicit, detailed discussion of the importance of updating one testimony and meaning of counsel's standard questions for every witness.
3. FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production.
4. One of the biggest concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessary reflect the most current information or accurate information available. FPL and the EPU Project Team should establish and implement explicit report owners (by position). In addition, the FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled off of the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.
5. As part of our investigation Concentric reviewed list of invitees to the ESC presentations. It was reported that no list of the attendees to each meeting is maintained. Noticeably absent from these list of invitees is a representative from regulatory affairs. Given the importance and scale of the EPU Projects, and the special cost recovery treatment being afforded to these projects, Concentric believes it is necessary to make certain that a relatively senior member of regulatory affairs attend each of these meetings. In addition, the EPU Project Team should document names of each attendee.
6. Concentric also believes FPL should revisit the current reporting relationship of the EPU Project Controls Director. While the change to reporting to the Vice President of Power Uprate is seen as positive development, the reporting relationship of the EPU Project Controls Direct should include some form of either a solid or dotted line outside of the EPU Projects. As an alternative, FPL could also consider forming a separate Project Controls department, similar to Integrated Supply Chain department. This separate Project Controls department would establish its own set of department procedures and instructions which would then be applied consistently across the FPL Group.

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7. Concentric's review Project status/probabilistic based contingency should be developed and used as supplement to or replacement for current balancing variable approach.
8. A formal internal process should be used to approve and communicate EPU budget, forecast or estimate changes on total project basis (i.e., not annual). This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved.
9. CR closure processes should be reviewed to follow up on adequacy and timeliness of correction/mitigation activities. (John, you will know better than I, but I believe this would have far reaching implications and the program is probably operating consistent with other nuclear plants. I believe the real problem may be with the tracking and closure of risk mitigation plans which are produced from CRs. The project now has an action item list that needs to include these risk mitigation plans and the steps for closure. Perhaps this should be updated and reviewed weekly, along with deadlines for risk mitigation plans.)
10. Policies should be used to define key terms and bases for project indicators, as well as document purposes of standard reports and the report owners (by position).
11. Use of independent source for cost estimate review should be expanded to PSL, and expanded or extrapolated to all units
12. Fully staffing EPU positions and reducing employee turnover need to continue to be high priorities
13. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust which exists at lower levels of the organization.
14. A report review/lessons-learned session should be held with EPU management after this investigation is closed.
15. Organizational readiness assessments should be undertaken prior to commencing complex, large-scale projects. This should include a detailed review of the Project Plan to ensure it clearly specifies how the project team will evolve and management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.

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FPL INVESTIGATION

I. Introduction

- 1 On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the [REDACTED] Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010². Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter³. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED].
- 2 All data requests or requests for interviews were sent directly to [REDACTED] or his designee [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].
- 3 Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

- The remainder of our report is organized in to eight sections. Section II presents a summary of Concentric's work plan which was used to perform this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the Martin Letter.
- 4 Section III presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁴. A review of Concentric's findings related to the flow of information from FPL to the Florida Public Service Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

- 5 [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED].
- 6 Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009.
- 7 Engagement Letter from [REDACTED] John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
- 8 FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

Comment [SGE1]: I know we have discussed this before, but I think we may need to revisit it given some of the new information and events. This report is currently silent on executive management's involvement in the EPU Projects and specifically their awareness of the revised cost estimate. Is this appropriate going forward? Given some of the information, including that Robo requested the line-by-line review and revised cost estimate. In addition, [REDACTED] indicated Robo would have been [REDACTED] behind revised CPVRR runs. I am pretty sure we know what the answers to our questions of Robo will be, but we will likely get questioned about this and why we did not interview any of the executives who attended the ESC meetings. It has the appearance of avoiding the issue.

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II. Concentric Work Plan

A. Sources of information

1 / Concentric's investigation into this matter relied upon two critical pathways for information. First Concentric submitted a number of requests for documentation to FPL, in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document request can be found in Exhibit [REDACTED].

2 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric selected specific individuals to be interviewed based upon the allegations contained within the Martin Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspect violation of this Code."⁵ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁶. At the conclusion of each interview, the interviewees were given an opportunity to review any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects organization. This knowledge was gained through three years of reviewing the project management processes of the EPU Projects for FPL as part of the annual Nuclear Cost Recovery Clause filings.

B. Independence

3 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees or contractors. To this end, FPL did not place any constraints on Concentric's access to information or current and former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

4 / Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous

⁵ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁶ Ibid.

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documents produced by the EPU Project team, whenever possible. The documents relied upon as part of this investigation are presented in Exhibit XX.

C. Key questions

- 1 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are directly aimed at determining whether any imprudent costs were passed onto FPL's customers or if FPL intentionally withheld information from the FL PSC.

Foremost amongst Concentric's keys questions is whether FPL has made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. Secondly, Concentric noted a need to determine if any costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision making. Third, we examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockers was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why. Similarly, Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

Comment [SGE2]: It seems to me we need to include in the discussion for the ESC meetings who the key invitees were. Do you want to go there?

2 III. Summary Level Response to [REDACTED] Letter

- 3 Exhibit XX presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a reviewer of the Martin Letter and Concentric's report.

- 5 As can be seen in Exhibit XX, a number of the allegations raised in the [REDACTED] Letter were shown to be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statement's related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to have been the predictable result of the evolving design which is inherent in any complex project.

- 7 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN Total Project Cash Flow Report⁷ and the PSL Annual Project Cash Flow Report⁸, confirmed [REDACTED] assertion. Concentric did note, however, that the November Executive Steering Committee ("ESC") presentation provided the updated cost forecast⁹.

- 10 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit XX, Concentric has found evidence which indicates the [REDACTED] and the [REDACTED] were alerted to the potential

⁷ Total Project Cash Flow, PTN EPU Project 2009, November 2009.

⁸ Annual Cash Flow, PSL EPU Project, October 2009.

⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. X

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for cost over-runs at PSL as early as April 2008. A similar opportunity was noted in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel. At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted below, the preliminary forecast in February 2009 was within approximately \$11 million, or 2%¹⁰, of the forecast ultimately provided to FPL's management in July 2009¹¹.

1 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this finding includes Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]. 2 Moreover, Concentric believes [REDACTED] is a capable project controls employee with a strong background within his function. 3 [REDACTED] employment history includes the previous positions noted in the [REDACTED] and many years of prior project controls employment as a contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note 4 that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of approximately 100 people¹². While it may be fair to say that [REDACTED] was not always 5 aware every aspect of the EPU Projects, it would not be fair to characterize [REDACTED] as under- or poorly qualified for his position.

10 Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and 11 FPL of a potential retaliation claim via email on March 19, 2010¹⁴. Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit [REDACTED]. Concentric reported the email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit XX. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. This chronology should not be viewed as a comprehensive history of the EPU Projects.

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate at the uprated conditions¹⁵. Concentric

¹⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25 2009, p. 8.

12 [REDACTED] Letter, p. 2.

13 Ibid.

14 Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

¹⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EE, September 17, 2007.

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understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007¹⁶.

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally did confirm the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%¹⁷.

Soon after the completion of the Shaw scoping studies in April 2008, the PSL EPU project team identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary," for the uprate¹⁸. In response to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to the CR¹⁹. The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED] among other items. The High Risk Mitigation Plan was executed by the [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric was unable to independently determine if this High Risk Mitigation Plan was ever completed. Concentric requested a copy of the revised cost estimate proscribed in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.

On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast for PTN of \$262 MM for the PTN EPU²⁰. This compares a scoping analysis assumption of \$225M²¹.

Later in December 2008, the PSL Project Controls team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project Management at that time. The EPU Project Management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 noted that the EPU project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately within the EPU Risk Mitigation Plan. CR-2008-37753 concludes that there was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²²

A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was attended by the EPU Project Management Team and reportedly included [REDACTED] who was

¹⁶ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁸ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

¹⁹ Ibid., p. 8.

²⁰ CITE JULY 25, 2009 PTN ESC PRESENTATION

²¹ CITE SCOPING ANALYSIS

²² ADD CITE TO CR-2008-37753

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1 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
 this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
 PSL, an increase of approximately \$139 million over the then current budget²³. This was
 2 approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁴. It
 was reported to Concentric that the [REDACTED] and the [REDACTED] responded
 with a number of questions related to the basis for the revised forecast and requested additional
 refinement.

3 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
 4 relative to this revised forecast. However, the PTN Project Team was requested by the [REDACTED]
 to revise the initial reports, to measure cost performance relative to the
 original project baseline because the revised estimate still had to be "validated," and because and
 "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
 5 PTN EPU Project."²⁵ Concentric was told that the [REDACTED] was not satisfied with these
 instructions, but chose to comply with the instructions from his superiors nonetheless.

In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
 at Point Beach for a period of two to three weeks in April. Upon their return, the EPU Project
 Director resigned from his position and it is reported that a similar undertaking was begun for the
 6 PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

7 Also on May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket
 8 090009-EI before the FL PSC²⁶. In this testimony, the [REDACTED] stated "The EPU projects are
 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
 9 Docket 080009-EI."²⁷ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
 10 [REDACTED]

11 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.

At the end of May 2009, the EPU Project Management Team reported to the ESC that the Bechtel
 EPC estimates had increased to a level in excess of Bechtel's indicative bid²⁸. This increase was
 reported to be the result of higher than expected projections of field non-manual and manual labor
 hours²⁹. Similarly, the current EPU estimates were reported to include redundant project
 management and oversight costs which may be able to be eliminated to reduce the EPC vendor's
 forecast³⁰. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid
 presented in November 2008. The EPU Project Management Team noted that the current
 estimates were based on preliminary design information, and that the project was in the process of

²³ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²⁴ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

²⁵ Email of [REDACTED] to [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

²⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

²⁷ Ibid at pp. 2-3.

²⁸ ADD CITE TO FILING

²⁹ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

³⁰ Ibid., p. 14.

³¹ Ibid.

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refining new "level 1" estimates³². A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³³.

Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification Scope Review for both PTN and PSL³⁴. The results of these reviews were presented to WHOM on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁵

The subsequent ESC meeting was held on June 23, 2009³⁶. In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008³⁷. This presentation was relatively short and precipitated the more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited three new employees for the EPU project team including a new [REDACTED] and the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 23, 2009.

At the July 23, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million³⁸. Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million³⁹. The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast"⁴⁰. Simultaneously, the ESC was advised that the current 2009 NCRRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009⁴¹. These revised feasibility scenarios did confirm the continued cost effectiveness of the EPU Projects.

No ESC meeting was held in August. Nonetheless, both EPU projects did produce a monthly cash flow report. In the case of PTN the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009⁴². In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was

³² Ibid., p. 15.

³³ Ibid., p. 18.

³⁴ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁵ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁶ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

³⁷ Ibid., p. 12.

³⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

³⁹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴⁰ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴¹ Ibid. p. 50.

⁴² Total Project Cash Flow, PTN EPU Project 2009, August 2009.

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changed to Red, and the total project cost summary presented on this report continued to be shown as "under review"⁴³.

1 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
2 [REDACTED] took the stand and indicated that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same⁴⁴.

The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁵. This presentation stated that approximately 30% of the total project costs have "high certainty"⁴⁶.

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project was unchanged, but the contingency had decreased by approximately \$12 million⁴⁷. In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million⁴⁸. A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁴⁹. Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSJ produced two Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009⁵⁰. This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million⁵¹. No one with whom Concentric spoke could explain the difference or the reason for the two reports.

A. Key conclusions from chronology relevant to 5 key questions

Concentric has developed the below conclusions which are relevant to the five key questions noted in Section II:

- The original RPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.
- The EPU senior project management was alerted to the potential for costs to exceed as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as early as December 2008 and a more refined version of this analysis in February 2008. The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the cost estimate.

43 Annual Cash Flow, PSL EPU Project, August 1, 2009.

3 44 Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

45 Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

46 Ibid., p. 9.

47 Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

48 Ibid., p. 6.

49 Ibid., pp. 6, 18.

50 Annual Cash Flow, PSL EPU Project, October 1, 2009.

51 Annual Cash Flow, PSL EPU Project, October 2009.

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- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised cost estimates and projected incremental output.
- The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate to FPL's executive managers as of the September 8, 2010, the date on which he presented his directed testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPU's

In determining whether EPU Project costs were prudently incurred the FL PSC will be concerned with two items. First, is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers? That question is described below. Second, the FL PSC will be concerned with whether the project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets 090009-EI and 100009-EI⁵² the result of prudent decisions by FPL's and the EPU Projects' management. This question is addressed in Section VI below.

The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants. As was necessarily the case, that work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects⁵³. This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU project team. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by six months. Concentric believes the six month time frame is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a

⁵² FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010

⁵³ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plants and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009⁵⁴.

Following a conclusion as to how much awareness of the revised cost estimate could have improved, Concentric evaluated whether this would have been likely to affect FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007⁵⁵.

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expected cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic, although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁵⁶ Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU Projects.

VI. The Pass-Through of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's review and involved the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimate process within the EPU Projects and more specifically the reporting of revisions to cost estimates to FPL's
- 3 executive management and the FL PSC. The [REDACTED] does not identify any costs which are the
- 4 result of an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED]
- 5 Letter during our interview with [REDACTED]

Similarly, Concentric has not found any indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by every interviewee with whom Concentric spoke. When asked whether they were aware of any costs that

6 should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to flow of information to FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC.

⁵⁴ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁵⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁵⁶ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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Concentric has, however, found evidence that suggests concerns with the reporting of revisions of the cost estimate. These documents and the concerns are described within Sections VII and VIII below.

VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁵⁷ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with the standards expected for testimony before, and submissions made, to a regulatory agency.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁵⁸ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

- 1 [REDACTED]
- 2 [REDACTED]
- 3 Mr. John J. Reed, Chairman and CEO of Concentric⁶¹, and [REDACTED]

The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶², and sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁴. Mr. Reed's testimony related to nuclear project controls, procedures, policies and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred

⁵⁷ FPSC Docket No. 090009-EI.

⁵⁸ FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

⁵⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶¹ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

⁶² Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶³ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁴ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

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costs and the 2009-2010 projected costs⁶⁵. She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPU's. Therefore, our review has focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

2 [REDACTED] pre-filed Direct Testimony contains the following statements

*"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁶⁶

3 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED], the uprate project continues to be cost effective when compared to the addition of other generation alternatives."*⁶⁷

*"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010."*⁶⁸

The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by Mr. Kundalkar, and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project⁶⁹.

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 080009-EI and that [REDACTED] continued to use in May, 2009⁷⁰
- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May, 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷¹

Comment [SGE3]: John, is this the correct number. Should we cite Need Determination, not NCRC since estimate was not used in NCRC yet?

⁶⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

⁶⁷ Ibid., pp. 2-3.

⁶⁸ Ibid., p. 24.

⁶⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁰ Extended Power Uprates, Project Update, Turkey Point, July 25, 2009 and Extended Power Uprates, Project Update, Saint Lucie, July 25, 2009.

⁷¹ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

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1. On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their current cost estimate for PSL is \$129 million above the May, 2008 estimate⁷²
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May, 2008 estimate; a decision is made to not use the higher cost estimate⁷³
2. [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, his cost estimates for PSL and PTN were unchanged from the May, 2008 estimates; the Projects' cost status is shown as "green."⁷⁴

As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate would be needed, [REDACTED] had not reported to the ESC that an increase was needed. On the contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony reports. While it is inherently a matter of judgment, Concentric does not believe that [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct as of the date it was filed.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all of the productions of documents and interrogatory responses submitted by FPL in Docket 090009-EI pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis⁷⁵. This interrogatory response, which is attached as Exhibit XX, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and actual costs as compared to the estimated in service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1, 2009, and describes that it is a "snapshot" of a continuous process.⁷⁶

Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a serious challenge to meeting the existing budget⁷⁷. On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁷⁸. On June

⁷² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁷³ Email from [REDACTED] to anonymous recipient, March 26, 2009: "We have revised the forecast submitted the end of Feb. to the pre-February numbers per your request."

We understand and agree that the numbers we submitted in Feb. still have to be validated and that there is an extensive effort about to begin to evaluate and validate our estimated cost to complete for the PTN EPU Project, which will also include significant discussions with our EPC contractor, Bechtel, on ways as a Team, we can reduce costs in both the FPL and Bechtel organizations."

⁷⁴ NEED CITATION FROM JJR

⁷⁵ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁷⁶ Ibid.

⁷⁷ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁷⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

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1 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁷⁹, and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several people reportedly working seven days a week for a month, and presented to the ESC at an all-day Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was reduced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May, 2008 estimates⁸⁰.

Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. In addition, the respondent to the interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates, nor of any source data or documents relating to this issue that were created after May 1, 2009. FPL's approach to complying with the Section 366.93(5) requirements was to perform a "snapshot" analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory Affairs staff nor the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents until preparations began in December, 2009 for the 2010 NCRC proceedings.

Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

4 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
5 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸¹:

6 BY [REDACTED]

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

A. Yes, they would be.

7 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

8 This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009.

⁷⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸¹ Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

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- 1 As of September 8, 2009, [REDACTED] had participated in the development of highly detailed cost projections for the EPU projects, and had presented these new estimates to dozens of senior FPL and contractor personnel on July 25, 2009⁸². The new estimates for PSL were caveated as still being "at the conceptual level"⁸³ (as were the May, 2008 estimates⁸⁴) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁸⁵ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience⁸⁶. Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FPSC, and that several new economic feasibility analyses had been performed, which updated those which had been submitted to the FPSC eleven weeks earlier.⁸⁷ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing⁸⁸.
- 2 In our interview with him, [REDACTED] defended his September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many scope changes and manpower estimates, and that they were a no better than a "guess" with little support. He indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a fast-tracked construction program, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates. The new estimates were the product of more than a dozen people working extended hours for a month, and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on far more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in May, 2010.
- 3 Concentric has concluded that by the time [REDACTED] took the stand, the information presented on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two

⁸² Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁴ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁸⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁶ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁸⁷ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁸⁸ Ibid., p. 50.

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individuals that participated in the decision to not update the testimony), and is strongly held by many of those we interviewed.

1 Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division of FPL.

2 Concentric has found no evidence to demonstrate that there was a widespread plan to purposefully keep updated information from being provided to the NCRC parties. The documents we have reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

Comment [JPB4]: Should expect question: Was there any plan at all, not just a widespread plan.

VIII. Information Flow within FPL

The chronology that Concentric has developed has raised several issues with regard to the information flow within the EPU project team and to broader audiences within FPL. For the purpose of reviewing these issues, we have segmented the chronology into the period preceding July 25, 2009 and that after it.

A. Pre-July 25, 2009 Information Flow

Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but not completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of EPU management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSI, which is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and
- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

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Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁶⁹.

An issue that contributed to the delay in briefing the ESC on the likely cost increases was the EPU's treatment of the cost estimate contingency and the synchronization of the risk register.

⁶⁹ EPU lessons learned PPL from April 2010

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IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a number of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations intend to improve the distribution of information within FPL the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects' since July 2009 may have addressed these recommendations. Nonetheless, we believe the importance of these changes must continue to be stressed the EPU Project Team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses including [REDACTED] and Mr. Reed, as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs departments continue to provide explicit instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs departments should assume these individuals may not have a full understanding of the regulatory process and the implications of their testimony. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with obligation or duty to education oneself on matter related to this subject matter or expertise.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. It was reported that the FPL does not maintain a list of the attendees to each meeting. Noticeably absent from these list of invitees is a representative from FPL's Regulatory Affairs department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, Concentric believes it is necessary to make certain that a relatively senior member of Regulatory Affairs department attend each future ESC presentation.

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5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU Project Team should establish and implement explicit report owners (by position). In addition, the FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled off of the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.
6. To the extent that a performance indicator relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (i.e., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator. Concentric's interviews also noted that individuals within the EPU Project Team were uncertain as to what was represented by each performance indicator. Providing the underlying calculation used develop that performance indicator will help clarify the purpose of the performance indicator.
7. ¹
²
³
⁴
⁵ FPL should revisit the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate is seen as a positive development, the reporting relationship of the EPU Project Controls Direct should include some form of either a solid or dotted line outside of the EPU Projects. This will help prevent any undue influence on the Project Controls Director and his staff. As an alternative, FPL could consider forming a separate Project Controls department, similar to the Integrated Supply Chain department. This separate Project Controls department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group. Concentric notes that future, large scale projects could benefit from a set of uniform and consistent project controls that incorporate best practices from across the organization.
8. Concentric's review Project status/probabilistic based contingency should be developed and used as supplement to or replacement for current balancing variable approach. |
9. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis (i.e., not annual). This process should be used for both scope additions or deletions and changes in the expected cost of approved project scope as a result of material or component cost escalation, increased manpower requirements or other factors. This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.

Comment [SGES]: John do you mind taking a crack at this one? I am not sure I am going capture it correctly.

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10. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location for the remainder of the EPU Projects. Concentric's notes that this change may already be implemented within the current EPU action item list. *Its importance, however, must continue to be stressed to the EPU Project Team.*
11. High Bridge Associates, or another independent third party should be retained to complete an engineering based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
12. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
13. The EPU Project Team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
14. / The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization.
15. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
16. Concentric and the EPU Project Management Team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, obtain management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.
2 Concentric would anticipate that the current Vice President of Power Uprate, the
3 Implementation Owner - South, the Project Controls Director, each Site Director and the
4 Site Project Controls Supervisor would be invited to attend this meeting.

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FPL INVESTIGATION

I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] an employee within the [REDACTED] Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010². Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter³. A copy of Concentric's engagement letter is included as Exhibit 1.

Comment [SGE1]: I know we have discussed this before, but I think we may need to revisit it given some of the new information and events. This report is currently silent on executive management's involvement in the EPU Projects and specifically their awareness of this revised cost estimate. Is this appropriate going forward? Given some of the information, including that Robb requested the line-by-line review and revised cost estimate. In addition, [REDACTED] indicated Robb would have been the driver behind revised FVER costs. I am pretty sure we know that the answers to our questions of Robb will be, but we will likely get questioned about this and why we did not interview any of the executives who attended the ESC meetings. It has the appearance of avoiding the issue.

Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED]. All data requests or requests for interviews were sent directly to [REDACTED] or his designate. [REDACTED] Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

The remainder of our report is organized in to eight sections. Section II presents a summary of Concentric's work plan which was used to perform this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] Letter. Section III presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁴. A review of Concentric's findings related to the flow of information from FPL to the Florida Public Service Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

[REDACTED] Side as of the date of the [REDACTED] Letter is [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.

Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

⁴ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Work Plan

A. Sources of information

Concentric's investigation into this matter relied upon two critical pathways for information. First Concentric submitted a number of requests for documentation to FPL, in order to deepen our knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details provided to us in the interviews described below. A log of Concentric's document request can be found in Exhibit 2.

Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews were conducted in person at the offices of FPL or at an off-site location depending on the location of the interviewee. The remaining five interviews were conducted via telephone. All of Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric selected specific individuals to be interviewed based upon the allegations contained with the Martin Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization. Concentric considers the names of the individuals we interviewed to be confidential.

Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and Ethics (the "Code") with each interviewee. This review included a specific discussion of each employee's "responsibility to report any actual or suspected violation of a law or regulation, any actual or suspected fraud, and any other violation or suspect violation of this Code."⁵ Similarly, Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁶. At the conclusion of each interview, the interviewees were given an opportunity to review any additional concerns they may have had.

The information Concentric relied upon in this investigation was supplemented by Concentric's existing knowledge of the EPU Projects organization. This knowledge was gained through three years of reviewing the project management processes of the EPU Projects for FPL as part of the annual Nuclear Cost Recovery Clause filings.

B. Independence

2 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter, Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our 3 approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not the result of specific directions from FPL, its employees or contractors. To this end, FPL did not place any constraints on Concentric's access to information or current and former employees. Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

4 Concentric's findings in this matter are based upon our review of original sources. Concentric did not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous

⁵ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁶ Ibid.

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documents produced by the EPU Project team, whenever possible. The documents relied upon as part of this investigation are presented in Exhibit 3.

C. Key questions

- 1 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five key questions which needed to be answered by our review. These key questions are directly intended to determining whether any imprudent costs were passed onto FPL's customers or if FPL intentionally withheld information from the FL PSC.

Foremost amongst Concentric's keys questions is whether FPL has made the correct decision to proceed with the EPU Projects in light of the best information available at the time decision was made. Secondly, Concentric noted a need to determine if *any* costs were incurred that should not be passed on to FPL's customers on the grounds of imprudent decision making. Third, we examined whether the information provided to the FL PSC and the interveners in each of the NCRC dockets was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed this to occur and why. Similarly, Concentric sought to determine if the information flowing from the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies, processes, and procedures need to be addressed as a result of these findings.

Comment [SGE21]: It seems to me we need to include in the discussion of the ESC meetings who the key inviters were. Do you want to go there?

2 III. Summary Level Response to [REDACTED] Letter | -----

- 3 Exhibit 4 presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its summary-level observations that resulted from our investigation of the allegations contained therein. In addition, each observation contains a citation to this report in order to provide a "roadmap" to a
4 reviewer of the [REDACTED] Letter and Concentric's report.

- 5 As can be seen in Exhibit 4, a number of the allegations raised in the [REDACTED] Letter were shown to
6 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED] statement's related to the timing of the initial scoping studies by Shaw and the repeated changes in the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to have been the predictable result of the evolving design which is inherent in any complex project.

- 7 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to support his assertion that as of November 2009, the EPU Projects were continuing to measure their cost performance relative to the original 2007 cost estimates. These reports, the November PTN
8 Total Project Cash Flow Report⁷ and the PSL Annual Project Cash Flow Report⁸, confirmed [REDACTED]
9 [REDACTED] assertion. Concentric did note, however, that the November Executive Steering Committee ("ESC") presentation provided the updated cost forecast⁹.

- Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 4, Concentric has found evidence
10 which indicates the [REDACTED] and the [REDACTED] were alerted to the potential

⁷ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁸ Annual Cash Flow, PSL EPU Project, October 2009.

⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5

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for cost over-runs at PSL as early as April 2008. A similar opportunity was noted in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel. At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted below, the preliminary forecast in February 2009 was within approximately \$11 million, or 2%¹⁰, of the forecast ultimately provided to FPL's management in July 2009¹¹.

- 1 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this
- 2 finding includes Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this
- 3 letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]
- 4 [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a
- 5 strong background within his function. [REDACTED] employment history includes the previous
- 6 positions noted in the [REDACTED] Letter¹² and many years of prior project controls employment as a
- 7 contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note
- 8 that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects
- 9 and a staff of approximately 100 people¹³. While it may be fair to say that [REDACTED] was not always
- 10 aware every aspect of the EPU Projects, it would not be fair to characterize [REDACTED] as under- or
- 11 poorly qualified for his position.
- 12 Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and
- 13 FPL via email on March 19, 2010 of potential retaliation by his supervisor¹⁴. Specifically, [REDACTED]
- 14 [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s
- organization. He told me in private that he does not intend [sic] being fired as his predecessors for
- poor performance and he will not let a few 'stupid' people affect his management effectiveness." A
- copy of this email is attached as Exhibit 5. Concentric reported this email to FPL's Legal
- department. It is Concentric's understanding this matter is being addressed by the FPL Human
- Resources department.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 6. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. This chronology should not be viewed as a comprehensive history of the EPU Projects.

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the components which would require replacement to operate at the updated conditions¹⁵. Concentric

¹⁰ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25 2009, p. 8.

¹² [REDACTED] Letter, p. 2.

¹³ Ibid.

¹⁴ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

¹⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-H1, September 17, 2007.

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understands, as originally proposed, the EPU Projects were expected to commence operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power Park Determination of Need in 2007¹⁶. FPL filed for a Determination of Need for the EPU Projects on September 17, 2007.¹⁷

In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to confirm or reject the results of this analysis. Concentric understands from our interviews that these studies generally did confirm the FPL scoping analysis, but some discrepancies related to the replacement or refurbishment of certain components existed for Turkey Point. The initial cost estimate included a contingency allocation of approximately 45%¹⁸.

Soon after the completion of the Shaw scoping studies in April 2008, the PSL EPU project team identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study may not have captured the full spectrum of modifications necessary," for the uprate¹⁹. In response to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to the CR²⁰. The High Risk Mitigation Plan included corrective actions which were required to be completed by the EPU Project team including preparation and submission of a revised cost estimate to the [REDACTED] among other items. The High Risk Mitigation Plan was executed by 1 the [REDACTED] and the [REDACTED] but not the [REDACTED] Concentric 2 was unable to independently determine if this High Risk Mitigation Plan was ever completed. Concentric requested a copy of the revised cost estimate proscribed in the High Risk Mitigation Plan, but was told that this document could not be located, nor could its existence be confirmed.²¹

On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast for PTN of \$262MM for the PTN EPU²². This compares a scoping analysis assumption of \$225MM²³.

Later in December 2008, the PSL Project Controls team again identified the potential to exceed the original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised forecast for PSL was prepared and provided to the EPU Project Management at that time. The EPU Project Management, however, requested that the PSL Project Controls group further refine and develop the revised forecast.

CR-2008-37753 noted that the EPU project is a major change for PSL and should have a change management plan in place. In addition, CR-2008-37753 goes on to state that CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and tracked separately

¹⁶ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁸ Ibid.

¹⁹ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²⁰ Ibid., p. 8.

²¹ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²² Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²³ Ibid.

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within the EPU Risk Mitigation Program. CR-2008-37753 concludes that there was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²¹

1 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
2 attended by the EPU Project Management Team and reportedly included [REDACTED] who was
3 appointed the EPU Project Controls Manager as of January 2009, and the PSL Project Team. At
4 this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
5 PSL, an increase of approximately \$139 million over the then current budget²⁵. This was
6 approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁶. It
7 was reported to Concentric that the [REDACTED] and the [REDACTED] responded
8 with a number of questions related to the basis for the revised forecast and requested additional
9 refinement.

10 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
11 relative to this revised forecast. However, the PTN Project Team was requested by the Vice
12 President of Power Uprate to revise the initial reports, to measure cost performance relative to the
13 original project baseline because the revised estimate still had to be "validated," and because and
14 "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
15 PTN EPU Project."²⁷ Concentric was told that the [REDACTED] was not satisfied with these
16 instructions, but chose to comply with the instructions from his superiors nonetheless.

17 In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
18 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
19 at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED]
20 [REDACTED] resigned from his position and it is reported that a similar undertaking was begun for the
21 PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

22 Also on May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket
23 090009-EI before the FL PSC²⁸. In this testimony, the [REDACTED] stated "The EPU projects are
24 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
25 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
26 Docket 080009-EI."²⁹ At the same time, FPL submitted the pre-filed, direct testimonies of
27 [REDACTED]
28 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³⁰

29 At the end of May 2009, the EPU Project Management Team reported to the ESC that the Bechtel
30 EPC estimates had increased to a level in excess of Bechtel's indicative bid³¹. This increase was
31 reported to be the result of higher than expected projections of field non-manual and manual labor

²¹ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

²² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

²³ Extended Power Uprates, Project Update, Saint Lucie July 25 2009, p. 8.

12 ²⁴ Email of [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

13 ²⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

²⁶ Ibid at pp. 2-3.

²⁷ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January - December 2010, May 1, 2009.

²⁸ Extended Power Uprates, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

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hours³². Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which may be able to be eliminated to reduce the EPC vendor's forecast³³. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project Management Team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates³⁴. A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³⁵.

Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification Scope Review for both PTN and PSL³⁶. The results of these reviews were presented on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁷

The subsequent ESC meeting was held on June 23, 2009³⁸. In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008³⁹. This presentation was relatively short and precipitated the more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited three new employees for the EPU project team including a new [REDACTED] and the [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 23, 2009.

At the July 23, 2009 ESC presentation, the new EPU senior management team was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million⁴⁰. Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million⁴¹. The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast"⁴². Simultaneously, the ESC was advised that the current 2009 NCRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009⁴³. These revised feasibility scenarios did confirm the continued cost effectiveness of the EPU Projects.

³² Ibid., p. 14.

³³ Ibid.

³⁴ Ibid., p. 15.

³⁵ Ibid., p. 18.

³⁶ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁷ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁸ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

³⁹ Ibid., p. 12.

⁴⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴² Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴³ Ibid. p. 50.

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No ESC meeting was held in August. Nonetheless, both EPU projects did produce a monthly cash flow report. In the case of PTN the Total Project Cash Flow report was not updated to reflect the revised forecast that had been presented to executive management on July 25, 2009⁴⁴. In contrast, the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was changed to Red, and the total project cost summary presented on this report continued to be shown as "under review"⁴⁵.

1 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
2 [REDACTED] took the stand and indicated that should he be asked the same questions contained within his pre-filed, direct testimony his answers would remain the same⁴⁶.

The following day, September 9, 2009, the ESC was presented with a newly revised forecast that further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁷. This presentation stated that approximately 30% of the total project costs have "high certainty"⁴⁸.

At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project was unchanged, but the contingency had decreased by approximately \$12 million⁴⁹. In addition, the AFUDC estimate was decreased by approximately \$150 million to \$200 million⁵⁰. A footnote in the presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁵¹. Concentric notes that the remaining values shown in this presentation are depicted as the full cost of the EPU Projects regardless of ownership.

Also in October, PSL produced two Annual Project Cash Flow Reports with different budget performance indicators and different total project cost summaries. The first of these reports is dated October 1, 2009⁵². This report includes a red performance indicator and the total project cost summary is listed as "under review". The second report is dated October 2009. The budget performance indicator in this report is listed as yellow and the total project cost summary is changed to \$651 million⁵³. No one with whom Concentric spoke could explain the difference or the reason for the two reports.

A. Key conclusions from chronology relevant to the five key questions

Concentric has developed the below conclusions which are relevant to the five key questions noted in Section II:

- The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed with the EPU Projects in 2007.

⁴⁴ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

⁴⁵ Annual Cash Flow, PSL EPU Project, August 1, 2009.

3 ⁴⁶ Transcript of Direct Examination of [REDACTED], September 8, 2009, pp. 208-209.

⁴⁷ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009.

⁴⁸ Ibid., p. 9.

⁴⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

⁵⁰ Ibid., p. 6.

⁵¹ Ibid., pp. 6, 18.

⁵² Annual Cash Flow, PSL EPU Project, October 1, 2009.

⁵³ Annual Cash Flow, PSL EPU Project, October 2009.

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- The EPU senior project management was alerted to the potential for costs to exceed as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as early as December 2008 and a more refined version of this analysis in February 2008. The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the cost estimate.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised cost estimates and projected incremental output.
- The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate to FPL's executive managers as of September 8, 2010, the date on which he presented his direct testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPU's

In determining whether EPU Project costs were prudently incurred the FL PSC will be concerned with two items. First, is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers? That question is described below. Second, the FL PSC will be concerned with whether the project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets 090009-EI and 100009-EI⁵⁴ the result of prudent decisions by FPL's management? This question is addressed in Section VI below.

The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁵ As was necessarily the case, that work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects⁵⁶. This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It would not be appropriate to assume FPL's executive management should have become aware of the revised cost estimate in December 2008. The estimate that was prepared at this time was reported to be preliminary in nature and warranted additional review by the EPU project team to

⁵⁴ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010

⁵⁵ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

⁵⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-III, September 17, 2007.

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further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the EPU senior management could have taken this opportunity to notify FPL's executive management of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this conclusion.

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month time frame is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this meeting followed an initial review of the PSL cost estimate in December 2008 and presented a revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost estimate that was provided to FPL's executive management on July 25, 2009⁵⁷.

Following a conclusion as to how much awareness of the revised cost estimate could have improved, Concentric evaluated whether this would have been likely to affect FPL's decision to proceed with the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to the cost estimate, FPL also learned that a higher level of incremental output may be produced by the EPU Projects. This additional output was the result of more detailed engineering which had been completed since the original scoping studies in 2007⁵⁸.

As noted above, FPL's decision to proceed with the EPU Projects was based on an economic feasibility analysis which relied upon the expected incremental output of the facilities as well as the expect cost, among other items. Due to the increase in the projected output of the EPU Projects, the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic, although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁵⁹ Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to proceed with the EPU Projects.

VI. The Pass-Through of EPU Costs in the NCRC

- 1 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation process and the incurrence of specific costs. The former is the projection of future costs without the actual expenditure of company or customer dollars. The later is more critical to the FL PSC's review and involved the actual expenditure of company and customer dollars or the commitment to do so at a later date.
- 2 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimate process within the EPU Projects and more specifically the reporting of revisions to cost estimates to FPL's executive management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the
- 3 result of an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED]
- 4 Letter during our interview with [REDACTED]
- 5

⁵⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁵⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁵⁹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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Similarly, Concentric has not found any indications of costs that were the result of imprudent decisions or actions on the part of FPL's management. This conclusion was reinforced by every interviewee with whom Concentric spoke. When asked whether they were aware of any costs that should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our interview that "the costs will be what they [are]" and his concerns are related to what information would be presented to the FL PSC. As a result, Concentric believes there are no costs which should be subject to disallowance by the FL PSC.

Concentric has, however, found evidence that suggests concerns with the reporting of revisions of the cost estimate. These documents and the concerns are described within Sections VII and VIII below.

VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

The chronology of events presented in Section IV of this report led Concentric to focus on the 2009 NCRC proceedings⁶⁰ in order to assess whether the information presented by FPL in those proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with the standards expected for testimony before, and submissions made, to a regulatory agency.

There were three separate sets of activities in the 2009 NCRC proceedings in which information about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony, both direct and rebuttal, 2) production of documents and answering of interrogatories in the discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal); documents were provided and interrogatories were responded to from January, 2009 through the hearing; the hearings on these issues were held on September 8, 2009.⁶¹ Since an important element of this investigation has been about the timeliness of internal and external information flow, we have chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

3

[REDACTED]
Mr. John J. Reed, Chairman and CEO of Concentric⁶², and [REDACTED]

4

⁶⁰ FPSC Docket No. 090009-EI.

⁶¹ FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

⁶² Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶³ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

⁶⁴ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

⁶⁵ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

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The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and cost-effectiveness of the EPU, were presented in [REDACTED] direct testimony⁶⁶, and sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁷. Mr. Reed's testimony related to nuclear project controls, procedures, policies and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs⁶⁸. She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

[REDACTED] pre-filed Direct Testimony contains the following statements

*"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PIN) Units 3 & 4 nuclear power plants."*⁶⁹

*"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."*⁷⁰

*"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010."*⁷¹

The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project⁷².

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 080009-EI and that [REDACTED] continued to use in May, 2009⁷³

Comment [SGE3]: John, is this the correct number. Should we cite Need Determination, not NCR, since estimate was not used in NCR yet?

⁶⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁷ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

⁷⁰ Ibid., pp. 2-3.

⁷¹ Ibid., p. 24.

⁷² Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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- On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- In early December, 2008 the EPU's Project Controls Group identified that the May, 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08 Condition Report was a "missed opportunity"⁷⁴
- 1 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by Project Controls and the PSL site that their current cost estimate for PSL is \$129 million above the May, 2008 estimate⁷⁵
- By March 26, 2009 the PTN site team had also concluded that the cost estimate should be raised above the May, 2008 estimate; a decision is made to not use the higher cost estimate⁷⁶
- 2 • [REDACTED] participated in developing a presentation in late April/early May 2009 informing the ESC that while Bechtel had estimated higher costs, his cost estimates for PSL and PTN were unchanged from the May, 2008 estimates; the Projects' cost status is shown as "green."⁷⁷

As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1, 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate would be needed [REDACTED] had not reported to the ESC that an increase was needed. On the contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony reports. While it is inherently a matter of judgment, Concentric does not believe that [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct as of the date it was filed.

C. Interrogatory Responses and Production of Documents

Concentric requested, received and reviewed all of the productions of documents and interrogatory responses submitted by FPL in Docket 090009-EI pertaining to the EPU budget, schedule and cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in response to Staff's Fifth Set, No. 53, for further analysis⁷⁸. This interrogatory response, which is attached as Exhibit 7, sought a listing of each analysis that FPL was offering to satisfy the requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and actual costs as compared to the estimated in service cost of nuclear projects. The response, which was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1, 2009, and describes that it is a "snapshot" of a continuous process.⁷⁹

⁷⁴ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

⁷⁵ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

7 ⁷⁶ Email from [REDACTED] to anonymous recipient, March 26, 2009: "We have revised the forecast submitted the end of Feb. to the pre-February numbers per your request."

We understand and agree that the numbers we submitted in Feb. still have to be validated and that there is an extensive effort about to begin to evaluate and validate our estimated cost to complete for the PTN EPU Project, which will also include significant discussions with our EPC contractor, Bechtel, on ways as a Team, we can reduce costs in both the FPL and Bechtel organizations."

⁷⁷ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

⁷⁸ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁷⁹ Ibid.

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Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a serious challenge to meeting the existing budget⁸⁰. On June 3, 2009, Bechtel submitted a "P50" (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁸¹. On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸², and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED] by several people reportedly working seven days a week for a month, and presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May, 2008 estimates⁸³.

Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. However, the interrogatory only asked for a *listing* of the responsive analyses, not for FPL's current or updated analyses. In addition, the respondent to the interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates, nor of any source data or documents relating to this issue that were created after May 1, 2009. FPL's approach to complying with the Section 366.93(5) requirements was to perform a "snapshot" analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory Affairs staff nor the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents until preparations began in December, 2009 for the 2010 NCRC proceedings.

Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

4/ As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
5- At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁴:

6

BY [REDACTED]

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

A. Yes, they would be.

7

[REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

⁸⁰ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

⁸¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸² Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

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⁸⁴ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

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- ¹ This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009.
- ² As of September 8, 2009, [REDACTED] had participated in the development of highly detailed cost projections for the EPU projects, and had presented these new estimates to dozens of senior FPL and contractor personnel on July 25, 2009⁸⁵. The new estimates for PSL were caveated as still being "at the conceptual level"⁸⁶ (as were the May, 2008 estimates⁸⁷) and the comment was made that the full scope was still not known. However, the new values were clearly labeled as the "Current Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was being increased to the "Current Forecast."⁸⁸ The July 25, 2009 presentation offers an extensive perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned from this experience⁸⁹. Concentric also notes that the ESC was explicitly advised that the new cost estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the FPSC, and that several new economic feasibility analyses had been performed, which updated those which had been submitted to the FPSC eleven weeks earlier.⁹⁰ The new feasibility analyses continued to show that the projects were beneficial to customers, although less so than in the May 1, 2009 filing⁹¹.
- ⁴ In our interview with him, [REDACTED] defended his September 8, 2009 reaffirmation of his pre-filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the validity of many scope changes and manpower estimates, and that they were a no better than a "guess" with little support. He indicated that he does not recall any discussion with regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that the new cost estimates were based on only partially completed engineering and design information, and that they were still subject to revision as new information became available. However, that is always the case with a fast-tracked construction program, and continues to be the case today. These facts do not support the continued use of information that was based on even earlier conceptual designs and out-of-date manpower and material estimates. The new estimates were the product of more than a dozen people working extended hours for a month, and had been reviewed by every level of management in the EPU organization. They reflected far more knowledge about the scope of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost estimates that were based on far more recent data and manpower estimates that reflected the revised scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the executives of FPL in charge of EPU governance (and who were responsible for approving budget changes for the projects) as the best "line-by-line" estimates available at the time, were materially different from the 2008 estimates, and have continued to serve as the reference point for all subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in May, 2010.

⁸⁵ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁶ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-111, September 17, 2007.

⁸⁸ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁹ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁹⁰ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁹¹ Ibid., p. 50.

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- 1 Concentric has concluded that by the time [REDACTED] took the stand, the information presented on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony), and is strongly held by many of those we interviewed.
- 2 Concentric has found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as
- 3 sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division of FPL.

Concentric has found no evidence to demonstrate that there was a [widespread plan] to purposefully keep updated information from being provided to the NCRC parties. The documents we have reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

Comment [JPB4]: Should expect question: Was there any plan at all, not just a widespread plan.

VIII. Information Flow within FPL

The chronology that Concentric has developed has raised several concerns with regard to the information flow within the EPU project team and to broader audiences within FPL. For the purpose of reviewing these issues, we have segmented the chronology into the period preceding July 25, 2009 and that after it.

A. Pre-July 25, 2009 Information Flow

Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but not completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of the EPU senior management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL, which is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project,"
- It "did not assess [the] capacity of [the] organization and costs," and

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- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁹².

An issue that contributed to the delay in informing the ESC about the likely cost increases was the EPU's treatment of the cost estimate contingency and the development and synchronization of the trend registers and risk registers.

FPL has in place two sets of instructions that address how contingencies are to be developed and applied in the cost estimation process. EPPI-320 is specific to these projects and addresses how cost estimates are to be developed, including the development and inclusion of contingencies. This instruction has been in place since March, 2008, and remains in effect today [VERIFY]. EPPI-320 states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining percentage of risk and the amount of money associated with the contingency." EPPI-320 states that it is supplemental to NPDI-304, which is a Nuclear Projects Instruction which provides specific guidance on the development of contingencies. NPDI-304 states that:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008, and appear to have achieved or at least approached Level 1 status by the end of 2009. FPL's practice has been to label the contingency as "Scope Not Defined", or "Scope Not Estimated." The EPU has defined the contingency as "Contingency is an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects." (NPDI-304, p9) The EPU instructions also state that the contingency should be "based on the level of uncertainty or complexity of a project." In addition to the contingency, the EPU estimates include an allowance for the expected (probabilistically determined) value of specific modifications or conditions which have arisen. This value is supposed to be derived from the risk register, which identifies the issue, its cost impact, its probability of occurrence, and its expected value. Items are supposed to enter the risk register from the trends register, which is an early-warning system for changing conditions at the projects which can affect cost or schedule performance. EPPI-300, another EPU instruction relating to changes in project cost estimates, describes the purpose of the trend program as follows:

2.1...The trend program fosters vigilance, awareness and action through constant probing, reporting, reviewing, discussing, and analyzing the projects performance against the project plan. The trend program is a dynamic decision-making process, which exposes pending decisions and their related impact(s) prior to the fact. Timeliness in identifying and resolving trends is a key element in controlling project cost and must be managed and recorded to maintain current forecasts.

⁹² EPU lessons learned PPL from April 2010

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Based on our review of documents, and as confirmed in our interviews, from May 2008 to today, the EPU's cost estimation process has not complied with these instructions. The discrepancies between the instructions and actual practices have been numerous, but the most significant include:

- Since the Bechtel contract was executed in November, 2008, the project has not maintained a level of contingency that is consistent with FPL's guidelines; the contingency has been depleted month-by-month by scope changes, escalation and risk adjustments; the contingency has been treated as a balancing variable with the value derived simply by taking the total current cost estimate and subtracting out the known scope and risk register elements rather than basing it on the level of development or uncertainty associated with the project; currently, the contingency is far below the standards applicable for a Level 1 estimate. This practice was acknowledged in the July 25, 2009 lessons learned section of the ESC presentations by the comments that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project." The responsibility for ensuring compliance with EPPI-320 lies with the [REDACTED] according to the currently effective version of this instruction. This position no longer exists within the EPU organization [VERIFY], and has not since July 25, 2009. The new EPU management team is addressing these issues through the retention of High Bridge to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency, however that work is not yet complete, and the issue of the depleted contingency remains unresolved.
- The trends registers and risk registers have not been developed in accordance with the projects' instruction set, and the risk register was not directly synchronized with the contingency or the cost estimate until after July, 2009; Concentric has reviewed the trends and risk registers for the projects as they existed from January, 2008 to today, and has found that..... This issue was acknowledged in the July 25, 2009 ESC briefing by the comments that "Current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." The current EPU management team has explicitly linked the risk register to the cost estimate, however, the link between the risk register and the contingency (scope not defined) has apparently not been established, and is apparently awaiting the receipt of the High Bridge report.

A second issue that adversely affected the timely flow of project cost information within FPL relates to the process for developing updated project cost estimates, securing the approval of these updates, and communicating these updates within the FPL organization. FPL's EPPI-300 governs the process for these activities, and establishes the following procedures and responsibilities:

- 4
- Potential changes to the cost baseline or forecast are to be captured through the trends program and recorded on the trends register. The [REDACTED] is responsible for the accuracy and timeliness of the trends register.
 - All issues are to begin as trends; depending on the nature of the issue, consideration is to be given to adding the issue to the risk register, as called for in EPPI-340, which governs the risk management program. The [REDACTED] is responsible for developing and updating the risk register [ADD POSITION PER EPPI 340]
 - If an issue identified in the trends/risk management programs cannot be resolved (mitigated), then a Scope Change/Forecast Variance Form ("SC/FV") is to be prepared to

Comment (SGE5): This is not a reason to exclude. It is simple for your information. This will contradict your testimony in 2009 and 2010.

2
3
Comment (SGE6): Confirmed [REDACTED] as [REDACTED] has taken its place for FL.

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authorize a change to the project's cost forecast. SC/FVs are required to be established separately for each site and for all project modifications. The SC/FVs are to be signed and approved by up to ten different positions in the EPU organization, depending on the magnitude of the cost change; FPL's [REDACTED] is required to approve all SC/FVs in excess of \$5 million.

- The SC/FVs are required to indicate where the additional funding is coming from, which can be from a release of funds from the contingency, or from a change to the approved budget.
- All releases of funds from the contingency need to be reviewed by the EPU Site Project Director, and approved through the approval process for SC/FV forms.
- All SC/FV forms are to be retained as permanent project records, and their location is to be known at all times.

Concentric requested all SC/FV forms for the EPU projects since 1/1/08. Our review of the documents produced in response to this request indicated that

Concentric has concluded that the EPU's published procedures for developing, estimating, approving, tracking, and possibly retaining revisions to the cost estimates were largely ignored through July, 2009, and are still far from achieving widespread compliance. It is clear that the process required for releasing funds from the contingency has not been followed, and that revisions to the cost estimates have not These facts have resulted in widespread confusion within the organization regarding what the current approved budget is at any point in time, who has to approve changes to that budget, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledge by EPU management in the July 25, 2009 lessons learned sections of the ESC presentations, where the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persisted throughout 2009 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization, often with no explanation as to why the changes were made. In other instances, individuals were told to make the changes themselves by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. These actions appear to be largely attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

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IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a number of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations intend to improve the distribution of information within FPL the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects' since July 2009 may have addressed these recommendations. Nonetheless, we believe the importance of these changes must continue to be stressed the EPU Project Team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs departments continue to provide explicit instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs departments should assume these individuals may not have a full understanding of the regulatory process and the implications of their testimony. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with obligation or duty to education oneself on matters related to this subject matter or expertise.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. It was reported that the FPL does not maintain a list of the attendees to each meeting. Noticeably absent from these lists of invitees is a representative from FPL's Regulatory Affairs department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, it is necessary to make certain that a relatively senior member of Regulatory Affairs department attend each future ESC presentation.
5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information

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available. FPL and the EPU Project Team should establish and implement explicit report owners (by position). In addition, the FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled off of the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissenting process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

6. To the extent that a performance indicator relies upon a calculation in order to produce a particular indicator, the result of the underlying calculation should be reported along with the performance indicator (i.e., budget or forecast performance). By providing the result of the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy between the performance indicator and the calculation that produced that indicator. Concentric's interviews also noted that individuals within the EPU Project Team were uncertain as to what was represented by each performance indicator. Providing the underlying calculation used develop that performance indicator will help clarify the purpose of the performance indicator.
7. FPL should revisit the reporting relationship of the EPU Project Controls Director. While the change in reporting from the EPU Project Director to the Vice President of Power Uprate is a positive development, the reporting relationship of the EPU Project Controls Director should include either a solid or dotted line outside of the EPU Projects. This will help prevent any undue influence on the Project Controls Director and his staff. As an alternative, FPL could consider forming a separate Project Controls department, similar to the Integrated Supply Chain department. This separate Project Controls department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group. Concentric notes that future, large scale projects could benefit from a set of uniform and consistent project controls that incorporate best practices from across the organization.
8. Concentric's review Project status/probabilistic based contingency should be developed and used as supplement to or replacement for current balancing variable approach.
9. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis (i.e., not annual). This process should be used for both scope additions or deletions and changes in the expected cost of approved project scope as a result of material or component cost escalation, increased manpower requirements or other factors. This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.
10. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location for the remainder of the EPU Projects. Concentric notes that this change may already be

Comment [SGE7]: John do you mind taking a crack at this one? I am not sure I am going capture it correctly.

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implemented within the current EPU action item list. Its importance, however, must continue to be stressed to the EPU Project Team.

11. High Bridge Associates, or another independent third party, should be retained to complete an engineering based cost estimate of PTN Unit 4 and both PSL units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
12. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
13. The EPU Project Team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall transparency into the EPU Projects and document that the proper level of oversight is being provided to the EPU Projects.
14. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization.
15. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
16. Concentric and the EPU Project Management Team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, obtain management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges. Concentric would anticipate that the current Vice President of Power Uprate, the Implementation Owner -- South, the Project Controls Director, each Site Director and the Site Project Controls Supervisor would be invited to attend this meeting.

153239-3263

**Analysis of
Ameren Service Company's
Costs and Services**

Prepared for

The Ameren Illinois Utilities

Confidential Report
Investigation for
Florida Light and Power

May XX, 2010

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FPL INVESTIGATION

I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the [REDACTED] of Florida Power & Light Company ("FPL").¹ Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010². Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter³. A copy of Concentric's engagement letter is included as Exhibit 1.

Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED] All data requests or requests for interviews were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

The remainder of our report is organized in to eight sections. Section II presents a summary of Concentric's work plan which was used to perform this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] Letter. Section III presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁴. A review of Concentric's findings related to the flow of information from FPL to the Florida Public Service Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a review of the flow information within FPL can be found in Section VIII. Finally, a review of Concentric's findings and specific recommendations can be found in Section IX.

¹ [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]

² Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.

³ Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

⁴ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

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II. Concentric Work Plan

A. Sources of information

1 Concentric's investigation into this matter relied upon two critical pathways for information. First
2 Concentric submitted a number of requests for documentation to FPL, in order to deepen our
3 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details
4 provided to us in the interviews described below. A log of Concentric's document request can be
5 found in Exhibit 2.

6 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews
7 were conducted in person at the offices of FPL or at an off-site location depending on the location
8 of the interviewee. The remaining five interviews were conducted via telephone. All of
9 Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric
10 selected specific individuals to be interviewed based upon the allegations contained within the [REDACTED]
11 Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization.
12 Concentric considers the names of the individuals we interviewed to be confidential.

13 Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and
14 Ethics (the "Code") with each interviewee. This review included a specific discussion of each
15 employee's "responsibility to report any actual or suspected violation of a law or regulation, any
16 actual or suspected fraud, and any other violation or suspected violation of this Code."⁵ Similarly,
17 Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁶. At the
18 conclusion of each interview, the interviewees were given an opportunity to review any additional
19 concerns they may have had.

20 The information Concentric relied upon in this investigation was supplemented by Concentric's
21 existing knowledge of the EPU Projects organization. This knowledge was gained through three
22 years of reviewing the project management processes of the EPU Projects for FPL as part of the
23 Company's annual Nuclear Cost Recovery Clause filings.

B. Independence

24 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter,
25 Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our
26 approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not
27 the result of specific directions from FPL, its employees or contractors. To this end, FPL did not
28 place any constraints on Concentric's access to information or current and former employees.
29 Lastly, Concentric was not constrained by budget or schedule expectations on the part of FPL.

30 Concentric's findings in this matter are based upon our review of original sources. Concentric did
31 not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and
32 verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous

⁵ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009, p. 2.

⁶ Ibid.

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1 documents produced by the EPU Project team, whenever possible. The documents relied upon as
2 part of this investigation are presented in Exhibit 3.

C. Key questions

3 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five
4 key questions which needed to be answered by our review. These key questions are directly
5 intended to determine whether any imprudent costs were passed onto FPL's customers or if FPL
6 intentionally withheld information from the FL PSC.

7 Foremost amongst Concentric's key questions is whether FPL has made the correct decision to
8 proceed with the EPU Projects in light of the best information available at the time decision was
9 made. Secondly, Concentric noted a need to determine if *any* costs were incurred that should not be
10 passed on to FPL's customers on the grounds of imprudent decision-making. Third, we examined
11 whether the information provided to the FL PSC and the interveners in each of the NCRC dockets
12 was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed
13 this to occur and why. Similarly, Concentric sought to determine if the information flowing from
14 the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and
15 if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies,
16 processes, and procedures need to be addressed as a result of these findings.

17 III. Summary Level Response to [REDACTED] Letter

18 Exhibit 4 presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its
19 summary-level observations that resulted from our investigation of the allegations contained therein.
20 In addition, each observation contains a citation to this report in order to provide a "roadmap" to a
21 reviewer of the [REDACTED] Letter and Concentric's report.

22 As can be seen in Exhibit 4, a number of the allegations raised in the [REDACTED] Letter were shown to
23 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED]
24 statements related to the timing of the initial scoping studies by Shaw and the repeated changes in
25 the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to
26 have been the predictable result of the evolving design which is inherent in any complex project.

27 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to
28 support his assertion that as of November 2009, the EPU Projects were continuing to measure their
29 cost performance relative to the original 2007 cost estimates. These reports, the November PTN
30 Total Project Cash Flow Report⁷ and the PSL Annual Project Cash Flow Report⁸, confirmed [REDACTED]
31 [REDACTED] assertion. Concentric did note, however, that the November Executive Steering
32 Committee ("ESC") presentation provided the updated cost forecast⁹.

33 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for
34 the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 4, Concentric has found evidence
35 which indicates the [REDACTED] and the [REDACTED] were alerted to the potential

⁷ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁸ Annual Cash Flow, PSL EPU Project, October 2009.

⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5

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1 for cost over-runs at PSL as early as April 2008.¹⁰ A similar opportunity was noted in December,
2 2008 when these individuals were presented with a preliminary revised forecast for PSL. This
3 followed the award of an engineering, procurement and construction ("EPC") contract for the EPU
4 Projects to Bechtel. At this time, the PSL Project Team was told to continue refining their forecast
5 until February 2009 when it was reviewed again by the EPU senior management. As noted below,
6 the preliminary forecast in February 2009 was within approximately \$11 million, or 2%¹¹, of the
7 forecast ultimately provided to FPL's management in July 2009¹².

8 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this
9 finding includes Concentric's interview with [REDACTED] the fact that [REDACTED] chose to send this
10 letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]
11 [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a
12 strong background within his function. [REDACTED] employment history includes the previous
13 positions noted in the [REDACTED]³ and many years of prior project controls employment as a
14 contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note
15 that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects
16 and a staff of approximately 100 people¹⁴. While it may be fair to say that [REDACTED] was not always
17 aware of every aspect of the EPU Projects, it would not be fair to characterize [REDACTED] as under-
18 or poorly qualified for his position.

19 Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and
20 FPL via email on March 19, 2010 of potential retaliation by his supervisor¹⁵. Specifically, [REDACTED]
21 [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s
22 organization. He told me in private that he does not intend [sic] being fired as his predecessors for
23 poor performance and he will not let a few 'stupid' people affect his management effectiveness." A
24 copy of this email is attached as Exhibit 5. Concentric reported this email to FPL's Legal
25 department. It is Concentric's understanding this matter is being addressed by the FPL Human
26 Resources department.

IV. Chronology of Events

27 A chronology of the EPU Projects is presented in Exhibit 6. A summary of the chronology,
28 including the major events relevant to Concentric's review are highlighted below. This chronology
29 was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing
30 of certain EPU Project activities. This chronology should not be viewed as a comprehensive history
31 of the EPU Projects.

32 The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine
33 a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the
34 components which would require replacement to operate PSL and PTN at the uprated conditions¹⁶.

35 ¹⁰ CR 2008-11443, April 3, 2008.

36 ¹¹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

37 ¹² Extended Power Upgrades, Project Update, Saint Lucie, July 25 2009, p. 8.

38 ¹³ [REDACTED] Letter, p. 2.

39 ¹⁴ Ibid.

40 ¹⁵ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

41 ¹⁶ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for
42 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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1 Concentric understands, as originally proposed, the EPU Projects were expected to commence
2 operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power
3 Park Determination of Need in 2007¹⁷. FPL filed for a Determination of Need for the EPU
4 Projects on September 17, 2007.¹⁸

5 In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to
6 confirm or reject the results of this analysis. Concentric understands from our interviews that these
7 studies generally did confirm the FPL scoping analysis, but some discrepancies related to the
8 replacement or refurbishment of certain components existed for Turkey Point. The initial cost
9 estimate included a contingency allocation of approximately 45%¹⁹.

10 Soon after the completion of the Shaw scoping studies in April 2008, the PSL EPU project team
11 identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL
12 initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study
13 may not have captured the full spectrum of modifications necessary," for the uprate²⁰. In response
14 to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to
15 the CR²¹. The High Risk Mitigation Plan included corrective actions which were required to be
16 completed by the EPU Project team including preparation and submission of a revised cost estimate
17 to the [REDACTED] among other items. The High Risk Mitigation Plan was executed by
18 the [REDACTED] and the [REDACTED] but not the [REDACTED]. Concentric
19 was unable to independently determine if this High Risk Mitigation Plan was ever completed.
20 Concentric also requested a copy of the revised cost estimate described in the High Risk Mitigation
21 Plan, but was told that this document could not be located, nor could its existence be confirmed.²²

22 On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast for PTN of
23 \$262MM for the PTN EPU²³. This compares a scoping analysis assumption of \$225MM²⁴.

24 In December 2008, the PSL Project Controls team again identified the potential to exceed the
25 original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised
26 forecast for PSL was prepared and provided to the EPU Project Management at that time. The
27 EPU Project Management, however, requested that the PSL Project Controls group further refine
28 and develop the revised forecast.

29 CR-2008-37753 noted in December 2008 that the EPU project is a major change for PSL and
30 should have a change management plan in place. In addition, CR-2008-37753 goes on to state that
31 CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and

¹⁷ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

¹⁹ Ibid.

²⁰ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²¹ Ibid., p. 8.

²² The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁴ Ibid.

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1 tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concludes that there
2 was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²⁵

3 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
4 attended by the EPU Project Management Team and reportedly included [REDACTED] who was
5 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
6 this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
7 PSL, an increase of approximately \$139 million over the then current budget²⁶. This was
8 approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁷. It
9 was reported to Concentric that the [REDACTED] and the [REDACTED] responded
10 with a number of questions related to the basis for the revised forecast and requested additional
11 refinement.

12 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
13 relative to this revised forecast. However, the PTN Project Team was requested by the [REDACTED]
14 [REDACTED] to revise the initial reports, to measure cost performance relative to the
15 original project baseline because the revised estimate still had to be "validated," and because and
16 "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
17 PTN EPU Project."²⁸ Concentric was told that the [REDACTED] was not satisfied with these
18 instructions, but chose to comply with the instructions from his superiors nonetheless.

19 In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
20 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
21 at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED]
22 [REDACTED] resigned from his position, and it is reported that a similar undertaking was begun for the
23 PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

24 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
25 before the FL PSC²⁹. In this testimony, the [REDACTED] stated "The EPU projects are
26 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
27 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
28 Docket 080009-EI."³⁰ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
29 [REDACTED]
30 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric."

31 At the end of May 2009, the EPU Project Management Team reported to the ESC that the Bechtel
32 EPC estimates had increased to a level in excess of Bechtel's indicative bid³¹. This increase was
33 reported to be the result of higher than expected projections of field non-manual and manual labor

34 ²⁵ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

35 ²⁶ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

36 ²⁷ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

37 ²⁸ Email of [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

38 ²⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

39 ³⁰ Ibid at pp. 2-3.

40 ³¹ Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the
41 Peiord January - December 2010, May 1, 2009.

42 ³² Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

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1 hours³³. Similarly, the current EPU estimates were reported to include redundant project
2 management and oversight costs which the EPU Project Management Team believed could to be
3 eliminated to reduce the EPC vendor's forecast³⁴. Finally, it was reported that the EPU scope had
4 grown to be larger than the indicative bid presented in November 2008. The EPU Project
5 Management Team noted that the current estimates were based on preliminary design information,
6 and that the project was in the process of refining new "level 1" estimates³⁵. A target completion
7 date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³⁶.

8 Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification
9 Scope Review for both PTN and PSL³⁷. The results of these reviews were presented on June 16,
10 2009 and recommended the elimination of a substantial number of modifications as not necessary to
11 operate in an uprated condition.³⁸

12 The subsequent ESC meeting was held on June 23, 2009³⁹. In this presentation, the EPU senior
13 management team noted that the EPU Projects were completing "level 2" estimates and reiterated
14 the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008⁴⁰. This
15 presentation was relatively short and precipitated the more detailed cost review in July 2009.

16 During the intervening period between the June and July 2009 ESC presentations, the EPU Project
17 Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the
18 PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was
19 made. As a result FPL's executive team recruited three new employees for the EPU project team
20 including a new [REDACTED]

21 [REDACTED] These individuals were selected and recruited from within FPL between the end of June
22 2009 and July 23, 2009.

23 At the July 23, 2009 ESC presentation, the new EPU senior management team was introduced and
24 the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was
25 revised upward by approximately \$161 million from \$749 million to \$910 million⁴¹. Similarly, the
26 PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million⁴².
27 The slides which presented this information to the ESC noted that the "current budget" was being
28 increased to the "current forecast"⁴³. Simultaneously, the ESC was advised that the current 2009
29 NCRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were
30 presented based upon the current forecast as of July 25, 2009⁴⁴. These revised feasibility scenarios
31 did confirm the continued cost effectiveness of the EPU Projects.

³³ Ibid., p. 14.

³⁴ Ibid.

³⁵ Ibid., p. 15.

³⁶ Ibid., p. 18.

³⁷ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁸ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴⁰ Ibid., p. 12.

⁴¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴³ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁴ Ibid. p. 50.

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1 No ESC meeting was held in August. Nonetheless, both EPU projects did produce a monthly cash
2 flow report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the
3 revised forecast that had been presented to executive management on July 25, 2009⁴⁵. In contrast,
4 the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was
5 changed to Red, and the total project cost summary presented on this report continued to be shown
6 as "under review"⁴⁶.

7 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
8 [REDACTED] took the stand and indicated that should he be asked the same questions
9 contained within his pre-filed, direct testimony his answers would remain the same⁴⁷.

10 The following day, September 9, 2009, the ESC was presented with a newly revised forecast that
11 further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁸. This
12 presentation stated that approximately 30% of the total project costs have "high certainty"⁴⁹.

13 At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project
14 was unchanged, but the contingency had decreased by approximately \$12 million⁵⁰. In addition, the
15 AFUDC estimate was decreased by approximately \$150 million to \$200 million⁵¹. A footnote in the
16 presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁵².
17 Concentric notes that the remaining values shown in this presentation are depicted as the full cost of
18 the EPU Projects regardless of ownership.

19 Also in October, PSL produced two Annual Project Cash Flow Reports with different budget
20 performance indicators and different total project cost summaries. The first of these reports is
21 dated October 1, 2009⁵³. This report includes a red performance indicator and the total project cost
22 summary is listed as "under review". The second report is dated October 2009. The budget
23 performance indicator in this report is listed as yellow and the total project cost summary is changed
24 to \$651 million⁵⁴. No one with whom Concentric spoke could explain the difference or the reason
25 for the two reports.

A. Key conclusions from chronology relevant to the five key questions

24 Concentric has developed the following conclusions which are relevant to the five key questions
25 noted in Section II:

- 28 • The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed
29 with the EPU Projects in 2007.

30 ⁴⁵ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

31 ⁴⁶ Annual Cash Flow, PSL EPU Project, August 1, 2009.

32 ⁴⁷ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

33 ⁴⁸ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009

34 ⁴⁹ Ibid., p. 9.

35 ⁵⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

36 ⁵¹ Ibid., p. 6.

37 ⁵² Ibid., pp. 6, 18.

38 ⁵³ Annual Cash Flow, PSL EPU Project, October 1, 2009.

39 ⁵⁴ Annual Cash Flow, PSL EPU Project, October 2009.

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- 1 • The EPU senior project management was alerted to the potential for costs to exceed as early as
2 April 2008 through CR-2008-11443.
- 3 • The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as
4 early as December 2008 and a more refined version of this analysis in February 2008. The EPU
5 senior management prepared the July 25, 2009 ESC presentations with the intent of providing a
6 detailed, line-by-line review of the changes to the cost estimate.
- 7 • As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the
8 revised cost estimates and projected incremental output.
- 9 • The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate
10 to FPL's executive managers as of September 8, 2010, the date on which he presented his direct
11 testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPUs

- 12 In determining whether EPU Project costs were prudently incurred the FL PSC will be concerned
13 with two items. First, is whether the decision to proceed with the project was prudent based on the
14 expected economic and other benefits to FPL's customers? That question is described below.
15 Second, the FL PSC will be concerned with whether the EPU project's costs were prudently
16 incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets
17 090009-EI and 100009-EI⁵⁵ the result of prudent decisions by FPL's management? This question is
18 addressed in Section VI below.
- 19 The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and
20 Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would
21 require replacement or modification to support the increased output of the plants.⁵⁶ As was
22 necessarily the case, this work was completed absent any detailed design work. The information
23 presented in this study was used as one component of a feasibility analysis which compared the
24 operating cost of FPL's portfolio of generating resources with and without the EPU Projects⁵⁷. This
25 analysis relied upon the projected level of incremental output, the commercial operations dates of
26 the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the
27 EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to
28 be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the
29 EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would
30 "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and
31 influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or
32 again in 2009?
- 33 It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved
34 by five months. Concentric believes the five month time frame is appropriate given the February
35 2009 meeting between the EPU senior management and the PSL project team. As noted above, this

⁵⁵ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010

⁵⁶ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate Scoping Study, February 2008.

⁵⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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1 meeting followed an initial review of the PSL cost estimate in December 2008 and presented a
2 revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost
3 estimate that was provided to FPL's executive management on July 25, 2009⁵⁸.

4 It would not be appropriate to assume FPL's executive management should have become aware of
5 the revised cost estimate in December 2008. The estimate that was prepared at this time was
6 reported to be preliminary in nature and warranted additional review by the EPU project team to
7 further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the
8 EPU senior management could have taken this opportunity to notify FPL's executive management
9 of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this
10 conclusion.

11 Following a conclusion as to how much awareness of the revised cost estimate could have
12 improved, Concentric evaluated whether this would have likely affected FPL's decision to proceed
13 with the EPU Projects. In this regard, it is important to note that contemporaneous with the
14 revision to the cost estimate, FPL also learned that a higher level of incremental output may be
15 produced by the EPU Projects. This additional output was the result of more detailed engineering
16 which had been completed since the original scoping studies in 2007⁵⁹.

17 As noted above, FPL's decision to proceed with the EPU Projects was based on an economic
18 feasibility analysis which relied upon the expected incremental output of the facilities as well as the
19 expect cost, among other items. Due to the increase in the projected output of the EPU Projects,
20 the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed
21 the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic,
22 although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁶⁰
23 Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to
24 proceed with the EPU Projects.

VI. The Pass-Through of EPU Costs in the NCRC

25 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation
26 process and the incurrence of specific costs. The former is the projection of future costs without
27 the actual expenditure of company or customer dollars. The later is more critical to the FL PSC's
28 review and involved the actual expenditure of company and customer dollars or the commitment to
29 do so at a later date.

30 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within
31 the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive
32 management and the FL PSC. The [REDACTED] does not identify any costs which are the result of
33 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
34 our interview with [REDACTED]

⁵⁸ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁵⁹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁶⁰ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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1 Similarly, Concentric has not found any indications of costs that were the result of imprudent
2 decisions or actions on the part of FPL's management. This conclusion was reinforced by every
3 interviewee with whom Concentric spoke. When asked whether they were aware of any costs that
4 should not be passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged
5 during our interview that "the costs will be what they [are]" and his concerns are related to what
6 information would be presented to the FL PSC. As a result, Concentric believes there are no costs
7 which should be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

8 Concentric has, however, found evidence that suggests concerns with the reporting of revisions of
9 the cost estimate. These documents and the concerns are described within Sections VII and VIII
10 below.

VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

11 The chronology of events presented in Section IV of this report led Concentric to focus on the 2009
12 NCRC proceedings⁶¹ in order to assess whether the information presented by FPL in those
13 proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with
14 the standards expected for testimony before, and submissions made, to a regulatory agency.

15 There were three separate sets of activities in the 2009 NCRC proceedings in which information
16 about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony,
17 both direct and rebuttal, 2) production of documents and answering of interrogatories in the
18 discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed
19 testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal);
20 documents were provided and interrogatories were responded to from January, 2009 through the
21 hearing; the hearings on these issues were held on September 8, 2009.⁶² Since an important element
22 of this investigation has been about the timeliness of internal and external information flow, we have
23 chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

24 FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

25
26
27
28

[REDACTED]
Mr. John J. Reed, Chairman and CEO of Concentric⁶⁵, and
[REDACTED]

29 ⁶¹ FPSC Docket No. 090009-EI.

30 ⁶² FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008
31 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

32 ⁶³ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

33 ⁶⁴ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

34 ⁶⁵ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

35 ⁶⁶ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

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The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁷, and sponsored by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁸. Mr. Reed's testimony related to nuclear project controls, procedures, policies and practices, and the prudence of FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred costs and the 2009-2010 projected costs⁶⁹. She did not offer any estimate of the projected costs to completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

[REDACTED] pre-filed Direct Testimony contains the following statements

*"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁷⁰

*"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be cost effective when compared to the addition of other generation alternatives."*⁷¹

*"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010."*⁷²

The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along with a restatement of the caveat that the Company continued to evaluate the costs of the project⁷³.

As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had transpired:

- A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁴ and that [REDACTED] continued to use in May, 2009⁷⁵

⁶⁷ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁶⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

⁷⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

⁷¹ Ibid., pp. 2-3.

⁷² Ibid., p. 24.

⁷³ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

⁷⁴ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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- 1 • On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN
- 2 EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- 3 • In early December, 2008 the EPU's Project Controls Group identified that the May,
- 4 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- 5 • A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08
- 6 Condition Report was a "missed opportunity"⁷⁶
- 7 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by
- 8 Project Controls and the PSL site that their current cost estimate for PSL is \$129
- 9 million above the May, 2008 estimate⁷⁷
- 10 • By March 26, 2009 the PTN site team had also concluded that the cost estimate
- 11 should be raised above the May, 2008 estimate; a decision is made to not use the
- 12 higher cost estimate⁷⁸
- 13 • [REDACTED] participated in developing a presentation in late April/early May 2009
- 14 informing the ESC that while Bechtel had estimated higher costs, his cost estimates
- 15 for PSL and PTN were unchanged from the May, 2008 estimates; the Projects' cost
- 16 status is shown as "green."⁷⁹

17 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1,
 18 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate
 19 would be needed, [REDACTED] had not reported to the ESC that an increase was needed. On the
 20 contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony
 21 reports. While it is inherently a matter of judgment, Concentric does not believe that [REDACTED]
 22 [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct as of the
 23 date it was filed.

C. Interrogatory Responses and Production of Documents

24 Concentric requested, received and reviewed all of the productions of documents and interrogatory
 25 responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule or
 26 cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in
 27 response to Staff's Fifth Set, No. 53, for further analysis⁸⁰. This interrogatory response, which is
 28 attached as Exhibit 7, sought a listing of each analysis that FPL was offering to satisfy the
 29 requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and
 30 actual costs as compared to the estimated in service cost of nuclear projects. The response, which
 31 was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1,
 32 2009, and describes that it is a "snapshot" of a continuous process.⁸¹

33 Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for
 34 the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a

35 ⁷⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
 36 Saint Lucie, July 25, 2009.

37 ⁷⁶ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

38 ⁷⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

39 ⁷⁸ Email from [REDACTED] to anonymous recipient, March 26, 2009:

40 ⁷⁹ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

41 ⁸⁰ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

42 ⁸¹ Ibid.

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1 serious challenge to meeting the existing budget⁸². On June 3, 2009, Bechtel submitted a "P50"
 2 (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁸³. On June
 3 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁴, and the ESC instructed him to
 4 prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC
 5 meeting. This updated estimate was prepared at the direction of [REDACTED] by several people
 6 reportedly working seven days a week for a month, and presented to the ESC at an all-day, Saturday
 7 meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was
 8 replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively
 9 participated in the July 25, 2009 presentation. That presentation established new cost estimates for
 10 the EPU projects which were approximately 21% higher than the May, 2008 estimates⁸⁵.

11 Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was
 12 out of date by August 17, 2009. However, the interrogatory only asked for a *listing* of the responsive
 13 analyses, not for FPL's current or updated analyses. In addition, the respondent to the
 14 interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates,
 15 nor of any source data or documents relating to this issue that were created after May 2009. FPL's
 16 approach to complying with the Section 366.93(5) requirements was to perform a "snapshot"
 17 analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory
 18 Affairs staff, the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents
 19 until preparations began in December, 2009 for the 2010 NCRC proceedings.

20 Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though
 21 the document referred to was out-of-date. The respondent answered the question in a forthright
 22 fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

23 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
 24 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁶:

25 BY [REDACTED]

26 Q. If I asked you the same questions contained in your prefiled direct testimony, would your
 27 answers be the same?

28 A. Yes, they would be.

29 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as
 30 though read.

31 This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and
 32 updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange

33 ⁸² Total Project Cashflow, PIN EPU Project 2009, May 31, 2009.

34 ⁸³ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

35 ⁸⁴ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

36 ⁸⁵ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
 37 Saint Lucie, July 25, 2009.

38 ⁸⁶ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

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1 with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the
2 exhibits sponsored by [REDACTED] remained truthful and accurate as of September 8, 2009.

3 As of September 8, 2009, [REDACTED] had participated in the development of highly detailed cost
4 projections for the EPU projects, and had presented these new estimates to dozens of senior FPL
5 and contractor personnel on July 25, 2009⁸⁷. The new estimates for PSL were caveated as still being
6 "at the conceptual level"⁸⁸ (as were the May, 2008 estimates⁸⁹) and the comment was made that the
7 full scope was still not known. However, the new values were clearly labeled as the "Current
8 Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was
9 being increased to the "Current Forecast."⁹⁰ The July 25, 2009 presentation offers an extensive
10 perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned
11 from this experience⁹¹. Concentric also notes that the ESC was explicitly advised that the new cost
12 estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the
13 FPSC, and that several new economic feasibility analyses had been performed, which updated those
14 analyses which had been submitted to the FPSC eleven weeks earlier.⁹² The new feasibility analyses
15 continued to show that the projects were beneficial to customers, although less so than in the May 1,
16 2009 filing⁹³.

17 In our interview with him [REDACTED] defended his September 8, 2009 reaffirmation of his pre-
18 filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
19 validity of many unapproved scope changes and manpower estimates, and that they were a no better
20 than a "guess" with little support. He also indicated that he does not recall any discussion with
21 regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that
22 the new cost estimates were based on only partially completed engineering and design information,
23 and that they were still subject to revision as new information became available. However, that is
24 always the case with a fast-tracked construction program, and continues to be the case today. These
25 facts do not support the continued use of information that was based on even earlier conceptual
26 designs and out-of-date manpower and material estimates. The new estimates were the product of
27 more than a dozen people working extended hours for a month, and had been reviewed by every
28 level of management in the EPU organization. They reflected far more knowledge about the scope
29 of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost
30 estimates that were based on far more recent data and manpower estimates that reflected the revised
31 scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the
32 executives of FPL in charge of EPU governance (and who were responsible for approving budget
33 changes for the projects) as the best "line-by-line" estimates available at the time, were materially
34 different from the 2008 estimates, and have continued to serve as the reference point for all
35 subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in
36 May, 2010.

⁸⁷ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁸ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁹⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹¹ Ibid., pp. 38-40 and pp. 51-52, respectively.

⁹² Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁹³ Ibid., p. 50.

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1 Concentric has concluded that by the time [REDACTED] took the stand, the information presented
2 on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by
3 the statements of nearly all of the EPU project personnel we interviewed (other than the two
4 individuals that participated in the decision to not update the testimony), and is strongly held by
5 many of those we interviewed.

6 Concentric has also found no evidence to suggest that [REDACTED] FPL's witness on the cost
7 effectiveness of the EPU projects, had any knowledge that updated cost estimates had been
8 presented to the ESC. It is our understanding that he relied on the cost estimates provided on
9 Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or
10 the nuclear division of FPL.

11 Concentric has found no evidence to demonstrate that there was a widespread plan to purposefully
12 keep updated information from being provided to the NCRC parties. The documents we have
13 reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff
14 in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports
15 were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional
16 details). The EPU staff had experienced significant turnover and was also undergoing a major
17 reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

18 The chronology Concentric developed has raised several concerns with regard to the information
19 flow within the EPU project team and to broader audiences within FPL. For the purpose of
20 reviewing these issues, we have segmented the chronology into the period preceding July 25, 2009
21 and that after it.

A. Pre-July 25, 2009 Information Flow

22 Concentric has reviewed documents which indicate that the EPU management team was made
23 aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost
24 estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue,
25 but appears to have not been completed. These concerns re-surfaced after the Bechtel contract was
26 awarded in November, 2008, and were brought to the attention of the EPU senior management in
27 December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members
28 had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost
29 increase for PSL. The revised estimate is quite close to the values presented to the ESC in July, 2009.
30 Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to
31 discontinue use of this estimate until management had reviewed it further. Throughout late 2008
32 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of
33 which were substantially higher than its indicative bid and higher than the estimate developed as part
34 of the Shaw scoping analysis.

35 The EPU's assessment of its own performance during this period, as presented to the ESC on July
36 25, 2009, was that:

- 37 • It "underestimated the risk and costs associated with the fast track project,"
- 38 • It "did not assess [the] capacity of [the] organization and costs," and

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- “Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner.”

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁹⁴.

An issue that contributed to the delay in informing the ESC about the likely cost increases was the EPU's treatment of the cost estimate contingency and the development and synchronization of the trend registers and risk registers.

FPL has in place two sets of instructions that address how contingencies are to be developed and applied in the cost estimation process. EPPI-320 is specific to these projects and addresses how cost estimates are to be developed, including the development and inclusion of contingencies. This instruction has been in place since March, 2008, and remains in effect today [VERIFY]. EPPI-320 states that “estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining percentage of risk and the amount of money associated with the contingency.” EPPI-320 states that it is supplemental to NPDI-304, which is a Nuclear Projects Instruction which provides specific guidance on the development of contingencies. NPDI-304 states that:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008, and appear to have achieved or at least approached Level 1 status by the end of 2009. FPL's practice has been to label the contingency as “Scope Not Defined”, or “Scope Not Estimated.” FPL has defined the contingency as “an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects.”⁹⁵ The EPU instructions also state that the contingency should be “based on the level of uncertainty or complexity of a project.” In addition to the contingency, the EPU estimates include an allowance for the expected (probabilistically determined) value of specific modifications or conditions which have arisen. This value is supposed to be derived from the risk register, which identifies the issue, its cost impact, its probability of occurrence, and its expected value. Items are supposed to enter the risk register from the trends register, which is an early-warning system for changing conditions at the projects which can affect cost or schedule performance. EPPI-300, another EPU instruction relating to changes in project cost estimates, describes the purpose of the trend program as follows:

2.1...The trend program fosters vigilance, awareness and action through constant probing, reporting, reviewing, discussing, and analyzing the projects performance against the project plan. The trend program is a dynamic decision-making process, which exposes pending decisions and their related impact(s) prior to the fact. Timeliness in identifying and resolving trends is a key element in controlling project cost and must be managed and recorded to maintain current forecasts.

⁹⁴ EPU lessons learned PPL from April 2010.

⁹⁵ NPDI-304, p9.

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1 Based on our review of documents, and as confirmed in our interviews, from May 2008 to today,
2 the EPU's cost estimation process has not complied with these instructions. The most significant
3 discrepancies between the instructions and actual practices include:

- 4 • Since the Bechtel contract was executed in November, 2008, the project has not maintained
5 a level of contingency that is consistent with FPL's guidelines; the contingency has been
6 depleted month-by-month by scope changes, escalation and risk adjustments; the
7 contingency has been treated as a balancing variable with the value derived simply by taking
8 the total current cost estimate and subtracting out the known scope and risk register
9 elements rather than basing it on the level of development or uncertainty associated with the
10 project; currently, the contingency is far below the standards applicable for a Level 1
11 estimate. This practice was acknowledged in the July 25, 2009 lessons learned section of the
12 ESC presentations by the comments that "...undefined scope depletion not dealt with in a
13 timely fashion...undefined scope allowance used in establishing base contracts and work left
14 little for emergent items or increased scope...must include undefined scope allowance based
15 on level of risk/progress on project." The new EPU management team is addressing these
16 issues through the retention of High Bridge to perform a third-party review of the cost
17 estimates, and to develop a probabilistically-determined contingency, however that work is
18 not yet complete, and the issue of the depleted contingency remains unresolved.
- 19 • The trends registers and risk registers have not been developed in accordance with the
20 projects' instruction set, and the risk register was not directly synchronized with the
21 contingency or the cost estimate until after July, 2009; Concentric has reviewed the trends
22 and risk registers for the projects as they existed from January, 2008 to today, and has found
23 that..... This issue was acknowledged in the July 25, 2009 ESC briefing by the
24 comments that "Current undefined scope allowance is not aligned to the risk
25 matrix...looked at the project only from a high level risk." The current EPU management
26 team has explicitly linked the risk register to the cost estimate, however, the link between the
27 risk register and the contingency (scope not defined) has apparently not been established,
28 and is apparently awaiting the receipt of the High Bridge report.

29 A second issue that adversely affected the timely flow of project cost information within FPL relates
30 to the process for developing updated project cost estimates, securing the approval of these updates,
31 and communicating these updates within the FPL organization. FPL's EPPI-300 governs the
32 process for these activities, and establishes the following procedures and responsibilities:

- 33 • Potential changes to the cost baseline or forecast are to be captured through the trends
34 program and recorded on the trends register. The [REDACTED] is
35 responsible for the accuracy and timeliness of the trends register.
- 36 • All issues are to begin as trends; depending on the nature of the issue, consideration is to be
37 given to adding the issue to the risk register, as called for in EPPI-340, which governs the
38 risk management program. The [REDACTED] is responsible for developing and
39 updating the risk register [ADD POSITION PER EPPI 340]
- 40 • If an issue identified in the trends/risk management programs cannot be resolved
41 (mitigated), then a Scope Change/Forecast Variance Form ("SC/FV") is to be prepared to
42 authorize a change to the project's cost forecast. SC/FVs are required to be established
43 separately for each site and for all project modifications. The SC/FVs are to be signed and
44 approved by up to ten different positions in the EPU organization, depending on the

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- 1 magnitude of the cost change; [REDACTED] is required to approve all SC/FVs in
2 excess of \$5 million.
- 3 • The SC/FVs are required to indicate where the additional funding is coming from, which
4 can be from a release of funds from the contingency, or from a change to the approved
5 budget.
 - 6 • All releases of funds from the contingency need to be reviewed by the [REDACTED]
7 [REDACTED] and approved through the approval process for SC/FV forms.
 - 8 • All SC/FV forms are to be retained as permanent project records, and their location is to be
9 known at all times.

10 Concentric requested all SC/FV forms for the EPU projects since 1/1/08. Our review of the
11 documents produced in response to this request indicated that [REDACTED]

12 Concentric has concluded that the EPU's published procedures for developing, estimating,
13 approving, tracking, and possibly retaining revisions to the cost estimates were largely ignored
14 through July, 2009, and are still far from achieving widespread compliance. It is clear that the
15 process required for releasing funds from the contingency has not been followed, and that revisions
16 to the cost estimates have not [REDACTED]. These facts have resulted in widespread confusion
17 within the organization regarding what the current approved budget is at any point in time, who has
18 to approve changes to that budget, whether there is a meaningful difference between the terms
19 budget, cost estimate and cost forecast (all of which are used in different standard reports), and how
20 to measure and report variances from the budget/estimate/forecast. Many of these same points
21 were acknowledge by EPU management in the July 25, 2009 lessons learned sections of the ESC
22 presentations, where the comments were made that "Individual Modification Budgets and Site
23 Department budgets [were] not established...did not use formal process such as Plant Review Board
24 to approve scope growth during design process prior to 01/01/09...no formal cost benefit was
25 performed on design changes."

26 Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports
27 and presentations has made us aware of several reports that were issued with incorrect, misleading
28 or out-of-date information. These problems persisted into 2010 in the Monthly Operating Reports
29 (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we
30 have received from individuals within FPL that documents they were responsible for preparing were
31 changed, after the originator had issued them, by someone else in the organization, often with no
32 explanation as to why the changes were made. In other instances, individuals were told to make
33 changes by someone else within FPL. While these accounts are very difficult to verify, they do not
34 represent a single account or example, and some corroborating documentation has been provided to
35 us. These actions appear to be largely attributed to managers that are no longer in the EPU
36 organization, but they demonstrate the need for more definitive document control and ownership
37 procedures.

IX. Preliminary Recommendations for Improvements

38 Concentric's investigation into this matter has produced a number of recommendations for process
39 improvements and corrective actions. These recommendations are presented below. Many of these
40 recommendations are intended to improve the distribution of information within FPL, the NCRC
41 docket team and to the IFL PSC. In certain of the recommendations listed below, Concentric has

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noted that changes to the EPU Projects' since July 2009 may have already addressed these recommendations. Nonetheless, we believe the importance of these changes should continue to be stressed the EPU Project Team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC on a timely basis.
3. The NCRC docket team has included and continues to include a number of first time witnesses or witnesses with limited experience serving in this role. As a result, it is vitally important that FPL's Legal and Regulatory Affairs departments continue to provide explicit instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs departments should assume these individuals may not have a full understanding of the regulatory process and the implications of their testimony. The importance of updating one's pre-filed testimony and exhibits should be an explicit part of the witness training program, along with an explanation of the meaning of the standard questions asked by FPL's legal counsel. Witnesses should also be made aware of the fact that they are providing testimony within a certain expertise or subject matter on behalf of the Company and not as individuals. This may come with obligation or duty to education oneself on matters related to this subject matter or expertise regardless of whether this falls within one's day-to-day responsibilities.
4. As part of our investigation Concentric reviewed the list of invitees to the ESC presentations. Noticeably absent from these lists of invitees is a representative from FPL's Regulatory Affairs department. Given the importance and scale of the EPU Projects, and the alternative cost recovery treatment being afforded to these projects, a relatively senior member of Regulatory Affairs department should attend each future ESC presentation.
5. One of the more significant concerns identified by Concentric's investigation is the ownership and consistent updating of EPU Project reports. Often in late 2009 these reports were inconsistent and did not necessarily reflect the most current or accurate information available. FPL and the EPU Project Team should establish and implement explicit report owners (by report). In addition, the FPL and the EPU Project team should establish and implement an explicit report sign off or dissent procedure. This procedure could be modeled off of the current Invoice Review/Approval checklist form. In addition, the report sign-off and dissent process should include a link to the ECP or other similar program for anonymously notifying superiors in the event of a concern with project reporting.

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- 1 6. To the extent that a performance indicator relies upon a calculation in order to produce a
2 particular indicator, the result of the underlying calculation should be reported along with
3 the performance indicator (i.e., budget or forecast performance). By providing the result of
4 the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy
5 between the performance indicator and the calculation that produced that indicator.
6 Concentric's interviews also noted that individuals within the EPU Project Team were
7 uncertain as to what was represented by each performance indicator. Providing the
8 underlying calculation used develop that performance indicator will help clarify the purpose
9 of the performance indicator.
- 10 7. FPL should consider changing the reporting relationship of the EPU Project Controls
11 Director. While the change in reporting from the EPU Project Director to the Vice
12 President of Power Uprate is a positive development, the reporting relationship of the EPU
13 Project Controls Direct should include either a solid or dotted line outside of the EPU
14 Projects. This will help prevent any undue influence on the Project Controls Director and
15 his staff. As an alternative, FPL could consider forming a separate Project Controls
16 department, similar to the Integrated Supply Chain department. This separate Project
17 Controls department would establish its own set of department processes, procedures and
18 instructions which would then be applied consistently across the FPL Group. Concentric
19 notes that future, large scale projects could benefit from a set of uniform and consistent
20 project controls that incorporate best practices from across the organization.
- 21 8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the
22 contingency as the balancing variable to maintain the projects within their cost estimates.
23 This is not consistent with FPL's EPPI-300 or with sound project management practices.
24 The contingency should be based on the level of uncertainty in the project, which is best
25 captured through a probabilistic analysis of the cost estimate. Reductions in the contingency
26 should not typically be used to fund scope changes, and the contingency should only be
27 released if the uncertainty associated with the project has declined. Concentric notes that the
28 appropriate level of the contingency is an issue that has been assigned to High Bridge in its
29 current independent review of the project cost estimate. The EPU Projects should establish a
30 formal internal process to approve and communicate EPU budget, forecast or estimate
31 changes on a total project basis each month (i.e., not annual). This process should be used
32 for both scope additions or deletions and changes in the expected cost of approved project
33 scope as a result of material or component cost escalation, increased manpower
34 requirements or other factors. This process should include a report checklist to make certain
35 all reports are updated consistently once a new budget, forecast or estimate is approved.
36 Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented
37 thoroughly, these changes should address this recommendation.
- 38 9. To the extent condition reports are being utilized to document potential budget or cost
39 estimate challenges, the CR closure processes should be revised to prevent the closure of a
40 CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans
41 can be tracked separately, but must not be closed until each of the action items listed on the
42 risk mitigation plan are completed. Additionally, the completion of all action items must be
43 documented and those documents should be preserved in a central location for the
44 remainder of the EPU Projects. Concentric notes that this change may already be
45 implemented within the current EPU action item list.

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- 1 10. High Bridge Associates, or another independent third party, should be retained to complete
2 an engineering based cost estimate of PTN Unit 4 and both PSL units as soon as possible.
3 This estimate is needed to re-baseline the project forecasts and to enhance the certainty of
4 future forecasts.
- 5 11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient
6 number of staff members are required to maintain adequate project control, including the
7 updating and production of project reports. Throughout our investigation it was noted to
8 Concentric that many within the organization were overwhelmed with the amount of work
9 that must be accomplished given the "fast-tracked" status of the project. At times, this may
10 have contributed to the inconsistency or inaccuracy of certain project reports.
-
- 11 12. The EPU Project Team should document the names of each ESC presentation attendee and
12 maintain this list of attendees with the ESC Presentations. This will increase the overall
13 transparency into the EPU Projects and document that the proper level of oversight is being
14 provided to the EPU Projects.
- 15 13. The results of this investigation should be provided to the Corporate Responsibility Officer
16 for use in improving employee confidence throughout the organization. Management needs
17 to be aware of and understand the current fear of retaliation and mistrust that exists at lower
18 levels of the organization.
- 19 14. Concentric suggests FPL institute a procedure for conducting organizational readiness
20 assessments prior to commencing complex, large-scale projects. This procedure should
21 include a documented review of the Project Plan to ensure that it adequately details how the
22 project is expected to evolve over time and ensure proper expectations related to
23 performance reporting and measurement are communicated throughout the project teams.
24 In addition, these assessments should include a detailed review of executive management's
25 expectations regarding the development and updating of the project schedule, cost estimate,
26 budgets and reports.
- 27 15. Concentric and the EPU Project Management Team should conduct an investigation close-
28 out meeting at the end of this investigation. This meeting will review Concentric's findings
29 in this investigation, obtain management's response to those findings and discuss ways in
30 which processes or procedures could be improved to prevent similar project challenges.
31 Concentric would anticipate that the current Vice President of Power Upstate, the
32 Implementation Owner – South, the Project Controls Director, each Site Director and the
33 Site Project Controls Supervisor would be invited to attend this meeting.

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Analysis of §
Ameren Service Company's §
Costs and Services§

Prepared for §
The Ameren Illinois Utilities§

1 [REDACTED] Investigation Report

2 Prepared for

3 Florida Power & Light Company

4 CONFIDENTIAL - DRAFT

5 May XX, 2010

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FPL INVESTIGATION

I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] Letter", an employee within the Nuclear Projects Division of Florida Power & Light Company ("FPL").¹ Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010.² Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.³ A copy of Concentric's engagement letter is included as Exhibit 1.

Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

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Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor.⁴ Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 2. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

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The remainder of our report is organized in to eight sections. Section II presents a summary of Concentric's work plan which was used to perform this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] Letter. Section III presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("PTN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state

¹ [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED].
² Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.
³ Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.
⁴ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

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1 regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's
 2 investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁵. A review
 3 of Concentric's findings related to the flow of information from FPL to the Florida Public Service
 4 Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a
 5 review of the flow information within FPL can be found in Section VIII. Finally, a review of
 6 Concentric's findings and specific recommendations can be found in Section IX.

II. Concentric Work Plan

A. Sources of information

7 Concentric's investigation into this matter relied upon two pathways for information. First
 8 Concentric submitted a number of requests for documentation to FPL, in order to deepen our
 9 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details
 10 provided to us in the interviews described below. A log of Concentric's document request can be
 11 found in Exhibit 3.

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12 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews
 13 were conducted in person at the offices of FPL or at an off-site location depending on the location
 14 of the interviewee. The remaining five interviews were conducted via telephone. All of
 15 Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric
 16 selected specific individuals to be interviewed based upon the allegations contained in the [REDACTED]
 17 Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization.
 18 Concentric considers the names of the individuals we interviewed to be confidential.

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19 Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and
 20 Ethics (the "Code") with each interviewee. This review included a specific discussion of each
 21 employee's "responsibility to report any actual or suspected violation of a law or regulation, any
 22 actual or suspected fraud, and any other violation or suspected violation of this Code."⁶ Similarly,
 23 Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁷. At the
 24 conclusion of each interview, the interviewees were given an opportunity to review any additional
 25 concerns they may have had.

26 The information Concentric relied upon in this investigation was supplemented by Concentric's
 27 existing knowledge of the EPU Projects organization. This knowledge was gained through three
 28 years of reviewing the project management processes of the EPU Projects for FPL as part of the
 29 Company's annual Nuclear Cost Recovery Clause filings.

B. Independence

30 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter,
 31 Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our
 32 approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not

⁵ FL PSC Dockets 080009-E1 & 090009-E1, In Re: Nuclear Cost Recovery Clause.

⁶ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009,
 p. 2.

⁷ Ibid.

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1 the result of specific directions from FPL, its employees or contractors. To this end, FPL did not
2 place any constraints on Concentric's access to current and former employees. Lastly, Concentric
3 was not materially constrained by budget or schedule expectations on the part of FPL.

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4 Concentric's findings in this matter are based upon our review of original sources. Concentric did
5 not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and
6 verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous
7 documents produced by the EPU Project team, whenever possible. The documents relied upon as
8 part of this investigation are presented in Exhibit 4.

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C. Key questions

9 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five
10 key questions which needed to be answered by our review. These key questions are intended to
11 determine whether any imprudent costs were passed onto FPL's customers or if FPL intentionally
12 withheld information from the FL PSC.

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13 Foremost amongst Concentric's key questions is whether FPL has made the correct decision to
14 proceed with the EPU Projects in light of the best information available at the time decision was
15 made. Secondly, Concentric noted a need to determine if *any* costs were incurred that should not be
16 passed on to FPL's customers on the grounds of imprudent decision-making. Third, we examined
17 whether the information provided to the FL PSC and the interveners in each of the NCRC dockets
18 was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed
19 this to occur and why. Similarly, Concentric sought to determine if the information flowing from
20 the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and
21 if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies,
22 processes, and procedures need to be addressed as a result of these findings.

III. Summary Level Response to [REDACTED] Letter

23 Exhibit 4 presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its
24 summary-level observations that resulted from our investigation of the allegations contained therein.
25 In addition, each observation contains a citation to this report in order to provide a "roadmap" to a
26 reviewer of the [REDACTED] Letter and Concentric's report.

27 As can be seen in Exhibit 5, a number of the allegations raised in the [REDACTED] Letter were shown to
28 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED]
29 statements related to the timing of the initial scoping studies by Shaw and the repeated changes in
30 the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to
31 have been the predictable result of the evolving design which is inherent in any complex project.
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33 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to
34 support his assertion that as of November 2009, the EPU Projects were continuing to measure their
35 cost performance relative to the original 2007 cost estimates. These reports, the November PTN
36 Total Project Cash Flow Report⁸ and the PSL Annual Project Cash Flow Report⁹, confirmed [REDACTED]

⁸ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁹ Annual Cash Flow, PSL EPU Project, October 2009.

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1 [REDACTED] assertion. Concentric did note, however, that the November Executive Steering Committee ("ESC") presentation provided the updated cost forecast¹⁰.

2 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 5, Concentric has found evidence which indicates the [REDACTED] and the [REDACTED] were alerted to the potential for cost over-runs at PSL as early as April 2008.¹¹ A similar opportunity was noted in December, 2008 when these individuals were presented with a preliminary revised forecast for PSL. This followed the award of an engineering, procurement and construction ("EPC") contract for the EPU Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to continue refining their forecast until February 2009 when it was reviewed again by the EPU senior management. As noted in Section IV, the preliminary forecast in February 2009 was within approximately \$11 million, or 2%¹², of the forecast ultimately provided to FPL's management in July 2009¹³.

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3 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this finding includes Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a strong background within his function. [REDACTED] employment history includes the previous positions noted in the [REDACTED] Letter¹⁴ and many years of prior project controls employment as a contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects and a staff of approximately 100 people¹⁵. While it may be fair to say that [REDACTED] was not always aware of every aspect of the EPU Projects, it would not be fair to characterize [REDACTED] as under- or poorly qualified for his position.

IV. Chronology of Events

A chronology of the EPU Projects is presented in Exhibit 6. A summary of the chronology, including the major events relevant to Concentric's review are highlighted below. This chronology was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing of certain EPU Project activities. This chronology should not be viewed as a comprehensive history of the EPU Projects.

The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the

12 Deleted: Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor¹³. Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 5. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

¹⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5

¹¹ CR 2008-11443, April 3, 2008.

¹² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

¹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25 2009, p. 8.

¹⁴ [REDACTED] Letter, p. 2.

¹⁵ Ibid.

¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-HI, September 17, 2007.

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1 components which would require replacement to operate PSL and PTN at the uprated conditions¹⁷.
2 Concentric understands, as originally proposed, the EPU Projects were expected to commence
3 operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power
4 Park Determination of Need in 2007¹⁸. FPL filed for a Determination of Need for the EPU
5 Projects on September 17, 2007.¹⁹

6 In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to
7 confirm or reject the results of this analysis. Concentric understands from our interviews that these
8 studies generally did confirm the FPL scoping analysis, but some discrepancies related to the
9 replacement or refurbishment of certain components existed for Turkey Point. The initial cost
10 estimate included a contingency allocation of approximately 45%²⁰.

11 Soon after the completion of the Shaw scoping studies in April 2008, the PSL EPU project team
12 identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL
13 initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study
14 may not have captured the full spectrum of modifications necessary," for the uprate²¹. In response
15 to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to
16 the CR²². The High Risk Mitigation Plan included corrective actions which were required to be
17 completed by the EPU Project team including preparation and submission of a revised cost estimate
18 to the [REDACTED] among other items. The High Risk Mitigation Plan was executed by
19 the [REDACTED] and the [REDACTED] but not the [REDACTED] Concentric
20 was unable to independently determine if this High Risk Mitigation Plan was ever completed.
21 Concentric also requested a copy of the revised cost estimate described in the High Risk Mitigation
22 Plan, but was told that this document could not be located, nor could its existence be confirmed.²³

23 On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast for PTN of
24 \$262MM for the PTN EPU²⁴. This compares to a scoping analysis assumption of \$225MM²⁵.

25 In December 2008, the PSL Project Controls team again identified the potential to exceed the
26 original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised
27 forecast for PSL was prepared and provided to the EPU Project Management at that time. The
28 EPU Project Management, however, requested that the PSL Project Controls group further refine
29 and develop the revised forecast.

30 CR-2008-37753 noted in December 2008 that the EPU project is a major change for PSL and
31 should have a change management plan in place. In addition, CR-2008-37753 goes on to state that
32 CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and

¹⁸ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-FI, September 17, 2007.

²⁰ Ibid.

²¹ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²² Ibid., p. 8.

²³ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁵ Ibid.

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1 tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concludes that there
2 was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²⁶

3 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
4 attended by the EPU Project Management Team and reportedly included [REDACTED] who was
5 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
6 this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
7 PSL, an increase of approximately \$129 million over the then current budget²⁷. This was
8 approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁸. It
9 was reported to Concentric that the [REDACTED] and the [REDACTED] responded
10 with a number of questions related to the basis for the revised forecast and requested additional
11 refinement to the estimate.

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12 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
13 relative to this revised forecast. However, the PTN Project Team was requested by the [REDACTED]
14 [REDACTED] to revise the initial reports, to measure cost performance relative to the
15 original project baseline because the revised estimate still had to be "validated," and because and
16 "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
17 PTN EPU Project."²⁹ Concentric was told that the [REDACTED] was not satisfied with these
18 instructions, but chose to comply with the instructions from his superiors nonetheless.

19 In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
20 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
21 at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED]
22 [REDACTED] resigned from his position, and it is reported that a similar undertaking was begun for the
23 PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

24 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
25 before the FL PSC³⁰. In this testimony, the [REDACTED] stated "The EPU projects are
26 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
27 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
28 Docket 080009-EI."³¹ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
29 [REDACTED]
30 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³²

31 At the end of May 2009, the EPU Project Management Team reported to the ESC that the Bechtel
32 EPC estimates had increased to a level in excess of Bechtel's indicative bid³³. This increase was
33 reported to be the result of higher than expected projections of field non-manual and manual labor

34 ²⁶ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

35 ²⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

36 ²⁸ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

37 ²⁹ Email of [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

38 ³⁰ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

39 ³¹ Ibid at pp. 2-3.

40 ³² Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the
41 Period January - December 2010, May 1, 2009.

42 ³³ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

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hours³⁴. Similarly, the current EPU estimates were reported to include redundant project management and oversight costs which the EPU Project Management Team believed could be eliminated to reduce the EPC vendor's forecast³⁵. Finally, it was reported that the EPU scope had grown to be larger than the indicative bid presented in November 2008. The EPU Project Management Team noted that the current estimates were based on preliminary design information, and that the project was in the process of refining new "level 1" estimates³⁶. A target completion date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³⁷.

Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification Scope Review for both PTN and PSL³⁸. The results of these reviews were reported on June 16, 2009 and recommended the elimination of a substantial number of modifications as not necessary to operate in an uprated condition.³⁹

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The subsequent ESC meeting was held on June 23, 2009⁴⁰. In this presentation, the EPU senior management team noted that the EPU Projects were completing "level 2" estimates and reiterated the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008⁴¹. This presentation was relatively short and precipitated the more detailed cost review in July 2009.

During the intervening period between the June and July 2009 ESC presentations, the EPU Project Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was made. As a result FPL's executive team recruited three new employees for the EPU project team including a new [REDACTED] and [REDACTED]. These individuals were selected and recruited from within FPL between the end of June 2009 and July 25, 2009.

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At the July 25, 2009 ESC presentation, the new [REDACTED] was introduced and the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was revised upward by approximately \$161 million from \$749 million to \$910 million⁴². Similarly, the PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million⁴³. The slides which presented this information to the ESC noted that the "current budget" was being increased to the "current forecast"⁴⁴. Simultaneously, the ESC was advised that the current 2009 NCRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were presented based upon the current forecast as of July 25, 2009⁴⁵. These revised feasibility scenarios did confirm the continued cost effectiveness of the EPU Projects.

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³⁴ Ibid., p. 14.

³⁵ Ibid.

³⁶ Ibid., p. 15.

³⁷ Ibid., p. 18.

³⁸ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

⁴⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴¹ Ibid., p. 12.

⁴² Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴⁴ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁵ Ibid. p. 50.

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1 No ESC meeting was held in August. Nonetheless, both EPU projects did produce a cash flow
2 report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the
3 revised forecast that had been presented to executive management on July 25, 2009⁴⁶. In contrast,
4 the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was
5 changed to Red, and the total project cost summary presented on this report continued to be shown
6 as "under review"⁴⁷.

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7 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
8 [REDACTED] took the stand and indicated that should he be asked the same questions
9 contained within his pre-filed, direct testimony his answers would remain the same⁴⁸.

10 The following day, September 9, 2009, the ESC was presented with a newly revised forecast that
11 further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁹. This
12 presentation stated that approximately 30% of the total project costs have "high certainty"⁵⁰.

13 At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project
14 was unchanged, but the contingency had decreased by approximately \$12 million⁵¹. In addition, the
15 AFUDC estimate was decreased by approximately \$150 million to \$200 million⁵². A footnote in the
16 presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁵³.
17 Concentric notes that the remaining values shown in this presentation are depicted as the full cost of
18 the EPU Projects regardless of ownership.

19 Also in October, PSL produced two Annual Project Cash Flow Reports with different budget
20 performance indicators and different total project cost summaries. The first of these reports is
21 dated October 1, 2009⁵⁴. This report includes a red performance indicator and the total project cost
22 summary is listed as "under review". The second report is dated October 2009. The budget
23 performance indicator in this report is listed as yellow and the total project cost summary is changed
24 to \$651 million⁵⁵. No one with whom Concentric spoke could explain the difference or the reason
25 for the two reports. Key conclusions from chronology relevant to the five key questions

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26 Concentric has developed the following conclusions which are relevant to the five key questions
27 noted in Section II:

- 28 • The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed
29 with the EPU Projects in 2007.
30 • The EPU senior project management was alerted to the potential for costs to exceed as early as
31 April 2008 through CR-2008-11443.

32 ⁴⁶ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

33 ⁴⁷ Annual Cash Flow, PSL EPU Project, August 1, 2009.

34 ⁴⁸ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

35 ⁴⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009

36 ⁵⁰ Ibid., p. 9.

37 ⁵¹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

38 ⁵² Ibid., p. 6.

39 ⁵³ Ibid., pp. 6, 18.

40 ⁵⁴ Annual Cash Flow, PSL EPU Project, October 1, 2009.

41 ⁵⁵ Annual Cash Flow, PSL EPU Project, October 2009.

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- 1 • The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as
- 2 early as December 2008 and a more refined version of this analysis in February 2008.
- 3 • The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of
- 4 providing a detailed, line-by-line review of the changes to the cost estimate.
- 5 • As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the
- 6 revised cost estimates and projected incremental output.
- 7 • The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate
- 8 to FPL's executive managers as of September 8, 2010, the date on which he presented his direct
- 9 testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPU's

10 In determining whether EPU Project costs were prudently incurred the FL PSC is concerned with
 11 two items. First, is whether the decision to proceed with the project was prudent based on the
 12 expected economic and other benefits to FPL's customers? That question is described below.
 13 Second, the FL PSC will be concerned with whether the EPU project's costs were prudently
 14 incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets
 15 090009-EI and 100009-EI⁵⁶ the result of prudent decisions by FPL's management? This question is
 16 addressed in Section VI.

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17 The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and
 18 Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would
 19 require replacement or modification to support the increased output of the plants.⁵⁷ As was
 20 necessarily the case, this work was completed absent any detailed design work. The information
 21 presented in this study was used as one component of a feasibility analysis which compared the
 22 operating cost of FPL's portfolio of generating resources with and without the EPU Projects.⁵⁸ This
 23 analysis relied upon the projected level of incremental output, the commercial operations dates of
 24 the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the
 25 EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to
 26 be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the
 27 EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would
 28 "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and
 29 influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or
 30 again in 2009?

31 It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved
 32 by five months. Concentric believes the five month time frame is appropriate given the February
 33 2009 meeting between the EPU senior management and the PSL project team. As noted above, this
 34 meeting followed an initial review of the PSL cost estimate in December 2008 and presented a

⁵⁶ FL PSC Docket 100009-EI, FPL, Notice of Intent to Retain Party Status, January 6, 2010

⁵⁷ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Upate Scoping Study, February 2008.

⁵⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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1 revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost
2 estimate that was provided to FPL's executive management on July 25, 2009⁵⁹.

3 It would not be appropriate to assume FPL's executive management should have become aware of
4 the revised cost estimate in December 2008. The estimate that was prepared at this time was
5 reported to be preliminary in nature and warranted additional review by the EPU project team to
6 further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the
7 EPU senior management could have taken this opportunity to notify FPL's executive management
8 of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this
9 conclusion.

10 Following a conclusion as to how much awareness of the revised cost estimate could have
11 improved, Concentric evaluated whether this would have affected FPL's decision to proceed with
12 the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to
13 the cost estimate, FPL also learned that a higher level of incremental output may be produced by the
14 EPU Projects. This additional output was the result of more detailed engineering which had been
15 completed since the original scoping studies in 2007⁶⁰.

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16 As noted above, FPL's decision to proceed with the EPU Projects was based on an economic
17 feasibility analysis which relied upon the expected incremental output of the facilities as well as the
18 expected cost, among other items. Due to the increase in the projected output of the EPU Projects,
19 the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed
20 the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic,
21 although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁶¹
22 Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to
23 proceed with the EPU Projects.

VI. The Pass-Through of EPU Costs in the NCRC

24 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation
25 process and the incurrence of specific costs. The former is the projection of future costs without
26 the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's
27 review and involved the actual expenditure of company and customer dollars or the commitment to
28 do so at a later date.

29 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within
30 the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive
31 management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of
32 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
33 our interview with [REDACTED]

34 Similarly, Concentric has not found indications of costs that were the result of imprudent decisions
35 or actions on the part of FPL's management. This conclusion was reinforced by every interviewee

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⁵⁹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁶⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁶¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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1 with whom Concentric spoke. When asked whether they were aware of any costs that should not be
2 passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our
3 interview that "the costs will be what they [are]" and his concerns are related to what information
4 would be presented to the FL PSC. As a result, Concentric believes there are no costs which should
5 be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

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6 Concentric has, however, found evidence that suggests concerns with the reporting of revisions of
7 the cost estimate. These documents and the concerns are described within Sections VII and VIII
8 below.

VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

9 The chronology of events presented in Section IV of this report led Concentric to focus on the 2009
10 NCRC proceedings⁶² in order to assess whether the information presented by FPL in those
11 proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with
12 the standards expected for testimony before, and submissions made, to a regulatory agency.

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13 There were three separate sets of activities in the 2009 NCRC proceedings in which information
14 about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony,
15 both direct and rebuttal, 2) production of documents and answering of interrogatories in the
16 discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed
17 testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal);
18 documents were provided and interrogatories were responded to from January, 2009 through the
19 hearing; the hearings on these issues were held on September 8, 2009.⁶³ Since an important element
20 of this investigation has been about the timeliness of internal and external information flow, we have
21 chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

22 FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

23 [REDACTED]
24 [REDACTED]
25 Mr. John I. Reed, Chairman and CEO of Concentric⁶⁴, and
26 [REDACTED]

27 The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and
28 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁵, and sponsored

29 ⁶² FPSC Docket No. 090009-HI.

30 ⁶³ FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008
31 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

32 ⁶⁴ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

33 ⁶⁵ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

34 ⁶⁶ Direct Testimony of John I. Reed, Docket No. 090009-EI, May 1, 2009.

35 ⁶⁷ Direct Testimony of [REDACTED] Docket No. 090009-HI, May 1, 2009.

36 ⁶⁸ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

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1 by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁹. Mr. Reed's
2 testimony related to nuclear project controls, procedures, policies and practices, and the prudence of
3 FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost
4 effectiveness of the EPU's. [REDACTED] testimony related to the accounting for FPL's incurred
5 costs and the 2009-2010 projected costs⁷⁰. [REDACTED] did not offer any estimate of the projected costs to
6 completion or opinions on the cost effectiveness of the EPU's. Therefore, our review has focused
7 on the testimony of [REDACTED] and, to a lesser extent, [REDACTED]

8 [REDACTED] pre-filed Direct Testimony contains the following statements

9 *"The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits*
10 *of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1*
11 *& 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."*⁷¹

12 *"There are no changes at this time to the total non-binding cost estimate provided in May 2008 in*
13 *Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be*
14 *cost effective when compared to the addition of other generation alternatives."*⁷²

15 *"Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally*
16 *filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise*
17 *the total non-binding cost estimate provided last May in Docket 080009-EI. As would be*
18 *expected, the Company continues to evaluate the costs associated with this project. As activities such*
19 *as final engineering analyses and design, associated NRC requirements and reviews, and*
20 *construction planning are more clearly defined, the Company will make any necessary revisions to the*
21 *original cost estimate. The TOR schedules provide the best information currently available for the*
22 *cost recovery period through 2010."*⁷³

23 The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED]
24 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along
25 with a restatement of the caveat that the Company continued to evaluate the costs of the project⁷⁴.

26 As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had
27 transpired:

- 28 • A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the
29 validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁵
30 and that [REDACTED] continued to use in May, 2009⁷⁶

31 ⁶⁹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009.

32 ⁷⁰ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

33 ⁷¹ Direct Testimony of [REDACTED] Docket No. 090009-EI, May 1, 2009, p. 2.

34 ⁷² Ibid., pp. 2-3.

35 ⁷³ Ibid., p. 24.

36 ⁷⁴ Direct Testimony of [REDACTED] Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

37 ⁷⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for
38 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

39 ⁷⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
40 Saint Lucie, July 25, 2009.

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- 1 • On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN
- 2 EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- 3 • In early December, 2008 the EPU's Project Controls Group identified that the May,
- 4 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- 5 • A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08
- 6 Condition Report was a "missed opportunity"⁷⁷
- 7 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by
- 8 Project Controls and the PSL site that their current cost estimate for PSL is \$129
- 9 million above the May, 2008 estimate⁷⁸
- 10 • By March 26, 2009 the PTN site team had also concluded that the cost estimate
- 11 should be raised above the May, 2008 estimate; a decision is made to not use the
- 12 higher cost estimate⁷⁹
- 13 • [REDACTED] participated in developing a presentation in late April/early May 2009
- 14 informing the ESC that while Bechtel had estimated higher costs, his cost estimates
- 15 for PSL and PTN were unchanged from the May, 2008 estimates; the Projects' cost
- 16 status is shown as "green."⁸⁰

17 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1,
18 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate
19 would be needed, [REDACTED] had not reported to the ESC that an increase was needed. On the
20 contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony
21 reports. While it is inherently a matter of judgment, Concentric does not believe that [REDACTED]
22 May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct as of the
23 date it was filed.

C. Interrogatory Responses and Production of Documents

24 Concentric requested, received and reviewed all of the productions of documents and interrogatory
25 responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule or
26 cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in
27 response to Staff's Fifth Set, No. 53, for further analysis⁸¹. This interrogatory response, which is
28 attached as Exhibit 7, sought a listing of each analysis that FPL was offering to satisfy the
29 requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and
30 actual costs as compared to the estimated in service cost of nuclear projects. The response, which
31 was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1,
32 2009, and describes that it is a "snapshot" of a continuous process.⁸²

33 Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for
34 the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a
35 serious challenge to meeting the existing budget⁸³. On June 3, 2009, Bechtel submitted a "P50"

36 ⁷⁷ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

37 ⁷⁸ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

38 ⁷⁹ Email from [REDACTED] to anonymous recipient, March 26, 2009.

39 ⁸⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

40 ⁸¹ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

41 ⁸² Ibid.

42 ⁸³ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

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(mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁸⁴. On June 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁵, and the ESC instructed him to prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC meeting. This updated estimate was prepared at the direction of [REDACTED], by several people reportedly working seven days a week for a month, and presented to the ESC at an all-day, Saturday meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively participated in the July 25, 2009 presentation. That presentation established new cost estimates for the EPU projects which were approximately 21% higher than the May, 2008 estimates⁸⁶.

Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was out of date by August 17, 2009. However, the interrogatory only asked for a listing of the responsive analyses, not for FPL's current or updated analyses. In addition, the respondent to the interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates, nor of any source data or documents relating to this issue that were created after May 2009. FPL's approach to complying with the Section 366.93(5) requirements was to perform a "snapshot" analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory Affairs staff, the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents until preparations began in December, 2009 for the 2010 NCRC proceedings.

Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though the document referred to was out-of-date. The respondent answered the question in a forthright fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009. At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁷:

BY [REDACTED]

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

A. Yes, they would be.

[REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as though read.

This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the exhibits sponsored by [REDACTED], remained truthful and accurate as of September 8, 2009.

⁸⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

⁸⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁸⁷ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

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1 As of September 8, 2009, [REDACTED] had participated in the development of highly detailed cost
2 projections for the EPU projects, and had presented these new estimates to dozens of senior FPL
3 and contractor personnel on July 25, 2009⁸⁸. The new estimates for PSL were caveated as still being
4 "at the conceptual level"⁸⁹ (as were the May, 2008 estimates⁹⁰) and the comment was made that the
5 full scope was still not known. However, the new values were clearly labeled as the "Current
6 Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was
7 being increased to the "Current Forecast."⁹¹ The July 25, 2009 presentation offers an extensive
8 perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned
9 from this experience⁹². Concentric also notes that the ESC was explicitly advised that the new cost
10 estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the
11 FPSC, and that several new economic feasibility analyses had been performed, which updated those
12 analyses which had been submitted to the FPSC eleven weeks earlier.⁹³ The new feasibility analyses
13 continued to show that the projects were beneficial to customers, although less so than in the May 1,
14 2009 filing⁹⁴.

15 In our interview with him, [REDACTED] defended his September 8, 2009 reaffirmation of his pre-
16 filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
17 validity of many unapproved scope changes and manpower estimates, and that they were a no better
18 than a "guess" with little support. He also indicated that he does not recall any discussion with
19 regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that
20 the new cost estimates were based on only partially completed engineering and design information,
21 and that they were still subject to revision as new information became available. However, that is
22 always the case with a fast-tracked construction program, and continues to be the case today. These
23 facts do not support the continued use of information that was based on even earlier conceptual
24 designs and out-of-date manpower and material estimates. The new estimates were the product of
25 more than a dozen people working extended hours for a month, and had been reviewed by every
26 level of management in the EPU organization. They reflected far more knowledge about the scope
27 of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost
28 estimates that were based on far more recent data and manpower estimates that reflected the revised
29 scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the
30 executives of FPL in charge of EPU governance (and who were responsible for approving budget
31 changes for the projects) as the best "line-by-line" estimates available at the time, were materially
32 different from the 2008 estimates, and have continued to serve as the reference point for all
33 subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in
34 May, 2010.

35 Concentric has concluded that by the time [REDACTED] took the stand, the information presented
36 on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by
37 the statements of nearly all of the EPU project personnel we interviewed (other than the two

⁸⁸ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹⁰ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁹¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹² Ibid., pp. 38-40 and pp. 51-52, respectively.

⁹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁹⁴ Ibid., p. 50.

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1 individuals that participated in the decision to not update the testimony), and is strongly held by
2 many of those we interviewed.

3 Concentric has also found no evidence to suggest that [REDACTED] FPL's witness on the cost
4 effectiveness of the EPU projects, had any knowledge that updated cost estimates had been
5 presented to the ESC. It is our understanding that he relied on the cost estimates provided on
6 Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or
7 the nuclear division of FPL.

8 Concentric has found no evidence to demonstrate that there was a widespread plan to purposefully
9 keep updated information from being provided to the NCRC parties. The documents we have
10 reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff
11 in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports
12 were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional
13 details). The EPU staff had experienced significant turnover and was also undergoing a major
14 reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

15 As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw
16 scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project
17 instructions which identified the process for addressing changes or risk to this initial forecast. These
18 Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and
19 were updated at various points in the project, including following the introduction of a new senior
20 management team in July 2009. Concentric's review of the EPPIs have identified three which are
21 relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project
22 Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management
23 Program. For purposes of our review of these instructions, Concentric has segmented our review
24 into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

25 As early as April, 2008 the EPU management team was made aware of concerns about the adequacy
26 of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel
27 contract was awarded in November, 2008, and were brought to the attention of the EPU senior
28 management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls
29 group had developed a revised cost estimate, albeit in preliminary form, that projected a \$129
30 million cost increase for PSL. The revised estimate was within 2% of the values presented to the
31 ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU
32 staff was directed to discontinue use of this estimate until management had reviewed it further.
33 Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its
34 cost estimates, all of which were substantially higher than its indicative bid and higher than the
35 estimate developed as part of the Shaw scoping analysis.

36 These events followed the publication of EPPI-300 on March 4, 2008. This project instruction
37 established a formal process for identifying and tracking potential changes to the initial project
38 budget. EPPI-300 describes the purpose of the trend program as follows:

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1 "This document shall be used for scope changes to Capital and O&M sub-projects
2 within the EPU project. Changes to the approved budget will be made using the
3 approved Scope Change/Trend Notice form (SCN/TN) which shall become part of
4 the budget records."⁹⁵

5 These potential changes were divided into scope changes (i.e., additional plant modifications) or
6 trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300
7 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be
8 completed to request changes to the project forecast. The SCN/TN was then routed to the EPU
9 Director for approval. The process for addressing scope changes is similar, but requires additional
10 review of the potential scope change to ensure it is necessary for the EPU Projects. Once an
11 SCN/TN is initiated, EPPI-300 requires the EPU Project Cost Engineer to establish a tracking
12 number and the potential budget impact of the SCN/TN. The Project Scheduler is responsible for
13 indicating the potential schedule impact. Once this information is added to the SCN/TN, it is
14 routed to the EPU project team member with the appropriate approval authority for the potential
15 cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget
16 and all future project reports⁹⁶.

17 Concentric requested the EPU Projects' Trend Registers and the all SCN/TNs since January 1, 2008
18 and received many, but not all, of the SCN/TNs prior to issuing this draft report. Based on our
19 review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would
20 appear that, when implemented, the EPU Projects' only partially complied with this EPPI-300. For
21 PSL, a detailed and conscientiously maintained Trend Register was maintained between summer
22 2008 and at least June 2009. However, it appears that the process for reviewing and approving
23 trends was not appropriately implemented at PSL. Many of the same trends were identified each
24 month without [VERIFY] resolution or incorporation into the forecast. For PTN, it would appear
25 that the trend register was not as conscientiously maintained, but what was produced appears to
26 have been prepared to comply with EPPI-300. Similar to PSL, many of the same trends were
27 identified without being included within the forecast. Finally, many potential scope changes or
28 trends appear to have been captured on the Risk Register, which, as discussed below, was not
29 synchronized with the project forecast, rather than the Trend Register. For example, the CR
30 discussed in Section IV, above, resulted in a "High Risk Mitigation" plan, but does not appear to
31 have been included on the trend register. Thus potential scope changes or trends were not
32 adequately reflected within the forecast. Concentric also noted that prior to July 25, 2009, the [REDACTED]
33 [REDACTED] failed to identify a source of the funds on the SCN/TNs for nearly every form.

34 EPPI-320 provides the project instruction for cost estimating, including the development and
35 inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This
36 instruction was established in March, 2008 and remains in effect today. Specifically, this instruction
37 states that "estimates should include project risks, uncertainties, and contingency. These should be
38 documented along with the methods for determining the percentage of risk and the amount of
39 money associated with the contingency." EPPI-320 also indicates that it is supplemental to the
40 Nuclear Projects Department Instruction - 304 ("NPDI-304").

⁹⁵ EPPI-300, Project Change Control, Pg 3, Rev 00

⁹⁶ *Ibid* at 4-6

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1 FPL has defined the contingency as "an amount added to an estimate to allow for additional costs
2 that experience shows will likely be required. This may be derived either through statistical analysis
3 of past project costs, or by applying experience gained on similar projects."⁹⁷ NPDI-304 provides
4 specific guidance on the development of contingencies and states:

5 4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency.
6 Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or
7 definitive estimates a 5-10% contingency. The exact percentage is determined on a
8 case by case basis.

9 The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008, and appear to
10 have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009, was to label
11 the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it
12 referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat
13 overall forecast trend and was not based upon project risk. As a result, the contingency was
14 depleted month-by-month, the Risk Register was never synchronized with the project forecast and
15 the EPU projects no longer maintained a level of contingency that is consistent with FPL's
16 guidelines. In other words, the EPU senior management viewed the initial contingency as a static
17 "allowance" that was to be used to meet increases in scope or cost rather than a dynamic value
18 which reflects the risk remaining in the project, including those identified by the Risk Registers.
19 This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC
20 presentations by the statements that "...undefined scope depletion not dealt with in a timely
21 fashion...undefined scope allowance used in establishing base contracts and work left little for
22 emergent items or increased scope...must include undefined scope allowance based on level of
23 risk/progress on project."

24 EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each
25 "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost,
26 schedule and project impact. The process set forth within EPPI-340 does not include a clear link to
27 the EPU Projects' forecasts, but rather in as an evaluation tool for determining the level of
28 uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current
29 undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high
30 level risk." Because the EPU senior management used the contingency as a balancing variable to
31 depict a flat forecast trend, the Risk Management Program was never used in this manner. At best,
32 by early 2009, the risk registers became little more than a repository for project risks and with little
33 or no connection to the EPU Projects' forecast.

34 With regard to the risk management process, the EPU's assessment of its own performance during
35 this period, as presented to the ESC on July 25, 2009, was that:

- 36 • It "underestimated the risk and costs associated with the fast track project."
- 37 • It "did not assess [the] capacity of [the] organization and costs," and
- 38 • "Early warning on cost overruns and undefined scope depletion were not dealt with in a
39 timely manner."

97 NPDI-304, Estimate Preparation, Pg 9, Rev 0

98 EPU lessons learned PPL from April 2010.

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Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁹⁹.

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs-300 and 340.

With regard to EPPi-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for view and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include the forecast variations. Similarly, the SCN/TN forms being issued by the project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance for scope changes. While this is not prohibited by the current revision of EPPi-300, Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

EPPi 340 has been revised to similarly provide greater clarity with respect to the risk management program. These revisions include

The EPU senior management team does still have opportunities for improvement. Specifically, the current EPU management team has explicitly linked the risk registers to the cost estimate through the line item of "risk", but the link between the level of risk remaining in the project and contingency or scope not defined has yet to be established. The new EPU management team is addressing this issue through the retention of High Bridge Associates to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency. That work is not yet complete, and the contingency continues to be the balancing variable in the EPU cost estimate as of March 2010, which has led to the contingency being at an unduly low level.

C. Conclusions Related to Flow of Information within EPL

Concentric has concluded that the EPU Project did not fully comply with its and EPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates prior to July, 2009, and has yet to achieve widespread compliance today. It is clear that the process required for releasing funds from the contingency has not been followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget and cost

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forecast is at any point in time, who has to approve changes to that budget or cost forecast, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established... did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09... no formal cost benefit was performed on design changes."

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persist in 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization, often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a number of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects' since July 2009 may have already addressed these recommendations. Nonetheless, we believe the importance of these changes should continue to be stressed the EPU Project Team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how they have developed up to that point. It would also help to ensure adequate information is distributed to the FL PSC on a timely basis.

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<#>Pre-July 25, 2009 Information Flow
<#>Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but appears to have not been completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of the EPU senior management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.
<#>The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:
<#>It "underestimated the risk and costs associated with the fast track project,"
<#>It "did not assess [the] capacity of [the] organization and costs," and
<#>"Early warning on cost overruns and undefined scope depletion [...]"

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- 1 3. The NCRC docket team has included and continues to include a number of first time
2 witnesses or witnesses with limited experience serving in this role. As a result, it is vitally
3 important that FPL's Legal and Regulatory Affairs departments continue to provide explicit
4 instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs
5 departments should assume these individuals may not have a full understanding of the
6 regulatory process and the implications of their testimony. The importance of updating
7 one's pre-filed testimony and exhibits should be an explicit part of the witness training
8 program, along with an explanation of the meaning of the standard questions asked by FPL's
9 legal counsel. Witnesses should also be made aware of the fact that they are providing
10 testimony within a certain expertise or subject matter on behalf of the Company and not as
11 individuals. This may come with obligation or duty to education oneself on matters related
12 to this subject matter or expertise regardless of whether this falls within one's day-to-day
13 responsibilities.
- 14 4. As part of our investigation Concentric reviewed the list of invitees to the ESC
15 presentations. Noticeably absent from these lists of invitees is a representative from FPL's
16 Regulatory Affairs department. Given the importance and scale of the EPU Projects, and
17 the alternative cost recovery treatment being afforded to these projects, a relatively senior
18 member of Regulatory Affairs department should attend each future ESC presentation.
- 19 5. One of the more significant concerns identified by Concentric's investigation is the
20 ownership and consistent updating of EPU Project reports. Often in late 2009 these reports
21 were inconsistent and did not necessarily reflect the most current or accurate information
22 available. FPL and the EPU Project Team should establish and implement explicit report
23 owners (by report). In addition, the FPL and the EPU Project team should establish and
24 implement an explicit report sign off or dissent procedure. This procedure could be
25 modeled off of the current Invoice Review/Approval checklist form. In addition, the report
26 sign-off and dissent process should include a link to the ECP or other similar program for
27 anonymously notifying superiors in the event of a concern with project reporting.
- 28 6. To the extent that a performance indicator relies upon a calculation in order to produce a
29 particular indicator, the result of the underlying calculation should be reported along with
30 the performance indicator (i.e., budget or forecast performance). By providing the result of
31 the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy
32 between the performance indicator and the calculation that produced that indicator.
33 Concentric's interviews also noted that individuals within the EPU Project Team were
34 uncertain as to what was represented by each performance indicator. Providing the
35 underlying calculation used develop that performance indicator will help clarify the purpose
36 of the performance indicator.
- 37 7. FPL should consider changing the reporting relationship of the EPU Project Controls
38 Director. While the change in reporting from the EPU Project Director to the Vice
39 President of Power Uprate is a positive development, the reporting relationship of the EPU
40 Project Controls Direct should include either a solid or dotted line outside of the EPU
41 Projects. This will help prevent any undue influence on the Project Controls Director and
42 his staff. As an alternative, FPL could consider forming a separate Project Controls
43 department, similar to the Integrated Supply Chain department. This separate Project
44 Controls department would establish its own set of department processes, procedures and

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1 instructions which would then be applied consistently across the FPL Group. Concentric
2 notes that future, large scale projects could benefit from a set of uniform and consistent
3 project controls that incorporate best practices from across the organization.

- 4 8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the
5 contingency as the balancing variable to maintain the projects within their cost estimates.
6 This is not consistent with FPL's EPPI-300 or with sound project management practices.
7 The contingency should be based on the level of uncertainty in the project, which is best
8 captured through a probabilistic analysis of the cost estimate. Reductions in the contingency
9 should not typically be used to fund scope changes, and the contingency should only be
10 released if the uncertainty associated with the project has declined. Concentric notes that the
11 appropriate level of the contingency is an issue that has been assigned to High Bridge in its
12 current independent review of the project cost estimate. The EPU Projects should establish a
13 formal internal process to approve and communicate EPU budget, forecast or estimate
14 changes on a total project basis each month (i.e., not annual). This process should be used
15 for both scope additions or deletions and changes in the expected cost of approved project
16 scope as a result of material or component cost escalation, increased manpower
17 requirements or other factors. This process should include a report checklist to make certain
18 all reports are updated consistently once a new budget, forecast or estimate is approved.
19 Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented
20 thoroughly, these changes should address this recommendation.
- 21 9. To the extent condition reports are being utilized to document potential budget or cost
22 estimate challenges, the CR closure processes should be revised to prevent the closure of a
23 CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans
24 can be tracked separately, but must not be closed until each of the action items listed on the
25 risk mitigation plan are completed. Additionally, the completion of all action items must be
26 documented and those documents should be preserved in a central location for the
27 remainder of the EPU Projects. Concentric notes that this change may already be
28 implemented within the current EPU action item list.
- 29 10. High Bridge Associates, or another independent third party, should be retained to complete
30 an engineering based cost estimate of PTN Unit 4 and both PSL units as soon as possible.
31 This estimate is needed to re-baseline the project forecasts and to enhance the certainty of
32 future forecasts.
- 33 11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient
34 number of staff members are required to maintain adequate project control, including the
35 updating and production of project reports. Throughout our investigation it was noted to
36 Concentric that many within the organization were overwhelmed with the amount of work
37 that must be accomplished given the "fast-tracked" status of the project. At times, this may
38 have contributed to the inconsistency or inaccuracy of certain project reports.
- 39 12. The EPU Project Team should document the names of each ESC presentation attendee and
40 maintain this list of attendees with the ESC Presentations. This will increase the overall
41 transparency into the EPU Projects and document that the proper level of oversight is being
42 provided to the EPU Projects.

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13. The results of this investigation should be provided to the Corporate Responsibility Officer for use in improving employee confidence throughout the organization. Management needs to be aware of and understand the current fear of retaliation and mistrust that exists at lower levels of the organization.
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14. Concentric suggests FPL institute a procedure for conducting organizational readiness assessments prior to commencing complex, large-scale projects. This procedure should include a documented review of the Project Plan to ensure that it adequately details how the project is expected to evolve over time and ensure proper expectations related to performance reporting and measurement are communicated throughout the project teams. In addition, these assessments should include a detailed review of executive management's expectations regarding the development and updating of the project schedule, cost estimate, budgets and reports.
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15. Concentric and the EPU Project Management Team should conduct an investigation close-out meeting at the end of this investigation. This meeting will review Concentric's findings in this investigation, obtain management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges. Concentric would anticipate that the current Vice President of Power Uprate, the Implementation Owner – South, the Project Controls Director, each Site Director and the Site Project Controls Supervisor would be invited to attend this meeting.

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1 The chronology Concentric developed has raised several concerns with regard
2 to the information flow within the EPU project team and to broader audiences within
3 FPL. For the purpose of reviewing these issues, we have segmented the chronology
4 into the period preceding July 25, 2009 and that after it.

Pre-July 25, 2009 Information Flow

5 Concentric has reviewed documents which indicate that the EPU
6 management team was made aware of staff concerns about the adequacy of the Shaw
7 scoping analysis and associated cost estimate as early as April, 2008. A detailed risk
8 mitigation plan was developed to address this issue, but appears to have not been
9 completed. These concerns re-surfaced after the Bechtel contract was awarded in
10 November, 2008, and were brought to the attention of the EPU senior management
11 in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls
12 group members had developed a revised cost estimate, albeit in preliminary form,
13 that projected a \$129 million cost increase for PSL. The revised estimate is quite
14 close to the values presented to the ESC in July, 2009. Similar estimates had been
15 developed for PTN by March, 2009, but the EPU staff was directed to discontinue
16 use of this estimate until management had reviewed it further. Throughout late 2008
17 and the first six months of 2009, Bechtel submitted several revisions to its cost
18 estimates, all of which were substantially higher than its indicative bid and higher
19 than the estimate developed as part of the Shaw scoping analysis.

20 The EPU's assessment of its own performance during this period, as
21 presented to the ESC on July 25, 2009, was that:

22 It "underestimated the risk and costs associated with the fast track project,"

23 It "did not assess [the] capacity of [the] organization and costs," and

24 "Early warning on cost overruns and undefined scope depletion were not
25 dealt with in a timely manner."

26 Concentric concurs with these assessments, and notes that many of these
27 issues have been remedied through changes in procedures and the organizational
28 structure since July 25, 2009¹.

29 An issue that contributed to the delay in informing the ESC about the likely
30 cost increases was the EPU's treatment of the cost estimate contingency and the
31 development and synchronization of the trend registers and risk registers.

¹ EPU lessons learned PPL from April 2010.

1 FPL has in place two sets of instructions that address how contingencies are
2 to be developed and applied in the cost estimation process. EPPI-320 is specific to
3 these projects and addresses how cost estimates are to be developed, including the
4 development and inclusion of contingencies. This instruction has been in place
5 since March, 2008, and remains in effect today [VERIFY]. EPPI-320 states that
6 "estimates should include project risks, uncertainties, and contingency. These
7 should be documented along with the methods for determining percentage of risk
8 and the amount of money associated with the contingency." EPPI-320 states that it
9 is supplemental to NPDI-304, which is a Nuclear Projects Instruction which
10 provides specific guidance on the development of contingencies. NPDI-304 states
11 that:

12 4.7.6. As a general rule, conceptual estimates should have a 25-30%
13 contingency, Level 1 or preliminary estimates should have 15-25% contingency and
14 Level 2 or definitive estimates a 5-10% contingency. The exact percentage is
15 determined on a case by case basis.

16 The EPU projects' cost estimates fit the criteria for a conceptual estimate in
17 2008, and appear to have achieved or at least approached Level 1 status by the end of
18 2009. FPL's practice has been to label the contingency as "Scope Not Defined", or
19 "Scope Not Estimated." FPL has defined the contingency as "an amount added to
20 an estimate to allow for additional costs that experience shows will likely be required.
21 This may be derived either through statistical analysis of past project costs, or by
22 applying experience gained on similar projects."² The EPU instructions also state
23 that the contingency should be "based on the level of uncertainty or complexity of a
24 project." In addition to the contingency, the EPU estimates include an allowance for
25 the expected (probabilistically determined) value of specific modifications or
26 conditions which have arisen. This value is supposed to be derived from the risk
27 register, which identifies the issue, its cost impact, its probability of occurrence, and
28 its expected value. Items are supposed to enter the risk register from the trends
29 register, which is an early-warning system for changing conditions at the projects
30 which can affect cost or schedule performance. EPPI-300, another EPU instruction
31 relating to changes in project cost estimates, describes the purpose of the trend
32 program as follows:

33 2.1...The trend program fosters vigilance, awareness and action through
34 constant probing, reporting, reviewing, discussing, and analyzing the projects
35 performance against the project plan. The trend program is a dynamic decision-
36 making process, which exposes pending decisions and their related impact(s) prior
37 to the fact. Timeliness in identifying and resolving trends is a key element in
38 controlling project cost and must be managed and recorded to maintain current
39 forecasts.

² NPDI-304, p9.

1 Based on our review of documents, and as confirmed in our interviews, from
2 May 2008 to today, the EPU's cost estimation process has not complied with these
3 instructions. The most significant discrepancies between the instructions and actual
4 practices include:

5 Since the Bechtel contract was executed in November, 2008, the project has
6 not maintained a level of contingency that is consistent with FPL's guidelines; the
7 contingency has been depleted month-by-month by scope changes, escalation and
8 risk adjustments; the contingency has been treated as a balancing variable with the
9 value derived simply by taking the total current cost estimate and subtracting out the
10 known scope and risk register elements rather than basing it on the level of
11 development or uncertainty associated with the project; currently, the contingency is
12 far below the standards applicable for a Level 1 estimate. This practice was
13 acknowledged in the July 25, 2009 lessons learned section of the ESC presentations
14 by the comments that "...undefined scope depletion not dealt with in a timely
15 fashion...undefined scope allowance used in establishing base contracts and work
16 left little for emergent items or increased scope...must include undefined scope
17 allowance based on level of risk/progress on project." The new EPU management
18 team is addressing these issues through the retention of High Bridge to perform a
19 third-party review of the cost estimates, and to develop a probabilistically-
20 determined contingency, however that work is not yet complete, and the issue of the
21 depleted contingency remains unresolved.

22 The trends registers and risk registers have not been developed in accordance
23 with the projects' instruction set, and the risk register was not directly synchronized
24 with the contingency or the cost estimate until after July, 2009; Concentric has
25 reviewed the trends and risk registers for the projects as they existed from January,
26 2008 to today, and has found that..... This issue was acknowledged in the July
27 25, 2009 ESC briefing by the comments that "Current undefined scope allowance is
28 not aligned to the risk matrix...looked at the project only from a high level risk."
29 The current EPU management team has explicitly linked the risk register to the cost
30 estimate, however, the link between the risk register and the contingency (scope not
31 defined) has apparently not been established, and is apparently awaiting the receipt
32 of the High Bridge report.

33 A second issue that adversely affected the timely flow of project cost
34 information within FPL relates to the process for developing updated project cost
35 estimates, securing the approval of these updates, and communicating these updates
36 within the FPL organization. FPL's EPPI-300 governs the process for these
37 activities, and establishes the following procedures and responsibilities:

38 Potential changes to the cost baseline or forecast are to be captured through
39 the trends program and recorded on the trends register. The EPU Site Project
40 Controls Supervisor is responsible for the accuracy and timeliness of the trends
41 register.

1 Finally, due in large part to the confusion discussed above, our review of the
2 EPU's standard reports and presentations has made us aware of several reports that
3 were issued with incorrect, misleading or out-of-date information. These problems
4 persisted into 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow
5 reports, and ESC presentations. Even more troubling are reports we have received
6 from individuals within FPL that documents they were responsible for preparing
7 were changed, after the originator had issued them, by someone else in the
8 organization, often with no explanation as to why the changes were made. In other
9 instances, individuals were told to make changes by someone else within FPL.
10 While these accounts are very difficult to verify, they do not represent a single
11 account or example, and some corroborating documentation has been provided to
12 us. These actions appear to be largely attributed to managers that are no longer in
13 the EPU organization, but they demonstrate the need for more definitive document
14 control and ownership procedures.

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1 [REDACTED] Investigation Report
2 Prepared for
3 Florida Power & Light Company
4 CONFIDENTIAL - DRAFT
5 May XX, 2010

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FPL INVESTIGATION

I. Introduction

On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group, Inc ("FPL Group") received a letter from [REDACTED] an employee within the [REDACTED] of Florida Power & Light Company ("FPL").¹ Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by FPL's Legal and Regulatory Affairs departments on March 10, 2010.² Following initial discussions between Concentric and FPL, Concentric was retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of the claims and matters set forth in the [REDACTED] Letter.³ A copy of Concentric's engagement letter is included as Exhibit 1.

Pursuant to Concentric's engagement by FPL, Concentric is reporting directly to FPL's Legal department, and specifically to [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]. Similarly, Concentric's findings and recommendations in this matter are being provided directly to [REDACTED].

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Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters related to the performance review of [REDACTED] and all other human resource related matters, including the performance of specific individuals within FPL. Concentric understands that these matters are being and will continue to be handled internally by FPL's Human Resources department.

Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor.⁴ Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 2. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

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The remainder of our report is organized in to eight sections. Section II presents a summary of Concentric's work plan which was used to perform this matter. Section III includes a summary response to the [REDACTED] Letter including reference to an interlineated copy of the [REDACTED] Letter. Section III presents a chronology of key events related to the [REDACTED] Letter occurring between January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and Turkey Point ("TPN") Nuclear Power plants ("EPU Projects"). As discussed further in this section, Concentric has focused its attention in this matter on the nuclear units in Florida due to the state

¹ [REDACTED] title as of the date of the [REDACTED] Letter is Senior Nuclear Project Manager.

² Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10, 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and Concentric's receipt of the letter on March 10, 2010.

³ Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

⁴ Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.

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1 regulatory structure. Section VI reviews the implications of the [REDACTED] Letter and Concentric's
2 investigation on the Nuclear Cost Recovery Clause ("NCRC") dockets in 2009 & 2010⁵. A review
3 of Concentric's findings related to the flow of information from FPL to the Florida Public Service
4 Commission ("FL PSC") and its staff ("FL PSC Staff") can be found in Section VII. Similarly, a
5 review of the flow information within FPL can be found in Section VIII. Finally, a review of
6 Concentric's findings and specific recommendations can be found in Section IX.

II. Concentric Work Plan

A. Sources of information

7 Concentric's investigation into this matter relied upon two pathways for information. First
8 Concentric submitted a number of requests for documentation to FPL, in order to deepen our
9 knowledge of the allegations set forth in the [REDACTED] Letter and to independently confirm details
10 provided to us in the interviews described below. A log of Concentric's document request can be
11 found in Exhibit 3.

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12 Concentric also requested and conducted 13 separate interviews. Eight of Concentric's interviews
13 were conducted in person at the offices of FPL or at an off-site location depending on the location
14 of the interviewee. The remaining five interviews were conducted via telephone. All of
15 Concentric's interviews occurred between the weeks of March 15th and April 12th. Concentric
16 selected specific individuals to be interviewed based upon the allegations contained in the [REDACTED]
17 Letter, our prior interviews, and Concentric's understanding of the EPU Projects organization.
18 Concentric considers the names of the individuals we interviewed to be confidential.

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19 Prior to beginning each interview, Concentric reviewed the FPL Code of Business Conduct and
20 Ethics (the "Code") with each interviewee. This review included a specific discussion of each
21 employee's "responsibility to report any actual or suspected violation of a law or regulation, any
22 actual or suspected fraud, and any other violation or suspected violation of this Code."⁶ Similarly,
23 Concentric reiterated the Company's non-retaliation commitment outlined in the Code⁷. At the
24 conclusion of each interview, the interviewees were given an opportunity to review any additional
25 concerns they may have had.

26 The information Concentric relied upon in this investigation was supplemented by Concentric's
27 existing knowledge of the EPU Projects organization. This knowledge was gained through three
28 years of reviewing the project management processes of the EPU Projects for FPL as part of the
29 Company's annual Nuclear Cost Recovery Clause filings.

B. Independence

30 Throughout Concentric's investigation into the allegations contained within the [REDACTED] Letter,
31 Concentric maintained independence from FPL's Legal and Regulatory Affairs departments. Our
32 approach to investigating the [REDACTED] Letter and the allegations contained therein is our own, and not

⁵ FL PSC Dockets 080009-EI & 090009-EI, In Re: Nuclear Cost Recovery Clause.

⁶ Florida Power & Light Company, Code of Business Conduct and Ethics, most recently revised October 16, 2009,
p. 2.

⁷ Ibid.

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1 the result of specific directions from FPL, its employees or contractors. To this end, FPL did not
2 place any constraints on Concentric's access to current and former employees. Lastly, Concentric
3 was not constrained by budget or schedule expectations on the part of FPL.

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4 Concentric's findings in this matter are based upon our review of original sources. Concentric did
5 not rely solely upon statements by FPL employees or contractors. Instead, Concentric reviewed and
6 verified assertions made in the [REDACTED] Letter and Concentric's interviews with contemporaneous
7 documents produced by the EPU Project team, whenever possible. The documents relied upon as
8 part of this investigation are presented in Exhibit 4.

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C. Key questions

9 Concentric's review of the allegations raised in the [REDACTED] Letter and our interviews, identified five
10 key questions which needed to be answered by our review. These key questions are intended to
11 determine whether any imprudent costs were passed onto FPL's customers or if FPL intentionally
12 withheld information from the FL PSC.

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13 Foremost amongst Concentric's key questions is whether FPL has made the correct decision to
14 proceed with the EPU Projects in light of the best information available at the time decision was
15 made. Secondly, Concentric noted a need to determine if any costs were incurred that should not be
16 passed on to FPL's customers on the grounds of imprudent decision-making. Third, we examined
17 whether the information provided to the FL PSC and the interveners in each of the NCRC dockets
18 was accurate, consistent, timely and reliable. If not, Concentric sought to determine what allowed
19 this to occur and why. Similarly, Concentric sought to determine if the information flowing from
20 the EPU Projects to FPL's executive management was accurate, timely, consistent and reliable, and
21 if not, what allowed this to occur and why. Finally, Concentric sought to determine which policies,
22 processes, and procedures need to be addressed as a result of these findings.

22A III. Summary Level Response to [REDACTED] Letter

23 Exhibit 4 presents a copy of the [REDACTED] Letter. To the original letter, Concentric has added its
24 summary-level observations that resulted from our investigation of the allegations contained therein.
25 In addition, each observation contains a citation to this report in order to provide a "roadmap" to a
26 reviewer of the [REDACTED] Letter and Concentric's report.

27 As can be seen in Exhibit 5, a number of the allegations raised in the [REDACTED] Letter were shown to
28 be accurate. Specifically, Concentric has noted documentation which confirms [REDACTED]
29 statements related to the timing of the initial scoping studies by Shaw and the repeated changes in
30 the overall project scope. However, Concentric believes the shifting scope of the EPU Projects to
31 have been the predictable result of the evolving design which is inherent in any complex project.

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32 Along these same lines, Concentric has reviewed certain reports relied upon by [REDACTED] to
33 support his assertion that as of November 2009, the EPU Projects were continuing to measure their
34 cost performance relative to the original 2007 cost estimates. These reports, the November PTN
35 Total Project Cash Flow Report⁸ and the PSL Annual Project Cash Flow Report⁹, confirmed [REDACTED]

⁸ Total Project Cash flow, PTN EPU Project 2009, November 2009.

⁹ Annual Cash Flow, PSL EPU Project, October 2009.

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1 assertion. Concentric did note, however, that the November Executive Steering Committee ("ESC") presentation provided the updated cost forecast¹⁰.

3 Also noteworthy are Concentric's findings related to the evolution of cost estimates or forecasts for
4 the PTN & PSL EPU Projects. As shown on Pg. 3 of Exhibit 5, Concentric has found evidence
5 which indicates the [REDACTED] and the [REDACTED] were alerted to the potential
6 for cost over-runs at PSL as early as April 2008.¹¹ A similar opportunity was noted in December,
7 2008 when these individuals were presented with a preliminary revised forecast for PSL. This
8 followed the award of an engineering, procurement and construction ("EPC") contract for the EPU
9 Projects to Bechtel Corporation ("Bechtel"). At this time, the PSL Project Team was told to
10 continue refining their forecast until February 2009 when it was reviewed again by the EPU senior
11 management. As noted in Section IV, the preliminary forecast in February 2009 was within
12 approximately \$11 million, or 2%¹², of the forecast ultimately provided to FPL's management in July
13 2009¹³.

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14 Overall, Concentric has found [REDACTED] and his allegations to be credible. The basis of this
15 finding includes Concentric's interview with [REDACTED], the fact that [REDACTED] chose to send this
16 letter on a non-anonymous basis, and the supporting documentation produced or cited by [REDACTED]
17 [REDACTED]. Moreover, Concentric believes [REDACTED] is a capable project controls employee with a
18 strong background within his function. [REDACTED] employment history includes the previous
19 positions noted in the [REDACTED] Letter¹⁴ and many years of prior project controls employment as a
20 contractor at FPL's PTN site, as well as other nuclear facilities in the US. It is important to note
21 that FPL had enough confidence in [REDACTED] to give him responsibility for multiple major projects
22 and a staff of approximately 100 people¹⁵. While it may be fair to say that [REDACTED] was not always
23 aware of every aspect of the EPU Projects, it would not be fair to characterize [REDACTED] as under-
24 or poorly qualified for his position.

IV. Chronology of Events

25 A chronology of the EPU Projects is presented in Exhibit 6. A summary of the chronology,
26 including the major events relevant to Concentric's review are highlighted below. This chronology
27 was used to more fully understand the ongoing dynamics of the EPU Projects and the precise timing
28 of certain EPU Project activities. This chronology should not be viewed as a comprehensive history
29 of the EPU Projects.

30 The EPU Projects began in 2007, at which time FPL undertook an initial scoping study to determine
31 a rough order of magnitude ("ROM") cost estimate based upon a preliminary assessment of the

Deleted: Following our interview with [REDACTED] on March 17, 2010, [REDACTED] notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor¹³. Specifically, [REDACTED] noted "that I am the next target for elimination from [REDACTED] organization. He told me in private that he does not intend [sic] being fired as his predecessors for poor performance and he will not let a few 'stupid' people affect his management effectiveness." A copy of this email is attached as Exhibit 5. Concentric reported this email to FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL Human Resources department.

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32 ¹⁰ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point November 13, 2009, p. 5

33 ¹¹ CR 2008-11443, April 3, 2008.

34 ¹² Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

35 ¹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25 2009, p. 8.

36 ¹⁴ [REDACTED] Letter, p. 2.

37 ¹⁵ Ibid.

38 ¹⁷ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for
39 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-BI, September 17, 2007.

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1 components which would require replacement to operate PSL and PTN at the uprated conditions¹⁷.
2 Concentric understands, as originally proposed, the EPU Projects were expected to commence
3 operations post-2012, but were advanced following the FL PSC's rejection of the Glades Power
4 Park Determination of Need in 2007¹⁸. FPL filed for a Determination of Need for the EPU
5 Projects on September 17, 2007.¹⁹

6 In the winter of 2007 and 2008, FPL retained Shaw to review FPL's initial scoping study and to
7 confirm or reject the results of this analysis. Concentric understands from our interviews that these
8 studies generally did confirm the FPL scoping analysis, but some discrepancies related to the
9 replacement or refurbishment of certain components existed for Turkey Point. The initial cost
10 estimate included a contingency allocation of approximately 45%²⁰.

11 Soon after the completion of the Shaw scoping studies in April 2008, the PSL EPU project team
12 identified the potential to exceed the original FPL & Shaw scoping estimates. At this time, PSL
13 initiated Condition Report 2008-11443 (the "CR") which stated the "EPU Project Feasibility Study
14 may not have captured the full spectrum of modifications necessary," for the uprate²¹. In response
15 to this CR, the EPU Project Team developed a "High Risk Mitigation Plan" which was attached to
16 the CR²². The High Risk Mitigation Plan included corrective actions which were required to be
17 completed by the EPU Project team including preparation and submission of a revised cost estimate
18 to the [REDACTED], among other items. The High Risk Mitigation Plan was executed by
19 the [REDACTED] and the [REDACTED], but not the [REDACTED]. Concentric
20 was unable to independently determine if this High Risk Mitigation Plan was ever completed.
21 Concentric also requested a copy of the revised cost estimate described in the High Risk Mitigation
22 Plan, but was told that this document could not be located, nor could its existence be confirmed.²³

23 On November 7, 2008 the EPU Projects' EPC vendor submitted a revised forecast for PTN of
24 \$262MM for the PTN EPU²⁴. This compares to a scoping analysis assumption of \$225MM²⁵.

25 In December 2008, the PSL Project Controls team again identified the potential to exceed the
26 original forecast following the execution of the EPC agreement with Bechtel. A preliminary, revised
27 forecast for PSL was prepared and provided to the EPU Project Management at that time. The
28 EPU Project Management, however, requested that the PSL Project Controls group further refine
29 and develop the revised forecast.

30 CR-2008-37753 noted in December 2008 that the EPU project is a major change for PSL and
31 should have a change management plan in place. In addition, CR-2008-37753 goes on to state that
32 CR-2008-11443 was closed with several future actions contained within a risk mitigation plan and

¹⁸ Florida Public Service Commission, Order No. PSC-08-0021-FOF-EI, January 7, 2008.

¹⁹ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

²⁰ Ibid.

²¹ CR 2008-11443, "Detailed Description," April 3, 2008, p. 1.

²² Ibid., p. 8.

²³ The June 8, 2008 Risk Register includes an item which is similar to the High Risk Mitigation Plan, but the documents required to close out this High Risk Mitigation Plan could not be located.

²⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

²⁵ Ibid.

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1 tracked separately within the EPU Risk Mitigation Program. CR-2008-37753 concludes that there
2 was a "missed opportunity" to screen CR-2008-11443 as a change management plan.²⁶

3 A second meeting to review the revised PSL forecast occurred in February 2009. This meeting was
4 attended by the EPU Project Management Team and reportedly included [REDACTED] who was
5 appointed the [REDACTED] as of January 2009, and the PSL Project Team. At
6 this time the EPU Senior Management was presented with a forecast of approximately \$785 MM for
7 PSL, an increase of approximately \$129 million over the then current budget²⁷. This was
8 approximately \$11 million or 2% below what was ultimately presented to the ESC in July 2009²⁸. It
9 was reported to Concentric that the [REDACTED] and the [REDACTED] responded
10 with a number of questions related to the basis for the revised forecast and requested additional
11 refinement to the estimate.

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12 A similar exercise was undertaken for PTN in March 2009 and PTN began to report its performance
13 relative to this revised forecast. However, the PTN Project Team was requested by the [REDACTED]
14 [REDACTED] to revise the initial reports, to measure cost performance relative to the
15 original project baseline because the revised estimate still had to be "validated," and because and
16 "extensive effort [was] about to begin to evaluate [PTN's] estimated cost to complete for [sic] the
17 PTN EPU Project."²⁹ Concentric was told that the [REDACTED] was not satisfied with these
18 instructions, but chose to comply with the instructions from his superiors nonetheless.

19 In April 2009, the EPU Project Management began a detailed cost review of the unregulated Point
20 Beach EPU Project. This review included the sequestration of the EPU Project Management Team
21 at Point Beach for a period of two to three weeks in April. Upon their return, the [REDACTED]
22 [REDACTED] resigned from his position, and it is reported that a similar undertaking was begun for the
23 PSL and PTN EPU Projects. The [REDACTED] was replaced on May 1, 2009.

24 On May 1, 2009 the [REDACTED] submitted pre-filed, direct testimony in Docket 090009-EI
25 before the FL PSC³⁰. In this testimony, the [REDACTED] stated "The EPU projects are
26 progressing on schedule and within budget." Additionally, this pre-filed direct testimony stated
27 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
28 Docket 080009-EI."³¹ At the same time, FPL submitted the pre-filed, direct testimonies of [REDACTED]
29 [REDACTED] and Mr. John J. Reed, Chairman and CEO of Concentric.³²

31 At the end of May 2009, the EPU Project Management Team reported to the ESC that the Bechtel
32 EPC estimates had increased to a level in excess of Bechtel's indicative bid³³. This increase was
33 reported to be the result of higher than expected projections of field non-manual and manual labor

34 ²⁶ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

35 ²⁷ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

36 ²⁸ Extended Power Upgrades, Project Update, Saint Lucie July 25 2009, p. 8.

37 ²⁹ Email of [REDACTED] in regards to Revised Forecast, dated March 26, 2009.

38 ³⁰ Direct Testimony [REDACTED], Docket No. 090009-EI, May 1, 2009.

39 ³¹ Ibid at pp. 2-3.

40 ³² Florida Power & Light Company's Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the
41 Period January - December 2010, May 1, 2009.

42 ³³ Extended Power Upgrades, Executive Steering Committee Update, Saint Lucie & Turkey Point, May 2009 p.3.

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1 hours³¹. Similarly, the current EPU estimates were reported to include redundant project
2 management and oversight costs which the EPU Project Management Team believed could be
3 eliminated to reduce the EPC vendor's forecast³⁵. Finally, it was reported that the EPU scope had
4 grown to be larger than the indicative bid presented in November 2008. The EPU Project
5 Management Team noted that the current estimates were based on preliminary design information,
6 and that the project was in the process of refining new "level 1" estimates³⁶. A target completion
7 date of June 30, 2009 for the new "level 1" estimates was presented to the ESC at this meeting³⁷.

8 Following the May 2009 ESC presentation, the EPU Project Team undertook an EPU Modification
9 Scope Review for both PTN and PSL³⁸. The results of these reviews were reported on June 16,
10 2009 and recommended the elimination of a substantial number of modifications as not necessary to
11 operate in an uprated condition.³⁹

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12 The subsequent ESC meeting was held on June 23, 2009⁴⁰. In this presentation, the EPU senior
13 management team noted that the EPU Projects were completing "level 2" estimates and reiterated
14 the concerns related to the EPC estimates since Bechtel's indicative bid in November 2008⁴¹. This
15 presentation was relatively short and precipitated the more detailed cost review in July 2009.

16 During the intervening period between the June and July 2009 ESC presentations, the EPU Project
17 Team expended considerable effort to produce a detailed, "line-by-line" cost review for both the
18 PSL and PTN project. Concurrently, a decision to replace the EPU senior management team was
19 made. As a result FPL's executive team recruited three new employees for the EPU project team
20 including a [REDACTED] and the [REDACTED]
21 [REDACTED] These individuals were selected and recruited from within FPL between the end of June
22 2009 and July 25, 2009.

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23 At the July 25, 2009 ESC presentation, the new EPU senior management team was introduced and
24 the ESC was briefed in detail on the revised cost forecast. At this time, the forecast for PTN was
25 revised upward by approximately \$161 million from \$749 million to \$910 million⁴². Similarly, the
26 PSL forecast was revised upward by approximately \$140 million from \$656 million to \$796 million⁴³.
27 The slides which presented this information to the ESC noted that the "current budget" was being
28 increased to the "current forecast"⁴⁴. Simultaneously, the ESC was advised that the current 2009
29 NCRRC feasibility analysis included the original cost forecast, and revised feasibility scenarios were
30 presented based upon the current forecast as of July 25, 2009⁴⁵. These revised feasibility scenarios
31 did confirm the continued cost effectiveness of the EPU Projects.

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³⁴ Ibid., p. 14.

³⁵ Ibid.

³⁶ Ibid., p. 15.

³⁷ Ibid., p. 18.

³⁸ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

³⁹ PTN EPU Scope Review dated June 2009, PSL EPU Modification Scope Review dated June 16, 2009.

⁴⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009.

⁴¹ Ibid., p. 12.

⁴² Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 5.

⁴³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, p. 8.

⁴⁴ Ibid., p. 11 and Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, p. 8.

⁴⁵ Ibid. p. 50.

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1 No ESC meeting was held in August. Nonetheless, both EPU projects did produce a cash flow
2 report. In the case of PTN, the Total Project Cash Flow report was not updated to reflect the
3 revised forecast that had been presented to executive management on July 25, 2009⁴⁶. In contrast,
4 the PSL Annual Project Cash Flow report was reviewed, the budget performance indicator was
5 changed to Red, and the total project cost summary presented on this report continued to be shown
6 as "under review"⁴⁷.

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7 On September 8, 2009 the NCRC hearings in Tallahassee began. During these hearings the [REDACTED]
8 [REDACTED] took the stand and indicated that should he be asked the same questions
9 contained within his pre-filed, direct testimony his answers would remain the same⁴⁸.

10 The following day, September 9, 2009, the ESC was presented with a newly revised forecast that
11 further increased the cost the EPU Projects by approximately \$104 MM for both sites⁴⁹. This
12 presentation stated that approximately 30% of the total project costs have "high certainty"⁵⁰.

13 At the October 22, 2009 ESC meeting, the ESC was advised that the current forecast for the project
14 was unchanged, but the contingency had decreased by approximately \$12 million⁵¹. In addition, the
15 AFUDC estimate was decreased by approximately \$150 million to \$200 million⁵². A footnote in the
16 presentation indicates the AFUDC was reduced to reflect FPL's pro-rata share of PSL Unit 2⁵³.
17 Concentric notes that the remaining values shown in this presentation are depicted as the full cost of
18 the EPU Projects regardless of ownership.

19 Also in October, PSL produced two Annual Project Cash Flow Reports with different budget
20 performance indicators and different total project cost summaries. The first of these reports is
21 dated October 1, 2009⁵⁴. This report includes a red performance indicator and the total project cost
22 summary is listed as "under review". The second report is dated October 2009. The budget
23 performance indicator in this report is listed as yellow and the total project cost summary is changed
24 to \$651 million⁵⁵. No one with whom Concentric spoke could explain the difference or the reason
25 for the two reports.

A. Key conclusions from chronology relevant to the five key questions

26 Concentric has developed the following conclusions which are relevant to the five key questions
27 noted in Section II:

- 28 • The original FPL and Shaw scoping studies provided the basis for FPL's decision to proceed
29 with the EPU Projects in 2007.

30 ⁴⁶ Total Project Cash Flow, PTN EPU Project 2009, August 2009.

31 ⁴⁷ Annual Cash Flow, PSL EPU Project, August 1, 2009.

32 ⁴⁸ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

33 ⁴⁹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, September 9, 2009

34 ⁵⁰ Ibid., p. 9.

35 ⁵¹ Extended Power Upgrades, Executive Steering Committee, St. Lucie and Turkey Point, October 22, 2009.

36 ⁵² Ibid., p. 6.

37 ⁵³ Ibid., pp. 6, 18.

38 ⁵⁴ Annual Cash Flow, PSL EPU Project, October 1, 2009.

39 ⁵⁵ Annual Cash Flow, PSL EPU Project, October 2009.

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- The EPU senior project management was alerted to the potential for costs to exceed as early as April 2008 through CR-2008-11443.
- The EPU senior project management reviewed a preliminary, revised cost estimate for PSL as early as December 2008 and a more refined version of this analysis in February 2008.
- The EPU senior management prepared the July 25, 2009 ESC presentations with the intent of providing a detailed, line-by-line review of the changes to the cost estimate.
- As of July 25, 2009, FPL believed the EPU Projects continued to be economic based on the revised cost estimates and projected incremental output.
- The [REDACTED] was aware of and assisted in the presentation of a revised cost estimate to FPL's executive managers as of September 8, 2010, the date on which he presented his direct testimony in a hearing before the Florida Public Service Commission.

V. FPL's Decision to Proceed with the EPU's

In determining whether EPU Project costs were prudently incurred the FL PSC is concerned with two items. First, is whether the decision to proceed with the project was prudent based on the expected economic and other benefits to FPL's customers? That question is described below. Second, the FL PSC will be concerned with whether the EPU project's costs were prudently incurred. That is to say, are the costs for which FPL sought and is seeking recovery in dockets 090009-EI and 100009-EI⁵⁶ the result of prudent decisions by FPL's management? This question is addressed in Section VI.

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The initial decision to proceed with the EPU Projects was made in 2008 on the basis of FPL's and Shaw's preliminary scoping analysis which predicted, at a high level, which plant components would require replacement or modification to support the increased output of the plants.⁵⁷ As was necessarily the case, this work was completed absent any detailed design work. The information presented in this study was used as one component of a feasibility analysis which compared the operating cost of FPL's portfolio of generating resources with and without the EPU Projects⁵⁸. This analysis relied upon the projected level of incremental output, the commercial operations dates of the EPU Projects and the duration of the outages, in addition, to the estimated cost to complete the EPU Projects. To the extent the resource portfolio that included the EPU Projects was projected to be cheaper to operate than the generating portfolio absent the EPU Projects, it was deemed the EPU Projects were in the best interest of FPL and its customers. Thus the question becomes would "perfect" reporting of the revised cost estimates have materially affected the feasibility analysis and influenced FPL's executive management's decision to proceed with the EPU Projects in 2008 or again in 2009?

It is Concentric's conclusion that, at-best, awareness of a revised forecast could have been improved by five months. Concentric believes the five month time frame is appropriate given the February 2009 meeting between the EPU senior management and the PSL project team. As noted above, this

⁵⁶ FL PSC Docket 100009-EI, FPL Notice of Intent to Retain Party Status, January 6, 2010

⁵⁷ Shaw Stone & Webster, Inc., Turkey Point Nuclear Plant, Balance of Plant, Extended Power uprate Scoping Study, February 2008 and Shaw Stone & Webster, Inc., St. Lucie Nuclear Plant, Balance of Plant, Extended Power Upate Scoping Study, February 2008.

⁵⁸ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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1 meeting followed an initial review of the PSL cost estimate in December 2008 and presented a
2 revised cost estimate that was within \$11 million or approximately 2 percent of the PSL cost
3 estimate that was provided to FPL's executive management on July 25, 2009⁵⁹.

4 It would not be appropriate to assume FPL's executive management should have become aware of
5 the revised cost estimate in December 2008. The estimate that was prepared at this time was
6 reported to be preliminary in nature and warranted additional review by the EPU project team to
7 further align it to the EPU senior management's objectives for the EPU Projects. Nonetheless, the
8 EPU senior management could have taken this opportunity to notify FPL's executive management
9 of the potential to revise the forecast in 2009. Virtually all of the interviewees agreed with this
10 conclusion.

11 Following a conclusion as to how much awareness of the revised cost estimate could have
12 improved, Concentric evaluated whether this would have affected FPL's decision to proceed with
13 the EPU Projects. In this regard, it is important to note that contemporaneous with the revision to
14 the cost estimate, FPL also learned that a higher level of incremental output may be produced by the
15 EPU Projects. This additional output was the result of more detailed engineering which had been
16 completed since the original scoping studies in 2007⁶⁰.

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17 As noted above, FPL's decision to proceed with the EPU Projects was based on an economic
18 feasibility analysis which relied upon the expected incremental output of the facilities as well as the
19 expected cost, among other items. Due to the increase in the projected output of the EPU Projects,
20 the economic feasibility analysis was not substantially affected by the revised cost estimate. Indeed
21 the July 25, 2009 ESC presentation for PSL indicates the EPU Projects continued to be economic,
22 although approximately 14-59% less so, at the higher cost estimate presented during that meeting.⁶¹
23 Thus, advanced awareness of the increased cost estimate would not have altered FPL's decision to
24 proceed with the EPU Projects.

VI. The Pass-Through of EPU Costs in the NCRC

25 Concentric's review of the [REDACTED] Letter has illustrated the distinction between the cost estimation
26 process and the incurrence of specific costs. The former is the projection of future costs without
27 the actual expenditure of company or customer dollars. The latter is more critical to the FL PSC's
28 review and involved the actual expenditure of company and customer dollars or the commitment to
29 do so at a later date.

30 The [REDACTED] Letter indicates [REDACTED] concerns are specific to the cost estimation process within
31 the EPU Projects and more specifically the reporting of revised cost estimates to FPL's executive
32 management and the FL PSC. The [REDACTED] Letter does not identify any costs which are the result of
33 an imprudent action by FPL. Concentric confirmed this understanding of the [REDACTED] Letter during
34 our interview with [REDACTED].

⁵⁹ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

⁶⁰ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁶¹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, Pg. 50.

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1 Similarly, Concentric has not found indications of costs that were the result of imprudent decisions
2 or actions on the part of FPL's management. This conclusion was reinforced by every interviewee
3 with whom Concentric spoke. When asked whether they were aware of any costs that should not be
4 passed along, the unanimous answer was "no". Indeed, [REDACTED] acknowledged during our
5 interview that "the costs will be what they [are]" and his concerns are related to what information
6 would be presented to the FL PSC. As a result, Concentric believes there are no costs which should
7 be subject to disallowance by the FL PSC on the basis of imprudent decision-making.

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8 Concentric has, however, found evidence that suggests concerns with the reporting of revisions of
9 the cost estimate. These documents and the concerns are described within Sections VII and VIII
10 below.

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VII. The Flow of Information to the FPSC and Other NCRC Parties

A. Scope of Inquiry

11 The chronology of events presented in Section IV of this report led Concentric to focus on the 2009
12 NCRC proceedings⁶² in order to assess whether the information presented by FPL in those
13 proceedings relating to the EPU cost estimates, schedule, and cost-effectiveness was consistent with
14 the standards expected for testimony before, and submissions made, to a regulatory agency.

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15 There were three separate sets of activities in the 2009 NCRC proceedings in which information
16 about the status of the EPU was presented. These sets of activities are the 1) pre-filing of testimony,
17 both direct and rebuttal, 2) production of documents and answering of interrogatories in the
18 discovery processes, and 3) testimony at the hearings. In the 2009 NCRC proceedings, pre-filed
19 testimony on these matters was submitted on May 1, 2009 (direct) and August 10, 2009 (rebuttal);
20 documents were provided and interrogatories were responded to from January, 2009 through the
21 hearing; the hearings on these issues were held on September 8, 2009.⁶³ Since an important element
22 of this investigation has been about the timeliness of internal and external information flow, we have
23 chosen to examine FPL's actions in the three separate timeframes discussed above.

B. Pre-filed Testimony

24 FPL presented four witnesses in the 2009 NCRC proceedings on issues relating to the EPU:

25 [REDACTED]
26 [REDACTED]
27 Mr. John J. Reed, Chairman and CEO of Concentric⁶⁶, and
28 [REDACTED]

29 ⁶² FPSC Docket No. 090009-EI.

30 ⁶³ FPSC Docket No. 090009-EI. Pre-filed testimony was also filed on March 2, 2009. That testimony relates to 2008
31 costs. Given Concentric's conclusions in Section VI, the testimony is not addressed in this section.

32 ⁶⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

33 ⁶⁵ Direct Testimony of [REDACTED], No. 090009-EI, May 1, 2009.

34 ⁶⁶ Direct Testimony of John J. Reed, Docket No. 090009-EI, May 1, 2009.

35 ⁶⁷ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

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1 The issues within the scope of this investigation, i.e., the projected cost to completion, schedule and
2 cost-effectiveness of the EPUs, were presented in [REDACTED] direct testimony⁶⁸, and sponsored
3 by him, and that information was used in [REDACTED] cost-effectiveness analyses⁶⁹. Mr. Reed's
4 testimony related to nuclear project controls, procedures, policies and practices, and the prudence of
5 FPL's costs. He offered no estimate of the projected costs to completion or opinions on the cost
6 effectiveness of the EPUs. [REDACTED] testimony related to the accounting for FPL's incurred
7 costs and the 2009-2010 projected costs⁷⁰. [REDACTED] did not offer any estimate of the projected costs to
8 completion or opinions on the cost effectiveness of the EPUs. Therefore, our review has focused
9 on the testimony of [REDACTED], and, to a lesser extent, Mr. Sim.

10 [REDACTED] pre-filed Direct Testimony contains the following statements

11 "The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits
12 of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) units 1
13 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants."⁷¹

14 "There are no changes at this time to the total non-binding cost estimate provided in May 2008 in
15 Docket 080009-EI. And, as demonstrated by FPL witness [REDACTED] the uprate project continues to be
16 cost effective when compared to the addition of other generation alternatives."⁷²

17 "Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally
18 filed St. Lucie and Turkey Point costs ... At this time, FPL has not identified any need to revise
19 the total non-binding cost estimate provided last May in Docket 080009-EI. As would be
20 expected, the Company continues to evaluate the costs associated with this project. As activities such
21 as final engineering analyses and design, associated NRC requirements and reviews, and
22 construction planning are more clearly defined, the Company will make any necessary revisions to the
23 original cost estimate. The TOR schedules provide the best information currently available for the
24 cost recovery period through 2010."⁷³

25 The TOR schedules include Schedule TOR-7 (True-Up to Original), which was sponsored by [REDACTED]
26 [REDACTED] and which continued to rely on the cost estimate submitted in Docket 080009-EI, along
27 with a restatement of the caveat that the Company continued to evaluate the costs of the project⁷⁴.

28 As of May 1, 2009 (the date the prefiled testimony quoted above was filed), the following events had
29 transpired:

- 30 • A Condition Report (CR-2008-11443) dated 4/3/08 raised concerns about the
31 validity and reliability of the EPU cost estimate that was used in Docket 070602-EI⁷⁵
32 and that [REDACTED] continued to use in May, 2009⁷⁶

33 ⁶⁸ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

34 ⁶⁹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

35 ⁷⁰ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009.

36 ⁷¹ Direct Testimony of [REDACTED], Docket No. 090009-EI, May 1, 2009, p. 2.

37 ⁷² Ibid., pp. 2-3.

38 ⁷³ Ibid., p. 24.

39 ⁷⁴ Direct Testimony of [REDACTED], Docket No. 090009-EI, Exhibit 1, May 1, 2009, p. 104.

40 ⁷⁵ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for
41 Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

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- 1 • On November 7, 2008, Bechtel informed FPL that its estimate of costs for the PTN
- 2 EPU's had increased by \$37 million; this higher value is used in the Bechtel contract
- 3 • In early December, 2008 the EPU's Project Controls Group identified that the May,
- 4 2008 cost estimate was likely to be too low given the Bechtel contract and cost
- 5 • A Condition Report dated 12/10/08 concludes that the resolution of the 4/3/08
- 6 Condition Report was a "missed opportunity."⁷⁷
- 7 • On February 17, 2009, [REDACTED] was presented with an analysis prepared by
- 8 Project Controls and the PSL site that their current cost estimate for PSL is \$129
- 9 million above the May, 2008 estimate.⁷⁸
- 10 • By March 26, 2009 the PTN site team had also concluded that the cost estimate
- 11 should be raised above the May, 2008 estimate; a decision is made to not use the
- 12 higher cost estimate.⁷⁹
- 13 • [REDACTED] participated in developing a presentation in late April/early May 2009
- 14 informing the ESC that while Bechtel had estimated higher costs, his cost estimates
- 15 for PSL and PTN were unchanged from the May, 2008 estimates; the Projects' cost
- 16 status is shown as "green."⁸⁰

17 As shown by this chronology, the EPU's cost estimates were clearly in a state of rapid flux by May 1,
 18 2009. While there was mounting evidence to indicate that an upward revision to the cost estimate
 19 would be needed, [REDACTED] had not reported to the ESC that an increase was needed. On the
 20 contrary, what [REDACTED] reported to the ESC was consistent with what his Direct Testimony
 21 reports. While it is inherently a matter of judgment, Concentric does not believe that [REDACTED]
 22 [REDACTED] May 1, 2009 Direct Testimony was outside the bounds of acceptable conduct as of the
 23 date it was filed.

C. Interrogatory Responses and Production of Documents

24 Concentric requested, received and reviewed all of the productions of documents and interrogatory
 25 responses submitted by FPL in Docket 090009-EI and pertaining to the EPU budget, schedule or
 26 cost effectiveness. Our review led us to follow up on one interrogatory response, submitted in
 27 response to Staff's Fifth Set, No. 53, for further analysis⁸¹. This interrogatory response, which is
 28 attached as Exhibit 7, sought a listing of each analysis that FPL was offering to satisfy the
 29 requirements of Section 366.93(5) F.S., which required an annual comparison of the budgeted and
 30 actual costs as compared to the estimated in service cost of nuclear projects. The response, which
 31 was submitted on August 17, 2009, refers to Schedule TOR-7, which had been submitted on May 1,
 32 2009, and describes that it is a "snapshot" of a continuous process.⁸²

33 Between May 1, 2009 and August 17, 2009, major changes had been made to the cost estimates for
 34 the EPU projects. On May 31, 2009, the PTN EPU budget indicator is shown as red, indicating a

35 ⁷⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
 Saint Lucie, July 25, 2009.

36 ⁷⁷ CR 2008-37753, "Additional Information," December 10, 2008, p.1.

37 ⁷⁸ Summary Cash Flow EPU Total 090217 Reviewed.xls, "PSL EPU Project Total," February 17, 2009.

38 ⁷⁹ Email from [REDACTED] to anonymous recipient, March 26, 2009.

⁸⁰ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, May 1, 2009, p. 8.

⁸¹ Response to Docket No. 090009-EI, Staff's Fifth Set of Interrogatories, Interrogatory No. 53.

⁸² Ibid.

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1 serious challenge to meeting the existing budget⁸³. On June 3, 2009, Bechtel submitted a "P50"
2 (mean value) cost estimate for PTN that was \$108 million above the May, 2008 estimate⁸⁴. On June
3 23, 2009, [REDACTED] advised the ESC of the Bechtel estimate⁸⁵, and the ESC instructed him to
4 prepare a "line-by-line" updated cost estimate for the projects to be reviewed at the next ESC
5 meeting. This updated estimate was prepared at the direction of [REDACTED] by several people
6 reportedly working seven days a week for a month, and presented to the ESC at an all-day, Saturday
7 meeting on July 25, 2009. In the week leading up to that meeting, the EPU leadership team was
8 replaced, and [REDACTED] was reassigned to a position outside of the EPU, although he actively
9 participated in the July 25, 2009 presentation. That presentation established new cost estimates for
10 the EPU projects which were approximately 21% higher than the May, 2008 estimates⁸⁶.

11 Therefore, Schedule TOR-7, which is referred to but not attached to the response to Staff 5-53, was
12 out of date by August 17, 2009. However, the interrogatory only asked for a *listing* of the responsive
13 analyses, not for FPL's current or updated analyses. In addition, the respondent to the
14 interrogatory, a Regulatory Affairs staff member, had no knowledge of the new EPU cost estimates,
15 nor of any source data or documents relating to this issue that were created after May 2009. FPL's
16 approach to complying with the Section 366.93(5) requirements was to perform a "snapshot"
17 analysis as of late April and to include that information in the May 1 filings. Neither the Regulatory
18 Affairs staff, the Legal staff, nor FPL's other witnesses, saw any post-May 1, 2009 source documents
19 until preparations began in December, 2009 for the 2010 NCRC proceedings.

20 Concentric views the response to Staff 5-53 as being accurate, reliable and responsive, even though
21 the document referred to was out-of-date. The respondent answered the question in a forthright
22 fashion based on all of the information known to this person at the time.

D. Testimony at Hearing

23 As stated earlier, [REDACTED] and [REDACTED] appeared at the NCRC hearings on September 8, 2009.
24 At the hearing, the following exchange took place between [REDACTED] and counsel for FPL⁸⁷:

25 BY [REDACTED]

26 Q. If I asked you the same questions contained in your prefiled direct testimony, would your
27 answers be the same?

28 A. Yes, they would be.

29 [REDACTED] FPL asks that the prefiled direct testimony be inserted into the record as
30 though read.

31 This followed [REDACTED] introducing several corrections to errata in his pre-filed testimony, and
32 updating his prefiled testimony to reflect his new title and responsibilities with FPL. The exchange

33 ⁸³ Total Project Cashflow, PTN EPU Project 2009, May 31, 2009.

34 ⁸⁴ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009, pp. 25-26.

35 ⁸⁵ Extended Power Upgrades, Executive Steering Committee Meeting, Saint Lucie & Turkey Point, June 23, 2009, p. 12.

36 ⁸⁶ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update,
37 Saint Lucie, July 25, 2009.

38 ⁸⁷ Transcript of Direct Examination of [REDACTED] September 8, 2009, pp. 208-209.

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1 with counsel had the effect of asserting that all of the statements in the pre-filed testimony, and the
2 exhibits sponsored by ██████████, remained truthful and accurate as of September 8, 2009.

3 As of September 8, 2009, ██████████ had participated in the development of highly detailed cost
4 projections for the EPU projects, and had presented these new estimates to dozens of senior FPL
5 and contractor personnel on July 25, 2009⁸⁸. The new estimates for PSL were caveated as still being
6 "at the conceptual level"⁸⁹ (as were the May, 2008 estimates⁹⁰) and the comment was made that the
7 full scope was still not known. However, the new values were clearly labeled as the "Current
8 Forecast," and the statement was clearly made that the "Current Budget" (the May, 2008 values) was
9 being increased to the "Current Forecast."⁹¹ The July 25, 2009 presentation offers an extensive
10 perspective on the shortcomings of the May, 2008 estimates and the lessons that should be learned
11 from this experience⁹². Concentric also notes that the ESC was explicitly advised that the new cost
12 estimates were inconsistent with the May, 2008 and May, 2009 data that had been presented to the
13 FPSC, and that several new economic feasibility analyses had been performed, which updated those
14 analyses which had been submitted to the FPSC eleven weeks earlier.⁹³ The new feasibility analyses
15 continued to show that the projects were beneficial to customers, although less so than in the May 1,
16 2009 filing⁹⁴.

17 In our interview with him, ██████████ defended his September 8, 2009 reaffirmation of his pre-
18 filed testimony on the grounds that the July 25, 2009 cost estimates were prepared assuming the
19 validity of many unapproved scope changes and manpower estimates, and that they were a no better
20 than a "guess" with little support. He also indicated that he does not recall any discussion with
21 regard to whether the updated estimate should be presented to the FPSC. Concentric agrees that
22 the new cost estimates were based on only partially completed engineering and design information,
23 and that they were still subject to revision as new information became available. However, that is
24 always the case with a fast-tracked construction program, and continues to be the case today. These
25 facts do not support the continued use of information that was based on even earlier conceptual
26 designs and out-of-date manpower and material estimates. The new estimates were the product of
27 more than a dozen people working extended hours for a month, and had been reviewed by every
28 level of management in the EPU organization. They reflected far more knowledge about the scope
29 of the EPU projects than had been used in the 2007-2008 Shaw scoping analysis, materials cost
30 estimates that were based on far more recent data and manpower estimates that reflected the revised
31 scope and loading estimates prepared by Bechtel. Most importantly, they were presented to the
32 executives of FPL in charge of EPU governance (and who were responsible for approving budget
33 changes for the projects) as the best "line-by-line" estimates available at the time, were materially
34 different from the 2008 estimates, and have continued to serve as the reference point for all
35 subsequent revisions to the cost estimates, including those that are being submitted to the FPSC in
36 May, 2010.

⁸⁸ Meeting request for EPU Saturday Session, July 25, 2009, 8:00 AM to 3:30 PM.

⁸⁹ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹⁰ Florida Power & Light Company's Petition to Determine Need for Expansion of Electrical Power Plans and for Exemption from Rule 25-22.082, F.A.C., Docket No. 070602-EI, September 17, 2007.

⁹¹ Extended Power Upgrades, Project Update, Turkey Point, July 25, 2009 and Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009.

⁹² Ibid., pp. 38-40 and pp. 51-52, respectively.

⁹³ Extended Power Upgrades, Project Update, Saint Lucie, July 25, 2009, pp. 44-49.

⁹⁴ Ibid., p. 50.

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Concentric has concluded that by the time [REDACTED] took the stand, the information presented on Schedule TOR-7, and the testimony related to it, was out-of-date. This opinion is supported by the statements of nearly all of the EPU project personnel we interviewed (other than the two individuals that participated in the decision to not update the testimony), and is strongly held by many of those we interviewed.

Concentric has also found no evidence to suggest that [REDACTED] FPL's witness on the cost effectiveness of the EPU projects, had any knowledge that updated cost estimates had been presented to the ESC. It is our understanding that he relied on the cost estimates provided on Schedule TOR-7, as sponsored by [REDACTED] and [REDACTED] was not in the EPU organization or the nuclear division of FPL.

Concentric has found no evidence to demonstrate that there was a widespread plan to purposefully keep updated information from being provided to the NCRC parties. The documents we have reviewed, and our interviews, indicate that there was considerable uncertainty within the project staff in September, 2009 as to whether the new cost estimates were "official" or not, and internal reports were inconsistent in their use or non-use of the updated forecast (see Section VIII for additional details). The EPU staff had experienced significant turnover and was also undergoing a major reorganization at that time, which appears to have contributed to the lack of clarity on this point.

VIII. Information Flow within FPL

As described in Section IV, the initial EPU Project budget was established by the FPL and Shaw scoping studies in 2007 and early 2008. The EPU Projects also established a variety of project instructions which identified the process for addressing changes or risk to this initial forecast. These Extended Power Uprate Project Instructions ("EPPIs") were first developed in spring 2008 and were updated at various points in the project, including following the introduction of a new senior management team in July 2009. Concentric's review of the EPPIs have identified three which are relevant to the flow of information related to cost estimates within FPL: 1) EPPI-300, EPU Project Change Control; 2) EPPI-320, Cost Estimating; 3) EPPI-340, EPU Project Risk Management Program. For purposes of our review of these instructions, Concentric has segmented our review into the period preceding July 25, 2009 and that after July 25, 2009.

A. Pre-July 25, 2009 Information Flow

As early as April, 2008 the EPU management team was made aware of concerns about the adequacy of the Shaw scoping analysis and associated budget. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of the EPU senior management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate within 2% of the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

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1 These events followed the publication of EPPI-300 on March 4, 2008. This project instruction
2 established a formal process for identifying and tracking potential changes to the initial project
3 budget. EPPI-300 describes the purpose of the trend program as follows:

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4 "This document shall be used for scope changes to Capital and O&M sub-projects
5 within the EPU project. Changes to the approved budget will be made using the
6 approved Scope Change/Trend Notice form (SCN/TN) which shall become part of
7 the budget records."⁵⁵

8 These potential changes were divided into scope changes (i.e., additional plant modifications) or
9 trends (i.e., increased costs of completing approved scope). In order to address a trend, EPPI-300
10 dictates that the trend should be identified on a formal "Trend Register" and a SCN/TN should be
11 completed to request changes to the project forecast. The SCN/TN was then routed to the [REDACTED]
12 [REDACTED] for approval. The process for addressing scope changes is similar, but requires additional
13 review of the potential scope change to ensure it is necessary for the EPU Projects. Once an
14 SCN/TN is initiated, EPPI-300 requires the [REDACTED] to establish a tracking
15 number and the potential budget impact of the SCN/TN. The [REDACTED] is responsible for
16 indicating the potential schedule impact. Once this information is added to the SCN/TN, it is
17 routed to the EPU project team member with the appropriate approval authority for the potential
18 cost impact. Upon approval, the SCN/TN is supposed to be incorporated into the project budget
19 and all future project reports⁵⁶.

20 Concentric requested the EPU Projects' Trend Registers and the all SCN/TNs since January 1, 2008
21 and received many, but not all, of the SCN/TNs prior to completing our report. Based on our
22 review of the Trend Register and SCN/TNs between January 1, 2008 and July 25, 2009 it would
23 appear that, when implemented, the EPU Projects' partially complied with this EPPI-300. For PSL,
24 a detailed and conscientiously maintained Trend Register was maintained between summer 2008 and
25 at least June 2009. However, it appears that the process for reviewing and approving trends was not
26 appropriately implemented at PSL. Many of the same trends were identified each month with
27 resolution or incorporation into the forecast. For PTN, it would appear that the trend register was
28 not as conscientiously maintained, but what was produced appears to comply with EPPI-300.
29 Similar to PSL, many of the same trends were identified without being included within the forecast.
30 Finally, many potential scope changes or trends appear to have been captured on the Risk Register,
31 which, as discussed below, was not synchronized with the project forecast, rather than the Trend
32 Register. For example, the CR discussed in Section IV above, resulted in a "High Risk Mitigation"
33 plan, but does not appear to have been included on the trend register. Thus potential scope changes
34 or trends were not adequately reflected within the forecast. Concentric also noted that prior to July
35 25, 2009, the [REDACTED] failed to identify a source of the funds on the SCN/TNs for
36 nearly every form.

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37 EPPI-320 provides the project instruction for cost estimating, including the development and
38 inclusion of contingencies and the estimates to be used on the SCN/TNs described above. This
39 instruction was established in March, 2008 and remains in effect today. Specifically, this instruction
40 states that "estimates should include project risks, uncertainties, and contingency. These should be
41 documented along with the methods for determining the percentage of risk and the amount of

⁵⁵ EPPI-300, Project Change Control, Pg 3, Rev 00

⁵⁶ Ibid at 4-6

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money associated with the contingency." EPPI-320 also indicates that it is supplemental to the Nuclear Projects Department Instruction - 304 ("NPDI-304").

FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."⁹⁷ NPDI-304 provides specific guidance on the development of contingencies and states:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency. Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008, and appear to have achieved Level 1 status by the end of 2009. FPL's practice prior to July 25, 2009, was to label the contingency as "Scope Not Defined", or "Scope Not Estimated." This line item, although it referenced the EPU Projects' risk matrices, was then used as a balancing variable to show a flat overall forecast trend and was not based upon project risk. As a result, the contingency was depleted month-by-month, the Risk Register was never synchronized with the project forecast and the EPU projects no longer maintained a level of contingency that is consistent with FPL's guidelines. In other words, the EPU senior management viewed the initial contingency as a static "allowance" that was to be used to meet increases in scope or cost rather than a dynamic value which reflects the risk remaining in the project, including those identified by the Risk Registers. This practice was acknowledged in the lessons learned sections of the July 25, 2009 ESC presentations by the statements that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project."

EPPI-340 was first initiated in February 2008 and establishes a process to ensure that each "identified risk is recorded in a risk matrix, and evaluated for probability, consequence, cost, schedule and project impact. The process set forth within EPPI-340 does not include a clear link to the EPU Projects' forecasts, but rather in as an evaluation tool for determining the level of uncertainty remaining in the project. Indeed, the July 25, 2009 PSL ESC presentation states "current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." Because the EPU senior management used the contingency as a balancing variable to depict a flat forecast trend, the Risk Management Program was never used in this manner. At best, by early 2009, the risk registers became little more than a repository for project risks and with little or no connection to the EPU Projects' forecast.

With regard to the risk management process, the EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

- It "underestimated the risk and costs associated with the fast track project."
- It "did not assess [the] capacity of [the] organization and costs," and

⁹⁷ NPDI-304, Estimate Preparation, Pg 9, Rev 0

⁹⁸ EPU lessons learned PPL from April 2010.

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- "Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009⁹⁹.

B. Post-July 25, 2009 Information Flow

As part of its transition, the new EPU senior management team has undertaken a process to revise many of the EPPIs to address many of the lessons learned that were identified in the July 25, 2009 ESC presentations. As described below, this process has included extensive revisions to EPPIs 300 and 340.

With regard to EPPI-300, this instruction has undergone at least four revisions since July 2009 and has been updated to include more rigorous trend identification, to more clearly define the roles of each person involved with the trend program and to define the timeframes for view and approval of these forms. These revisions included a revision to the SCN/TN forms. This revision changed the name of the form to explicitly include the forecast variations. Similarly, the SCN/TN forms being issued by the project today dictate the source of the funds for each scope change or forecast variance. The options for these funds include: 1) No change to project budget; 2) Contingency; 3) Variance to approved budget; 4) Other. Nonetheless, the EPU Project continues to use the contingency allowance for scope changes. While this is not prohibited by the current revision of EPPI-300, Concentric believes scope changes should be funded through a forecast variance to eliminate the use of contingency as a forecast balancing variable. This is consistent with NPDI-304 which states the following:

"Contingency usually does not include changes in scope, schedule or unforeseen major events such as strikes, tsunamis, hurricanes or earthquakes."

Lastly, the use of the trend program is improving with greater alignment between the Risk Register and the Trend Register.

EPPI 340 has been revised to similarly provide greater clarity with respect to the risk management program. These revisions include

The EPU senior management team does still have opportunities for improvement. Specifically, the current EPU management team has explicitly linked the risk registers to the cost estimate through the line item of "risk", but the link between the level of risk remaining in the project and contingency or scope not defined has yet to be established. The new EPU management team is addressing this issue through the retention of High Bridge Associates to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency. That work is not yet complete, and the contingency continues to be the balancing variable in the EPU cost estimate as of March 2010.

C. Conclusions Related to Flow of Information within FPL

Concentric has concluded that the EPU Project did not fully comply with its and FPL's published procedures for developing, estimating, approving, and tracking revisions to the cost estimates prior

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to July, 2009, and have yet to achieve widespread compliance today. It is clear that the process required for releasing funds from the contingency has not been followed, and that all revisions to the cost estimates have not been tracked through the trend program. These facts have resulted in widespread confusion within the organization regarding what the current approved budget is at any point in time, who has to approve changes to that budget, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the lessons learned sections of the July 25, 2009 ESC presentations. Here the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established... did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09... no formal cost benefit was performed on design changes."

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persist in 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization, often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. Some of these actions are attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

IX. Preliminary Recommendations for Improvements

Concentric's investigation into this matter has produced a number of recommendations for process improvements and corrective actions. These recommendations are presented below. Many of these recommendations are intended to improve the distribution of information within FPL, the NCRC docket team and to the FL PSC. In certain of the recommendations listed below, Concentric has noted that changes to the EPU Projects' since July 2009 may have already addressed these recommendations. Nonetheless, we believe the importance of these changes should continue to be stressed the EPU Project Team.

1. Concentric's investigation into this matter identified the flow of documentation and information from the business units to the other members of the docket team including regulatory affairs and other witnesses as an area of concern. Concentric recommends that this process be changed in order to provide timely and ongoing information within the NCRC docket team throughout each NCRC review cycle. This will help to ensure that any updated information is fully discussed within the NCRC docket team and prevent future concerns related to flow of information to the FL PSC.
2. Similar to recommendation one above, FPL and the FL PSC staff should revisit issue of intra/inter-cycle document production. The ongoing production of a limited number of key project documents would enhance the FL PSC staff's understanding of the projects and how

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<#>Pre-July 25, 2009 Information Flow
<#>Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but appears to have not been completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of the EPU senior management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

<#>The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

<#>It "underestimated the risk and costs associated with the fast track project."

<#>It "did not assess [the] capacity of [the] organization and costs," at ... [1]

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1 they have developed up to that point. It would also help to ensure adequate information is
2 distributed to the FL PSC on a timely basis.

- 3 3. The NCRC docket team has included and continues to include a number of first time
4 witnesses or witnesses with limited experience serving in this role. As a result, it is vitally
5 important that FPL's Legal and Regulatory Affairs departments continue to provide explicit
6 instruction and guidance to these individuals. FPL's Legal and Regulatory Affairs
7 departments should assume these individuals may not have a full understanding of the
8 regulatory process and the implications of their testimony. The importance of updating
9 one's pre-filed testimony and exhibits should be an explicit part of the witness training
10 program, along with an explanation of the meaning of the standard questions asked by FPL's
11 legal counsel. Witnesses should also be made aware of the fact that they are providing
12 testimony within a certain expertise or subject matter on behalf of the Company and not as
13 individuals. This may come with obligation or duty to education oneself on matters related
14 to this subject matter or expertise regardless of whether this falls within one's day-to-day
15 responsibilities.

- 14 4. As part of our investigation Concentric reviewed the list of invitees to the ESC
17 presentations. Noticeably absent from these lists of invitees is a representative from FPL's
18 Regulatory Affairs department. Given the importance and scale of the EPU Projects, and
19 the alternative cost recovery treatment being afforded to these projects, a relatively senior
20 member of Regulatory Affairs department should attend each future ESC presentation.

- 21 5. One of the more significant concerns identified by Concentric's investigation is the
22 ownership and consistent updating of EPU Project reports. Often in late 2009 these reports
23 were inconsistent and did not necessarily reflect the most current or accurate information
24 available. FPL and the EPU Project Team should establish and implement explicit report
25 owners (by report). In addition, the FPL and the EPU Project team should establish and
26 implement an explicit report sign off or dissent procedure. This procedure could be
27 modeled off of the current Invoice Review/Approval checklist form. In addition, the report
28 sign-off and dissent process should include a link to the ECP or other similar program for
29 anonymously notifying superiors in the event of a concern with project reporting.

- 30 6. To the extent that a performance indicator relies upon a calculation in order to produce a
31 particular indicator, the result of the underlying calculation should be reported along with
32 the performance indicator (i.e., budget or forecast performance). By providing the result of
33 the underlying calculation, a report preparer or reviewer can quickly identify any discrepancy
34 between the performance indicator and the calculation that produced that indicator.
35 Concentric's interviews also noted that individuals within the EPU Project Team were
36 uncertain as to what was represented by each performance indicator. Providing the
37 underlying calculation used develop that performance indicator will help clarify the purpose
38 of the performance indicator.

- 39 7. FPL should consider changing the reporting relationship of the EPU Project Controls
40 Director. While the change in reporting from the EPU Project Director to the Vice
41 President of Power Uprate is a positive development, the reporting relationship of the EPU
42 Project Controls Direct should include either a solid or dotted line outside of the EPU
43 Projects. This will help prevent any undue influence on the Project Controls Director and

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his staff. As an alternative, FPL could consider forming a separate Project Controls department, similar to the Integrated Supply Chain department. This separate Project Controls department would establish its own set of department processes, procedures and instructions which would then be applied consistently across the FPL Group. Concentric notes that future, large scale projects could benefit from a set of uniform and consistent project controls that incorporate best practices from across the organization.

8. FPL's current approach to establishing the EPU's contingency (Scope Not Defined) uses the contingency as the balancing variable to maintain the projects within their cost estimates. This is not consistent with FPL's EPPI-300 or with sound project management practices. The contingency should be based on the level of uncertainty in the project, which is best captured through a probabilistic analysis of the cost estimate. Reductions in the contingency should not typically be used to fund scope changes, and the contingency should only be released if the uncertainty associated with the project has declined. Concentric notes that the appropriate level of the contingency is an issue that has been assigned to High Bridge in its current independent review of the project cost estimate. The EPU Projects should establish a formal internal process to approve and communicate EPU budget, forecast or estimate changes on a total project basis each month (i.e., not annual). This process should be used for both scope additions or deletions and changes in the expected cost of approved project scope as a result of material or component cost escalation, increased manpower requirements or other factors. This process should include a report checklist to make certain all reports are updated consistently once a new budget, forecast or estimate is approved. Concentric notes that EPPI-300 has been revised twice since July 2009. If implemented thoroughly, these changes should address this recommendation.
9. To the extent condition reports are being utilized to document potential budget or cost estimate challenges, the CR closure processes should be revised to prevent the closure of a CR prior to the completion of a risk mitigation plan. In the alternative, risk mitigation plans can be tracked separately, but must not be closed until each of the action items listed on the risk mitigation plan are completed. Additionally, the completion of all action items must be documented and those documents should be preserved in a central location for the remainder of the EPU Projects. Concentric notes that this change may already be implemented within the current EPU action item list.
10. High Bridge Associates, or another independent third party, should be retained to complete an engineering based cost estimate of PTN Unit 4 and both PSI units as soon as possible. This estimate is needed to re-baseline the project forecasts and to enhance the certainty of future forecasts.
11. FPL should continue to maintain EPU Project staffing as a high priority. A sufficient number of staff members are required to maintain adequate project control, including the updating and production of project reports. Throughout our investigation it was noted to Concentric that many within the organization were overwhelmed with the amount of work that must be accomplished given the "fast-tracked" status of the project. At times, this may have contributed to the inconsistency or inaccuracy of certain project reports.
12. The EPU Project Team should document the names of each ESC presentation attendee and maintain this list of attendees with the ESC Presentations. This will increase the overall

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1 transparency into the EPU Projects and document that the proper level of oversight is being
2 provided to the EPU Projects.

- 3 13. The results of this investigation should be provided to the Corporate Responsibility Officer
4 for use in improving employee confidence throughout the organization. Management needs
5 to be aware of and understand the current fear of retaliation and mistrust that exists at lower
6 levels of the organization.

- 7 14. Concentric suggests FPL institute a procedure for conducting organizational readiness
8 assessments prior to commencing complex, large-scale projects. This procedure should
9 include a documented review of the Project Plan to ensure that it adequately details how the
10 project is expected to evolve over time and ensure proper expectations related to
11 performance reporting and measurement are communicated throughout the project teams.
12 In addition, these assessments should include a detailed review of executive management's
13 expectations regarding the development and updating of the project schedule, cost estimate,
14 budgets and reports.

- 15 15. Concentric and the EPU Project Management Team should conduct an investigation close-
16 out meeting at the end of this investigation. This meeting will review Concentric's findings
17 in this investigation, obtain management's response to those findings and discuss ways in
18 which processes or procedures could be improved to prevent similar project challenges.
19 Concentric would anticipate that the current Vice President of Power Uprate, the
20 Implementation Owner – South, the Project Controls Director, each Site Director and the
21 Site Project Controls Supervisor would be invited to attend this meeting.

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The chronology Concentric developed has raised several concerns with regard to the information flow within the EPU project team and to broader audiences within FPL. For the purpose of reviewing these issues, we have segmented the chronology into the period preceding July 25, 2009 and that after it.

Pre-July 25, 2009 Information Flow

Concentric has reviewed documents which indicate that the EPU management team was made aware of staff concerns about the adequacy of the Shaw scoping analysis and associated cost estimate as early as April, 2008. A detailed risk mitigation plan was developed to address this issue, but appears to have not been completed. These concerns re-surfaced after the Bechtel contract was awarded in November, 2008, and were brought to the attention of the EPU senior management in December, 2008 and February, 2009. By February, 2009 the EPU Project Controls group members had developed a revised cost estimate, albeit in preliminary form, that projected a \$129 million cost increase for PSL. The revised estimate is quite close to the values presented to the ESC in July, 2009. Similar estimates had been developed for PTN by March, 2009, but the EPU staff was directed to discontinue use of this estimate until management had reviewed it further. Throughout late 2008 and the first six months of 2009, Bechtel submitted several revisions to its cost estimates, all of which were substantially higher than its indicative bid and higher than the estimate developed as part of the Shaw scoping analysis.

The EPU's assessment of its own performance during this period, as presented to the ESC on July 25, 2009, was that:

It "underestimated the risk and costs associated with the fast track project,"

It "did not assess [the] capacity of [the] organization and costs," and

"Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner."

Concentric concurs with these assessments, and notes that many of these issues have been remedied through changes in procedures and the organizational structure since July 25, 2009¹.

An issue that contributed to the delay in informing the ESC about the likely cost increases was the EPU's treatment of the cost estimate contingency and the development and synchronization of the trend registers and risk registers.

¹ EPU lessons learned PPL from April 2010.

FPL has in place two sets of instructions that address how contingencies are to be developed and applied in the cost estimation process. EPPI-320 is specific to these projects and addresses how cost estimates are to be developed, including the development and inclusion of contingencies. This instruction has been in place since March, 2008, and remains in effect today [VERIFY]. EPPI-320 states that "estimates should include project risks, uncertainties, and contingency. These should be documented along with the methods for determining percentage of risk and the amount of money associated with the contingency." EPPI-320 states that it is supplemental to NPDI-304, which is a Nuclear Projects Instruction which provides specific guidance on the development of contingencies. NPDI-304 states that:

4.7.6. As a general rule, conceptual estimates should have a 25-30% contingency, Level 1 or preliminary estimates should have 15-25% contingency and Level 2 or definitive estimates a 5-10% contingency. The exact percentage is determined on a case by case basis.

The EPU projects' cost estimates fit the criteria for a conceptual estimate in 2008, and appear to have achieved or at least approached Level 1 status by the end of 2009. FPL's practice has been to label the contingency as "Scope Not Defined", or "Scope Not Estimated." FPL has defined the contingency as "an amount added to an estimate to allow for additional costs that experience shows will likely be required. This may be derived either through statistical analysis of past project costs, or by applying experience gained on similar projects."² The EPU instructions also state that the contingency should be "based on the level of uncertainty or complexity of a project." In addition to the contingency, the EPU estimates include an allowance for the expected (probabilistically determined) value of specific modifications or conditions which have arisen. This value is supposed to be derived from the risk register, which identifies the issue, its cost impact, its probability of occurrence, and its expected value. Items are supposed to enter the risk register from the trends register, which is an early-warning system for changing conditions at the projects which can affect cost or schedule performance. EPPI-300, another EPU instruction relating to changes in project cost estimates, describes the purpose of the trend program as follows:

2.1...The trend program fosters vigilance, awareness and action through constant probing, reporting, reviewing, discussing, and analyzing the projects performance against the project plan. The trend program is a dynamic decision-making process, which exposes pending decisions and their related impact(s) prior to the fact. Timeliness in identifying and resolving trends is a key element in controlling project cost and must be managed and recorded to maintain current forecasts.

² NPDI-304, p9.

Based on our review of documents, and as confirmed in our interviews, from May 2008 to today, the EPU's cost estimation process has not complied with these instructions. The most significant discrepancies between the instructions and actual practices include:

Since the Bechtel contract was executed in November, 2008, the project has not maintained a level of contingency that is consistent with FPL's guidelines; the contingency has been depleted month-by-month by scope changes, escalation and risk adjustments; the contingency has been treated as a balancing variable with the value derived simply by taking the total current cost estimate and subtracting out the known scope and risk register elements rather than basing it on the level of development or uncertainty associated with the project; currently, the contingency is far below the standards applicable for a Level 1 estimate. This practice was acknowledged in the July 25, 2009 lessons learned section of the ESC presentations by the comments that "...undefined scope depletion not dealt with in a timely fashion...undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope...must include undefined scope allowance based on level of risk/progress on project." The new EPU management team is addressing these issues through the retention of High Bridge to perform a third-party review of the cost estimates, and to develop a probabilistically-determined contingency, however that work is not yet complete, and the issue of the depleted contingency remains unresolved.

The trends registers and risk registers have not been developed in accordance with the projects' instruction set, and the risk register was not directly synchronized with the contingency or the cost estimate until after July, 2009; Concentric has reviewed the trends and risk registers for the projects as they existed from January, 2008 to today, and has found that..... This issue was acknowledged in the July 25, 2009 ESC briefing by the comments that "Current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk." The current EPU management team has explicitly linked the risk register to the cost estimate, however, the link between the risk register and the contingency (scope not defined) has apparently not been established, and is apparently awaiting the receipt of the High Bridge report.

A second issue that adversely affected the timely flow of project cost information within FPL relates to the process for developing updated project cost estimates, securing the approval of these updates, and communicating these updates within the FPL organization. FPL's EPPI-300 governs the process for these activities, and establishes the following procedures and responsibilities:

Potential changes to the cost baseline or forecast are to be captured through the trends program and recorded on the trends register. The [REDACTED]
[REDACTED] is responsible for the accuracy and timeliness of the trends register.

All issues are to begin as trends; depending on the nature of the issue, consideration is to be given to adding the issue to the risk register, as called for in EPPI-340, which governs the risk management program. The _____ is responsible for developing and updating the risk register [ADD POSITION PER EPPI 340]

If an issue identified in the trends/risk management programs cannot be resolved (mitigated), then a Scope Change/Forecast Variance Form ("SC/FV") is to be prepared to authorize a change to the project's cost forecast. SC/FVs are required to be established separately for each site and for all project modifications. The SC/FVs are to be signed and approved by up to ten different positions in the EPU organization, depending on the magnitude of the cost change; FPL's _____ is required to approve all SC/FVs in excess of \$5 million.

The SC/FVs are required to indicate where the additional funding is coming from, which can be from a release of funds from the contingency, or from a change to the approved budget.

All releases of funds from the contingency need to be reviewed by the EPU Site Project Director, and approved through the approval process for SC/FV forms.

All SC/FV forms are to be retained as permanent project records, and their location is to be known at all times.

Concentric requested all SC/FV forms for the EPU projects since 1/1/08. Our review of the documents produced in response to this request indicated that _____

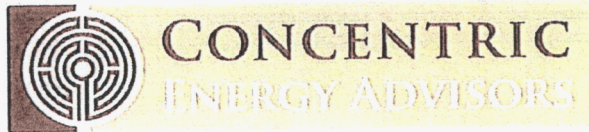
Concentric has concluded that the EPU's published procedures for developing, estimating, approving, tracking, and possibly retaining revisions to the cost estimates were largely ignored through July, 2009, and are still far from achieving widespread compliance. It is clear that the process required for releasing funds from the contingency has not been followed, and that revisions to the cost estimates have not _____. These facts have resulted in widespread confusion within the organization regarding what the current approved budget is at any point in time, who has to approve changes to that budget, whether there is a meaningful difference between the terms budget, cost estimate and cost forecast (all of which are used in different standard reports), and how to measure and report variances from the budget/estimate/forecast. Many of these same points were acknowledged by EPU management in the July 25, 2009 lessons learned sections of the ESC presentations, where the comments were made that "Individual Modification Budgets and Site Department budgets [were] not established...did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09...no formal cost benefit was performed on design changes."

Finally, due in large part to the confusion discussed above, our review of the EPU's standard reports and presentations has made us aware of several reports that were issued with incorrect, misleading or out-of-date information. These problems persisted into 2010 in the Monthly Operating Reports (MOPRs), monthly cash flow reports, and ESC presentations. Even more troubling are reports we have received from individuals within FPL that documents they were responsible for preparing were changed, after the originator had issued them, by someone else in the organization, often with no explanation as to why the changes were made. In other instances, individuals were told to make changes by someone else within FPL. While these accounts are very difficult to verify, they do not represent a single account or example, and some corroborating documentation has been provided to us. These actions appear to be largely attributed to managers that are no longer in the EPU organization, but they demonstrate the need for more definitive document control and ownership procedures.

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██████████ Investigation Report

Prepared for

Florida Power & Light Company

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May XX, 2010

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I. Introduction

1 On February 19, 2010 Mr. Lewis Hay, the Chairman and Chief Executive Officer of FPL Group,
2 Inc ("FPL Group") received a letter from [REDACTED] Letter", an
3 employee within the [REDACTED] of Florida Power & Light Company ("FPL").¹ The
4 [REDACTED] Letter included concerns about the "cost performance in Nuclear Projects and Extended
5 Power Uprate in 2009" and allegations related to the reporting of this performance to FPL's
6 executive management and the Florida Public Service Commission ("FLPSC")

7 Concentric Energy Advisors, Inc ("Concentric") was provided an electronic copy of this letter by
8 FPL's Legal and Regulatory Affairs departments on March 10, 2010². A copy of the letter is
9 attached as Exhibit 1. Following initial discussions between Concentric and FPL, Concentric was
10 retained by FPL's Legal department on March 15, 2010 to conduct an independent investigation of
11 the claims and matters set forth in the [REDACTED] Letter³. A copy of Concentric's engagement letter is
12 included as Exhibit 2. Pursuant to Concentric's engagement by FPL, Concentric is reporting directly
13 to FPL's Legal department, and specifically to [REDACTED]
14 [REDACTED]. All data requests were sent directly to [REDACTED] or his designee, [REDACTED]
15 Similarly, Concentric's findings and recommendations in this matter are being provided directly to
16 [REDACTED]

17 Concentric's investigation of the allegations raised in the [REDACTED] Letter explicitly excluded matters
18 related to the performance review of [REDACTED] and all other human resource related matters,
19 including the performance of specific individuals within FPL. Concentric understands that these
20 matters are being and will continue to be handled internally by FPL's Human Resources department.

21 It should be noted that, following our interview with [REDACTED] on March 17, 2010, [REDACTED]
22 notified Concentric and FPL via email on March 19, 2010 of potential retaliation by his supervisor⁴.
23 Specifically, [REDACTED] noted "that I am the next target for elimination from [name withheld for
24 confidentiality]'s organization. He told me in private that he does not intend [sic] being fired as his
25 predecessors for poor performance and he will not let a few 'stupid' people affect his management
26 effectiveness." A copy of this email is attached as Exhibit 3. Concentric reported this email to
27 FPL's Legal department. It is Concentric's understanding this matter is being addressed by the FPL
28 Human Resources department.

29 The remainder of our report is organized into eight sections. Section II presents a summary of
30 Concentric's work plan that was used to perform this investigation. Section III includes a summary
31 response to the [REDACTED] Letter, including reference to an interlineated copy of the [REDACTED] Letter.
32 Section IV presents a chronology of key events related to the [REDACTED] Letter occurring between
33 January 2008 and March 2010. Section V reviews Concentric's findings related to FPL's decision to
34 proceed with the Extended Power Uprate Projects at the Company's Saint Lucie ("PSL") and

35 1 [REDACTED] title as of the date of the [REDACTED] Letter is [REDACTED]

36 2 Email from [REDACTED] to Samuel Eaton, Project Manager, dated March 10,
37 2009. Concentric is unaware of and did not investigate what occurred between FPL's receipt of the letter and
38 Concentric's receipt of the letter on March 10, 2010.

39 3 Engagement Letter from [REDACTED] to John Reed, Re: Independent Investigation of February 19, 2010
40 correspondence to Mr. Lewis Hay, FPL Group Chairman and CEO, March 15, 2010.

41 4 Email from [REDACTED] dated March 19, 2010, to [REDACTED] John Reed, Sam Eaton, re: For your consideration.