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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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DOCKET NO. 110009-EI
FLORIDA POWER & LIGHT COMPANY

COMMISSION
CLERK

MARCH 1, 2011

EXTENDED POWER UPRATES - 2009

TESTIMONY & EXHIBITS OF:

JOHN J. REED

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF JOHN J. REED**

4 **DOCKET NO. 110009**

5 **March 1, 2011**

6
7 **Section I: Introduction**

8 **Q. Please state your name and business address.**

9 A. My name is John J. Reed. My business address is 293 Boston Post Road West,
10 Marlborough, Massachusetts 01752.

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

12 A. I am the Chairman and Chief Executive Officer of Concentric Energy Advisors,
13 Inc. ("Concentric").

14 **Q. Please describe Concentric.**

15 A. Concentric is an economic advisory and management consulting firm,
16 headquartered in Marlborough, Massachusetts, which provides consulting
17 services related to energy industry transactions, energy market analysis, litigation,
18 and regulatory support.

19 **Q. Please describe your educational background and professional experience.**

20 A. I have more than 30 years of experience in the energy industry, having served as
21 an executive in energy consulting firms, including the position of Co-Chief
22 Executive Officer of the largest publicly-traded management consulting firm in
23 the United States and as Chief Economist for the largest gas utility in the United
24 States. I have provided expert testimony on a wide variety of economic and

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1 financial issues related to the energy and utility industry on numerous occasions
2 before administrative agencies, utility commissions, courts, arbitration panels and
3 elected bodies across North America. A summary of my educational background
4 can be found on Exhibit JJR-EPU-1.

5 **Q. Are you sponsoring any exhibits in this case?**

6 A. Yes. I am sponsoring Exhibits JJR-EPU-1 through JJR-EPU-6, which are
7 attached to my direct testimony.

8	Exhibit JJR-EPU-1	Curriculum Vitae
9	Exhibit JJR-EPU-2	Testimony of John J. Reed 1998 – 2011
10	Exhibit JJR-EPU-3	Total Production Cost of Electricity
11	Exhibit JJR-EPU-4	List of the EPU Projects' Periodic
12		Meetings
13	Exhibit JJR-EPU-5	Concentric Observations Regarding the
14		EPU Projects' Activities in 2009
15	Exhibit JJR-EPU-6	Concentric's Prior Recommendations for
16		the EPU Projects

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

18 A. The purpose of my testimony is to review the benefits of nuclear power and the
19 appropriate prudence standard to be applied to Florida Power & Light's ("FPL"
20 or the "Company") decision-making processes in this Nuclear Cost Recovery
21 Clause ("NCRC") proceeding before the Florida Public Service Commission (the
22 "FPSC" or the "Commission"). In addition, I review the system of internal
23 controls that were being used by FPL to manage and implement Extended
24 Power Uprate ("EPU") Projects at FPL's existing Saint Lucie Units 1 & 2

1 (“PSL”) and Turkey Point Units 3 & 4 (“PTN” and collectively with PSL the
2 “EPU Projects” or the “Projects”) in 2009.

3 **Q. Please describe your experience with nuclear power plants, and**
4 **specifically your experience with major construction programs at these**
5 **plants.**

6 A. My consulting experience with nuclear power plants spans more than 25 years.
7 My clients have retained me for assignments relating to the construction of
8 nuclear plants; the purchase, sale and valuation of nuclear plants, power updates
9 and major capital improvement projects at nuclear plants; and the
10 decommissioning of nuclear plants. In addition to my work at FPL’s plants, I
11 have had significant experience with these activities at the following plants:

- | | | |
|----|-------------------|------------------|
| 12 | • Big Rock Point | • Oyster Creek |
| 13 | • Callaway | • Palisades |
| 14 | • Duane Arnold | • Peach Bottom |
| 15 | • Fermi | • Pilgrim |
| 16 | • Ginna | • Point Beach |
| 17 | • Hope Creek | • Prairie Island |
| 18 | • Indian Point | • Salem |
| 19 | • Limerick | • Seabrook |
| 20 | • Millstone | • Vermont Yankee |
| 21 | • Monticello | • Wolf Creek |
| 22 | • Nine Mile Point | • Vogtle |

23 I have recently been active on behalf of a number of clients in pre-construction
24 activities for new nuclear plants across the United States. These activities include
25 state and Federal regulatory processes, raising debt and equity financing for new
26 projects and evaluating the costs schedules and economics of new nuclear
27 facilities. These activities have included detailed reviews of cost estimation and

1 construction project management activities of other new nuclear project
2 developers.

3 **Q. Please summarize your testimony.**

4 A. The remainder of my testimony covers three main topic areas: (1) the benefits of
5 nuclear power to Florida; (2) the prudence standard; and (3) Concentric's review
6 of the Projects. Each of these topics is summarized below.

7 The five existing nuclear reactors in Florida have provided, and continue
8 to provide, substantial benefits to Florida customers. These benefits include
9 virtually no air emissions, increased fuel diversity, reduced exposure to fuel price
10 volatility, fuel cost savings, highly reliable base load capacity, and efficient land
11 use. Similarly, additional nuclear capacity is expected to provide more of these
12 same benefits to Florida.

13 The rule that governs the Commission's review of FPL's nuclear projects
14 calls for an annual prudence determination. The prudence standard encapsulates
15 three main elements. First, prudence relates to decisions and actions and not
16 costs incurred by a utility. Second, the prudence standard includes a
17 presumption of prudence with regard to the utility's actions. Absent evidence to
18 the contrary, a utility is assumed to have acted prudently. Third, the prudence
19 standard excludes hindsight. Thus the prudence of a utility's actions must be
20 evaluated on the basis of information that was known or could have been known
21 at the time the decision was made.

22 Finally, Concentric has reviewed the processes and procedures that are
23 used to manage and implement the Projects. This review has focused on the
24 Company's internal controls that are in place to provide assurance that the

1 Company meets its strategic, financial, and regulatory objectives related to the
2 Projects. Our review is premised on a framework developed by Concentric
3 when advising potential investors in new nuclear development projects and our
4 recent regulatory experience. Based upon our review, it is my conclusion that
5 FPL management's actions did not result in any imprudently incurred costs
6 during the review period, and the Company's costs should all be allowed in rates.
7 For the EPU Projects, in 2009, these prudent actions included managing an
8 organizational shift of more responsibilities to the sites and a management
9 transition within the EPU Projects, and making progress towards completion of
10 all four License Amendment Requests ("LAR") that must be submitted to the
11 Nuclear Regulatory Commission ("NRC"), including the submittal of one LAR
12 to the NRC. These actions, as of December 2009, left the EPU Projects better
13 positioned for the upcoming implementation of the EPU's through 2012.

14 **Q. Please describe how the remainder of your testimony is organized.**

15 A. The remainder of my testimony is organized into six sections. Section II
16 provides an overview of the potential benefits of additional nuclear power for
17 FPL's customers, and Section III discusses the appropriate prudence standard
18 for evaluating FPL's management of the Projects. Section IV describes the
19 framework that guided Concentric's review. Sections V and VI describe the
20 EPU Projects' activities in 2009 and Concentric's review of and observations
21 relating to the EPU Projects' 2009 project controls, respectively. Finally, Section
22 VII presents my conclusions.

1

2 **Section II: Potential Benefits of Nuclear to Florida**

3 **Q. Has nuclear power benefited FPL customers?**

4 A. Yes. Nuclear power has a long and successful history of operation in FPL's
5 power generating fleet. The four reactors at PSL and PTN have been generating
6 power for an average of over 34 years. Throughout the last three decades, these
7 units have benefited Florida customers by reliably producing emissions-free
8 energy, decreasing total fuel costs, enhancing the diversity of fuels used to
9 generate power and insulating customers from commodity price spikes.

10 **Q. Is it prudent to continue the development of additional nuclear capacity in
11 Florida?**

12 A. Yes, whenever that capacity can be developed on an economic basis over its
13 useful life. One of the most compelling advantages to additional nuclear power is
14 that it emits virtually no carbon dioxide. Whereas the alternative base load
15 power sources in Florida are carbon intensive, nuclear power emits no
16 greenhouse gases ("GHG"). Based upon FPL's 2009 generation and the
17 Environmental Protection Agency's ("EPA") eGrid tool, the four nuclear units
18 FPL operates in Florida avoid between 11 and 12 million tons of CO₂ emissions
19 per year compared to an average natural gas-fired, combined cycle generating
20 station.¹ The magnitude of avoided emissions would increase further if
21 compared with a coal-fired plant that is capable of producing the same amount
22 of energy, rather than a natural gas-fired power plant.

23 Legislation to address the problems associated with anthropomorphic
24 GHG emissions has been introduced on several occasions. These efforts are

1 currently stalled in Congress, but Federal regulation of the point sources of
2 emissions is poised to proceed nevertheless. In 2009, the EPA declared CO₂ and
3 several other GHGs to be dangerous to public health and welfare, and began a
4 process to enact Federal regulations for the emission of these gases.² At the
5 moment, the prospects for this type of regulation are unclear. The current
6 administration has made it clear that it would like to move forward with GHG
7 regulation through executive agencies if Congressional action does not produce a
8 satisfactory bill, and the Senate rejected a bill that would strip the EPA of the
9 authority to regulate CO₂.³ However, opposition to regulations, which could
10 affect factories, utilities and automobiles, remains strong in the House of
11 Representatives. Independent of progress at the Federal level, State and regional
12 programs such as the Regional Greenhouse Gas Initiative in the northeast and
13 the Western Climate Initiative in the northwest continue to move forward with
14 programs to regulate emissions.

15 While the stringency and form that GHG regulations will ultimately take
16 remains uncertain, there is a very real likelihood that industrial emitters, including
17 utilities, will be faced with regulations addressing GHG emissions within the next
18 several years.

19 Moreover, the diversification of the electric generation mix is an
20 important source of benefits to customers. In recent years, Florida has become
21 increasingly dependent on natural gas as a fuel source for electric generating
22 facilities.⁴ Unless the State's utilities continue to develop alternatively fueled
23 facilities, Florida's generation mix is likely to become extraordinarily dependent
24 on natural gas-fired generation. As a result, Florida will become even more

1 susceptible to natural gas price spikes and acutely vulnerable to natural gas supply
2 disruptions. Furthermore, the State would fall short of achieving any meaningful
3 reductions in GHG emissions levels.

4 **Q. How does the current price of natural gas compare with recent trends in**
5 **natural gas prices?**

6 A. While the wholesale price of natural gas is currently below levels that have been
7 observed for the past several years, the long-term outlook for the price of natural
8 gas is an increasingly important concept to consider when evaluating the benefits
9 of resource diversity. While the price of natural gas is currently on the low end
10 of what we have observed in recent years, the price has also been subject to
11 significant swings, and reasonably can be expected to revert to more traditional
12 cross-fuel price relationships over the likely 60 year life of a nuclear facility.

13 **Q. How do trends in the production cost of natural gas-fired generation**
14 **compare with trends in the price of nuclear power?**

15 A. The cost of nuclear power has been stable due to the fact that fuel represents a
16 comparatively small portion of the operating costs of nuclear power facilities.
17 According to the Nuclear Energy Institute (“NEI”), fuel accounts for
18 approximately 90% of the total production cost of energy from natural gas,
19 whereas fuel costs of nuclear power are only 25-30% of the total production
20 cost.⁵

21 As shown in Exhibit JJR-EPU-3, the production cost of energy from
22 nuclear power is substantially lower than other sources of base load energy. The
23 electric bills of Florida residents are and have been lower and much less subject
24 to fuel price volatility as a result of the lower production costs of nuclear power.

1 **Q. Is it appropriate for the Commission to continue to allow recovery of**
2 **certain pre-construction costs and construction carrying costs prior to the**
3 **units entering into service?**

4 A. Yes. Given the magnitude of the potential benefits of additional nuclear
5 capacity, it is absolutely appropriate to allow for cost recovery through the
6 annual NCRC process. The NCRC is important for both the Company and its
7 customers. With respect to the Company, the NCRC provides FPL's debt and
8 equity investors with some measure of assurance of cost recovery if their
9 investments are used to prudently incur costs. In addition, by allowing recovery
10 of carrying costs during construction, the NCRC eliminates the effect of
11 compound interest on the total project costs, which will reduce customer bills if
12 and when the facilities are constructed.

13 **Q. Have other utilities considering nuclear development activities noted the**
14 **necessity of NCRC-like recovery mechanisms?**

15 A. Yes. Utilities such as Duke, SCANA, Georgia Power, Progress Energy and
16 Ameren have publicly acknowledged the benefits and the necessity of cost
17 recovery mechanisms like the NCRC.

18 **Q. Are there benefits of nuclear power other than those that quantitatively**
19 **affect the price of electricity?**

20 A. Yes. The comparatively small footprint of a nuclear powered generating station
21 compared to alternative clean, emissions-free technologies is often overlooked.
22 By requiring less land, nuclear power plants limit the degree of forest clearing,
23 wetlands encroachments, and other environmental impacts associated with siting
24 a generating facility.

1

2 **Section III: The Prudence Standard**

3 **Q. Please generally describe the prudence standard as you understand it.**

4 A. The prudence standard is captured by three key features. First, prudence relates
5 to actions and decisions; costs themselves are not prudent or imprudent. It is the
6 decision or action that must be reviewed and assessed, not simply whether the
7 costs are above or below expectations. The second feature is that the standard
8 incorporates a presumption of prudence, which is often referred to as a
9 rebuttable presumption. The burden of showing that a decision is outside of the
10 reasonable bounds falls, at least initially, on the party challenging the utility's
11 actions. The final feature is the total exclusion of hindsight. A utility's decisions
12 must be judged based upon what was known or knowable at the time the
13 decision was made by the utility. The prudence of a utility's decisions cannot be
14 judged based upon the result of the decision or information that was not
15 available for several weeks, months or even years after the decision was made.
16 This feature would preclude a finding that identifies a decision as potentially
17 imprudent dependent upon the future outcome. Such a finding would create an
18 unachievable standard for utility managers.

19 **Q. Are there historical precedents for the prudence standard?**

20 A. Yes. The original standard of prudence was expressed by Supreme Court Justice
21 Louis Brandeis in 1923 as a means of guiding regulators conducting reviews of
22 utility capital investments. Since that time, substantial jurisprudence has been
23 developed to refine the Prudent Investment Test. Much of this was developed in
24 the 1980s following the nuclear construction programs of the previous two

1 decades. As originally proffered, the test provides a basis for establishing a
2 utility's investment or rate base based on the cost of such investment:

3 There should not be excluded from the finding of the base,
4 investments which, under ordinary circumstances, would be deemed
5 reasonable. The term is applied for the purpose of excluding what
6 might be found to be dishonest or obviously wasteful or imprudent
7 expenditures. Every investment may be assumed to have been made
8 in the exercise of reasonable judgment, unless the contrary is
9 shown... adoption of the amount prudently invested as the rate base
10 and the amount of the capital charge as the measure of the rate of
11 return ... [would provide] a basis for decision which is certain and
12 stable. The rate base would be ascertained as a fact, not determined
13 as a matter of opinion.⁶

14 The position of Justice Brandeis was endorsed in 1935 when Supreme Court
15 Justice Benjamin N. Cardozo stated:

16 Good faith is to be presumed on the part of managers of a
17 business. In the absence of a showing of inefficiency or
18 improvidence, a court will not substitute its judgment for theirs
19 as to the measure of a prudent outlay.⁷

20 The Prudent Investment Test offered by Justice Brandeis was applied sparingly
21 for the first four decades following its pronouncement. It was not until the
22 nuclear construction projects of the 1970s and 1980s that the Prudent
23 Investment Test, at least in name, was applied frequently in various electric utility
24 rate cases.

25 **Q. Please further describe the Prudent Investment Test.**

26 A. The Prudent Investment Test closely follows the traditional standard established
27 by Justice Brandeis. Under this standard, regulators must utilize a balanced,
28 retrospective review based upon the information that was known or knowable at
29 the time of the decision. In addition, the Prudent Investment Test considers a
30 range of reasonable behavior given the circumstances, rather than requiring
31 perfection or even consistently above-average performance.

1 We have not sought to retroactively apply new policies to Gulf's
2 prior actions and we have recognized that a utility cannot foresee
3 the future.⁹

4 We must avoid impermissibly applying hindsight review, which is
5 the application of facts that are known today to decisions made in
6 the past (i.e., Monday morning quarterbacking). As we consider
7 whether PEF acted prudently, we must ask ourselves, did PEF
8 know or should PEF have known about a particular set of
9 circumstances.¹⁰

10 As can be seen from these statements, the Commission has generally prohibited
11 the use of hindsight when reviewing utility management decisions. Instead, the
12 Commission has chosen to strictly follow the traditional standard by developing
13 a range of reasonable behaviors based on the circumstances that were known at
14 the time of the decision or action. The Commission's order in the 2009 Nuclear
15 Cost Recovery docket adopted a similar position. Further, the Commission has
16 noted a need to apply a consistent standard to reviewing utility decisions.

17

18 **Section IV: Framework of Internal Controls Review**

19 **Q. What is meant by the term "internal control" and what does it intend to**
20 **achieve?**

21 A. The Committee of Sponsoring Organizations of the Treadway Commission
22 ("COSO") is a global industry organization that provides guidance as to the
23 development, implementation and assessment of systems of internal control.
24 COSO has defined internal control as a process that provides reasonable
25 assurance of the effectiveness of operations, reliability of financial reporting and
26 compliance with applicable laws and regulations. This definition has been
27 further expanded to reflect four critical concepts. First amongst these is that
28 internal control is a process. While internal control may be assessed at specific

1 moments in time, a system of internal control can only be effective if it responds
2 to the dynamic nature of organizations and projects over time. Second, internal
3 control is created by people, and thus the effectiveness of an internal control
4 system is dependent on the individuals in an organization. Third, internal
5 control is specifically directed at the achievement of an entity's goals. Thus, risks
6 that present the greatest challenge to the achievement of those objectives must
7 take priority. Finally, internal control can provide only reasonable assurance.
8 Expectations of absolute assurance cannot be achieved.

9 **Q. Please describe the framework Concentric used to review the Company's**
10 **system of internal control as implemented by the EPU Projects in 2009.**

11 A. In order to review and assess the Company's internal controls, Concentric
12 utilized a similar framework to that which it has used previously for FPL's
13 NCRC proceedings. That framework is based upon Concentric's
14 contemporaneous experience advising prospective investors in new nuclear
15 projects and Concentric's regulatory experience.

16 In summary, the framework has focused on six elements of the
17 Company's internal controls, including:

- 18 • Defined corporate procedures
- 19 • Written project execution plans
- 20 • Involvement of key internal stakeholders
- 21 • Reporting and oversight requirements
- 22 • Corrective action mechanisms
- 23 • Reliance on a viable technology

24 Each of these elements was reviewed for five processes including:

- 1 ● Project estimating and budgeting processes
- 2 ● Project schedule development and management processes
- 3 ● Contract management and administration processes
- 4 ● Internal oversight mechanisms
- 5 ● External oversight mechanisms

6 Concentric's work in 2010 and 2011 is additive to our work reviewing the
7 projects in 2008 and 2009. In other words, Concentric's efforts in 2010 and
8 2011 reflect the information and understanding of the Projects gained during
9 Concentric's reviews in prior years.

10 **Q. Please describe how Concentric performed this review.**

11 A. Concentric's review was performed over two distinct periods. In the first quarter
12 of 2010, we performed the review described below with a focus on 2009
13 activities. Subsequently, in January and February 2011, we supplemented our
14 prior year's review to confirm and update our understanding of the EPU
15 Projects' 2009 activities. Concentric began our evaluation by reviewing the
16 Company's policies, procedures and instructions with particular emphasis placed
17 on those policies, procedures or instructions that may have been revised since
18 the time of Concentric's 2009 review. In addition, Concentric reviewed the
19 project organizational structures and key project milestones that were achieved in
20 2009. Concentric then reviewed other documents and conducted several in-
21 person interviews to make certain the EPU Projects' policies, procedures and
22 instructions were known by the project teams, were being implemented by the
23 Projects and have resulted in prudent decisions based on the information that
24 was available at the time of each decision.

1 Concentric's in person interviews included representatives from each of the
2 following functional areas:

- 3 • Project Management
- 4 • Project Controls
- 5 • Integrated Supply Chain Management ("ISC")
- 6 • Marketing & Communications
- 7 • Employee Concerns Program
- 8 • Quality Assurance/Quality Control ("QA/QC")
- 9 • Human Resources
- 10 • Transmission
- 11 • Environmental Services
- 12 • Legal Services
- 13 • State Regulatory Affairs
- 14 • NRC Regulatory Interface

15 In addition to our periodic reviews of the Projects, Concentric also
16 undertook during 2010 an investigation related to employee concerns regarding
17 project management, at the request of FPL.

18 **Q. Please describe why you believe it is important for FPL to have defined**
19 **corporate procedures in place throughout the development of the Projects.**

20 A. Defined corporate procedures are critical to any project development process as
21 they detail the methodology with which the project will be completed and make
22 certain that business processes are consistently applied to the project. To be
23 effective, these procedures should be documented with sufficient detail to allow

1 project teams to implement the procedures, and they should be clear enough to
2 allow project teams to easily comprehend the procedures. It is also important to
3 assess whether the procedures are known by the project teams and adopted into
4 the Company's culture, including a process that allows employees to openly
5 challenge and seek to improve the existing procedures and to incorporate lessons
6 learned from other projects into the Company's procedures. Within each of the
7 EPU Projects, the Project Controls and the Nuclear Business Operations staff is
8 primarily responsible for ensuring the Company's corporate procedures are
9 applied consistently by the various FPL and contractor staff members who are
10 working on the Projects. However, it is acknowledged that this is a shared
11 responsibility held by all project team members, including the project managers.

12 **Q. Please explain the importance of written project execution plans.**

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

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

3 A. One of the most challenging aspects of prudently developing a large project is
4 the ability to balance the needs of all stakeholders, including various Company
5 representatives and the Company's customers. This balance is necessary to make
6 certain that the maximum value of the project is realized. For example, it is
7 important that an EPU project be successfully implemented in an efficient
8 manner to avoid unnecessarily interfering with each plant's operations.
9 Modifications to an existing nuclear plant can have unwanted or unexpected
10 impacts on the day-to-day operations of the facility. By including these
11 stakeholders in a transparent project development process, the project sponsor
12 will be better positioned to deliver on these high-value projects.

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

15 A. Effective internal and external communications enable an organization to meet
16 its key objectives, and allow employees to effectively discharge their
17 responsibilities. By having an established reporting structure and periodic
18 reporting requirements, the project sponsor's senior management will be well
19 informed on the status of the project's various activities. Reporting requirements
20 give senior management the information it needs to leverage its background and
21 previous experience to prudently direct the many facets of the project. In
22 addition, established reporting requirements ensure that senior management is
23 fully aware of the activities of the respective project teams so management can
24 effectively control the overall project risks. In the case of the EPU Projects, this

1 level of project administration by senior management is prudent considering the
2 large expenditures that will be required to complete the Projects and the potential
3 impact of the Projects on the Company overall.

4 In order to be considered robust, these reporting requirements should be
5 frequent and periodic (*i.e.*, established daily, weekly and monthly reporting
6 requirements) and should include varying levels of detail based on the frequency
7 of the report. The need for timely and effective project reporting is well
8 recognized in the industry. To that point, a field guide for construction
9 managers notes:

10 Cost and time control information must be timely with little delay
11 between field work and management review of performance.
12 This timely information gives the project manager a chance to
13 evaluate alternatives and take corrective action while an
14 opportunity still exists to rectify the problem areas.¹¹

15 **Q. What is the purpose of corrective action mechanisms and why are they**
16 **important to ensure the Company is prudently incurring costs?**

17 A. A corrective action mechanism is a defined process whereby a learning culture is
18 implemented and nurtured throughout an organization to help eliminate
19 concerns that can interfere with the successful completion of the project.
20 Corrective action mechanisms help identify the root cause of issues, such as an
21 activity that is trending behind schedule, and provide the opportunity to adopt
22 mechanisms that mitigate and correct the negative impact from these issues. A
23 robust corrective action mechanism assigns responsibility for implementing the
24 corrective actions and a means by which these activities are managed. In
25 addition, a corrective action mechanism educates the project team in such a
26 manner as to ensure project risks are prudently managed in the future.

1 **Q. Are there any other elements of the Company's internal controls included**
2 **in your review?**

3 A. No. There were no other elements of the Company's internal controls included
4 in my review.

5

6 **Section V: EPU Projects Activities in 2009**

7 **Q. What period of time did your review of the EPU Projects encompass?**

8 A. As stated previously, my review of the EPU Projects was for the period January
9 1, 2009 through December 31, 2009. Concentric's review of this time period
10 relied upon data that was provided to Concentric in the period from January
11 2010 to August 2010, as well as in January and February 2011.

12 **Q. Please provide a brief introduction to FPL's EPU Projects.**

13 A. FPL is implementing an EPU at PSL and PTN. An EPU is the process of
14 modifying and upgrading specific components at a nuclear power plant to
15 increase the maximum power level at which the power plant can operate. Once
16 completed, the EPU Projects were expected to increase the nuclear generating
17 capacity of PSL and PTN by at least 414 megawatts in total as of January 2010.
18 The final increase in capacity will not be known until all design engineering is
19 complete.

20 **Q. How were the EPU Projects structured as of year-end 2009?**

21 A. The EPU Projects consisted of four overlapping phases: (i) the Engineering
22 Analysis Phase; (ii) the Long Lead Equipment Procurement Phase; (iii) the
23 Engineering Design Modification Phase; and (iv) the Implementation Phase.
24 The first three phases are already underway, and as of January 2010, the first

1 steps had been made in the Implementation Phase. As of January 2010, the EPU
2 Projects were expected to be implemented in 2011 for PSL Unit 1, and in 2012
3 for PTN Units 3 and 4 and PSL Unit 2. The EPU Projects were scheduled at
4 that time for completion in 2012, after the last of the outages required for
5 finishing the Implementation Phase at both PSL and PTN. The activities
6 undertaken in each of the four phases presented above are further described in
7 the testimony of FPL Witness Jones.

8 **Q. Please describe the general progress of the EPU Projects in 2009 as it**
9 **pertained to the phases you have identified above.**

10 A. The Engineering Analysis and Long Lead Procurement Phases were in progress.
11 One LAR Alternative Source Term (“AST”) submittal was completed in 2009
12 and, as of January 2010 three LAR submittals were planned for 2010. Regarding
13 Long Lead Procurement, most of the long lead contracts were awarded and the
14 equipment was being fabricated as of January 2010. The Engineering Design
15 Modification Phase was also underway, and, as of January 2010, two percent of
16 the design modifications were issued. Finally, the Implementation Phase was in
17 its nascent stage, with the overwhelming majority of the construction work
18 expected to be performed during the outages scheduled in 2010 through 2012.

19 **Q. Given that all phases of the Projects were underway, what was the timeline**
20 **for the implementation of the EPU Projects?**

21 A. As of January 2010, the project schedule included approximately 185 EPU
22 modifications at PSL and PTN. These modifications were expected to be
23 performed in successive outages for each of the nuclear units, the last of which
24 was scheduled for completion in the fall of 2012. The licensing schedule for

1 NRC approval was supportive of the implementation schedules for the physical
2 modifications to each unit. In 2009, the EPU Projects' management team
3 continued to make the necessary adjustments to the Projects to meet schedules,
4 control costs and contain additional project scope.

5 **Q. How were the EPU Projects organized in 2009?**

6 A. Prior to 2009, the EPU Projects were centrally managed to streamline oversight
7 and procurement functions. As the Projects moved from the analysis and
8 planning phases to include the Implementation Phase, FPL made the appropriate
9 decision to disaggregate its management structure and moved a significant
10 portion of the project management responsibility to the plant sites.

11 **Q. Please describe the reorganization of the project management in 2009.**

12 A. In July 2009, FPL determined that the reorganization of project management was
13 necessary as the EPU Projects moved from the Engineering Analysis and Long
14 Lead Procurement phases to the Implementation Phase. Previously consisting of
15 a centralized management team, the restructuring created business unit
16 management teams and staff at each site to report to a core leadership group at
17 FPL headquarters. This new structure allowed director-level control over the
18 operations and staff at each site, and its creation acknowledged the different
19 operating and staffing conditions between the EPU sites. This management
20 change was announced on July 15, 2009 and was implemented effective August
21 1, 2009.

22 **Q. What centralized oversight remained for the EPU Projects as of 2009?**

23 A. In 2009, FPL maintained a core project management team to provide centralized
24 oversight for the EPU Projects. The primary centralized positions that provided

1 this project management included: the Nuclear Power Uprate Vice President,
2 responsible for all aspects of project execution, including licensing, design,
3 engineering, cost, implementation and regulatory; the EPU Implementation
4 Owner - South, who provided oversight and governance for the respective site
5 EPU project; a Technical Director, who provided management and technical
6 support; the Controls Director, who provided direction, oversight and
7 governance to the Project Control Supervisor at each site and held overall
8 responsibility for the EPU Projects control functions including cost control,
9 estimating, scheduling and support activities; the *EPU Licensing and Regulatory*
10 *Interface Director*, who was responsible for the oversight, coordination,
11 *production and technical quality* of the licensing engineering and analysis related
12 to the LARs and other regulatory submittals; and the EPU Nuclear Cost
13 Recovery interface manager, responsible for the overall coordination of the
14 project with the Commission and FPL Regulatory Affairs.

15 **Q. Did the EPU Projects team consist of any other centralized management**
16 **positions?**

17 A. Yes. Throughout 2009, the EPU Projects team included a Quality Assurance
18 (“QA”) manager at the Company’s headquarters. Described in greater detail later
19 in this section of my testimony, this function necessarily acted separately from
20 the functions described above to maintain independence when assessing the
21 EPU Projects.

22 **Q. Please briefly describe each project site’s management team in 2009.**

23 A. Since the project management function was decentralized, each EPU site had its
24 own management team organized under a Site Project Director. This position

1 served as the senior EPU project management individual on site and held overall
2 responsibility for all aspects of the EPU project at the assigned site. Reporting
3 directly to the Site Project Director was the Site Project Manager, Site EPU
4 Contracts Manager, and the Site EPU Modification Engineering Manager.
5 Additionally, there were Site Managers in place for Project Controls, and for
6 EPU LAR, who reported to the Controls Director and the Director of EPU
7 Licensing and Regulatory Interface, respectively.

8 **Q. Was the management structure explicitly defined in a Company procedure**
9 **or instruction?**

10 A. Yes. Initially this management structure was outlined in the EPU Change
11 Management Plan. Extended Power Uprate Project Instruction ("EPPI")-140:
12 Roles and Responsibilities, was later revised to incorporate this management
13 structure.

14 **Q. What major milestones were met on the EPU Projects in 2009?**

15 A. The EPU Projects achieved several major accomplishments in 2009, including
16 the reorganization of the project management, change in management personnel
17 and organization, further outage planning, the execution of a groundwater
18 monitoring agreement for PTN, submittal of the first LAR for PTN, and
19 progress on the remaining LARs.

20 **Q. Please describe the other changes to the EPU Projects management in**
21 **2009.**

22 A. In addition to decentralizing the project management, there were several changes
23 of EPU management personnel during 2009. These included the appointment of
24 Mr. Terry Jones as the Vice President of Nuclear Power Uprates, the elimination

1 of the position of Director of EPU Projects, creation of the position of
2 Implementation Owner – South and the changed reporting structure of Project
3 Controls to the director level. A copy of the EPU Projects Organizational Chart
4 can be found in the testimony of FPL Witness Jones as Exhibit TOJ-3.

5 **Q. Please describe the EPU Projects' regulatory progress in 2009.**

6 A. FPL submitted the AST LAR for PTN Units 3 and 4 in late June 2009. The AST
7 LAR, which included preliminary EPU information required for approval before
8 the submittal of the EPU LAR to the NRC, was accepted by the NRC on
9 September 25, 2009. The company also continued to make progress on the two
10 EPU LARs for PSL (one for each unit), and the one EPU LAR for PTN during
11 2009. These filings were scheduled for submission to the NRC in 2010. The
12 NRC review and approval was expected to take approximately fourteen months
13 for each EPU LAR, during which time the NRC may require additional
14 modifications.

15 **Q. Were there any outstanding Conditions of Certification that were satisfied**
16 **in 2009?**

17 A. Yes. In October 2009, the South Florida Water Management District
18 ("SFWMD") governing board adopted the Fifth Supplemental Agreement
19 between SFWMD and FPL concerning the operation and monitoring of the
20 PTN cooling canal system. This agreement provided for two years of
21 groundwater monitoring prior to operating the PTN facility at increased power
22 levels and for two years following the implementation of the EPU Projects. The
23 adoption of this agreement closed the remaining Conditions of Certification for
24 the PTN EPU project.

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Section VI: Review and Observations Relating to the EPU Projects in 2009

Q. How is this section of your testimony organized?

A. This section describes my review of the five key processes (*i.e.*, project estimating and budgeting, project schedule development and management, contract management and administration, internal oversight mechanisms, and external oversight mechanisms), described above, as well as observations and recommendations related to each process.

Q. As a preliminary matter, what did your review lead you to conclude with regard to the prudence of FPL's actions in 2009 as they related to the EPU Projects?

A. FPL's decision to continue pursuing the EPU Projects 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 EPU Projects. In addition, it is my opinion that FPL's 2009 expenditures on the EPU Projects have been prudently incurred. While Concentric's review produced a list of observations (summarized in Exhibit JJR-EPU-5) and recommendations for process improvements, for nearly all of the recommendations, Concentric has noted that changes to the EPU Projects since July 2009 have already addressed these recommendations.

1 Project Estimating and Budgeting Processes

2 **Q. Please describe the mechanisms utilized to track the Projects' 2009**
3 **budgets.**

4 A. Several budget and cost reporting mechanisms were established to ensure that
5 key decisions related to the EPU Projects were prudent and made at the
6 appropriate level of FPL's management structure. These reporting mechanisms
7 included presentations and status calls as well as periodic reports. This allowed
8 the Company to leverage the experience of its executive team. A list of the EPU
9 Projects' periodic meetings can be found in Exhibit JJR-EPU-4.

10 **Q. How was undefined scope accounted for in the EPU Projects' cost**
11 **estimates?**

12 A. Undefined scope was accounted for by a specific line denoted as scope not
13 estimated within the EPU Projects' cost estimates. In 2009, the EPU Projects'
14 allowance for undefined scope was released at times to fund project costs. It is
15 Concentric's view that this practice was inconsistent with FPL's policies and
16 procedures, as described in more detail in Exhibit JJR-EPU-5.

17 **Q. Did the EPU Projects take steps to correct this concern?**

18 A. Yes. FPL retained an independent consulting firm, High Bridge Associates, Inc.
19 ("High Bridge") to assist the Company with establishing an appropriate
20 contingency for the project.

21 **Q. How were project controls executed by the site teams and the overall**
22 **project management team to track the EPU Projects' 2009 budget?**

23 A. The site team utilized multiple reports and reviews in 2009 to track the EPU
24 Projects' 2009 budget including those that are listed on FPL Witness Jones'

1 Exhibit TOJ-4. These reports included the Monthly Operating Performance
2 Report that categorized the overall performance of the EPU Projects as either on
3 budget, budget-challenged, or out of budget. Each site also produced monthly
4 cash flow reports in 2009, which contained monthly actual and forecast capital
5 expenditures as compared to the budget. These reports were reviewed and
6 discussed during formal project management meetings. Concentric has noted
7 certain instances in 2009 where certain project reports do not appear to have
8 been updated to reflect current cost estimates or cost-related performance
9 indicators did not appropriately reflect the EPU Projects' performance, as
10 described in more detail in Exhibit JJR-EPU-5.

11 **Q. What steps were taken by the Company to address Concentric's**
12 **observations?**

13 A. As part of its transition, the new EPU senior management team has undertaken a
14 process to revise many of the EPPIs to address many of the lessons learned over
15 the course of the project. As described below, this process has included
16 extensive revisions to EPPI-300, which was revised at least four times since July
17 2009 and has been updated to include more rigorous trend identification, to
18 more clearly define the roles of each person involved with the trend program and
19 to define the timeframes for review and approval of these forms. These
20 revisions included a revision to the forms used to track scope changes and trends
21 (*i.e.*, Scope Change/Trend Notice ("SC/TN") forms). This revision also
22 changed the name of these forms to explicitly include forecast variations.
23 Similarly, the SC/TN forms (now titled "Scope Change or Forecast Variation" or
24 "SC/FV" forms) being issued by the EPU Projects today dictate the source of

1 the funds for each scope change or forecast variance. The options for these
2 funds include: 1) No change to project budget; 2) Contingency; 3) Variance to
3 approved budget; or 4) Other. Nonetheless, the EPU Projects continued in 2009
4 to use the contingency allowance to fund scope changes, rather than maintaining
5 the contingency at a level that appropriately reflects the risk to the cost forecast.
6 Concentric believes scope changes should be funded through a forecast variance
7 to eliminate the use of contingency as a forecast balancing variable, consistent
8 with the Company's procedures.

9 Lastly, the use of the trend program is improving with greater alignment
10 between the Risk Register and the Trend Register (described in Exhibit JJR-
11 EPU-5).

12 **Q. In 2009, did anything related to the budgeting and expenditure tracking**
13 **processes occur that would eliminate the cost effectiveness of the EPU**
14 **Projects?**

15 A. No. The estimation and tracking of costs at both EPU sites is an ongoing
16 process, but, as of January 2010, the company did not record any cost challenges
17 that would eliminate the cost effectiveness of the project. The EPU Projects
18 were subject to an annual feasibility analysis that included a review of the
19 continued cost effectiveness of the Projects. In addition, FPL has regularly
20 reviewed the cost effectiveness of the EPU Projects to ensure that they remain in
21 the interest of customers.

22 **Q. How did the EPU Projects track and identify risks to the project schedule?**

23 A. In 2009, the EPU Projects used a Risk Matrix to track challenges to the current
24 budgets and cost estimates and to provide a brief explanation of the reasons for

1 the challenges. According to EPPI-340, the risk identification process covered
2 identification, assessment and analysis, handling strategy, risk management,
3 categorization, reporting, and mitigation. The Company defined risks as issues
4 that affect nuclear quality, environment, project cost, schedule, safety, security,
5 legal, plant operations, regulatory, and reputation. While Concentric believes the
6 EPU Projects did not fully implement the process described in EPPI-340 during
7 2009 (as describe further in Exhibit JJR-EPU-5), it is my opinion that the EPU
8 Projects did not incur any costs imprudently in 2009.

9 **Q. Did FPL perform an internal assessment of its risk management process?**

10 A. Yes. With regard to the risk management process, the EPU Projects' assessment
11 of its own performance during this period, as presented to the Executive Steering
12 Committee ("ESC") on July 25, 2009, was that:

- 13 • It "underestimated the risk and costs associated with the fast track project,"
- 14 • It "did not assess [the] capacity of [the] organization and costs," and
- 15 • "Early warning[s] on cost overruns and undefined scope depletion were not
16 dealt with in a timely manner."¹²

17 Concentric concurs with these assessments, and notes that many of these
18 issues have been remedied through changes in procedures and the organizational
19 structure.¹³

20 **Q. Did Concentric review the process by which the EPU Projects made**
21 **certain that each plant modification or component replacement is**
22 **necessary for the completion of the EPU Projects?**

1 A. Yes, Concentric reviewed the process by which FPL made certain that the costs
2 being charged to the EPU Projects in 2009 are separate and apart from the
3 normal maintenance and operations of PSL and PTN, and, therefore eligible for
4 recovery through the NCRC. This process included a detailed engineering
5 analysis to determine if the component replacement or plant modification is
6 necessary for plant operations under uprated conditions.

7 **Q. Has the Commission previously reviewed and approved this**
8 **methodology?**

9 A. Yes. In Commission Order PSC-09-0783-FOF-EI the Commission determined
10 that “FPL’s separate and apart methodology is reasonable and appropriate for
11 identifying NCRC costs.”¹⁴

12 **Q. Did Concentric have any observations related to the EPU Projects’**
13 **processes used to track cost performance in 2009?**

14 A. Yes. Concentric noted that the process as implemented in 2009 provides a
15 procedure for developing an initial target budget. However, the initial cost
16 estimate used to develop this budget became outdated. This initial scoping
17 estimate was completed in 2007 and represented an estimate of the EPU
18 Projects’ scope of plant modifications. Since that time, the magnitude of
19 changes has consistently increased and it was necessary for the Company to
20 revisit this cost estimate.

21 Concentric also noted increased transparency in reporting both within
22 the project team and to the Company’s senior management. Early in 2009, the
23 impact of project decisions on the EPU Projects’ budgets was not clearly defined
24 in the Projects’ reports. Between July 2009 and December 2009, the quantity

1 and quality of this information notably improved. Concentric concluded that as
2 of year-end 2009 further effort needed to be made to make sure project team
3 members clearly communicate throughout the EPU organization. This
4 improvement in communication should include the Projects' plans for addressing
5 current project challenges such as the availability of vendor and Company
6 resources.

7 Finally, Concentric previously provided recommendations regarding
8 budgeting and cost estimating management to the EPU Projects in 2010, as
9 detailed in Exhibit JJR-EPU-6. FPL has taken steps to address all of these
10 recommendations.

11

12 *Project Schedule Development and Management Process*

13 **Q. How did the EPU Projects monitor their schedule performance in 2009?**

14 A. In 2009, the EPU Projects team instituted several periodic reporting mechanisms
15 including daily, weekly, bi-weekly, and monthly conference calls. In addition, the
16 EPU Projects team issued a variety of reports, including a Daily Report. Exhibit
17 JJR-EPU-4 provides a listing of the meetings used in 2009 to monitor the EPU
18 Projects' schedule performance. A list of the reports used to monitor the EPU
19 Projects' schedule performance can be found in the testimony of FPL Witness
20 Jones as Exhibit TOJ-4. Many of these reports included a discussion of the EPU
21 Projects' schedule performance as compared to an initial target schedule.

22 **Q. Did the EPU Projects make any changes to these reports in 2009?**

23 A. Yes. In response to Concentric's recommendations presented to the Company
24 in 2009, FPL has added additional detail to the variance reports issued by the

1 EPU Projects. This additional detail has helped the project team to understand
2 the basis for any budget or schedule variance and to help minimize future
3 negative variances.

4 **Q. Did the EPU Projects use any other methods to monitor schedule**
5 **performance in 2009?**

6 A. Yes. FPL used an industry standard software package known as Primavera P-6 to
7 review the project schedule based on approved updates on an almost real-time
8 basis. Primavera provides Critical Path Method (“CPM”) Scheduling, which uses
9 the activity duration, relationships between activities, and calendars to calculate a
10 schedule for the project. CPM identifies the critical path of activities that affect
11 the completion date for the project or an intermediate deadline, and how these
12 activity schedules may affect the completion of the project. This software
13 package is used by many in the nuclear power industry to schedule refueling
14 outages and major capital projects.

15 **Q. What status reports did the EPU Projects’ key vendors provide to the**
16 **Company?**

17 A. In addition to monitoring the EPU Projects team’s efforts, the Company also
18 required that status reports be provided by its key vendors in 2009. At the
19 beginning of each vendor’s scope of work, FPL required the vendors to provide
20 a reasonable target schedule from which future progress would be measured.
21 The vendors were then responsible for providing monthly progress reports
22 regarding this schedule. The Company also received some insight regarding the
23 vendors’ progress by monitoring the number of work hours that were included

1 on each monthly invoice. This was done by comparing the number of work
2 hours expended during the prior month with a projection.

3 **Q. How did the EPU Projects track and identify risks to the project schedule?**

4 A. In 2009, the EPU Projects used the same Risk Matrix described earlier to track
5 challenges to the current schedule and to provide a brief explanation of the
6 reasons for the challenges.

7 **Q. What EPPI governs schedule creation and management?**

8 A. The processes for schedule creation and management was described in EPPI-
9 310: Project Instructions – Development, Maintenance and Update of Schedules.

10 **Q. What activities occurred in 2009 that altered the project schedule?**

11 A. The deadlines for completion of the LARs at both sites were changed to 2010.
12 Initially scheduled for completion in the fourth quarter of 2009, in January 2010
13 the Company expected the PSL Unit 1 LAR and the PTN LAR to be submitted
14 in the second quarter of 2010, and the PSL Unit 2 LAR to be submitted in fourth
15 quarter of 2010.

16 **Q. What outstanding challenges to the timely execution of the EPU Projects’
17 schedule existed in 2009?**

18 A. In 2009, there were unresolved challenges that posed threats to the then-current
19 EPU Projects’ schedule. On the regulatory front, progression of the EPU
20 Projects continued to hinge on the timely completion and submission of the
21 LARs to the NRC. The LARs remained a potential area for concern both
22 because of staffing and resource constraints, as well as the chance that additional
23 areas for modification will be discovered during the LAR analysis. Difficulties in
24 meeting staffing requirements continued to pose a challenge to the EPU

1 Projects' schedule in 2009, as well as to the broader nuclear industry in the
2 United States. FPL continued to respond to these challenges by allocating
3 additional Company and vendor resources to the EPU Projects and reassigning
4 company and vendor resources within the EPU Projects, and through continued
5 management vigilance.

6 **Q. Please describe these broader nuclear industry staffing challenges.**

7 A. The nuclear industry is facing a significant shortage of highly skilled labor,
8 primarily due to the amount of time that has elapsed since the United States last
9 completed construction of a commercial nuclear power plant, and the high skill
10 levels and regulatory criteria required to work within the nuclear power industry.
11 Over time, reduced interest amongst students in nuclear science and engineering
12 programs has forced universities to scale back or even close these departments.
13 The impact of these factors is exacerbated by the number of existing employees
14 who are expected to be retirement-eligible in the coming decade, and by a recent
15 upswing in demand for nuclear workers as more nuclear operators consider
16 uprating their existing units and constructing new nuclear power plants.

17 **Q. Please describe how many nuclear industry employees are expected to be
18 retirement eligible in coming years.**

19 A. According to NEI, approximately 38% of the 120,000 workers currently in the
20 nuclear work force may reach retirement eligibility within five years.¹⁵

21 **Q. Please describe Concentric's observations related to the EPU Projects'
22 schedule development and management in 2009.**

23 A. Foremost, Concentric noted that the EPU Projects' schedule as of January 2010
24 contained approximately four months of additional float before additional delays

1 in the review and approval of the LARs would affect the implementation date of
2 the higher plant capacities. The EPU Projects management stated that in the
3 case of delayed NRC approval of a LAR(s), the project will move forward with
4 the physical modifications to the plants and return the units to service at each
5 unit's then currently licensed output. Once the NRC approves the LAR, the
6 Company will then be able to increase output to the EPU levels. Concentric
7 believes this contingency plan is important since it will provide the EPU Projects
8 with additional schedule flexibility.

9 Further, Concentric has noted that the EPU Projects struggled to obtain
10 the resources necessary to complete the LARs during 2009. This resulted in
11 resource sharing between projects and a decision to prioritize certain LARs. This
12 concern appears to have affected both the EPU Projects staff and the EPU
13 Projects' vendors. In light of these constraints, FPL's management has
14 responded reasonably to these challenges by prioritizing activities and allocating
15 additional resources to the project.

16

17 *Contract Management and Administration Processes*

18 **Q. In 2009, what processes were used to ensure the EPU Projects were**
19 **prudently managing and administering the Company's procurement**
20 **functions?**

21 A. Several policies and procedures governed the procurement functions in 2009,
22 including General Operating ("GO") Procedure 705 and Nuclear Policy NP-
23 1100, Procurement Control. In 2009, these policies were administered through
24 the ISC organization and include a significant breadth and depth of procurement

1 processes, including a stated preference for competitive bidding wherever
2 possible, the proper means for conducting a comprehensive solicitation, initial
3 contract formation, and administration of the contract.

4 **Q. Were there cases in 2009 when contracts were executed without first**
5 **having gone through a competitive bidding process?**

6 A. Yes. Certain situations called for the use of single or sole source procurement
7 methods. The reasons for this included the fact that there were very few
8 suppliers qualified to handle the vast amount of proprietary technical
9 information relied upon when operating or working on a nuclear plant.
10 Additionally, single sourcing was appropriate in certain situations that involved
11 leveraging existing knowledge or expertise or otherwise capitalizing on synergies.

12 **Q. Please describe the procedures involved in the awarding of non-**
13 **competitively bid contracts.**

14 A. Single and sole source procurements required documented justification for using
15 a single or sole source procurement strategy and senior-level approval. The
16 recommendation of any vendor for a single or sole sourced contract necessitated
17 the completion of a Single/Sole Source Justification (“SSJ”) Memorandum.
18 This document must describe the conditions that have given rise to the need to
19 procure outside services, a justification for not seeking competitive bids, and an
20 explanation of the reasonableness of the vendor’s costs.

21 **Q. Were any contracts with a value in excess of \$100,000 awarded in 2009**
22 **under SSJ conditions?**

23 A. Yes, three contracts in excess of \$100,000 were single sourced in 2009 for
24 Absolute Consulting, High Bridge Associates, and Proto-Power Corporation.

1 These contracts, and their respective values, are listed on Schedule T-7 of the
2 Company's Nuclear Filing Requirements.

3 **Q. Did the Commission previously identify concerns with the Company's**
4 **SSJs?**

5 A. Yes. In Docket 080009-EI, the Commission identified a need for the Company
6 to improve the level of documentation and transparency provided by the SSJs
7 such that a third party could better understand the valid business reason for this
8 procurement strategy.

9 **Q. In 2009, how did the EPU Projects team respond to the Commission's**
10 **concerns?**

11 A. Throughout 2009, the EPU Projects team conducted training for all existing
12 project team members and for any new team member who joined the project.
13 This training was focused upon the level of detail required to adequately
14 complete an SSJ and provide sufficient transparency to third parties. Following
15 this training, FPL produced two additional SSJs for contracts greater than
16 \$100,000. Each of these SSJs provided additional details related to the process
17 for determining the valid business reason for the procurement strategy and an
18 explicit discussion of the reasonableness of the proposed cost as compared with
19 other vendors or previous projects within a similar expertise.

20 **Q. Please describe the Company's competitive bidding process in 2009.**

21 A. The competitive bidding process begins not with the solicitation of bids, but
22 with the creation of a purchase requisition. Pursuant to the creation of a
23 purchase requisition, the department that originated the request, in conjunction
24 with ISC, was required to develop a scope of work or technical specification and

1 develop a timeline to ensure it meets the schedule requirements. Once these
2 steps were complete, the originating department was required to provide the
3 purchase requisition to the Nuclear Supply Chain (“NSC”) Sourcing Specialist
4 who was a member of ISC.

5 The NSC Sourcing Specialist, with assistance from the originating
6 department, was responsible for the creation and issuance of the request for
7 proposals (“RFP”), but worked in concert with the originating department when
8 identifying potential bidders and determining the base commercial terms and
9 conditions that were included in the RFP. What followed was the assembly of
10 the RFP package, which incorporated any special terms identified by the
11 originating department, an RFP transmittal letter providing the potential bidders
12 with all specific instructions and requirements, and any applicable attachments.

13 Upon receipt of proposals, the NSC Sourcing Specialist sorted and
14 distributed all submissions to subject matter experts for technical and
15 commercial analysis. If questions arose during this review process, written
16 requests for clarification or additional information were sent to the bidder for
17 commercial or technical clarifications. After this initial phase, the originating
18 department undertook a side-by-side comparison of the bids’ technical
19 information, taking into consideration scope requirements, differences in
20 operational impacts, whether or not any technical exceptions were necessary, and
21 the potential for impacts to the scope of work. At the conclusion of this
22 process, the NSC Sourcing Specialist and the originating department together
23 determined the recommended supplier.

1 **Q. What process was used in 2009 to make certain that the Company and its**
2 **customers received the full value of the various contracts for services and**
3 **materials?**

4 A. FPL utilized an invoice review process to make certain that the Company and its
5 customers received the full value of the goods and services being procured for
6 the EPU Projects. The process required a review of each invoice by key project
7 team members who worked closely with the vendor on the goods and services
8 for which payment was requested to make certain that the costs being billed were
9 correct and appropriate. Each invoice review required approval by certain senior
10 project team members based upon the individuals' corporate approval authority.

11 **Q. Does Concentric have any observations and recommendations related to**
12 **the processes used to manage the EPU Projects' procurement functions in**
13 **2009?**

14 A. Yes. Overall, Concentric noted that the EPU Projects' procurement functions
15 performed quite well in 2009. Concentric noted that ISC personnel have
16 responded to Concentric's 2009 recommendations to make certain that all costs
17 are charged to the appropriate EPU project by vendors who have similar scopes
18 of work at both PTN and PSL, and the Company's affiliated Point Beach
19 Nuclear Plant in Two Rivers, Wisconsin. This effort included reminders of
20 proper cost reporting through informal discussions with vendors on a periodic
21 basis and a formal communication in November of each year. As an additional
22 review, Nuclear Business Operations performed a separate, independent review
23 of the cost being charged to the EPU Projects to help ensure the costs were
24 properly charged to the appropriate Company account.

1 Concentric concluded in 2010 that one further enhancement related to
2 the EPU Projects' procurement procedures could be made. Concentric believed
3 a need existed for a formal guideline related to procurements in excess of \$5
4 million. This guideline would state that any bids received in response to an RFP,
5 in excess of \$5 million, are reviewed by ISC roughly contemporaneously and
6 with at least two people participating in the review process. Similarly, when a
7 material delay is granted to one RFP respondent, all bidders should be notified of
8 an opportunity to further revise their bids. Concentric has not observed, and
9 does not believe there have been, any instances of impropriety in the EPU
10 Projects' RFP process in 2009 or prior years. This recommendation was made
11 solely with the intent to prevent future challenges or concerns before they occur.
12 FPL implemented a new Procurement Guideline in 2010 to address these
13 observations. This guideline, which defined contracts in excess of \$5 million as
14 "Critical Path Agreements," established procedures to be followed regarding
15 justification and bid review for such arrangements.¹⁶

16

17 *Internal Oversight Mechanisms*

18 **Q. What mechanisms exist for internal oversight and review of the EPU**
19 **Projects?**

20 A. There are three primary mechanisms used to make certain the EPU Projects
21 received adequate oversight in 2009. First, the Company has in place senior
22 oversight and management committees, including the Board of Directors, the
23 Nuclear Committee on the Board of Directors, the Company's Nuclear Review
24 Board, and On-Site Review Groups at both PSL and PTN. In addition, the

1 Company's senior management received a briefing of the EPU Projects on a
2 periodic basis. The Company's Chief Nuclear Officer also received a briefing on
3 an approximately bi-weekly basis.

4 Secondly, the EPU Projects were subject to an annual review by the FPL
5 Internal Audit Division. Lastly, the FPL QA/QC department was responsible
6 for making certain that the FPL QA program was being implemented by the
7 EPU Projects.

8 **Q. With the EPU Projects' management effort now decentralized, how was**
9 **information communicated from the site-level to the corporate-level in**
10 **2009?**

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

17 **Q. Please describe the Internal Audit division and its functions.**

18 A. The Internal Audit process was a backstop to make certain the EPU Projects
19 complied with the Company's internal policies and procedures. The Internal
20 Audit Division did not report to any of the EPU Projects team members to
21 protect the Internal Audit employees' independence. Instead, Internal Audit
22 reported directly to the FPL Group (now NextEra Energy) Chairman and CEO.
23 Internal Audit's 2009 financial review of the EPU Projects (performed in 2010)

1 ensured that costs were being appropriately charged to the Projects and that the
2 Projects complied with the Company's accounting policies.

3 **Q. Did Internal Audit conduct a review of the EPU Projects costs charged in**
4 **2009?**

5 A. Yes. Costs incurred by the EPU Projects in 2009 were reviewed by the
6 Company's Internal Audit in Spring 2010, and a final report was issued by
7 Internal Audit in May 2010. The EPU Projects' controls were deemed to be
8 adequate by Internal Audit, and costs charged to the NCRC were deemed to be
9 appropriate. Any exceptions noted by Internal Audit, all of which were minor in
10 nature, either were remedied by the EPU Projects during the course of the audit,
11 or resulted in follow-up action items agreed to by management.

12 **Q. Please describe the FPL QA/QC division and its purpose.**

13 A. In 2009, the FPL QA/QC division was responsible for implementing the
14 Company's QA Program that was mandated by the NRC in 10 CFR 50,
15 Appendix B. The QA/QC division was separate from the EPU Projects and
16 reported to the Company's Chief Nuclear Officer through the Director of
17 Nuclear Assurance. Federal regulations define eighteen criteria for a NRC
18 licensee's QA program. It was the responsibility of the QA/QC division to
19 ensure that FPL's QA program met these criteria.

20 **Q. What quality assurance activities, related to the EPU Projects, took place**
21 **in 2009?**

22 A. Throughout 2009 the QA/QC department prepared for the implementation
23 phase of the EPU Projects. As the EPU Projects commenced the early stages of
24 the implementation phase, QA inspectors were assigned to both PTN and PSL.

1 The QA/QC division was also responsible for reviewing certain activities by the
2 EPU Projects' vendors, both at the EPU project sites as well as at certain
3 vendors' manufacturing facilities. These activities included multiple in-person
4 reviews of the project vendors' methodologies, qualifications and QA programs.
5 Finally, the QA/QC division monitored NRC QA activities and suggested
6 changes to the EPU Projects to respond to the NRC's findings at other power
7 uprate projects.

8 **Q. What practice did the Company implement in 2009 to help provide the**
9 **EPU Projects with additional internal control and cost management?**

10 A. FPL began producing EPU Projects Whitepapers in response to Concentric's
11 recommendations in 2009. These documents were produced by the project team
12 when a significant decision was made that might impact the Projects. The
13 memoranda included a discussion of the information that was known at the time
14 of the decision, what decision was made and the basis for that decision. The first
15 of these Whitepapers was completed in October 2009 and related to the
16 Company's decision to proceed with the replacement of the condensers at PTN.

17 **Q. Please provide Concentric's observations related to the internal oversight**
18 **and review mechanisms utilized in 2009.**

19 A. Concentric recognized that in mid-2009 FPL's senior management team
20 increased its oversight of the EPU Projects. This increased oversight included
21 more frequent meetings with certain members of senior management and a
22 greater depth of reporting to senior management. In addition, the EPU Projects
23 were reviewed by Internal Audit to address the EPU Projects' compliance with
24 the Company's financial and accounting controls. Similarly, Concentric noted

1 that the Company's QA/QC department was actively preparing for the
2 implementation of the EPU Projects by conducting surveillance activities and
3 preparing its team for upcoming implementation activities. Nevertheless,
4 Concentric noted a potential need to reinforce the QA/QC department with an
5 individual with design engineering experience, discussed in Exhibit JJR-EPU-5.

6 Additionally, Concentric noted that a potential challenge to the EPU
7 Projects implementation may have existed with the turbine rotors being procured
8 from Siemens. The manufacturing process of these turbines was being
9 adequately monitored by the Company's QA/QC department, and additional
10 management oversight has occurred since our review procedures were completed
11 in 2010.

12

13 *External Oversight Mechanisms*

14 **Q. What external oversight mechanisms did the Company utilize in 2009 to**
15 **ensure the EPU Projects had adequate internal controls and were**
16 **prudently incurring costs?**

17 A. There were several external oversight and review mechanisms in place for the
18 EPU Projects, including the retention of my firm, Concentric, to assess the EPU
19 Projects' internal control mechanisms, the engagement of High Bridge
20 Associates to provide third-party cost estimation guidance, ongoing contact with
21 the Projects' major vendors' quality oversight functions, industry contacts, and
22 the FPSC Staff's financial and internal controls audits. Additionally, as a publicly
23 traded company, NextEra Energy must undergo an annual company-wide audit

1 of its financial and internal controls. As discussed by FPL Witness Powers, these
2 reviews were conducted by Deloitte & Touche, LLP in 2009.

3 **Q. Please expand on Concentric's role vis-à-vis external oversight and**
4 **review.**

5 A. Concentric conducted a review of the EPU Projects, their procedures, and the
6 various mechanisms in place to ensure compliance with these procedures in
7 2009. Concentric focused on ensuring that these internal controls were
8 implemented, and as a result, that the EPU Projects prudently incurred costs
9 during 2009.

10 **Q. Please describe the scope of work performed by High Bridge Associates.**

11 A. The Company engaged High Bridge Associates, a project management and
12 consulting services company, to develop a detailed, bottom-up cost estimate for
13 the EPU activities taking place at PTN Unit 3.

14 **Q. In 2009, did industry contacts provide a form of external oversight and**
15 **review?**

16 A. Yes. FPL was a member of industry groups that provided further guidance
17 about uprate projects. These groups include the Institute of Nuclear Power
18 Operations, the World Association of Nuclear Operators, the Electric Power
19 Research Institute and NEI, among others. Each of these groups provided the
20 EPU Projects team access to a wide breadth and depth of information that was
21 used to enhance the project team's effectiveness. Additionally, the EPU Projects
22 team members maintained close relationships with their counterparts at other
23 nuclear power plants around the country. These valuable relationships allowed

1 the EPU Projects team to monitor developments or challenges at other plants
2 and leverage those experiences at PSL and PTN.

3 **Q. Did Concentric have any observations related to external oversight and**
4 **review of the Projects in 2009?**

5 A. During its review, Concentric noted that FPL appeared to have taken reasonable
6 steps to obtain and implement lessons learned from outside sources in 2009.
7 These lessons learned are vital to the successful execution of the Projects.

8 **Q. Did Concentric note any other observations related to the EPU Projects**
9 **performance in 2009?**

10 A. Yes, Concentric noted an instance where the information provided by FPL to
11 the FPSC did not reflect the most up-to-date information as of the time it was
12 provided to the FPSC in September 2009. In order to address this concern, and
13 to improve the flow of the EPU Projects' information to the Commission,
14 Concentric has provided the below recommendations to the Company.

15 • Concentric recommends that the process for providing updated information
16 to regulatory affairs be changed in order to provide timely and ongoing
17 information within the NCRC docket team throughout each NCRC review
18 cycle. This will help to ensure that any updated information is fully discussed
19 within the NCRC docket team and prevent future concerns related to flow of
20 information to the FPSC. Concentric has been informed that this change has
21 already been implemented.

22 • Similar to the recommendation above, FPL and the FPSC staff should revisit
23 the issue of intra/inter-cycle document production. The ongoing production
24 of a limited number of key project documents could enhance the FPSC

1 staff's understanding of the Projects and how they are developing on an on-
2 going basis.

- 3 ● The NCRC docket team included some first time witnesses or witnesses with
4 limited experience serving in this role. As a result, it is vitally important that
5 FPL's Law and Regulatory Affairs Departments continue to provide explicit
6 instruction and guidance to these individuals. FPL has implemented
7 procedures that stress the importance of providing timely and accurate
8 information to the Commission and the parties in the NCRC proceedings.
- 9 ● As part of our review Concentric reviewed the list of invitees to the ESC
10 presentations. Noticeably absent from these lists of invitees in 2009 was a
11 representative from FPL's Regulatory Affairs and Law Departments. It is
12 our understanding that this procedure has been changed to include these
13 groups.

14 As I stated earlier, however, it is my opinion that all of FPL's 2009
15 expenditures on the EPU Projects have been prudently incurred.

16

17 **Section VII: Conclusions**

18 **Q. Please summarize your conclusions.**

19 A. It is my conclusion that there were no imprudently incurred costs or project
20 management deficiencies that led to imprudently incurred costs during
21 Concentric's review periods for the Projects. Based on Concentric's review of
22 the Projects, we also have made a number of recommendations and observations
23 related to the Projects that are detailed in Section VI and Exhibits JJR-5 and JJR-
24 6 of my testimony. These recommendations and observations are intended to

1 enhance the effectiveness of FPL's management of the Projects. In addition, it is
2 important to note that for over three decades nuclear power has provided a
3 number of substantial benefits to utility customers in Florida. These benefits
4 include electric generation with virtually no GHG emissions, fuel cost savings,
5 fuel diversity, reduced exposure to fuel price volatility and more efficient land
6 use. As a result, it is prudent for FPL to develop additional nuclear capacity for
7 the benefit of its customers. In order to do so, FPL is carefully managing the
8 EPU Projects through capable project managers and directors who are guided by
9 detailed company procedures and appropriate management oversight.

10 **Q. Does this conclude your testimony?**

11 **A. Yes, it does.**

1 Environmental Protection Agency, eGRIDweb online application.
<http://cfpub.epa.gov/egridweb/view.cfm>

2 Broder, John. *E.P.A. Clears Way for Greenhouse Gas Rules*. New York Times, April 17, 2009.

3 Gardner, Timothy, and Richard Cowan. *Senate Defeats Move to Stop EPA CO₂ Regulation*. Reuters, June 10, 2010.

4 *Florida Nuclear Profile* (last updated September, 2010). Department of Energy, Energy Information Administration.

5 Production cost is equal to operating and maintenance costs plus fuel costs.

6 Separate, concurring opinion of Justice Louis Brandeis, *Missouri ex. Rel. Southwestern Bell Telephone Co. v. Public Service Commission*, 262 U.S. 276 (1923). Clarification added.

7 *West Ohio Gas Co. v. Public Utilities Commission of Ohio* (No.1), 249 U.S. 63, (1935), Opinion.

8 Staff recommendation in Docket no. 060658-EI – Petition on behalf of Citizens of the State of Florida to require Progress Energy Florida, Inc to refund customers \$143 million, citing.

9 Docket No. 820001-EU-A, In Re: Investigation of Fuel Cost Recovery Clauses of Electric Utilities (Gulf Power Company – Maxine Mine).

10 FL PSC Order No. PSC-07-0816-FOF-EI, at 4.

11 Sears, Keoki S., Glenn A. Sears, and Richard H. Clough, Construction Project Management: A Practical Guide to Field Construction Management. 5th Edition, John Wiley & Sons, Hoboken, NJ, 2008, at 20.

12 Turkey Point Executive Steering Committee Presentation, July 25, 2009. Clarification added.

13 EPU Lessons Learned Response Document, April 2010.

14 Florida Public Service Commission Order No. PSC-090783-FOF-EI

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- ¹⁵ *Nuclear Industry's Comprehensive Approach Develops Skilled Work Force for the Future.* Nuclear Energy Institute, September 2010.
- ¹⁶ *See, New Nuclear Projects Procurement Guideline, "Award of Critical Project Agreements,"* Draft November 12, 2010.

JJR-1

John J. Reed
Chairman and Chief Executive Officer

John J. Reed is a financial and economic consultant with more than 30 years of experience in the energy industry. Mr. Reed has also been the CEO of an NASD member securities firm, and Co-CEO of the nation's largest publicly traded management consulting firm (NYSE: NCI). He has provided advisory services in the areas of mergers and acquisitions, asset divestitures and purchases, strategic planning, project finance, corporate valuation, energy market analysis, rate and regulatory matters and energy contract negotiations to clients across North and Central America. Mr. Reed's comprehensive experience includes the development and implementation of nuclear, fossil, and hydroelectric generation divestiture programs with an aggregate valuation in excess of \$20 billion. Mr. Reed has also provided expert testimony on financial and economic matters on more than 150 occasions before the FERC, Canadian regulatory agencies, state utility regulatory agencies, various state and federal courts, and before arbitration panels in the United States and Canada. After graduation from the Wharton School of the University of Pennsylvania, Mr. Reed joined Southern California Gas Company, where he worked in the regulatory and financial groups, leaving the firm as Chief Economist in 1981. He served as executive and consultant with Stone & Webster Management Consulting and R.J. Rudden Associates prior to forming REED Consulting Group (RCG) in 1988. RCG was acquired by Navigant Consulting in 1997, where Mr. Reed served as an executive until leaving Navigant to join Concentric as Chairman and Chief Executive Officer.

REPRESENTATIVE PROJECT EXPERIENCE

Executive Management

As an executive-level consultant, worked with CEOs, CFOs, other senior officers, and Boards of Directors of many of North America's top electric and gas utilities, as well as with senior political leaders of the U.S. and Canada on numerous engagements over the past 25 years. Directed merger, acquisition, divestiture, and project development engagements for utilities, pipelines and electric generation companies, repositioned several electric and gas utilities as pure distributors through a series of regulatory, financial, and legislative initiatives, and helped to develop and execute several "roll-up" or market aggregation strategies for companies seeking to achieve substantial scale in energy distribution, generation, transmission, and marketing.

Financial and Economic Advisory Services

Retained by many of the nation's leading energy companies and financial institutions for services relating to the purchase, sale or development of new enterprises. These projects included major new gas pipeline projects, gas storage projects, several non-utility generation projects, the purchase and sale of project development and gas marketing firms, and utility acquisitions. Specific services provided include the development of corporate expansion plans, review of acquisition candidates, establishment of divestiture standards, due diligence on acquisitions or financing, market entry or expansion studies, competitive assessments, project financing studies, and negotiations relating to these transactions.

Litigation Support and Expert Testimony

Provided expert testimony on more than 150 occasions in administrative and civil proceedings on a wide range of energy and economic issues. Clients in these matters have included gas distribution utilities, gas pipelines, gas producers, oil producers, electric utilities, large energy consumers, governmental and regulatory



agencies, trade associations, independent energy project developers, engineering firms, and gas and power marketers. Testimony has focused on issues ranging from broad regulatory and economic policy to virtually all elements of the utility ratemaking process. Also frequently testified regarding energy contract interpretation, accepted energy industry practices, horizontal and vertical market power, quantification of damages, and management prudence. Have been active in regulatory contract and litigation matters on virtually all interstate pipeline systems serving the U.S. Northeast, Mid-Atlantic, Midwest, and Pacific regions.

Also served on FERC Commissioner Terzic's Task Force on Competition, which conducted an industry-wide investigation into the levels of and means of encouraging competition in U.S. natural gas markets. Represented the interests of the gas distributors (the AGD and UDC) and participated actively in developing and presenting position papers on behalf of the LDC community.

Resource Procurement, Contracting and Analysis

On behalf of gas distributors, gas pipelines, gas producers, electric utilities, and independent energy project developers, personally managed or participated in the negotiation, drafting, and regulatory support of hundreds of energy contracts, including the largest gas contracts in North America, electric contracts representing billions of dollars, pipeline and storage contracts, and facility leases.

These efforts have resulted in bringing large new energy projects to market across North America, the creation of hundreds of millions of dollars in savings through contract renegotiation, and the regulatory approval of a number of highly contested energy contracts.

Strategic Planning and Utility Restructuring

Acted as a leading participant in the restructuring of the natural gas and electric utility industries over the past fifteen years, as an adviser to local distribution companies (LDCs), pipelines, electric utilities, and independent energy project developers. In the recent past, provided services to many of the top 50 utilities and energy marketers across North America. Managed projects that frequently included the redevelopment of strategic plans, corporate reorganizations, the development of multi-year regulatory and legislative agendas, merger, acquisition and divestiture strategies, and the development of market entry strategies. Developed and supported merchant function exit strategies, marketing affiliate strategies, and detailed plans for the functional business units of many of North America's leading utilities.

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2002 – Present)

Chairman and Chief Executive Officer

CE Capital Advisors (2004 – Present)

Chairman, President, and Chief Executive Officer

Navigant Consulting, Inc. (1997 – 2002)

President, Navigant Energy Capital (2000 – 2002)

Executive Director (2000 – 2002)

Co-Chief Executive Officer, Vice Chairman (1999 – 2000)

Executive Managing Director (1998 – 1999)

President, REED Consulting Group, Inc. (1997 – 1998)



REED Consulting Group (1988 – 1997)
Chairman, President and Chief Executive Officer

R.J. Rudden Associates, Inc. (1983 – 1988)
Vice President

Stone & Webster Management Consultants, Inc. (1981 – 1983)
Senior Consultant
Consultant

Southern California Gas Company (1976 – 1981)
Corporate Economist
Financial Analyst
Treasury Analyst

EDUCATION AND CERTIFICATION

B.S., Economics and Finance, Wharton School, University of Pennsylvania, 1976
Licensed Securities Professional: NASD Series 7, 63, and 24 Licenses

BOARDS OF DIRECTORS (PAST AND PRESENT)

Concentric Energy Advisors, Inc.
Navigant Consulting, Inc.
Navigant Energy Capital
Nukem, Inc.
New England Gas Association
R. J. Rudden Associates
REED Consulting Group

AFFILIATIONS

National Association of Business Economists
International Association of Energy Economists
American Gas Association
New England Gas Association
Society of Gas Lighters
Guild of Gas Managers

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Alaska Public Utilities Commission				
Chugach Electric	12/86	Chugach Electric	Docket No. U-86-11	Cost Allocation
Chugach Electric	6/87	Enstar Natural Gas Company	Docket No. U-87-2	Tariff Design
Chugach Electric	12/87	Enstar Natural Gas Company	Docket No. U-87-42	Gas Transportation
Chugach Electric	2/88	Chugach Electric	Docket No. U-87-35	Cost of Capital
California Energy Commission				
Southern California Gas Co.	8/80	Southern California Gas Co.	Docket No. 80-BR-3	Gas Price Forecasting
California Public Utility Commission				
Southern California Gas Co.	3/80	Southern California Gas Co.	TY 1981 G.R.C.	Cost of Service, Inflation
Pacific Gas Transmission Co.	10/91	Pacific Gas & Electric Co.	App. 89-04-033	Rate Design
Pacific Gas Transmission Co.	7/92	Southern California Gas Co.	A. 92-04-031	Rate Design
Colorado Public Utilities Commission				
AMAX Molybdenum	2/90	Commission Rulemaking	Docket No. 89R-702G	Gas Transportation
AMAX Molybdenum	11/90	Commission Rulemaking	Docket No. 90R-508G	Gas Transportation
Xcel Energy	8/04	Xcel Energy	Docket No. 031-134E	Cost of Debt
CT Dept. of Public Utilities Control				
Connecticut Natural Gas	12/88	Connecticut Natural Gas	Docket No. 88-08-15	Gas Purchasing Practices
United Illuminating	3/99	United Illuminating	Docket No. 99-03-04	Nuclear Plant Valuation
Southern Connecticut Gas	2/04	Southern Connecticut Gas	Docket No. 00-12-08	Gas Purchasing Practices
Southern Connecticut Gas	4/05	Southern Connecticut Gas	Docket No. 05-03-17	LNG/Trunkline
Southern Connecticut Gas	5/06	Southern Connecticut Gas	Docket No. 05-03-17PH01	LNG/Trunkline
Southern Connecticut Gas	8/08	Southern Connecticut Gas	Docket No. 06-05-04	Peaking Service Agreement

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
District Of Columbia PSC				
Potomac Electric Power Company	3/99, 5/99, 7/99	Potomac Electric Power Company	Docket No. 945	Divestiture of Gen. Assets & Purchase Power Contracts
Fed'l Energy Regulatory Commission				
Safe Harbor Water Power Corp.	8/82	Safe Harbor Water Power Corp.		Wholesale Electric Rate Increase
Western Gas Interstate Company	5/84	Western Gas Interstate Company	Docket No. RP84-77	Load Fcst. Working Capital
Southern Union Gas	4/87	El Paso Natural Gas Company	Docket No. RP87-16-000	Take-or-Pay Costs
Connecticut Natural Gas	11/87	Penn-York Energy Corporation	Docket No. RP87-78-000	Cost Alloc./Rate Design
AMAX Magnesium	12/88	Questar Pipeline Company	Docket No. RP88-93-000	Cost Alloc./Rate Design
Western Gas Interstate Company	6/89	Western Gas Interstate Company	Docket No. RP89-179-000	Cost Alloc./Rate Design, Open-Access Transportation
Associated CD Customers	12/89	CNG Transmission	Docket No. RP88-211-000	Cost Alloc./Rate Design
Utah Industrial Group	9/90	Questar Pipeline Company	Docket No. RP88-93-000, Phase II	Cost Alloc./Rate Design
Iroquois Gas Trans. System	8/90	Iroquois Gas Transmission System	Docket No. CP89-634-000/001; CP89-815-000	Gas Markets, Rate Design, Cost of Capital, Capital Structure
Boston Edison Company	1/91	Boston Edison Company	Docket No. ER91-243-000	Electric Generation Markets

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Cincinnati Gas and Electric Co., Union Light, Heat and Power Company, Lawrenceburg Gas Company	7/91	Texas Gas Transmission Corp.	Docket No. RP90-104-000, RP88-115-000, RP90-192-000	Cost Alloc./Rate Design Comparability of Svc.
Ocean State Power II	7/91	Ocean State Power II	ER89-563-000	Competitive Market Analysis, Self-dealing
Brooklyn Union/PSE&G	7/91	Texas Eastern	RP88-67, et al	Market Power, Comparability of Service
Northern Distributor Group	9/92	Northern Natural Gas Company	RP92-1-000, et al	Cost of Service
Canadian Association of Petroleum Producers and Alberta Pet. Marketing Comm.	10/92	Lakehead Pipe Line Co. L.P.	IS92-27-000	Cost Allocation, Rate Design
Colonial Gas, Providence Gas	7/93, 8/93	Algonquin Gas Transmission	RP93-14	Cost Allocation, Rate Design
Iroquois Gas Transmission	94	Iroquois Gas Transmission	RP94-72-000	Cost of Service and Rate Design
Transco Customer Group	1/94	Transcontinental Gas Pipeline Corporation	Docket No. RP92-137-000	Rate Design, Firm to Wellhead
Pacific Gas Transmission	2/94	Pacific Gas Transmission	Docket No. RP94-149-000	Rolled-In vs. Incremental Rates
Tennessee GSR Group	1/95, 3/95	Tennessee Gas Pipeline Company	Docket Nos. RP93-151-000, RP94-39-000, RP94-197-000, RP94-309-000	GSR Costs
Pacific Gas Transmission	2/95	Pacific Gas Transmission	RP94-149-000	Rate Design
ProGas and Texas Eastern	1/96	Tennessee Gas Pipeline Company	RP93-151	Declaration
PG&E and SoCal Gas	96	El Paso Natural Gas Company	RP92-18-000	Stranded Costs

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Iroquois Gas Transmission System, L.P.	97	Iroquois Gas Transmission System, L.P.	RP97-126-000	Cost of Service, Rate Design
BEC Energy - Commonwealth Energy System	2/99	Boston Edison Company/ Commonwealth Energy System	EC99-___-000	Market Power Analysis - Merger
Central Hudson Gas & Electric, Consolidated Co. of New York, Niagara Mohawk Power Corporation, Dynegy Power Inc.	10/00	Central Hudson Gas & Electric, Consolidated Co. of New York, Niagara Mohawk Power Corporation, Dynegy Power Inc.	Docket No. EC00-___	Market Power 203/205 Filing
Wyckoff Gas Storage	12/02	Wyckoff Gas Storage	CP03-33-000	Need for Storage Project
Indicated Shippers/Producers	10/03	Northern Natural Gas	Docket No. RP98-39-029	Ad Valorem Tax Treatment
Maritimes & Northeast Pipeline	6/04	Maritimes & Northeast Pipeline	Docket No. RP04-360-000	Rolled-In Rates
ISO New England	8/04	ISO New England	Docket No. ER03-563-030	Cost of New Entry
Transwestern Pipeline Company, LLC	9/06	Transwestern Pipeline Company, LLC	Docket No. RP06-614-000	
Portland Natural Gas Transmission System	6/08	Portland Natural Gas Transmission System	Docket No. RP08-306-000	Market Assessment, natural gas transportation; rate setting
Portland Natural Gas Transmission System	5/10	Portland Natural Gas Transmission System	Docket No. RP10-729-000	Business risks; extraordinary and non-recurring events pertaining to discretionary revenues
Morris Energy	7/10	Morris Energy	Docket No. RP10-	Affidavit re: Impact of Preferential Rate

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Florida Public Service Commission				
Florida Power and Light Co.	10/07	Florida Power & Light Co.	Docket No. 070650-EI	Need for new nuclear plant
Florida Power and Light Co.	5/08	Florida Power & Light Co.	Docket No. 080009-EI	New Nuclear cost recovery, prudence
Florida Power and Light Co.	3/09	Florida Power & Light Co.	Docket No. 080677-EI	Benchmarking in support of ROE
Florida Power and Light Co.	3/09	Florida Power & Light Co.	Docket No. 090009-EI	New Nuclear cost recovery, prudence
Florida Power and Light Co.	3/10; 5/10, 8/10	Florida Power & Light Co.	Docket No. 100009-EI	New Nuclear cost recovery, prudence
Florida Senate Committee on Communication, Energy and Utilities				
Florida Power and Light Co.	2/09	Florida Power & Light Co.		Securitization
Hawaii Public Utility Commission				
Hawaiian Electric Light Company, Inc. (HELCO)	6/00	Hawaiian Electric Light Company, Inc.	Cause No. 41746	Standby Charge
Indiana Utility Regulatory Commission				
Northern Indiana Public Service Company	10/01	Northern Indiana Public Service Company	Docket No. 99-0207	Valuation of Electric Generating Facilities
Northern Indiana Public Service Company	01/08	Northern Indiana Public Service Company	Cause No. 43396	Asset Valuation
Northern Indiana Public Service Company	08/08	Northern Indiana Public Service Company	Cause No. 43526	Fair Market Value Assessment

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Iowa Utilities Board				
Interstate Power and Light	7/05	Interstate Power and Light and FPL Energy Duane Arnold, LLC	Docket No. SPU-05-15	Sale of Nuclear Plant
Interstate Power and Light	5/07	City of Everly, Iowa	Docket No. SPU-06-5	Municipalization
Interstate Power and Light	5/07	City of Kalona, Iowa	Docket No. SPU-06-6	Municipalization
Interstate Power and Light	5/07	City of Wellman, Iowa	Docket No. SPU-06-10	Municipalization
Interstate Power and Light	5/07	City of Terril, Iowa	Docket No. SPU-06-8	Municipalization
Interstate Power and Light	5/07	City of Rolfe, Iowa	Docket No. SPU-06-7	Municipalization
Maine Public Utility Commission				
Northern Utilities	5/96	Granite State and PNGTS	Docket No. 95-480, 95-481	Transportation Service and PBR
Maryland Public Service Commission				
Eastalco Aluminum	3/82	Potomac Edison	Docket No. 7604	Cost Allocation
Potomac Electric Power Company	8/99	Potomac Electric Power Company	Docket No. 8796	Stranded Cost & Price Protection
Mass. Department of Public Utilities				
Haverhill Gas	5/82	Haverhill Gas	Docket No. DPU #1115	Cost of Capital
New England Energy Group	1/87	Commission Investigation		Gas Transportation Rates
Energy Consortium of Mass.	9/87	Commonwealth Gas Company	Docket No. DPU-87-122	Cost Alloc./Rate Design
Mass. Institute of Technology	12/88	Middleton Municipal Light	DPU #88-91	Cost Alloc./Rate Design
Energy Consortium of Mass.	3/89	Boston Gas	DPU #88-67	Rate Design
PG&E Bechtel Generating Co./ Constellation Holdings	10/91	Commission Investigation	DPU #91-131	Valuation of Environmental Externalities



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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Coalition of Non-Utility Generators		Cambridge Electric Light Co. & Commonwealth Electric Co.	DPU 91-234 EFSC 91-4	Integrated Resource Management
The Berkshire Gas Company Essex County Gas Company Fitchburg Gas and Elec. Light Co.	5/92	The Berkshire Gas Company Essex County Gas Company Fitchburg Gas & Elec. Light Co.	DPU #92-154	Gas Purchase Contract Approval
Boston Edison Company	7/92	Boston Edison	DPU #92-130	Least Cost Planning
Boston Edison Company	7/92	The Williams/Newcorp Generating Co.	DPU #92-146	RFP Evaluation
Boston Edison Company	7/92	West Lynn Cogeneration	DPU #92-142	RFP Evaluation
Boston Edison Company	7/92	L'Energia Corp.	DPU #92-167	RFP Evaluation
Boston Edison Company	7/92	DLS Energy, Inc.	DPU #92-153	RFP Evaluation
Boston Edison Company	7/92	CMS Generation Co.	DPU #92-166	RFP Evaluation
Boston Edison Company	7/92	Concord Energy	DPU #92-144	RFP Evaluation
The Berkshire Gas Company Colonial Gas Company Essex County Gas Company Fitchburg Gas and Electric Company	11/93	The Berkshire Gas Company Colonial Gas Company Essex County Gas Company Fitchburg Gas and Electric Co.	DPU #93-187	Gas Purchase Contract Approval
Bay State Gas Company	10/93	Bay State Gas Company	Docket No. 93-129	Integrated Resource Planning
Boston Edison Company	94	Boston Edison	DPU #94-49	Surplus Capacity
Hudson Light & Power Department	4/95	Hudson Light & Power Dept.	DPU #94-176	Stranded Costs
Essex County Gas Company	5/96	Essex County Gas Company	Docket No. 96-70	Unbundled Rates
Boston Edison Company	8/97	Boston Edison Company	D.P.U. No. 97-63	Holding Company Corporate Structure
Berkshire Gas Company	6/98	Berkshire Gas Mergeco Gas Co.	D.T.E. 98-87	Merge approval
Eastern Edison Company	8/98	Montaup Electric Company	D.T.E. 98-83	Marketing for divestiture of its generation business.
Boston Edison Company	98	Boston Edison Company	D.T.E. 97-113	Fossil Generation Divestiture

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Boston Edison Company	98	Boston Edison Company	D.T.E. 98-119	Nuclear Generation Divestiture
Eastern Edison Company	12/98	Montaup Electric Company	D.T.E. 99-9	Sale of Nuclear Plant
NStar	9/07, 12/07	NStar, Bay State Gas, Fitchburg G&E, NE Gas, W. MA Electric	DPU 07-50	Decoupling, risk
Mass. Energy Facilities Siting Council				
Mass. Institute of Technology	1/89	M.M.W.E.C.	EFSC-88-1	Least-Cost Planning
Boston Edison Company	9/90	Boston Edison	EFSC-90-12	Electric Generation Mkts
Silver City Energy Ltd. Partnership	11/91	Silver City Energy	D.P.U. 91-100	State Policies; Need for Facility
Michigan Public Service Commission				
Detroit Edison Company	9/98	Detroit Edison Company	Case No. U-11726	Market Value of Generation Assets
Consumers Energy Company	8/06	Consumers Energy Company	Case No. U-14992	Sale of Nuclear Plant
Minnesota Public Utilities Commission				
Xcel Energy/No. States Power	9/04	Xcel Energy/No. States Power	Docket No. G002/GR-04-1511	NRG Impacts
Interstate Power and Light	8/05	Interstate Power and Light and FPL Energy Duane Arnold, LLC	Docket No. E001/PA-05-1272	Sale of Nuclear Plant
Northern States Power Company d/b/a Xcel Energy	11/05	Northern States Power Company	Docket No. E002/GR-05-1428	NRG Impacts on Debt Costs
Northern States Power Company d/b/a Xcel Energy	09/06	NSP v. Excelsior	Docket No. E6472/M-05-1993	PPA, Financial Impacts
Northern States Power Company d/b/a Xcel Energy	11/06	Northern States Power Company	Docket No. G002/GR-06-1429	Return on Equity



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Northern States Power	11/08	Northern States Power Company	Docket No. E002/GR-08-1065	Return on Equity
Northern States Power	11/09	Northern States Power Company	Docket No. G002/GR-09-1153	Return on Equity
Northern States Power	11/10	Northern States Power Company	Docket No. E002/GR-10-971	Return on Equity
Missouri Public Service Commission				
Missouri Gas Energy	1/03	Missouri Gas Energy	Case No. GR-2001-382	Gas Purchasing Practices; Prudence
Aquila Networks	2/04	Aquila-MPS, Aquila_L&P	Case Nos. ER-2004-0034 HR-2004-0024	Cost of Capital, Capital Structure
Aquila Networks	2/04	Aquila-MPS, Aquila_L&P	Case No. GR-2004-0072	Cost of Capital, Capital Structure
Missouri Gas Energy	11/05	Missouri Gas Energy	Case Nos. GR-2002-348 GR-2003-0330	Capacity Planning
Missouri Gas Energy	11/10, 1/11	KCP&L	Case No. ER-2010-0355	Natural Gas DSM
Missouri Gas Energy	11/10, 1/11	KCP&L GMO	Case No. ER-2010-0356	Natural Gas DSM
Montana Public Service Commission				
Great Falls Gas Company	10/82	Great Falls Gas Company	Docket No. 82-4-25	Gas Rate Adjust. Clause
Nat. Energy Board of Canada				
Alberta-Northeast	2/87	Alberta Northeast Gas Export Project	Docket No. GH-1-87	Gas Export Markets

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Alberta-Northeast	11/87	TransCanada Pipeline	Docket No. GH-2-87	Gas Export Markets
Alberta-Northeast	1/90	TransCanada Pipeline	Docket No. GH-5-89	Gas Export Markets
Indep. Petroleum Association of Canada	1/92	Interprovincial Pipe Line, Inc.	RH-2-91	Pipeline Valuation, Toll
The Canadian Association of Petroleum Producers	11/93	Transmountain Pipe Line	RH3-93	Cost of Capital
Alliance Pipeline L.P.	6/97	Alliance Pipeline L.P.	GH-3-97	Market Study
Maritimes & Northeast Pipeline	97	Sable Offshore Energy Project	GH-6-96	Market Study
Maritimes & Northeast Pipeline	2/02	Maritimes & Northeast Pipeline	GH-3-2002	Natural Gas Demand Analysis
TransCanada Pipelines	8/04	TransCanada Pipelines	RH-3-2004	Toll Design
Brunswick Pipeline	9/06	Brunswick Pipeline	GH-1-2006	Market Study
TransCanada Pipelines Ltd.	3/07	TransCanada Pipelines Ltd.: Gros Cacouna Receipt Point Application	RH-1-2007	Toll Design
Repsol Energy Canada Ltd	3/08	Repsol Energy Canada Ltd	GH-1-2008	Market Study
Maritimes & Northeast Pipeline	7/10	Maritimes & Northeast Pipeline	RH-4-2010	Regulatory policy, toll development
New Brunswick Energy and Utilities Board				
Atlantic Wallboard/JD Irving Co	1/08	Enbridge Gas New Brunswick	MCTN #298600	Rate Setting for EGNB
Atlantic Wallboard/Flakeboard	09/09, 6/10, 7/10	Enbridge Gas New Brunswick	NBEUB 2009-017	Rate Setting for EGNB
NH Public Utilities Commission				
Bus & Industry Association	6/89	P.S. Co. of New Hampshire	Docket No. DR89-091	Fuel Costs
Bus & Industry Association	5/90	Northeast Utilities	Docket No. DR89-244	Merger & Acq. Issues
Eastern Utilities Associates	6/90	Eastern Utilities Associates	Docket No. DF89-085	Merger & Acq. Issues
EnergyNorth Natural Gas	12/90	EnergyNorth Natural Gas	Docket No. DE90-166	Gas Purchasing Practices



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
EnergyNorth Natural Gas	7/90	EnergyNorth Natural Gas	Docket No. DR90-187	Special Contracts, Discounted Rates
Northern Utilities, Inc.	12/91	Commission Investigation	Docket No. DR91-172	Generic Discounted Rates
New Jersey Board of Public Utilities				
Hilton/Golden Nugget	12/83	Atlantic Electric	B.P.U. 832-154	Line Extension Policies
Golden Nugget	3/87	Atlantic Electric	B.P.U. No. 837-658	Line Extension Policies
New Jersey Natural Gas	2/89	New Jersey Natural Gas	B.P.U. GR89030335J	Cost Alloc./Rate Design
New Jersey Natural Gas	1/91	New Jersey Natural Gas	B.P.U. GR90080786J	Cost Alloc./Rate Design
New Jersey Natural Gas	8/91	New Jersey Natural Gas	B.P.U. GR91081393J	Rate Design; Weather Norm. Clause
New Jersey Natural Gas	4/93	New Jersey Natural Gas	B.P.U. GR93040114J	Cost Alloc./Rate Design
South Jersey Gas	4/94	South Jersey Gas	BRC Dock No. GR080334	Revised levelized gas adjustment
New Jersey Utilities Association	9/96	Commission Investigation	BPU AX96070530	PBOP Cost Recovery
Morris Energy Group	11/09	Public Service Electric & Gas	BPU GR 09050422	Discriminatory Rates
New Jersey American Water Co.	4/10	New Jersey American Water Co.	BPU WR 1040260	Tariff Rates and Revisions
New Mexico Public Service Commission				
Gas Company of New Mexico	11/83	Public Service Co. of New Mexico	Docket No. 1835	Cost Alloc./Rate Design
New York Public Service Commission				
Iroquois Gas. Transmission	12/86	Iroquois Gas Transmission System	Case No. 70363	Gas Markets
Brooklyn Union Gas Company	8/95	Brooklyn Union Gas Company	Case No. 95-6-0761	Panel on Industry Directions



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SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Central Hudson, ConEdison and Niagara Mohawk	9/00	Central Hudson, ConEdison and Niagara Mohawk	Case No. 96-E-0909 Case No. 96-E-0897 Case No. 94-E-0098 Case No. 94-E-0099	Section 70, Approval of New Facilities
Central Hudson, New York State Electric & Gas, Rochester Gas & Electric	5/01	Joint Petition of NiMo, NYSEG, RG&E, Central Hudson, Constellation and Nine Mile Point	Case No. 01-E-0011	Section 70, Rebuttal Testimony
Rochester Gas & Electric	12/03	Rochester Gas & Electric	Case No. 03-E-1231	Sale of Nuclear Plant
Rochester Gas & Electric	01/04	Rochester Gas & Electric	Case No. 03-E-0765 Case No. 02-E-0198 Case No. 03-E-0766	Sale of Nuclear Plant; Ratemaking Treatment of Sale
Rochester Gas and Electric and NY State Electric & Gas Corp	2/10	Rochester Gas & Electric NY State Electric & Gas Corp	Case No. 09-E-0715 Case No. 09-E-0716 Case No. 09-E-0717 Case No. 09-E-0718	Depreciation policy
Oklahoma Corporation Commission				
Oklahoma Natural Gas Company	6/98	Oklahoma Natural Gas Company	Case PUD No. 980000177	Storage issues
Oklahoma Gas & Electric Company	9/05	Oklahoma Gas & Electric Company	Cause No. PUD 200500151	Prudence of McLain Acquisition
Oklahoma Gas & Electric Company	03/08	Oklahoma Gas & Electric Company	Cause No. PUD 200800086	Acquisition of Redbud generating facility
Ontario Energy Board				
Market Hub Partners Canada, L.P.	5/06	Natural Gas Electric Interface Roundtable	File No. EB-2005-0551	Market-based Rates For Storage

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Pennsylvania Public Utility Commission				
ATOC	4/95	Equitrans	Docket No. R-00943272	Rate Design, unbundling
ATOC	3/96	Equitrans	Docket No. P-00940886	Rate Design, unbundling
Rhode Island Public Utilities Commission				
Newport Electric	7/81	Newport Electric	Docket No. 1599	Rate Attrition
South County Gas	9/82	South County Gas	Docket No. 1671	Cost of Capital
New England Energy Group	7/86	Providence Gas Company	Docket No. 1844	Cost Alloc./Rate Design
Providence Gas	8/88	Providence Gas Company	Docket No. 1914	Load Forecast., Least-Cost Planning
Providence Gas Company and The Valley Gas Company	1/01	Providence Gas Company and The Valley Gas Company	Docket No. 1673 and 1736	Gas Cost Mitigation Strategy
The New England Gas Company	3/03	New England Gas Company	Docket No. 3459	Cost of Capital
Texas Public Utility Commission				
Southwestern Electric	5/83	Southwestern Electric		Cost of Capital, CWIP
P.U.C. General Counsel	11/90	Texas Utilities Electric Company	Docket No. 9300	Gas Purchasing Practices, Prudence
Oncor Electric Delivery Company	8/07	Oncor Electric Delivery Company	Docket No. 34040	Regulatory Policy, Rate of Return, Return of Capital and Consolidated Tax Adjustment
Oncor Electric Delivery Company	6/08	Oncor Electric Delivery Company	Docket No. 35717	Regulatory policy
Oncor Electric Delivery Company	10/08	Oncor, TCC, TNC, ETT, LCRA TSC, Sharyland, STEC, TNMP	Docket No. 35665	Competitive Renewable Energy Zone



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
CenterPoint Energy	6/10 10/10	CenterPoint Energy/Houston Electric	Docket No. 38339	Regulatory policy, risk, consolidated taxes
Oncor Electric Delivery Company	1/11	Oncor Electric Delivery Company	Docket No. 38929	Regulatory policy, risk
Texas Railroad Commission				
Western Gas Interstate Company	1/85	Southern Union Gas Company	Docket 5238	Cost of Service
Atmos Pipeline Texas	9/10; 1/11	Atmos Pipeline Texas	GUD 10000	Ratemaking Policy, risk
Utah Public Service Commission				
AMAX Magnesium	1/88	Mountain Fuel Supply Company	Case No. 86-057-07	Cost Alloc./Rate Design
AMAX Magnesium	4/88	Utah P&L/Pacific P&L	Case No. 87-035-27	Merger & Acquisition
Utah Industrial Group	7/90	Mountain Fuel Supply	Case No. 89-057-15	Gas Transportation Rates
AMAX Magnesium	9/90	Utah Power & Light	Case No. 89-035-06	Energy Balancing Account
AMAX Magnesium	8/90	Utah Power & Light	Case No. 90-035-06	Electric Service Priorities



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Benchmarking in support of ROE
Vermont Public Service Board				
Green Mountain Power	8/82	Green Mountain Power	Docket No. 4570	Rate Attrition
Green Mountain Power	12/97	Green Mountain Power	Docket No. 5983	Cost of Service
Green Mountain Power	7/98, 9/00	Green Mountain Power	Docket No. 6107	Ratae development
Wisconsin Public Service Commission				
WEC & WICOR	11/99	WEC	Docket No. 9401-YO-100 Docket No. 9402-YO-101	Approval to Acquire the Stock of WICOR
Wisconsin Electric Power Company	1/07	Wisconsin Electric Power Co.	Docket No. 6630-EI-113	Sale of Nuclear Plant
Wisconsin Electric Power Company	10/09	Wisconsin Electric Power Co.	Docket No. 6630-CE-302	CPCN Application for wind project



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
American Arbitration Association				
Michael Polsky	3/91	M. Polsky vs. Indeck Energy		Corporate Valuation, Damages
ProGas Limited	7/92	ProGas Limited v. Texas Eastern		Gas Contract Arbitration
Attala Generating Company	12/03	Attala Generating Co v. Attala Energy Co.	Case No. 16-Y-198-00228-03	Power Project Valuation; Breach of Contract; Damages
Nevada Power Company	4/08	Nevada Power v. Nevada Cogeneration Assoc. #2		Power Purchase Agreement
Commonwealth of Massachusetts, Suffolk Superior Court				
John Hancock	1/84	Trinity Church v. John Hancock	C.A. No. 4452	Damages Quantification
State of Colorado District Court, County of Garfield				
Questar Corporation, et al	11/00	Questar Corporation, et al.	Case No. 00CV129-A	Partnership Fiduciary Duties
State of Delaware, Court of Chancery, New Castle County				
Wilmington Trust Company	11/05	Calpine Corporation vs. Bank Of New York and Wilmington Trust Company	C.A. No. 1669-N	Bond Indenture Covenants
Illinois Appellate Court, Fifth Division				
Norweb, plc	8/02	Indeck No. America v. Norweb	Docket No. 97 CH 07291	Breach of Contract; Power Plant Valuation

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Independent Arbitration Panel				
Alberta Northeast Gas Limited	2/98	ProGas Ltd., Canadian Forest Oil Ltd., AEC Oil & Gas		
Ocean State Power	9/02	Ocean State Power vs. ProGas Ltd.	2001/2002 Arbitration	Gas Price Arbitration
Ocean State Power	2/03	Ocean State Power vs. ProGas Ltd.	2002/2003 Arbitration	Gas Price Arbitration
Ocean State Power	6/04	Ocean State Power vs. ProGas Ltd.	2003/2004 Arbitration	Gas Price Arbitration
Shell Canada Limited	7/05	Shell Canada Limited and Nova Scotia Power Inc.		Gas Contract Price Arbitration
International Court of Arbitration				
Wisconsin Gas Company, Inc.	2/97	Wisconsin Gas Co. vs. Pan-Alberta	Case No. 9322/CK	Contract Arbitration
Minnegasco, A Division of NorAm Energy Corp.	3/97	Minnegasco vs. Pan-Alberta	Case No. 9357/CK	Contract Arbitration
Utilicorp United Inc.	4/97	Utilicorp vs. Pan-Alberta	Case No. 9373/CK	Contract Arbitration
IES Utilities	97	IES vs. Pan-Alberta	Case No. 9374/CK	Contract Arbitration
State of New Jersey, Mercer County Superior Court				
Transamerica Corp., et. al.	7/07	IMO Industries Inc. vs. Transamerica Corp., et. al.	Docket No. L-2140-03	Breach-Related Damages, Enterprise Value
State of New York, Nassau County Supreme Court				
Steel Los III, LP	6/08	Steel Los II, LP & Associated Brook, Corp v. Power Authority of State of NY	Index No. 5662/05	Property seizure

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SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Province of Alberta, Court of Queen's Bench				
Alberta Northeast Gas Limited	5/07	Cargill Gas Marketing Ltd. vs. Alberta Northeast Gas Limited	Action No. 0501-03291	Gas Contracting Practices
State of Rhode Island, Providence City Court				
Aquidneck Energy	5/87	Laroche vs. Newport		Least-Cost Planning
State of Texas Hutchinson County Court				
Western Gas Interstate	5/85	State of Texas vs. Western Gas Interstate Co.	Case No. 14,843	Cost of Service
State of Utah Third District Court				
PacifiCorp & Holme, Roberts & Owen, LLP	1/07	USA Power & Spring Canyon Energy vs. PacifiCorp. et. al.	Civil No. 050903412	Breach-Related Damages
U.S. Bankruptcy Court, District of New Hampshire				
EUA Power Corporation	7/92	EUA Power Corporation	Case No. BK-91-10525-JEY	Pre-Petition Solvency
U.S. Bankruptcy Court, District Of New Jersey				
Ponderosa Pine Energy Partners, Ltd.	7/05	Ponderosa Pine Energy Partners, Ltd.	Case No. 05-21444	Forward Contract Bankruptcy Treatment



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
U.S. Bankruptcy Court, No. District of New York				
Cayuga Energy, NYSEG Solutions, The Energy Network	09/09	Cayuga Energy, NYSEG Solutions, The Energy Network	Case No. 06-60073-6-sdg	Going concern
U.S. Bankruptcy Court, So. District Of New York				
Johns Manville	5/04	Enron Energy Mktg. v. Johns Manville; Enron No. America v. Johns Manville	Case No. 01-16034 (AJG)	Breach of Contract; Damages
U.S. Bankruptcy Court, Northern District Of Texas				
Southern Maryland Electric Cooperative, Inc. and Potomac Electric Power Company	11/04	Mirant Corporation, et al. v. SMECO	Case No. 03-4659; Adversary No. 04-4073	PPA Interpretation; Leasing
U. S. Court of Federal Claims				
Boston Edison Company	7/06	Boston Edison v. Department of Energy	No. 99-447C No. 03-2626C	Spent Nuclear Fuel Litigation
Consolidated Edison of New York	08/07	Consolidated Edison of New York, Inc. and subsidiaries v. United States	No. 06-305T	Leasing, tax dispute
Consolidated Edison Company	2/08	Consolidated Edison Company v. United States	No. 04-0033C	SNF Expert Report
Vermont Yankee Nuclear Power Corporation	6/08	Vermont Yankee Nuclear Power Corporation	No. 03-2663C	SNF Expert Report
U. S. District Court, Boulder County, Colorado				

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SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
KN Energy, Inc.	3/93	KN Energy vs. Colorado GasMark, Inc.	Case No. 92 CV 1474	Gas Contract Interpretation
U. S. District Court, Northern California				
Pacific Gas & Electric Co./PGT PG&E/PGT Pipeline Exp. Project	4/97	Norcen Energy Resources Limited	Case No. C94-0911 VRW	Fraud Claim
U. S. District Court, District of Connecticut				
Constellation Power Source, Inc.	12/04	Constellation Power Source, Inc. v. Select Energy, Inc.	Civil Action 304 CV 983 (RNC)	ISO Structure, Breach of Contract
U. S. District Court, Massachusetts				
Eastern Utilities Associates & Donald F. Pardus	3/94	NECO Enterprises Inc. vs. Eastern Utilities Associates	Civil Action No. 92-10355-RCL	Seabrook Power Sales
U. S. District Court, Montana				
KN Energy, Inc.	9/92	KN Energy v. Freeport MacMoRan	Docket No. CV 91-40-BLG-RWA	Gas Contract Settlement
U.S. District Court, New Hampshire				
Portland Natural Gas Transmission and Maritimes & Northeast Pipeline	9/03	Public Service Company of New Hampshire vs. PNGTS and M&NE Pipeline	Docket No. C-02-105-B	Impairment of Electric Transmission Right-of-Way

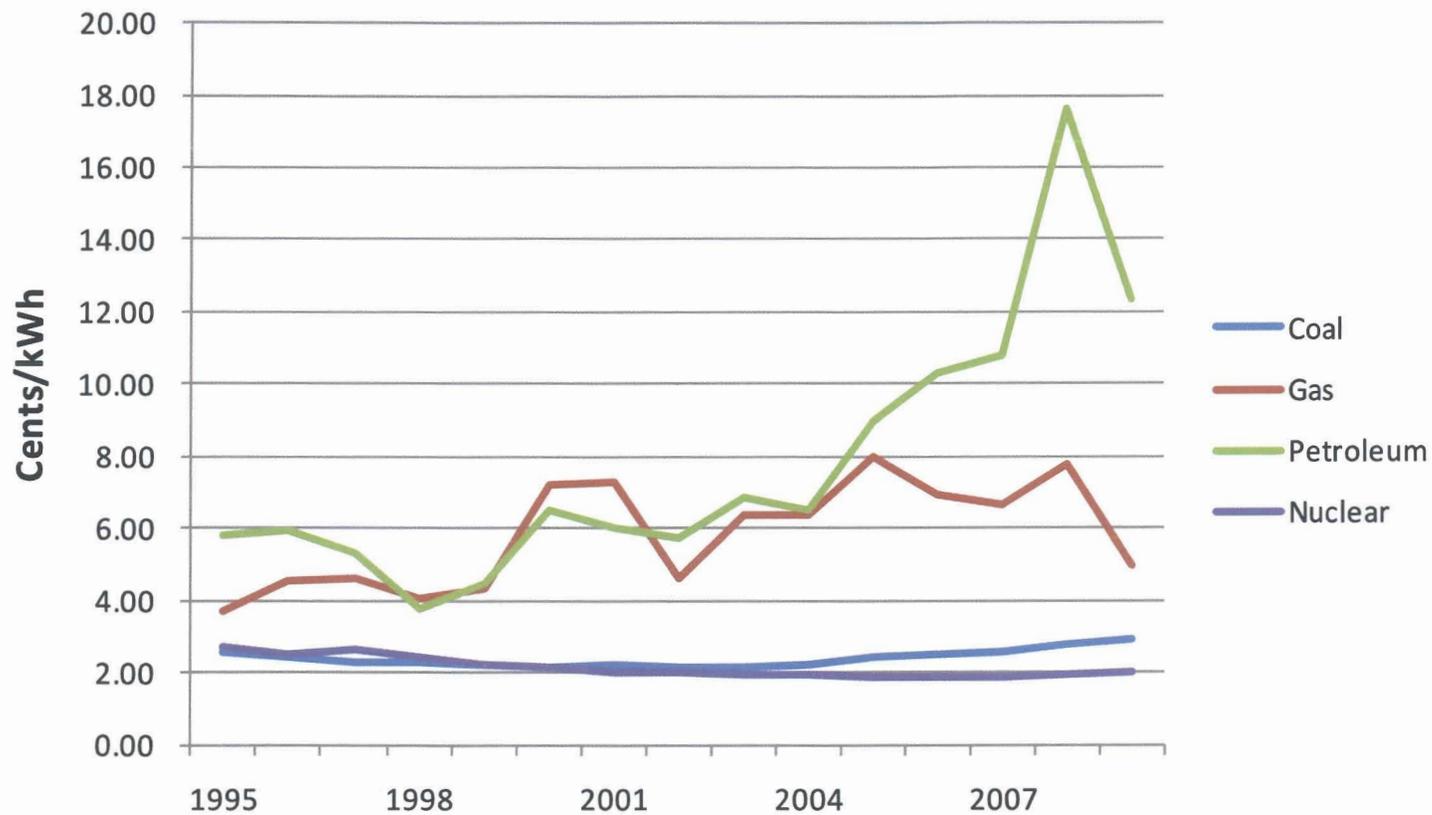


SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
U. S. District Court, Southern District of New York				
Central Hudson Gas & Electric	11/99, 8/00	Central Hudson v. Riverkeeper, Inc., Robert H. Boyle, John J. Cronin	Civil Action 99 Civ 2536 (BDP)	Electric restructuring, environmental impacts
Consolidated Edison	3/02	Consolidated Edison v. Northeast Utilities	Case No. 01 Civ. 1893 (JGK) (HP)	Industry Standards for Due Diligence
Merrill Lynch & Company	1/05	Merrill Lynch v. Allegheny Energy, Inc.	Civil Action 02 CV 7689 (HB)	Due Diligence, Breach of Contract, Damages
U. S. District Court, Eastern District of Virginia				
Aquila, Inc.	1/05	VPEM v. Aquila, Inc.	Civil Action 304 CV 411	Breach of Contract, Damages
U. S. District Court, Portland Maine				
ACEC Maine, Inc. et al.	10/91	CIT Financial vs. ACEC Maine	Docket No. 90-0304-B	Project Valuation
Combustion Engineering	1/92	Combustion Eng. vs. Miller Hydro	Docket No. 89-0168P	Output Modeling; Project Valuation
U.S. Securities and Exchange Commission				
Eastern Utilities Association	10/92	EUA Power Corporation	File No. 70-8034	Value of EUA Power
Council of the District of Columbia Committee on Consumer and Regulatory Affairs				
Potomac Electric Power Co.	7/99	Potomac Electric Power Co.	Bill 13-284	Utility restructuring

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Total Production Cost of Electricity, 1995-2009



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Index of the EPU Projects' Periodic Meetings

Meetings

1. EPU Executive Steering Committee Meeting
 - a. Occurs: quarterly
 - b. Attendees: EPU Executive Steering Committee
 - c. Purpose: overview of major project issues, costs, schedule and budget
2. Plan of the Day Accountability Meeting
 - a. Occurs: daily
 - b. Attendees: Site representatives
 - c. Purpose: review and report daily work plans
3. Engineering and Construction Trend Review Meeting (PTN)
 - a. Occurs: weekly
 - b. Attendees: managers
 - c. Purpose: review and approve Change/Trend at site level
4. Monthly Cost Reviews
 - a. Occurs: monthly
 - b. Attendees: FPL management
 - c. Purpose: review incurred and forecasted project costs
5. Risk Review
 - a. Occurs: weekly
 - b. Attendees: managers
 - c. Purpose: review and track identified project risks
6. Review of Key Performance Indicators
 - a. Occurs: weekly
 - b. Attendees: managers
 - c. Purpose: review Key Performance Indicators

7. EPU Leadership Meeting
 - a. Occurs: weekly
 - b. Attendees: FPL and Bechtel site managers
 - c. Purpose: discussion of project strategies and progress
 8. Plant Change Modifications
 - a. Occurs: weekly (daily at PSL)
 - b. Attendees: Engineering Supervision
 - c. Purpose: 8-week look ahead meeting
 9. FPL – Siemens meeting
 - a. Occurs: weekly
 - b. Attendees: EPU Management
 - c. Purpose: review status of Siemens EPU scope
 10. Bechtel Schedule and Cost Performance meeting
 - a. Occurs: weekly
 - b. Attendees: Bechtel and EPU management
 - c. Purpose: review of Bechtel's CPIs and SPIs
 11. Integrated Supply Chain meeting
 - a. Occurs: weekly
 - b. Attendees: Senior management
 - c. Purpose: review status of EPU project procurements
 12. FPL Senior Management Meeting
 - a. Occurs: daily
 - b. Attendees: VP and Implementation Owner & invitees
 - c. Purpose: discussion of progress
 13. Project and Plant Integration meeting (PTN)
 - a. Occurs: weekly
 - b. Attendees: EPU project management and plant management
 - c. Purpose: project and plant integration
-



14. Vendor Integration Meeting

- a. Occurs: Quarterly
- b. Attendees: Vendor Integration Committee and major vendors
- c. Purpose: review progress and interfacing between vendors

15. CNO Meeting

- a. Occurs: Biweekly
- b. Attendees: EPU Senior management
- c. Purpose: report project status

16. Lead Team Meeting

- a. Occurs: Daily
- b. Attendees: FPL Site EPU leadership team
- c. Purpose: review progress and project execution

17. Task Readiness Review Meeting (PTN)

- a. Occurs: As required per the project schedule
- b. Attendees: FPL and Bechtel supervisors and engineers
- c. Purpose: ensure implementation plan for modification is ready

JJR-5

Observation	Description
Observation 1	<p>In 2009, the EPU Projects' allowance for undefined scope was released at times to fund project costs. It is Concentric's view that this practice was inconsistent with FPL's Extended Power Uprate Project Instructions ("EPPI") 320 and Nuclear Projects Department Instruction ("NPDI") 304. EPPI-320 provides the project instruction for cost estimating, including the development and inclusion of contingencie. This instruction was established in March 2008 and remained in effect in 2009. This project instruction states that "[e]stimates 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."¹ EPPI-320 also indicates that it is supplemental to NPDI-304.</p> <p>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 NPDI-304 provides additional guidance on the development of contingencies and states:</p> <p style="padding-left: 40px;">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.³</p> <p>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 released to fund project costs and was not based upon project risk. As a result, the contingency was depleted month-by-month,</p>

¹ EPPI-320, Cost Estimating, Rev 00, at 5.

² NPDI-304, Estimate Preparation, Rev 0, at 9.

³ *Ibid.*, at 7.

Observation	Description
	<p>FPL's 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 Projects 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 reflected the risk remaining in the project, including those identified by FPL's Risk Registers. 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."⁴</p>
Observation 2	<p>Concentric observed that 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.</p>
Observation 3	<p>Concentric has noted certain instances in 2009 where certain project reports do not appear to have been updated to reflect current cost estimates or cost-related performance indicators did not appropriately reflect the EPU Projects' performance. These actions demonstrate that there was, as of the end of 2009, a need for more definitive document control and more definitive project configuration control.</p> <p>EPPI-300 provides for the EPU Projects to include an internal mechanism for documenting and tracking potential changes in cost and budget (<i>i.e.</i>, a Trend Register). When a condition that could potentially impact project costs arose, it was required to be recorded on the Trend Register, and reside there until it was evaluated and resolved. Concentric has identified some instances in 2009 where the EPU Projects did not fully comply with EPPI-300.</p> <p>EPPI-300 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:</p>

⁴ *Ibid.*, at 9.

Observation	Description
	<p>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.⁵</p> <p>These potential changes were divided into scope changes (<i>i.e.</i>, additional plant modifications) or trends (<i>i.e.</i>, increased costs of completing approved scope). In order to address a trend, EPPI-300 requires that the trend be identified on a formal “Trend Register” and a SCN/TN should be completed to request changes to the project forecast. The SCN/TN forms would then be routed to the EPU Projects 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 Projects 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 Projects team member with the appropriate approval authority for the potential cost impact. Upon approval, the SCN/TN is required to be incorporated into the project budget and all future project reports.⁶</p> <p>Concentric requested the EPU Projects’ Trend Registers and all SCN/TN forms since January 1, 2008. Based on our review of the Trend Register and SCN/TN forms between January 1, 2008 and July 25, 2009 it would appear that the EPU Projects only partially complied with 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 fully 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</p>

⁵ EPPI-300, Project Change Control, Rev 00, at 3.

⁶ *Ibid.*, at 4-7.

Observation	Description
	<p>June 2009 a trend was noted with regard to the EPC budget. These trend impacts ranged between \$10 million and \$140 million. The EPC forecast 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.</p> <p>Finally, many potential scope changes or trends appear to have been captured on FPL's Risk Register (which was not synchronized with the project forecast) rather than the Trend Register. For example, a Condition Report ("CR") Report was initiated in April 2008 (<i>i.e.</i>, CR 2008-11443) that resulted in a "High Risk Mitigation" plan, but it does not appear to have been included on the Trend Register. Similarly, an entry on the May 12, 2009 Risk Matrix identifies the large scope of work and PTN's ability to handle this large scope of work as a medium risk with a significant impact and 50% probability of occurrence. The estimated cost impact of this risk is \$5 million. However, there does not appear to be corresponding entries added to the PTN 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 EPU Projects Director failed to identify a source of the funds on the SCN/TNs for nearly every form.</p>
Observation 4	<p>Concentric believes the EPU Projects did not fully implement the process described in EPPI-340 during 2009. EPPI-340 was first initiated in February 2008 and established a process to ensure that each "identified risk will be recorded in a risk matrix, evaluated for probability, consequence, cost, schedule and project impact."⁷ 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, a July 25, 2009 PSL Executive Steering Committee ("ESC")</p>

⁷ EPPI-340, Project Instructions – EPU Project Risk Management Program, Rev 00, at 3.

Observation	Description
	presentation states “current undefined scope allowance is not aligned to the risk matrix...looked at the project only from a high level risk.” ⁸ Because FPL reported project costs in the contingency line item, the risk management program was never used as prescribed by EPPI-340.
Observation 5	Concentric has noted that the EPU Projects struggled to obtain the resources necessary to complete the License Amendment Requests (“LARs”) during 2009. This resulted in resource sharing between projects and a decision to prioritize certain LARs. This concern appears to have affected both the EPU Projects staff and the EPU Projects’ vendors. In light of these constraints, FPL’s management has responded reasonably to these challenges by prioritizing activities and allocating additional resources to the Projects.
Observation 6	It is Concentric’s understanding that the EPU Projects team was solely responsible for reviewing design engineering work. It was noted during our interviews in 2010 that FPL’s design engineering capabilities had not historically encountered significant quality deficiencies and thus this control and review process may be adequate. However, a lack of expertise within the QA/QC department was identified to Concentric by members of the EPU Projects team as an area for potential improvement. This issue has now been addressed.
Observation 7	Concentric has noted an instance where the information provided by FPL to the Florida Public Service Commission (the “FPSC” or the “Commission”) did not reflect the most up-to-date information as of the time it was provided to the FPSC in September 2009. See the Direct Testimony of John J. Reed for Concentric’s recommendations regarding this observation.

⁸ Saint Lucie Executive Steering Committee Presentation, July 25, 2009.

JJR-6

No.	Description	FPL Response
1	<p>FPL and the EPU Projects team should establish and implement explicit report owners (by report). In addition, FPL and the EPU Projects 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.</p>	<p>Although there are no explicit sign offs for most generated reports, it is well understood who the owner(s) are of each report generated, reviewed and approved. All project cost and schedule reports are generated independently from Project Management by the Project Controls organization and presented in daily, weekly or monthly formal and informal presentations. All high level reports such as the MOPR, CNO and ESC presentations are reviewed by the Senior Management team and ultimately approved by the Vice President, Nuclear Power Uprate prior to issuance.</p>
2	<p>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.</p>	<p>To the extent practical, this practice has been adopted (e.g., MOPR Safety, Weekly SPI & CPI, milestone tracking, and Annual Cash Flow Graph.</p>

No.	Description	FPL Response
3	<p>FPL should consider changing the reporting relationship of the EPU Projects Controls Director. While the change in reporting from the EPU Projects Director to the Vice President of Power Uprate in 2009 was a positive development, the reporting relationship of the EPU Projects 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 incorporates best practices from across the organization.</p>	<p>FPL has evaluated this recommendation and believes sufficient independence currently exist.</p>
4	<p>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 Extended Power Uprate Project Instructions ("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</p>	<p>As noted in the last sentence of the Concentric recommendation, changes to EPPI-300 have been implemented which should address this recommendation. Furthermore, the scope change process has been separated from the forecast variance process by the development of EPPI-301 Forecast Variance and Trends. EPPI-301 requires a monthly analysis and clearly documents the values and explanations of variances to major cost centers including base, risk and contingency.</p>



No.	Description	FPL Response
	<p>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 Projects have established a revised cost estimate range that was used in the Company's feasibility analysis and provided to the Florida Public Service Commission (the "FPSC" or the "Commission") on May 1, 2010. The EPU Projects should establish a formal internal process to approve and communicate the EPU Projects budget, forecast or estimate changes on a total project basis each month (<i>i.e.</i>, 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.</p>	

No.	Description	FPL Response
5	<p>To the extent Condition Reports (“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 Projects management team is already planning to address this change within the EPU Projects action item list.</p>	<p>PI-AA-205, Condition Evaluation and Corrective Action, indicates that Closure of Corrective Actions (CAPRs and CAs) is not permitted until corrective action(s) are completed as prescribed or appropriate justification and approval for intent change or cancellation / nonperformance of the corrective action is documented in the Condition Report.</p> <p>EPPI-340, Risk Program, includes adequate requirements to preclude closing a risk item prior to completing the risk mitigation actions.</p>
6	<p>FPL should continue to maintain EPU Projects 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 2010 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.</p>	<p>FPL has filled key positions in the organization such as the Site Project Manager, Construction Manager and Contract Administer in addition to other lower level positions. FPL established productivity analysis metrics which could provide early warnings of insufficient staff. FPL continues to maintain project staffing as a high priority.</p>



No.	Description	FPL Response
7	The EPU Projects team should document the names of each Executive Steering Committee (“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.	This practice has been adopted and included as the first page of each presentation subsequent to June 2010.
8	The results of Concentric’s 2010 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.	Members of the EPU organization are aware of several avenues to raise concerns such as the initiation of an anonymous Action Request, Blogs to the CEO or Employee Concerns Program to raise concerns which carry provisions of non-retaliation.

No.	Description	FPL Response
9	<p>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.</p>	<p>There are several nuclear fleet guidelines that address the attributes of ensuring organizational readiness which include:</p> <p>OM-AA-101-1008, Pre-Outage Milestones, includes readiness assessment. PR-AA-1000, Contract Development and Administration, requires the use of Field Activity Monitoring Plans which ensures contracted personnel are ready to work and then are monitored during execution.</p> <p>The EPU Project has active Project Execution Plans and several Extended Power Uprate Project Instructions to govern expectations, roles and responsibilities, and overall processes and reporting.</p>
10	<p>Concentric and the EPU Projects management team should conduct a closeout meeting regarding Concentric's 2010 investigation at the end of the investigation. This meeting will review Concentric's findings in the investigation, address management's response to those findings and discuss ways in which processes or procedures could be improved to prevent similar project challenges.</p>	<p>Concentric and FPL conducted a closeout meeting in August 2010.</p>