BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 150009-EI
FLORIDA POWER & LIGHT COMPANY

MARCH 2, 2015

IN RE: NUCLEAR POWER PLANT COST RECOVERY FOR THE YEAR ENDING DECEMBER 2014

TESTIMONY & EXHIBITS OF:

JOHN J. REED

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF JOHN J. REED

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Section I: Introduction

Q. Please state your name and business address.

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

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

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

Q. Please describe Concentric.

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

Q. Please describe your educational background and professional experience.

A. I have more than 38 years of experience in the energy industry, having served as an executive in energy consulting firms, including the position of Co-Chief Executive Officer of the largest publicly-traded management consulting firm in the United States and as Chief Economist for the largest gas utility in the United States. I have provided expert testimony on a wide variety of economic and

financial issues related to the energy and utility industry on numerous occasions before administrative agencies, utility commissions, courts, arbitration panels and elected bodies across North America. I also have provided testimony on behalf of FPL in its Nuclear Cost Recovery Clause ("NCRC") proceedings for the last seven years. A summary of my educational background can be found on Exhibit JJR-1.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits JJR-1 through JJR-4, which are attached to my direct testimony.

Exhibit JJR-1	Résumé of John J. Reed
Exhibit JJR-2	Expert Testimony of John J. Reed
Exhibit JJR-3	PTN 6 & 7 Organization Charts

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

A. The purpose of my testimony is to review the benefits of nuclear power and the appropriate prudence standard to be applied to Florida Power & Light Company's ("FPL" or the "Company") decision-making processes in this NCRC proceeding before the Florida Public Service Commission (the "FPSC" or the "Commission"). In addition, I provide a review of the system of internal controls used by the Company in 2014 in creating the opportunity to construct two new nuclear generating units at FPL's existing Turkey Point ("PTN") site (the project to develop two new nuclear units is referred to herein as "PTN 6 & 7" or the "Project"). Finally, I provide an opinion on whether the PTN 6 & 7 expenditures for which FPL is seeking recovery in this proceeding have been prudently incurred.

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

A. My consulting experience with nuclear power plants spans more than 30 years. My clients have retained me for assignments relating to the construction of nuclear plants, the purchase, sale and valuation of nuclear plants, power uprates and major capital improvement projects at nuclear plants, and the decommissioning of nuclear plants. In addition to my work at FPL's plants, I have had significant experience with those activities at the following plants:

- Big Rock Point
- Bruce Power
- Callaway
- Darlington
- Duane Arnold
- Fermi
- Ginna
- Hope Creek
- Indian Point
- Limerick
- Millstone
- Monticello
- Nine Mile Point
- Oyster Creek
- Palisades
- Peach Bottom
- Pilgrim
- Point Beach
- Prairie Island
- Salem
- Seabrook
- Vermont Yankee
- Wolf Creek
- Vogtle

I have been active on behalf of a number of clients in pre-construction activities for new nuclear plants across the United States and in Canada. Preconstruction activities I have supported include state and federal regulatory processes, raising debt and equity financing for new projects, and evaluating the costs, schedules and economics of new nuclear facilities. In addition, I have provided nuclear industry clients with detailed reviews of contracting strategies, cost estimation practices, and construction project management.

Q. Please summarize your testimony.

A. The remainder of my testimony covers five main topic areas. Section II contains an introduction to the Project and a brief discussion of the benefits of nuclear power to Florida. Section III describes the appropriate prudence standard that should be applied in this case, and discusses precedent with respect to the prudence standard in Florida. In Section IV, I discuss the internal controls, processes, and procedures that were the focus of Concentric's review. In Section V, I discuss Concentric's review of the PTN 6 & 7 Project. My conclusions are provided in Section VI. Each of those topics is summarized below.

FPL's four existing nuclear reactors in Florida have provided, and continue to provide, substantial benefits to Florida customers. Those benefits include virtually no air emissions, increased fuel diversity, reduced exposure to fuel price volatility, fuel cost savings, highly reliable base load capacity, and efficient land use. Additional nuclear capacity that is being developed through the PTN 6 & 7 Project would provide more of those same benefits to Florida.

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

Concentric has reviewed the processes and procedures that were used to manage and implement the PTN 6 & 7 Project in 2014. That review has focused on the Company's internal controls that are in place to provide assurance that the Company meets its strategic, financial, and regulatory objectives related to the Project. Our review is premised on a framework developed by Concentric when advising potential investors in new nuclear development projects and our recent regulatory experience.

Q. What are your conclusions with regard to the costs at issue in this proceeding?

A. Concentric has concluded that all of the 2014 costs for which FPL is seeking recovery have been prudently incurred.

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

Q. Please generally describe PTN 6 & 7.

A. The PTN 6 & 7 Project remains focused on obtaining the licenses and permits that will provide FPL and its customers the option to construct two new nuclear units at the existing PTN site. Specifically, through PTN 6 & 7, FPL continues to create the opportunity to construct approximately 2,200 MWe of new nuclear capacity. The Company's project management strategy remains focused on preserving flexibility and maintaining periodic hold points and off-ramps during which PTN 6 & 7's progress can be deferred for further analysis or progressed to more advanced stages of development. At each major hold point a decision on whether to move forward with development will be made based on the Project's ability to achieve a balance of high value to customers and decreased exposure to

risk. Once the Project has obtained all relevant permits and its Combined License ("COL") from the Nuclear Regulatory Commission ("NRC"), the option to construct will last for a period of at least 20 years.

Q. Has nuclear power benefited FPL customers?

A. Yes it has. Nuclear power continues to play a crucial role in FPL's power generating fleet. The four reactors at FPL's existing St. Lucie and PTN sites have been in operation for an average of over 39 years. For nearly four decades, these units have provided numerous and substantial benefits to Florida customers by reliably producing carbon-free energy, enhancing fuel diversity, and insulating customers from commodity price spikes.

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

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

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

A. One of the greatest advantages to additional nuclear power is that it has virtually no carbon dioxide, nitrogen oxide or sulfur dioxide emissions. Unlike alternative, base load sources in Florida, nuclear energy does not burn fossil fuels and, therefore, emits no greenhouse gases ("GHG") or other combustion byproducts. Based on Energy Information Administration (EIA) data, the four nuclear units FPL operates in Florida currently avoid approximately 13 million tons of CO_2 emissions per year compared to an average natural gas-fired,

combined cycle generating station.[1] The magnitude of avoided emissions is even greater when compared to other carbon-based fuels (*e.g.*, oil, coal) assuming each fuel is used to produce the same amount of energy.

In addition to its environmental benefits, nuclear power provides a vital source of diversification to the electric generation mix. In recent years, Florida has become increasingly dependent on natural gas as a fuel source for electric generating facilities. According to the Florida Reliability Coordinating Council's 2014 Load and Resource Plan, natural gas generated approximately 59% of Florida's electrical energy in 2013 – more than all other fuels combined. Over the next decade, natural gas is expected to increase its share of the state's primary fuel sources for electric generation. In order to mitigate the incremental dependence on natural gas, utilities in the state should continue to develop alternatively-fueled facilities. This will help limit the state's exposure to natural gas price spikes and potential supply disruptions.

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

A. Although the price of natural gas is currently on the low end of what we have observed in recent years, it is naturally subject to price changes. From 2002 through 2008, spot natural gas prices at Henry Hub rose from approximately $2.50 to over $14.00 per million British Thermal Units ("MMBtu")[2] before falling to current levels in response to new supply discoveries and advances in technologies used to recover gas from shale formations. The price of natural gas at the Henry Hub, a common trading location, fell to approximately $2 per MMBtu in July 2012 but then increased to an average of $4.37 per MMBtu in 2014.[3] While even the

current wholesale price of natural gas remains below historical levels, it is important to consider the long-term outlook when evaluating the benefits of resource diversity over the anticipated 60-year life-span of a nuclear facility.

Q. Does natural gas price volatility remain a relevant concern today?

A. Yes, it does. For example, in the first three months of 2014, several regions around the US experienced a "Polar Vortex," an extreme winter weather event that was marked by significant spikes in the price of natural gas and electricity as a result of temporary gas supply constraints. In New England, natural gas prices in 2012 averaged $3.76/MMBtu, with a high of $9.82/MMBtu over the first three months of that year. However, due to extreme weather and supply shortages, gas prices averaged $20.33/MMBtu, with spikes as high as $77.60/MMBtu in the same period in 2014.

Electricity markets experienced similarly substantial effects as a result of the fact that New England relies on natural gas for over 45% of its generation. While two years earlier New England's electricity prices averaged $31/MWh from January through March with a peak of $58/MWh, in 2014 prices over the period averaged $142/MWh and reached $334/MWh in late January.

The difference in the wholesale price of electricity between the first three months of 2012 and the same period in 2014 totaled $3.5 billion for the New England states. In addition, the increase in gas prices is estimated to have added hundreds of millions of dollars, if not billions, to the bills of gas consumers. These effects dramatically increased customers' bills, and have proven to be long-lasting.

While I recognize that there are distinct differences between the market structures that apply in Florida and New England, the difference in exposure to unexpected costs is one of degree, not susceptibility.

Q. What factors could affect the market for natural gas?

A. There are several factors that could have a significant impact on the market for natural gas, including the export of natural gas in the form of liquefied natural gas ("LNG"). There are a number of LNG export facilities at various stages of permitting and development in North America. These export terminals are being developed to serve the considerable demand for natural gas from markets outside the country. If and when the terminals enter service, the volume of gas flowing through them could significantly affect the domestic market for gas both as a source of home heating and for power generation and industrial use.

It is conceivable that incremental demand from export terminals can be met by increases in the development of natural gas resources in the shale formations throughout the United States. However, at this early stage we are already seeing changes in the flow of gas along major interstate pipelines, which could affect the regional market for natural gas. Natural gas to serve Florida currently comes largely from resources in Texas and the Gulf of Mexico, but is expected to come from resources in the Marcellus Shale in the near future as additional infrastructure to bring gas resources to the state come online.

Q. How does resource diversity benefit customers in Florida?

A. Resource diversification provides numerous benefits to Florida residents by mitigating exposure to any single fuel source. This concept, as explained in modern portfolio theory, is based on the idea that a group of diverse assets

collectively lower the risks relative to holding any individual asset or type of asset. Diversification of fuel sources—through added nuclear power and additional renewables—insulates consumers from commodity price fluctuations and reduces the risk profile of Florida's electric generation mix.

Diversification through pursuit of the option to construct new base load alternatives to natural gas is particularly important in the wake of decisions to permanently retire nuclear facilities and to halt development of new nuclear units in the Southeast region, but outside of FPL's system.

Q. Is it appropriate for the Commission to continue to allow recovery of costs, including carrying costs, through the annual NCRC process?

A. Yes. It is appropriate to allow for cost recovery through the annual NCRC process given the magnitude of the potential benefits of additional nuclear capacity. The NCRC is important for both the Company and its customers. It provides FPL's debt and equity investors with some measure of assurance concerning cost recovery if their investments are used prudently. In addition, by permitting recovery of carrying costs associated with construction, the NCRC eliminates the effect of compound interest on the total project costs, which will reduce customer bills when the facilities are fully implemented.

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

A. Yes. One benefit of nuclear generation that is often overlooked is its relatively small footprint compared to other clean, emissions-free technologies. Nuclear power plants require less land, and thus limit the degree of forest clearing, wetlands

encroachments, and other environmental impacts associated with siting other kinds of generating facilities.

Section III: The Prudence Standard

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

A. The prudence standard is captured by three key features. First, prudence relates to actions and decisions. Costs themselves are neither prudent nor imprudent. It is the decision or action that must be reviewed and assessed, not simply whether the costs are above or below expectations. The second feature is a presumption of prudence, which is often referred to as a rebuttable presumption – the burden of showing that a decision is outside of the reasonable bounds falls, at least initially, on the party challenging the utility's actions. The final feature is the total exclusion of hindsight. A utility's decisions must be judged based upon what was known or knowable at the time those decisions were made by the utility.

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

A. The Commission has prohibited the use of hindsight when reviewing utility management decisions and has instead chosen to strictly follow the standard I described above. As it has in prior years, in 2014, the Commission reaffirmed this approach (Order No. PSC-14-0617-FOF-EI):

> "Traditionally, we regulate by examining the prudence of utilities' management, financial, and operational activities prior to allowing cost recovery for those actions…Speculation and hindsight review are not consistent with the prudence standard recognized by this Commission, and has been rejected as a basis for finding imprudence."

Section IV: Framework of Internal Controls Review

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

A. Internal control is a process used by organizations to provide a reasonable assurance of the effectiveness of operations, the reliability of financial reporting, and compliance with applicable laws and regulations. Internal controls inform decision-making by tracking the organization's performance relative to its various objectives. Internal control is a process that responds to the dynamic nature of organizations and projects over time. Finally, internal control can provide only reasonable assurance. Expectations of absolute assurance cannot be achieved.

Q. Please describe the framework Concentric used to review the Company's system of internal control as implemented by the PTN 6 & 7 Project in 2014.

A. As in prior years, Concentric focused on six elements of the Company's internal controls:

- Defined corporate procedures;
- Written project execution plans;
- Involvement of key internal stakeholders;
- Reporting and oversight requirements;
- Corrective action mechanisms; and
- Reliance on a viable technology.

Each of these elements was reviewed for the following five processes:

- Project estimating and budgeting processes;
- Project schedule development and management processes;

- Contract management and administration processes;
- Internal oversight mechanisms; and
- External oversight mechanisms.

Concentric's work in this proceeding is additive to our work reviewing the Project in prior years. In other words, Concentric's review of PTN 6 & 7's 2014 activities incorporates the information and understanding of the Project gained during Concentric's reviews of FPL's activities from 2008 through 2014.

Q. Please describe how Concentric performed this review.

A. Concentric's review was performed over the period from December 2014 to February 2015. We began by reviewing the Company's policies, procedures and instructions with particular emphasis placed on those policies, procedures or instructions that may have been revised since the time of Concentric's previous review. In addition, Concentric reviewed the current project organizational structures and key project milestones that were achieved in 2014. Concentric then reviewed other documents and conducted in-person interviews of more than a dozen FPL personnel to make certain that PTN 6 & 7's policies, procedures, and instructions were known by the Project teams, were being implemented by the Project, and have resulted in prudent decisions based on the information that was available at the time of each decision.

Concentric's interviews included representatives from each of the following functional areas:

- Project Management;
- Project Controls;
- Integrated Supply Chain Management ("ISC");

- Employee Concerns Program;
- Quality Assurance/Quality Control ("QA/QC");
- Internal Audit;
- Transmission;
- Environmental Services; and
- Licensing and Permitting.

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

A. Defined corporate procedures are critical to any project development process as they detail the methodology with which the project will be completed and make certain that business processes are consistently applied to the project. To be effective, these procedures should be: (1) documented with sufficient detail to allow project teams to implement the procedures; (2) clear enough to allow project teams to easily comprehend the procedures; and (3) revisited and revised as the project evolves and as lessons are learned. It is also important to assess whether the procedures are known by the project teams and adopted into the Company's culture, including a process that allows employees to openly challenge and seek to improve the existing procedures and to incorporate lessons learned from other projects into the Company's procedures. Within PTN 6 & 7, the Project Controls staff is primarily responsible for ensuring the Company's corporate procedures are applied consistently by the various FPL and contractor staff members who are working on the Project. However, it is acknowledged that this is a shared responsibility held by all Project team members, including the project managers.

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

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

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

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

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

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

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

> Cost and time control information must be timely with little delay between field work and management review of performance. This timely information gives the project manager a chance to evaluate alternatives and take corrective action while an opportunity still exists to rectify the problem areas.[4]

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

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

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

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

Section VI: PTN 6 & 7 Project Activities in 2014

Q. How is this section of your testimony organized?

A. This section describes Concentric's review of the five key processes (*i.e.*, project schedule development and management, project estimating and budgeting, contract management and administration, internal oversight mechanisms, and external oversight mechanisms) as they were applied to PTN 6 & 7 in 2014.

Q. As a preliminary matter, what did your review lead you to conclude with regard to the prudence of FPL's actions in 2014 on the PTN 6 & 7 Project?

A. FPL's decision to continue pursuing PTN 6 & 7 in 2014 was prudent and was expected to be beneficial to customers. In addition, Concentric's review indicates that FPL's management of the PTN 6 & 7 Project over the course of 2014 has resulted in prudently-incurred costs. During 2014, FPL continued its methodical approach to achieving its licensing goals, and to identifying the costs and benefits of pursuing the option to build new nuclear capacity for its customers.

Q. How was PTN 6 & 7 organized in 2014?

A. The 2014 PTN 6 & 7 organizational structure is depicted in Exhibit JJR-3. The project continues to be developed primarily within two separate, but collaborative business units ("business units" or "functions"): Project Development and New Nuclear Projects. While these business units each report through the same executive management chain, their objectives are tied to each group's respective capabilities. That approach allows FPL to ensure the most qualified group is utilized to accomplish the Project's objectives.

Mr. Scroggs, the Senior Director Development, is responsible for aspects of the Project not related to the NRC in 2014, while Mr. Maher, the Senior Director Licensing, remains responsible for submitting and defending the PTN 6 & 7 Combined License Application ("COLA"). Mr. Reuwer, the Senior Director Construction, will be responsible for the engineering, procurement, construction, and subsequent start-up of the Project.

While the Project remains in its current phase of development, Mr. Reuwer is responsible for determining the proper sequencing of planning activities, which directly informs Project cost expectations and, thus, the annual feasibility analysis.

Q. Were there any changes in executive responsibility for the PTN 6 & 7 Project in 2014?

A. Not in 2014. In March 2013, the New Nuclear Projects and Project Development business units were moved from the Engineering and Construction organization to the Nuclear Division within FPL, which is led by the Company's Chief Nuclear Officer ("CNO"). This change was made to reflect the project's current focus on licensing and development of the option to construct the new units.

Q. In 2014, who was responsible for the New Nuclear Projects organization?

A. The CNO was supported directly by a Development Director, a Licensing Director and a Construction Director, who each manage a portion of the New Nuclear Projects organization. The Licensing Director was supported by multiple Licensing Engineers and Document Control personnel and the Construction Director was supported by a staff of engineers. As a whole, the New Nuclear Projects business unit received support from other business units within FPL through matrix relationships.

Q. What internal FPL departments supported these business units in 2014?

A. These business units received support from FPL's Juno Environmental Services, Law Department, and ISC, among others.

Q. Did Concentric have any observations related to the PTN 6 & 7 organizational structure in 2014?

A. Yes. Concentric believes the organizational structure appropriately assigned responsibility to those employees best equipped to respond to the Project needs and properly reflected the Project's focus on the licensing and permitting stage that the Project is currently in.

Q. What major milestones were achieved by PTN 6 & 7 in 2014?

A. The main focus of the New Nuclear Project in 2014 was to continue to make progress with federal and state licensing reviews. To that end, PTN 6 & 7 achieved several important milestones during the year.

The Company continues to make progress on the Land Exchange Agreement for the transmission corridor. The Everglades National Park Draft Environmental Impact Statement ("EIS") for the Land Exchange was published in January 2014 and was followed by a sixty day public comment period. Negotiations are currently taking place, with a final EIS expected in mid-2015.

On May 19, 2014, the State of Florida Electrical Power Plant Siting Board approved the Final Order of Certification for the Project, enabling it to pursue development of the eastern and western transmission lines (*i.e.*, the East Preferred Corridor and West Consensus Corridor). Four parties have filed appeals to the Final Order, which the Third District Court of Appeal expects to address by April 2016.

At the federal level, the NRC released an updated environmental milestone review schedule in April and issued a revised overall COLA milestone review schedule in August 2014. FPL completed an initial schedule review for the

purpose of feasibility analyses based on the NRC's COLA review schedule in December 2014. This assessment of the Project schedule was completed with the assistance of Chicago Bridge and Iron ("CB&I"), which has a part in managing the construction of both the VC Summer new nuclear facility in South Carolina and the Plant Vogtle new nuclear project in Georgia. In addition, the Project continued to respond to Requests for Additional Information ("RAIs") from the NRC as that agency's staff reviews the PTN 6 & 7 COLA. FPL completed all environmental RAIs in March 2014 and closed out the remaining RAIs related to safety in June 2014. As of year-end 2014, there were no remaining open RAIs.

Q. Were there changes in 2014 that affect expectations for the timing of future regulatory approvals?

A. Yes. As I mentioned above, the Project received an updated licensing review schedule in 2014, after delays related to staffing challenges at the NRC and litigation of the NRC's Waste Confidence ruling (discussed below), which was addressed in September of 2014.

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

A. Yes. The NRC was presented with two significant challenges in 2011 that I have discussed in prior years and that continue to affect the nuclear industry. In March 2011, the earthquake near Japan's Fukushima Daiichi Nuclear Generating Station prompted the NRC to shift considerable resources to an emergency task force assigned with ensuring that both existing and proposed U.S. nuclear facilities are adequately protected from similar seismic events. An earthquake that struck Virginia only months later caused additional reassignment of NRC engineering staff members to an assessment of that incident.

As a result of these emergent priorities, members of the teams assigned to review licensing applications for new nuclear projects were tasked with other priorities, delaying technical reviews of new nuclear licensing applications. FPL is not alone in having been affected by those staffing challenges. Exelon, Tennessee Valley Authority, PSEG, and other project sponsors have also received revised review schedules.

In addition, in June 2012 the United States Court of Appeals for the District of Columbia Circuit overturned the NRC's 2010 update to its Waste Confidence Rule, which determined that spent fuel could be safely stored at power plants for 60 years beyond their operation. As a result, the NRC temporarily refrained from granting licensing permits for new nuclear plants or renewing licenses of existing facilities until sufficient environmental studies could be concluded and the issue of how to store radioactive waste was sufficiently resolved. In August 2014, the NRC issued its Continued Storage of Spent Nuclear Fuel Rule, adopting findings from a supporting generic environmental impact statement ("GEIS"), which concludes that spent nuclear fuel can be safely managed in dry casks during short-term, long-term, and indefinite timeframes. While this decision ends the two-year licensing suspension, challenges to the new rule have been filed and are awaiting an NRC decision.

Q. Please describe key 2014 decisions related to PTN 6 & 7.

A. On the state level, FPL made a number of key decisions regarding stipulation agreements with stakeholders in the SCA process. By working closely with other parties, FPL was able to reach agreements that limited the scope of the SCA appeals process, preventing an even more protracted schedule.

As it has in years past, FPL determined in 2014 that continuing to extend PTN 6 & 7's reservation agreement with Westinghouse for reactor vessel head ultra-heavy forgings presented the best value to customers. Constraints with regard to ultra-heavy forgings have loosened considerably in recent years, and FPL has continued to maintain flexibility with regard to the agreement by regularly extending the terms while the Company evaluates the risks and benefits of maintaining the reservation.

Lastly, FPL has begun to reevaluate its execution schedule for the new units based on the NRC's new review schedule and other schedule-related development constraints.

Q. Was PTN 6 & 7 deemed feasible by the Company during the period of your review?

A. Yes. In the second fiscal quarter of 2014, the Company performed a feasibility analysis regarding PTN 6 & 7, concluding that the project continued to be cost-effective in seven of 14 scenarios. In six of the remaining seven scenarios, the breakeven nuclear capital cost fell above the low end of FPL's non-binding estimated range of capital costs for PTN 6&7, but below the high end of the range. FPL revisits its feasibility analysis on an annual basis in accordance with NCRC requirements.

Project Schedule Development and Management Processes

Q. Please describe how the PTN 6 & 7 Project team produced and managed the schedule of 2014 Project activities.

A. The initial PTN 6 & 7 Project schedule, which was developed early in PTN 6 & 7 life cycle, continues to be refined and managed using an industry standard software package developed by Primavera Systems, Inc.

Q. Who is responsible for reviewing and maintaining the Project's schedule?

A. The PTN 6 & 7 project schedule is currently managed by the New Nuclear Projects and Project Development business unit leaders.

Q. What procedures or Project Instructions existed in 2014 to govern the development and refinement of the PTN 6 & 7 schedule?

A. New Nuclear Project - Project Instruction 100 continues to govern the development, refinement and configuration of the project schedule. No substantive changes were made to this Project Instruction in 2014.

Q. What mechanisms were in place to ensure that the PTN 6 & 7 Project team prudently managed its schedule performance?

A. The PTN 6 & 7 Project team proactively monitored and managed its schedule performance on a weekly and monthly basis. In addition, the PTN 6 & 7 Project team has incorporated similar reporting requirements into its contracts with key vendors, such as Bechtel, requiring them to submit monthly progress reports detailing their progress to date including any projected delays.

Q. Did FPL revise the overall PTN 6 & 7 Project execution schedule in 2014?

A. Yes, it did. State policy and federal review schedules continue to evolve, which has caused the Company to revise its schedule expectations for the Project.

As I discussed above, after FPL received an updated COLA review schedule from the NRC, the Company conducted a detailed assessment of the development sequence that would be needed to complete the Project. As a result of this analysis, FPL has revised the commercial operation dates for the two new units to 2027 and 2028.

Q. What developments have contributed to this schedule revision?

A. First, as a result of the resource constraints and scheduling delays that have materialized throughout the NRC's COLA review process, the date by which FPL currently expects to receive its COL is now March 2017, approximately two and a half years later than initially expected.

In addition, revisions to Florida's NCRC limit the recovery of costs related to preconstruction and construction work before the NRC grants a COL to the Company. This limits FPL from undertaking certain stages of project development in parallel. Under conservative schedule assumptions, this has the effect of extending the overall Project timeline by an additional two and a half years for a total of five years of delays outside of the Company's control.

Q. Did Concentric have any observations related to risks the Project faces as a result of these NRC and policy-based delays?

A. Yes. The new timeline results in economic, financial, labor, weather, and nuclear industry uncertainties related to the Project. Extending the commercial operation

date of the new PTN units to 2027 and 2028 leaves the Project exposed to these various types of uncertainty for a longer period of time.

Q. Can you further describe the risks that you have listed above that could result from these NRC and policy-based delays?

A. Yes. Economic risks are associated with the influence of macroeconomic factors, such as load growth, inflation, and other events on the Project. Financial risks include interest rate risk, capital availability risk, and stock market risk. Labor risks pertain to the impact of changing workforce costs and skilled labor availability. Weather risks refer to the potential for adverse weather conditions to cause construction delays. Finally, nuclear risks, such as safety incidents at other nuclear sites, licensing revisions, and mandated design changes could cause the NRC to suspend licensing activities or create further regulatory requirements for nuclear plants. Extending the development time of PTN 6 & 7 increases the odds of these risks materializing, any one of which has cost and schedule implications.

Q. Did Concentric have any observations related to how the PTN 6 & 7 Project team managed and reported its schedule performance in 2014?

A. Yes. Concentric believes the PTN 6 & 7 Project team has taken appropriate steps to prudently manage and report on its schedule performance, which include keeping executive management informed on the Project's progress against its schedule plans and aware of the issues that have affected the Company's ability to complete the Project on its original schedule.

Project Estimating and Budgeting Processes

Q. Please describe how the project budgets were developed for PTN 6 & 7 in 2014.

A. As in prior years, the PTN 6 & 7 budgets were developed based on feedback from each department that supports the Project. Those budgets included a bottom-up analysis that assessed the resource needs of each department during the year. A 15% contingency adjustment was applied to each request for undefined scope or project uncertainties that could not be predicted at the beginning of the year.

Q. Was the process used by PTN 6 & 7 to develop its budgets consistent with the Company's policies and procedures?

A. Yes, the process utilized by PTN 6 & 7 to develop its 2014 budgets was consistent with FPL's corporate procedures, which outline the process to be used by each business unit when developing annual budgets.

No changes were made to the procedures that govern the development of project budgets during 2014.

Q. What mechanisms did the PTN 6 & 7 Project team use to monitor budget performance in 2014?

A. The PTN 6 & 7 Project team used numerous reports to manage budget performance. Those reports are more fully described by FPL Witness Scroggs in Exhibit SDS-5. Throughout the year, on a monthly basis, the PTN 6 & 7 Project Management team received reports detailing budget variances by department, with explanations of the variances. Those reports included a description of all costs expended in the current month and quarter as well as year-to-date and total cumulative spending. In addition, the PTN 6 & 7 Project team published quarterly

"Due Diligence" reports for the Company's senior executives. Further, project management presented a status update to FPL's senior management on a periodic basis. Those presentations included a description and explanation of any budget variances or significant challenges.

Q. What are your observations regarding the Company's Quarterly Risk Assessments?

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

The Quarterly Risk Assessments are one of the methods by which FPL's senior leadership is apprised of the PTN 6 & 7 Project's status. The assessments are, therefore, important to clearly communicate all risks and the full suite of mitigation strategies being considered for the project.

Q. Are those reporting mechanisms consistent with the PTN 6 & 7 Project Execution Plan?

A. Yes. Reporting mechanisms in place throughout 2014 were consistent with the PTN 6 & 7 Project Execution Plan.

Q. Within the PTN 6 & 7 Project team, who was responsible for tracking and reporting project expenditures?

A. Responsibility for tracking and reporting project expenditures was held by the PTN 6 & 7 Project Controls Senior Financial Analyst. The Senior Financial Analyst reviewed and approved significant vendor invoices and tracked the Project's expenditures relative to its annual budget. The processes in place for approving invoices and tracking project expenditures are contained in formal procedures used by the PTN 6 & 7 Project team. These procedures are reviewed regularly, and are updated as changes become necessary.

Q. Did Concentric have observations related to the PTN 6 & 7 budget processes?

A. Concentric found that in 2014 the PTN 6 & 7 Project team acted prudently when developing its annual budget and in tracking its performance relative to the annual budget. As in years past, the PTN 6 & 7 Project team developed a series of reports that track budget performance on a cumulative and periodic basis, along with a process for describing variances in actual expenditures relative to the budget. The PTN 6 & 7 budget processes continue to include a variety of mechanisms that ensure that the Project's management and the Company's senior management are well informed of the Project's performance.

Q. Has FPL developed a cost estimate that is sufficiently detailed for the current phase of the project?

A. Yes, it has. FPL's cost estimates are currently indicative in nature, and will need to be much more definitive before FPL commits to the construction phase of the

Project. The Company plans to obtain a more definitive cost estimate as the Project progresses beyond the licensing phase.

Q. Did FPL review its overnight cost estimate for the PTN 6 & 7 Project in 2014?

A. Yes. After conducting a review of cost trends among other AP1000 projects, FPL determined that no change in its cost estimate was warranted in 2014. Concentric understands that the Company plans to continue monitoring cost trends among the other utilities pursuing new nuclear units, and FPL will work with them and its contractors to update cost estimates in the future, as appropriate.

Q. Did FPL review its total project cost estimate for the PTN 6 & 7 Project in 2014?

A. FPL began to reevaluate its non-binding estimate of total costs for the PTN 6 & 7 Project in 2014, but it has not yet completed this work. It would be reasonable to expect that the significant expansion of the Project's development timeline will result in an increase in the total Project cost estimate due to additional escalation and financing costs that will accrue during a longer development period. FPL plans to complete this assessment of its non-binding cost estimate as part of its 2015 feasibility analysis.

Contract Management and Administration Processes

Q. Did PTN 6 & 7 require the use of outside vendors in 2014?

A. Yes. In order to avoid the need to recruit, train and retain the significant number of employees required to obtain a COL and Site Certification, to complete other project activities, and to respond to interrogatories from federal, state, and local

agencies, FPL continued to use a number of outside vendors in 2014. Those vendors were utilized to provide ongoing post-submittal support, among other tasks. As has been the case in years past, FPL's use of outside vendors and contractors is consistent with standard practices in the new nuclear industry.

Q. How did the PTN 6 & 7 Project team make certain that it was prudently managing and administering its procurement processes?

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

Q. Were any procedures used by the ISC team revised in 2014?

A. In 2014 no changes were made to procedures governing contractor oversight and management.

Q. Did Concentric review examples of how these processes were implemented throughout 2014?

A. Yes. Concentric reviewed information related to new contracts, purchase orders and change orders issued for the Project that involved at least $50,000 of

contracting or expenditure. PTN 6 & 7 entered into only three such contracts in 2014. Of these, two were competitively sourced and one was single-sourced.

Q. What processes were in place to ensure that PTN 6 & 7 received the full value for the goods and services that were procured in 2014 and that appropriate charges were invoiced to the project?

A. In order to ensure that the Company and its customers received the full value of the goods and services that were procured, the PTN 6 & 7 project directors and their staffs were responsible for reviewing each invoice received from the major PTN 6 & 7 vendors. To perform that review, the Project Control Senior Financial Analyst received the invoices from each of the Project's vendors. Upon receipt, an Invoice Review/Verification Form that detailed which technical or functional representative was responsible for reviewing each section of the invoice was attached to the invoice. That form and the respective invoice were then sent to each reviewer to verify that the appropriate charges were included in the invoice and that the work product met PTN 6 & 7's needs and contractual provisions prior to payment. When discrepancies were identified, FPL sought a credit on a future invoice or deducted the amount from the current invoice depending on discussions with the vendor. Similar processes are utilized by the FPL departments that support PTN 6 & 7.

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

A. Yes. Concentric found that FPL managed the contract management and administration process according to its corporate procedures and guidelines in 2014, and that these costs were prudently incurred.

Internal Oversight Mechanisms

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

A. The PTN 6 & 7 Project team continued to use a number of periodic reports in 2014 to inform the project management team and the Company's executive management of progress with PTN 6 & 7. Those reports are described in greater detail in the direct testimony of FPL Witness Scroggs and are used to make certain that the costs PTN 6 & 7 is incurring are the result of prudent decision-making processes.

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

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

A. FPL's Internal Audit Department performs regular audits of PTN 6 & 7, not only focusing on the eligibility of the costs being recorded to the NCRC for recovery from customers, but also considering internal controls as part of its review process. Each year, the FPL Internal Audit Department performs an audit of PTN 6 & 7 to test whether charges billed to the project are appropriate and that those charges are being accounted for correctly.

Costs incurred by the New Nuclear Project in 2014 are currently being reviewed by the Company's Internal Audit Department. As of January 2015, a final report was expected to be issued by Internal Audit in April 2015.

Q. Did the Internal Audit Group have any adverse findings related to PTN 6 & 7 in 2014?

A. No, it did not.

Q. Please describe the FPL QA/QC function and its purpose.

A. The FPL QA/QC function is responsible for implementing the Company's QA Program, which was mandated by the NRC in 10 CFR 50, Appendix B. Federal regulations define a variety of criteria that guide QA programs for nuclear programs. It was the responsibility of the QA/QC employees to ensure that FPL's QA program met those criteria, and that the PTN 6 & 7 Project was being implemented appropriately by the Project team and its vendors.

In 2014 the QA/QC function remained independent and separate from the PTN 6&7 Project and reported to the Company's CNO through the Director of Nuclear Assurance.

Q. What QA activities related to the PTN 6 & 7 Project took place in 2014?

A. The QA/QC function was responsible for reviewing certain activities by the Project's vendors, both at the Project site as well as at vendor facilities. Activities conducted by the QA/QC function on behalf of the Project included in-person reviews of vendors' methodologies, qualifications, and QA programs.

Q. Were any QA/QC issues found in 2014?

A. The QA/QC surveillance audits produced only minor findings in its reviews. These concerns were addressed to the satisfaction of the QA/QC team immediately. In addition, one warranty claim was identified in 2014 with Rizzo Associates for rework associated with RAI responses regarding geotechnical work. This claim was resolved in October 2014.

Q. Does the Company maintain other internal oversight and review mechanisms for PTN 6 & 7?

A. Yes. The Company maintains other internal oversight mechanisms that are available to help ensure that PTN 6 & 7 is prudently incurring costs. The first of those mechanisms is the FPL Corporate Risk Committee. This committee consists of FPL director-level and other senior employees, and is charged with ensuring that the project appropriately considers risks when making key project decisions. That committee is available to the project when necessary as an additional oversight tool.

Q. Did Concentric have any observations related to PTN 6 & 7's internal oversight mechanisms?

A. Yes. Concentric has found that FPL's internal oversight mechanisms were prudently and appropriately applied in 2014.

External Oversight Mechanisms

Q. What external review mechanisms were used by the PTN 6 & 7 Project team in 2014 to ensure the Company is prudently incurring costs?

A. PTN 6 & 7 and FPL have been subject to several external reviews. These reviews are utilized to make certain that industry best practices are incorporated into PTN 6 & 7 and to improve overall project and senior management performance. These reviews include Concentric's review of the Company's activities and project controls and the FPSC Staff's financial and internal controls audits.

Q. Are there other external information sources relied upon by the PTN 6 & 7 Project team?

A. Yes. In 2014, FPL maintained membership in several industry groups that relate to the development of new nuclear projects. Those groups include APOG (the AP1000 owners group), the Electric Power Research Institute, and Nuclear Energy Institute, among others. Each of those groups provides the PTN 6 & 7 Project team with access to a breadth and depth of information that can be used to enhance the PTN 6 & 7 Project team's effectiveness.

Q. Did Concentric have any observations related to the external oversight mechanisms utilized by FPL in 2014?

A. Based on Concentric's review to date, Concentric believes the PTN 6 & 7 Project team is proactively seeking to incorporate best practices into the management of PTN 6 & 7. That is being achieved by retaining outside experts to review and comment on certain aspects of the project and by soliciting external information sources that can provide useful guidance to the Project team.

Section VII: Conclusions

Q. Please summarize your conclusions.

A. It is my conclusion that FPL's decision making and management actions as they related to 2014 costs for which FPL is seeking recovery were prudent, and it is thus my opinion that FPL's 2014 expenditures on PTN 6 & 7 were prudently incurred. FPL continued its methodical approach to achieving its licensing goals, which will allow it to continue to create the option to build new nuclear capacity for the benefit of its customers.

For nearly four decades nuclear power has provided substantial benefits to utility customers in Florida. Those benefits include electric generation with no GHG emissions, fuel cost savings, fuel diversity, reduced exposure to fuel price volatility and efficient land use. As a result, it is prudent for FPL to develop additional nuclear capacity for its customers. FPL continues to develop PTN 6 & 7 through capable project managers and directors that are guided by detailed company procedures and appropriate management oversight.

Q. Does this conclude your testimony?

A. Yes, it does.

Endnotes:

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[1] Based on FPL's 2013 generation data. U.S. Department of Energy, Energy Information Administration (EIA), Monthly Nuclear Utility Generation (MWh) by State and Reactor, 2013 Preliminary Release.

U.S. Department of Energy, Energy Information Administration (EIA), Table of Carbon Dioxide Uncontrolled Emission Factors.

[2] Bloomberg Finance, L.P.

[3] "Because of cold start, average natural gas spot prices were higher in 2014," U.S. Department of Energy, The Energy Information Administration (EIA), January 13, 2015.

[4] 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.

John J. Reed
Chairman and Chief Executive Officer

John J. Reed is a financial and economic consultant with more than 35 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 200 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. Has 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 and served on a "Blue Ribbon" panel established by the Province of New Brunswick regarding the future of natural gas distribution service in that province.

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, pipelines, electric utilities, and independent energy project developers. In the recent past, provided services to most 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, 24, 79 and 99 Licenses

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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

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

ARTICLES AND PUBLICATIONS

"Maximizing U.S. federal loan guarantees for new nuclear energy," *Bulletin of the Atomic Scientists* (with John C. Slocum), July 29, 2009
"Smart Decoupling – Dealing with unfunded mandates in performance-based ratemaking," *Public Utilities Fortnightly*, May 2012

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	11/87, 2/88	Chugach Electric	Docket No. U-87-35	Cost of Capital
Alberta Utilities Commission				
Alberta Utilities (AltaLink, EPCOR, ATCO, ENMAX, FortisAlberta, Alta Gas)	1/13	Alberta Utilities	Application 1566373, Proceeding ID 20	Stranded Costs
Arizona Corporation Commission				
Tucson Electric Power	7/12	Tucson Electric Power	Docket No. E-01933A-12-0291	Cost of Capital
UNS Energy and Fortis Inc.	1/14	UNS Energy, Fortis Inc	Docket No. E-04230A-00011 and Docket No. E-01933A-14-0011	Merger
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, 11/91	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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Southern Union Gas	4/87, 5/87	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, 1/89	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
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, 11/92	Northern Natural Gas Company	RP92-1-000, et al	Cost of Service

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Canadian Association of Petroleum Producers and Alberta Pet. Marketing Comm.	10/92. 7/97	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, 3/95	Pacific Gas Transmission	Docket No. RP94-149-000	Rolled-In vs. Incremental Rates; rate design
Tennessee GSR Group	1/95, 3/95, 1/96	Tennessee Gas Pipeline Company	Docket Nos. RP93-151-000, RP94-39-000, RP94-197-000, RP94-309-000	GSR Costs
PG&E and SoCal Gas	8/96, 9/96	El Paso Natural Gas Company	RP92-18-000	Stranded Costs
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	EC99-33-000	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. EC01-7-000	Market Power 203/205 Filing
Wyckoff Gas Storage	12/02	Wyckoff Gas Storage	CP03-33-000	Need for Storage Project

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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 2/05	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, 3/11, 4/11	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. RP10-79-000	Affidavit re: Impact of Preferential Rate
Gulf South Pipeline	10/14	Gulf South Pipeline	Docket No. RP15-65-000	Business risk, rate design
BNP Paribas Energy Trading, GP South Jersey Resource Group, LLC	2/15	Transcontinental Gas Pipe Line Corporation	Docket No. RP06-569-008 and RP07-376-005	Regulatory policy, incremental rates, stacked rate
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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, 5/09, 8/09	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 Power and Light Co.	3/11, 7/11	Florida Power & Light Co.	Docket No. 110009-EI	New Nuclear cost recovery, prudence
Florida Power and Light Co.	3/12 7/12	Florida Power & Light Co.	Docket No. 120009-EI	New Nuclear cost recovery , prudence
Florida Power and Light Co.	3/12 8/12	Florida Power & Light Co.	Docket No. 120015-EI	Benchmarking in support of ROE
Florida Power and Light Co.	3/13, 7/13	Florida Power & Light Co.	Docket No. 130009	New Nuclear cost recovery, prudence
Florida Power and Light Co.	3/14	Florida Power & Light Co.	Docket No. 140009	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.	Docket No. 99-0207	Standby Charge

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Illinois Commerce Commission				
Renewables Suppliers (Algonquin Power Co., EDP Renewables North America, Invenergy, NextEra Energy Resources)	3/14	Renewables Suppliers	Docket No. 13-0546	Application for Rehearing and Reconsideration; long-term purchase power agreements
WE Energies Corporation	8/14 12/14 2/15	WE Energies/Integrys	Docket No. 14-0496	Merger Application
Indiana Utility Regulatory Commission				
Northern Indiana Public Service Company	10/01	Northern Indiana Public Service Company	Cause No. 41746	Valuation of Electric Generating Facilities
Northern Indiana Public Service Company	01/08, 03/08	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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Boston Edison Company	2/99	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
NStar	6/11	NStar, Northeast Utilities	DPU 10-170	Merger approval
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, 1/07	Consumers Energy Company	Case No. U-14992	Sale of Nuclear Plant
WE Energies	12/11	Wisconsin Electric Power Co	Case No. U-16830	Economic Benefits/Prudence
Consumer Energy Company	6/2013	Consumers Energy Company	Case No. U-17429	Certificate of Need, Integrated Resource Plan
WE Energies	08/14	WE Energies/Integrys	Case No. U-17682	Merger Application
Minnesota Public Utilities Commission				
Xcel Energy/No. States Power	9/04	Xcel Energy/No. States Power	Docket No. G002/GR-04-1511	NRG Impacts

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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, 10/06, 11/06	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
Northern States Power	11/08, 05/09	Northern States Power Company	Docket No. E002/GR-08-1065	Return on Equity
Northern States Power	11/09 6/10	Northern States Power Company	Docket No. G002/GR-09-1153	Return on Equity
Northern States Power	11/10, 5/11	Northern States Power Company	Docket No. E002/GR-10-971	Return on Equity
Missouri Public Service Commission				
Missouri Gas Energy	1/03 04/03	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 2/06 7/06	Missouri Gas Energy	Case Nos. GR-2002-348 GR-2003-0330	Capacity Planning

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
Laclede Gas Company	5/11	Laclede Gas Company	Case No. CG-2011-0098	Affiliate Pricing Standards
Union Electric Company d/b/a Ameren Missouri	2/12, 8/12	Union Electric Company	Case. No. ER-2012-0166	ROE/earnings attrition/regulatory lag
Union Electric Company d/b/a Ameren Missouri	08/14	Noranda Aluminum Inc.	Case No. EC-2014-0223	Ratemaking; regulatory and economic policy
Union Electric Company d/b/a Ameren Missouri	1/15 2/15	Union Electric Company	Case No. ER-2014-0258	Revenue requirements, ratemaking policies
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
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	RH-1-93	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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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	5/06	Brunswick Pipeline	GH-1-2006	Market Study
TransCanada Pipelines Ltd.	12/06, 04/07	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
TransCanada Pipelines Ltd	9/11, 5/12	TransCanada Pipelines Ltd.	RH-3-2011	Business Services and Tolls Application
Trans Mountain Pipeline LLC	6/12, 1/13	Trans Mountain Pipeline LLC	RH-1-2012	Toll Design
TransCanada Pipelines Ltd	8/13	TransCanada Pipelines Ltd	RE-001-2013	Toll Design
NOVA Gas Transmission Ltd	11/13	NOVA Gas Transmission Ltd	OF-Fac-Gas-N081-2013-10 01	Toll Design
Trans Mountain Pipeline LLC	12/13	Trans Mountain Pipeline LLC	OF-Fac-Oil-T260-2013-03 01	Economic and Financial Feasibility and Project Benefits
Energy East Pipeline Ltd.	10/14	Energy East Pipeline		Economic and Financial Feasibility and Project Benefits
New Brunswick Energy and Utilities Board				
Atlantic Wallboard/JD Irving Co	1/08	Enbridge Gas New Brunswick	MCTN #298600	Rate Setting for EGNB

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Atlantic Wallboard/Flakeboard	09/09, 6/10, 7/10	Enbridge Gas New Brunswick	NBEUB 2009-017	Rate Setting for EGNB
Atlantic Wallboard/Flakeboard	1/14	Enbridge Gas New Brunswick	NBEUB Matter 225	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
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
Public Service Co. of New Hampshire	7/14	Public Service Co. of NH	Docket No. DE 11-250	Prudence
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
Electric Customer Group	01/11	Generic Stakeholder Proceeding	BPU GR10100761 and ER10100762	Natural gas ratemaking standards and pricing
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
Southwestern Public Service Co., New Mexico	12/12	SPS New Mexico	Case No. 12-00350-UT	Rate Case, Return on Equity
PNM Resources	12/13 10/14 12/14	Public Service Co. of New Mexito	Case No. 13-00390-UT	Nuclear Valuation/In support of stipulation
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

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
Nova Scotia Utility and Review Board				
Nova Scotia Power	9/12	Nova Scotia Power	Docket No. P-893	Audit Reply
Nova Scotia Power	8/14	Nova Scotia Power	Docket No. P-887	Audit Reply
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Oklahoma Gas & Electric Company	08/14 01/15	Oklahoma Gas & Electric Company	Cause No. PUD 201400229	Integrated Resource Plan
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
Pennsylvania Public Utility Commission				
ATOC	4/95	Equitrans	Docket No. R-00943272	Rate Design, unbundling
ATOC	3/96 4/96	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 3/02	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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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, 11/08	Oncor, TCC, TNC, ETT, LCRA TSC, Sharyland, STEC, TNMP	Docket No. 35665	Competitive Renewable Energy Zone
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
Cross Texas Transmission	08/12 11/12	Cross Texas Transmission	Docket No. 40604	Return on Equity
Southwestern Public Service	11/12	Southwestern Public Service	Docket No. 40824	Return on Equity
Lone Star Transmission	5/14	Lone Star Transmission	Docket No. 42469	Return on Equity, Debt, Cost of Capital
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Texas State Legislature				
CenterPoint Energy	4/13	Association of Electric Companies of Texas	SB 1364	Consolidated Tax Adjustment Clause Legislation
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 8/90	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
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	Rate development

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
Northern States Power Wisconsin	10/13	Xcel Energy (dba Northern States Power Wisconsin)	Docket No. 4220-UR-119	Fuel Cost Adjustments
Wisconsin Electric Power Company	11/1/13	Wisconsin Electric Power Co.	Docket No. 6630-FR-104	Fuel Cost Adjustment
WE Energy	08/14 1/15	WE Energy/Integrys	Docket No. 9400-YO-100	Merger approval

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
Sensata Technologies, Inc./EMS Engineered Materials Solutions, LLC	1/11	Sensata Technologies, Inc./EMS Engineered Materials Solutions, LLC v. Pepco Energy Services	Case No. 11-198-Y-00848-10	Change in usage dispute/damages
Commonwealth of Massachusetts, Appellate Tax Board				
NStar Electric Company	8/14	NStar Electric Company		Valuation Methodology
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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, 10/07	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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
State of Texas District Court of Nueces County				
Northwestern National Insurance Company	11/11	ASARCO LLC	No. 01-2680-D	Damages
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
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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, 11/06	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, 6/08	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				
KN Energy, Inc.	3/93	KN Energy vs. Colorado GasMark, Inc.	Case No. 92 CV 1474	Gas Contract Interpretation

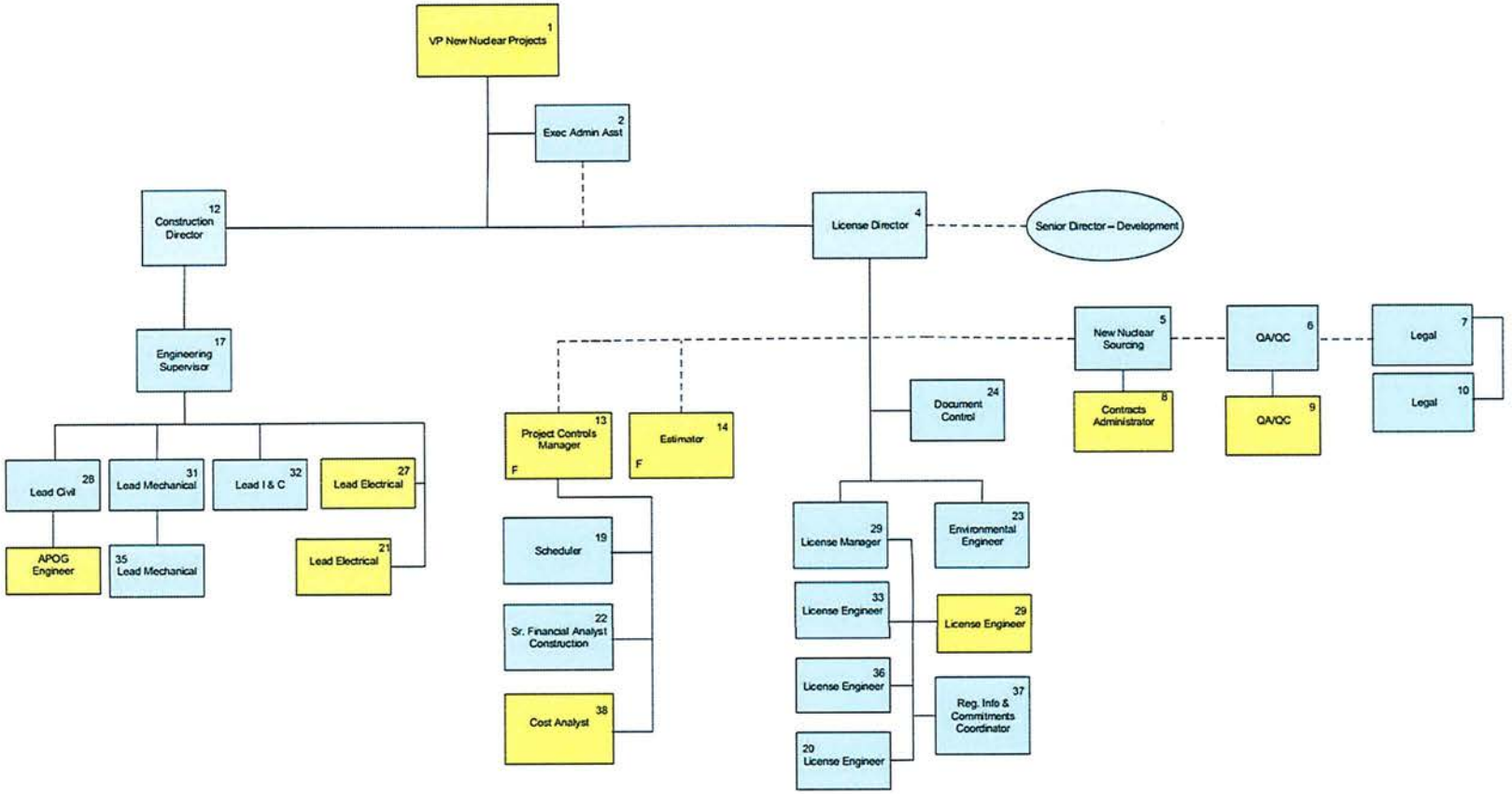
SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
U. S. District Court, Northern California				
Pacific Gas & Electric Co./PGT PG&E/PGT Pipeline Exp. Project	4/97	Norcen Energy Resources Limited	Case No. C94-0911 VRW	Fraud Claim
U. S. District Court, District of Connecticut				
Constellation Power Source, 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, Northern District of Illinois, Eastern Division				
U.S. Securities and Exchange Commission	4/12	U.S. Securities and Exchange Commission v. Thomas Fisher, Kathleen Halloran, and George Behrens	Case No. 07 C 4483	Prudence, PBR
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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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
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, 2/05	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

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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

CONCENTRIC ENERGY ADVISORS

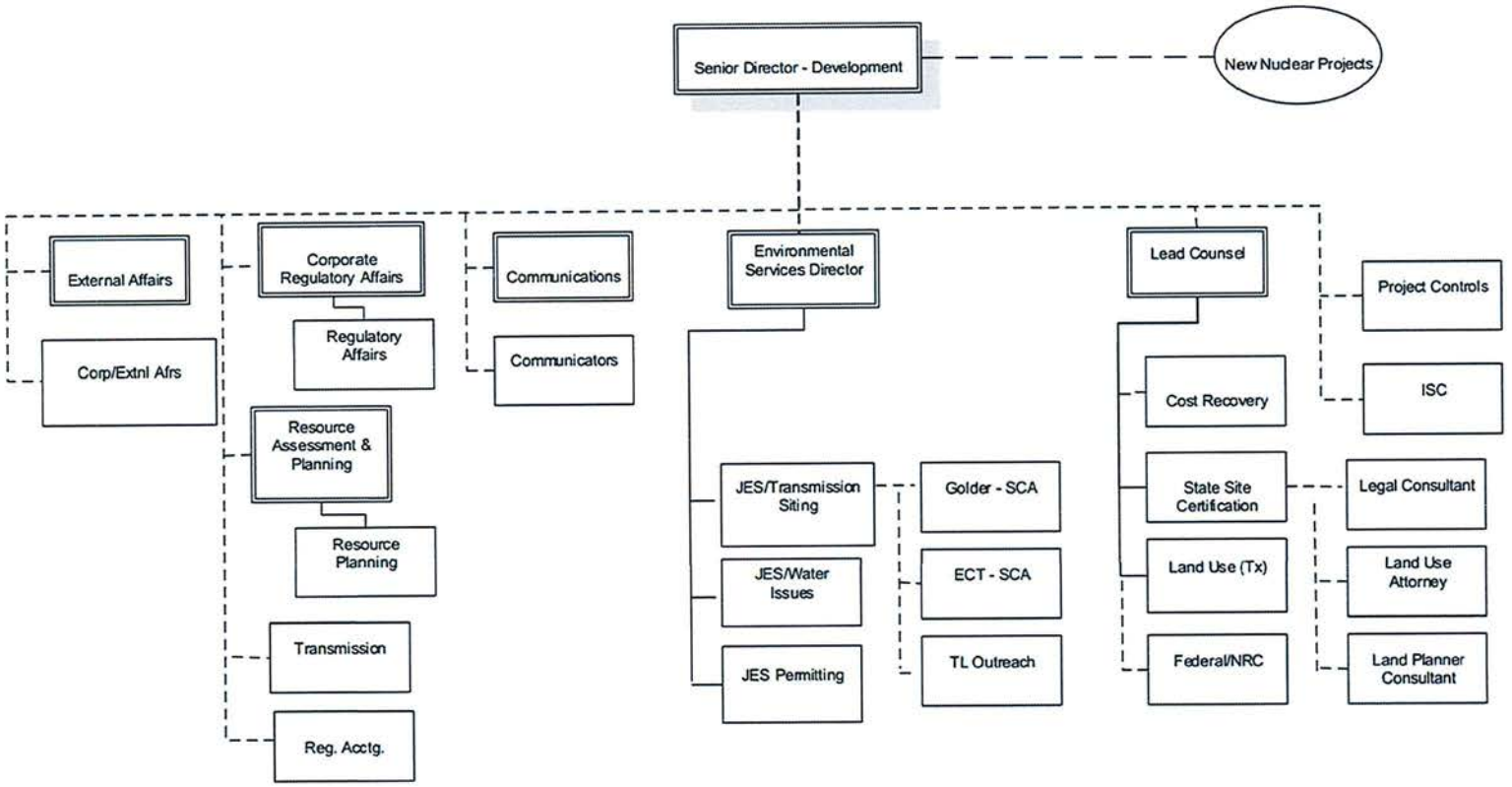
PTN Units 6 & 7 Project Organization
New Nuclear Projects



Docket No. 150009-EI
PTN 6 & 7 Organization Charts
Exhibit JJR-3, Page 1 of 2

CONCENTRIC ENERGY ADVISORS

Turkey Point 6 & 7
Development Project Organization
Licensing Phase



CERTIFICATE OF SERVICE
DOCKET NO. 150009-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing testimony and exhibits was served electronically this 2nd day of March, 2015, to the following:

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