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August 10, 2009

-VIA HAND DELIVERY -

Ms. Ann Cole, Director
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 090009-EI

Dear Ms. Cole:

I am enclosing for filing in the above docket the original and fifteen (15) copies of the rebuttal testimony and exhibits of Florida Power & Light Company witnesses S. Scroggs, R. Kundalkar, W. Powers, S. Sim, and J. Reed, Concentric Energy Advisors.

If there are any questions regarding this transmittal, please contact me at 561-304-5253.

Sincerely,

Bryan S. Anderson
Fla. Authorized House Counsel No. 219511

Enclosure
cc: Counsel for Parties of Record (w/encl.)

CERTIFICATE OF SERVICE
DOCKET NO. 090009-EI

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Rebuttal Testimony and Exhibits, was served by hand delivery* or U.S. Mail this 10th day of August, 2009 to the following:

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By: _____
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISION

DOCKET NO. 090009-EI
FLORIDA POWER & LIGHT COMPANY

IN RE: NUCLEAR POWER PLANT COST RECOVERY AMOUNT TO BE RECOVERED DURING THE PERIOD JANUARY – DECEMBER 2010

REBUTTAL TESTIMONY OF:

S. SCROGGS

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF STEVEN D. SCROGGS

DOCKET NO. 090009-EI

August 10, 2009

Q. Please state your name and business address.

A. My name is Steven D. Scroggs and my business address is 700 Universe Blvd., Juno Beach, FL 33408

Q. Have you previously provided testimony in this docket?

A. Yes.

Q. Are you sponsoring any rebuttal exhibits in this case?

A. Yes. I am sponsoring the following exhibits that are attached to my rebuttal testimony:

SDS – 5: FPL-BVZ Engineering Services Agreement Scope of Work and BVZ Costs by Scope and Year

SDS – 6: Excerpt from Witness Gundersen's deposition by Progress Energy Florida

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony addresses the direct testimony provided by Witness William R. Jacobs on behalf of the Office of Public Counsel, Witness Arnold Gundersen on behalf of Southern Alliance for Clean Energy (SACE) and Witness Mark Cooper on behalf of SACE as such testimony relates to the Turkey Point 6 & 7 project.

Q. Please summarize your rebuttal testimony.

A. During 2008 FPL carefully considered, decided and implemented a strategy which provides an alternative to an Engineering, Procurement, and Construction (EPC) contract for the Turkey Point 6 & 7 project but does not preclude later entering into an EPC contract. FPL's approach creates greater flexibility and optionality for itself and its customers, as well as the potential for significant cost savings for FPL's customers. As explained in this testimony, a part of this strategy is the retention of several qualified engineering firms to perform early specific scopes of work that are necessary in order to continue orderly progress on the project, to create a pool of credible vendors for future competitive bidding. FPL has also deferred the decision to enter into a large single or sole source Engineering Procurement (EP) or EPC contract that in FPL's view does not offer an acceptable balance of costs and risks under current market conditions.

OPC Witness Jacobs claims that FPL has committed unalterably to a plan that separates the EP and C functions and finds that FPL is imprudent for not signing an EPC agreement. He incorrectly claims that an EPC contract is advantageous and points to a selectively limited group of projects, including Progress Energy Florida (PEF), that have entered into EPC contracts as justification. In this same docket Witness Jacobs criticizes PEF for entering into an EPC contract. Witness Jacobs's testimony is incorrect in this regard and should be rejected for several reasons, explained further in my testimony.

FPL's decision to implement its step-wise incremental approach to contracting, rather than myopically executing an EPC contract as was suggested by Witness Jacobs, is supported by the fact that the nuclear industry marketplace has not presented FPL with EP or EPC contract opportunities that are sufficiently advantageous to FPL and its customers in terms of cost and risk. Further, this testimony identifies other U.S. nuclear projects that have made decisions similar to FPL.

Witness Gundersen's testimony identifies uncertainties in the regulatory and execution aspects of deploying new nuclear generation. These uncertainties, all of which have been identified and discussed by FPL in preceding Need Determination and Cost Recovery filings, have been addressed in FPL's planning and inform our deliberate, stepwise approach. My rebuttal testimony will clarify some mischaracterizations made by Witness Gundersen, identify how FPL's project approach recognizes and addresses these uncertainties and describe how the feasibility analysis provides a sufficient basis for proceeding in a careful, stepwise manner.

Witness Cooper's testimony offers no thorough economic analysis or study of the feasibility of FPL's Turkey Point 6 & 7 project. It is clear that Witness Cooper's testimony did not include any detailed review or consideration of FPL's project at all. Instead, citing only a variety of secondary sources and

not one of the complete and voluminous FPL documents produced in discovery, Witness Cooper asserts that the existence of uncertainties regarding the economic aspects of new nuclear generation mandates stopping project development now. The rebuttal testimony of FPL Witness Sim discusses Witness Cooper's testimony in greater detail. My rebuttal testimony, however, will address the danger of adopting a selective review of secondary data compared with FPL's rigorous project-specific analyses.

Q. How is your rebuttal testimony organized?

A. I will address the issues presented by each witness separately; however, some themes are common to all three witnesses.

REBUTTAL TO OPC WITNESS JACOBS

Q. Do you have any initial observations with respect to Witness Jacobs's testimony?

A. Yes. As an initial matter, I notice that Witness Jacobs's testimony in this NCRC case criticizes FPL for not yet entering into an EPC contract. Witness Jacobs's testimony with respect to Progress Energy Florida (PEF) criticizes PEF for already having entered into an EPC contract.

Similarly, in the 2008 NCRC proceeding, Witness Jacobs criticized FPL's use of single and sole source contracts for specific specialized Turkey Point 6 & 7 project work. This year, however, he asserts that FPL is imprudent for not

having entered into probably the largest possible single or sole source contract, an EPC contract for the construction of a nuclear plant, which contracts are necessarily single or sole source because of the proprietary nuclear design technology of any chosen vendor.

These mutually contradictory and self-canceling criticisms suggest that Witness Jacobs is pursuing an opportunistic approach in his review of FPL's projects, finding fault with FPL management's decisions regardless of the course of action taken.

Q. Witness Jacobs discusses FPL's hiring of Black & Veatch/Zachry (BVZ). Has Witness Jacobs correctly characterized the FPL-BVZ contractual relationship?

A. No. Witness Jacobs identifies that FPL has "retained BVZ as **the** preliminary engineer" (Jacobs at page 6, line 19; emphasis added). This statement, and his subsequent focus on BVZ, indicates that he has concluded that FPL has made a commitment to engage BVZ as the sole firm providing preliminary engineering services. In fact, FPL has also engaged other national/international engineering firms to support the Turkey Point 6 & 7 project. Presently Bechtel, HDR Engineering, CH2M Hill and BVZ are conducting various scopes of work increasing FPL's pool of credible potential bidders for future work scope

Q. What specific scope of work was assigned to BVZ throughout 2008 and 2009 and what expenditures were made?

A. BVZ has been retained to provide specific services related to preliminary construction planning for the project. Construction planning reviews the necessary site preparation activities leading up to the major construction effort and helps identify risks that could impact project schedule and cost. For example, BVZ is analyzing the optimal sequence of access road development, site excavation and site improvements to efficiently prepare the site for construction of the nuclear islands, turbine islands, balance of plant equipment, switchyards and water treatment facilities. This work is not dependent upon specific detailed knowledge of the AP-1000 design, and is similar to work BVZ has successfully conducted for FPL in the construction of natural gas fueled generation and renewable projects. However, the retention of BVZ for this scope of work should not be misunderstood to imply that they have been or will be selected for subsequent Construction scope.

The work scope and payment summary for BVZ is described in Exhibit SDS-5. In summary, BVZ provided engineering services on five specific scopes of work associated with the construction planning, scheduling and conceptual design of the Turkey Point 6 & 7 project. The expenditures for this scope of work were $1,915,714 through December of 2008, with an additional $4,293,362 projected for 2009.

Q. Has FPL ensured that the scope of work conducted by BVZ meets all quality requirements and is in keeping with FPL policies and procedures?

A. Yes, as is the case for all contracts associated with the Turkey Point 6 & 7 project. The work is conducted under the supervision of Martin Gettler, Vice President of New Nuclear Projects and his construction staff. FPL's project controls procedures have been applied to ensure all requirements have been met. This includes monthly progress reports, progress meetings, schedule adherence reviews, invoice reviews and detailed reviews of all contract deliverables for content quality and sufficiency. Additionally, BVZ activity has been reviewed during internal and external project audits with no deficiencies identified.

Q. Witness Jacobs expresses concern over the retention of BVZ because of their lack of familiarity with the Westinghouse AP-1000 design. Please explain FPL's rationale for hiring BVZ and other qualified engineering firms for selected scopes of work on the Turkey Point 6 & 7 project.

A. As described above, BVZ has been retained for a scope of work that is not unique to the AP-1000 technology. BVZ is a joint venture staffed by a major international engineering and construction firm with recent experience in nuclear power generation construction and has the necessary qualifications and talent to conduct work on new nuclear generation in the U.S. Further, BVZ has successfully performed as a constructor on gas fueled generation projects for FPL (Turkey Point 5, West County Energy Center, Martin Unit 8 and Manatee Unit 3). So, BVZ is fully qualified to conduct the scope of work assigned and is a proven provider of engineering services that have benefited FPL customers.

The rationale for hiring such qualified firms is based on developing a credible pool of qualified service providers, improving the opportunity for competition. FPL has successfully delivered the benefits of creating competition for Construction work on generation projects and intends to do so where possible on the Turkey Point 6 & 7 project. The retention of qualified providers to conduct small, defined scopes of work early in the project is a way to expand the base of credible construction firms that could potentially compete for larger segments of the construction later on in the project.

Q. Witness Jacobs also discusses a concern over FPL's contracting strategy. Did FPL foreclose the possibility of entering into either EP or EPC contracts through its management decisions and actions to date?

A. No. Throughout the discussion on contracting, Witness Jacobs seems to have concluded that FPL has made a final decision to split the Engineering and Procurement (EP) scope from the Construction (C) scope. This is not the case as FPL has not entered into any contract for these services. To be clear, FPL has not entered into an EPC contract, an EP contract or a C contract. FPL's strategy involves creating an opportunity for future competitive bidding, preserving its options. Either EP and C or EPC contracting arrangements remain alternatives available to FPL.

Q. Why has FPL not entered into an EPC contract or an EP and C contract?

A. Fundamentally, FPL has chosen to defer the commitment associated with either contracting approach because a compelling proposal of scope, schedule,

price and terms has not been offered to FPL. In the absence of a compelling contract offer, FPL has chosen to pursue further resolution of the key uncertainties I identified in my May 1, 2009 testimony; primarily those relating to the future permitting timeline and commercial negotiations.

Q. What is unique about new nuclear deployment that would allow for competition for Construction scope, but not for the Engineering and Procurement scope?

A. Due to the nature of new nuclear licensing, the EP scope is not something that can be competitively bid. Owners obtain licenses that are specific to a single proprietary technology with a sole provider. Many aspects of plant construction, however, are not unique to the specific technology and can be competitively bid. For example, activities involving civil work, non-safety related buildings, and other associated facilities can be separated into packages allowing for competition to be engendered. It is important that a body of credible qualified vendors be available to participate in the bidding in order to take advantage of this opportunity. Logically, one would think that the Westinghouse/Shaw consortium would be in an advantaged position to provide the most competitive bid under such a scenario. However, FPL has found that cultivating a competitive structure, where possible, ensures that its customers receive the best value for its investment.

Q. Do you agree with Witness Jacobs's assessment of EPC contracts currently being offered for new nuclear deployment?

A. No. Witness Jacobs's criticisms of FPL's strategy are based on a mistaken assumption that EPC contracts with suitable scope, pricing, schedule and terms providing significant risk protection are available and that FPL has just passed them up. Nothing could be further from the truth. Witness Jacobs is mistaken in assuming that the benefits of the EPC contracting approach, such as FPL and its affiliates have successfully used in gas-fired and wind generation construction are, or will be, available in new nuclear projects.

The EPC model provides benefits of efficiency and risk control in situations where there is a high level of industry experience and competition to accomplish the engineering, procurement and construction facets of a project. For example, this strategy can be effectively employed in the design and construction of natural gas fired combined cycle generation where the construction and fabrication risks are well defined, multiple capable suppliers exist and the contractors have experience that limit their execution risk. These characteristics do not currently exist in the new nuclear construction market to the same level as with other technologies. Therefore, there is little expectation that a new nuclear EPC contract will exhibit any of the beneficial attributes of EPC contracts that have been utilized before.

FPL understands that EPC contracts that are currently being offered for new nuclear generation provide little benefit in terms of cost control or risk management. Vendors offer a small fixed price portion, with the majority of

costs being either firm (fixed with an agreed upon index for escalation) or on a time and materials basis. In practice, EPC contracts for new nuclear do not offer the risk management features Witness Jacobs identifies. Therefore Witness Jacobs's conclusion that an "EPC-type contract... clearly reduces the risk" (See Jacobs at page 8, lines 5-6) is misinformed, misleading and does not reflect the realities of the market in which the initial units of the next generation of U.S. nuclear power will be built.

Q. Do you agree with Witness Jacobs's characterization regarding the universal adoption of an EPC contract by all other utilities?

A. No. While it is true that "all other U.S. utilities that have signed a contract for construction" have signed EPC agreements, the characterization is misleading. It is also true that many utilities have chosen to defer entering into EPC agreements for the very reasons FPL has identified; that terms available in the market are simply not compelling for all project owners. A broader review of the U.S. project listing results in a range of project management team decisions, only three of which have resulted in EPC contracts.

FPL understands that some U.S. utilities using the AP-1000 design (Georgia Power Company, SCANA Corporation, Progress Energy Inc.) have entered into contracts with the Westinghouse/Shaw Consortium that provide for consolidated Engineering, Procurement and Construction of the project – but contain scope, pricing, schedule and terms that make them significantly different from the EPC contracts that Witness Jacobs describes. Other AP-

1000 projects that have filed applications for NRC license review (Duke, Progress Energy Carolinas (Harris), and TVA) have not entered into EPC contracts.

Several U.S. utilities (Entergy, Ameren, Unistar (Nine Mile Point)) have chosen to suspend their projects awaiting resolution of uncertainties prior to entering into any large contracts. These projects are based on designs other than the Westinghouse AP-1000.

FPL expects that future contract structures will better recognize the realities of risk allocation and leverage the benefits of competition. For example, Luminant and Mitsubishi have recently announced that they have signed a memorandum of understanding detailing their plans to finalize an overall EP agreement associated with the Comanche Peak project. They are developing a separate construction plan. This approach mirrors that being considered by FPL.

Q. What are the benefits of FPL following its alternative contracting strategy, compared with having entered into an EPC contract?

A. The FPL step-wise approach benefits customers in five ways.

- FPL maintains progress on the overall project and towards the inherent benefits offered by conducting all work necessary using qualified vendors at market rates.

- The option of an EPC contract is preserved. Creating competition for the C scope of work will encourage Westinghouse/Shaw to bring the best price and terms to the table and may enhance a future EPC offer.
- The contractual commitment to Construction expenditures (whether through a combined or separated approach) is deferred until a later point in time when the detailed design is further developed and the market costs of materials and labor can be more accurately estimated. The Construction bidding is therefore expected to reflect a reduced "risk premium", additional costs that would otherwise be added to the current bid or assigned to the Owner through the contract terms.
- The strategy increases the number of credible providers resulting in a greater likelihood of competitive bidders and/or better industry "bench strength" to support the project.
- The process of defining a distinct demarcation between the EP and C scopes has produced added clarity for all parties involved. Requiring the delineation of work responsibility is necessary under EPC or EP and C structures. However, the transparency of that allocation and the ability to ensure that confusion does not create inefficiencies or added costs is greater when approached from a potential EP and C perspective. Without this driver, it would be difficult for FPL to ensure that the demarcation was clear within an EPC framework. In FPL's experience, delegation of management of the interfaces between EP and C functions is no guarantee that inefficiencies or

miscommunication are eliminated. Recognizing that, for new nuclear deployment, providers will have limited capacity to take on the "burden and risk". Therefore, it is incumbent upon FPL to play a role in proactively managing these interfaces.

Q. What is the alternative to FPL's contracting strategy?

A. As Witness Jacobs suggests, FPL could simply accept an EPC contract with a sole provider. FPL has not done so to date because a) the benefits of an EPC contract cited by Witness Jacobs are not available, b) it is unnecessary and unwarranted at this time based on FPL's assessment and desire to further resolve key uncertainties, c) the project is able to maintain progress without doing so, and d) it is not in the best interest of our customers to do so.

As previously discussed, FPL will necessarily be required to sole source the EP portion of the project to Westinghouse/Shaw due to the proprietary nature of the AP-1000 design. In the absence of credible additional service providers for the C scope of work, FPL would also be required to sole source the C scope. Ultimately, such a decision may be identified as the most cost-effective route. However, in order to minimize the likelihood and magnitude of sole source contracts, and provide a means to test the market for competitive services where possible, we have chosen to manage our near term procurement decisions in a way that fosters optionality, better pricing and more favorable terms for our customers in the future. Such an approach is in keeping with FPL procurement policies.

Q. Is Witness Jacobs's current position consistent with comments provided in the 2008 Nuclear Cost Recovery docket?

A. No. In that docket Witness Jacobs was critical of sole and single source procurement decisions on a number of smaller contracts, while this year he seems to advocate doing so on one of the largest cost components of the project. FPL remains consistent with our view that competitive bidding is preferred, but under certain specific circumstances sole or single source procurement may be the appropriate or only available method.

Q. What was Witness Jacobs's criticism regarding FPL's feasibility analysis?

A. Witness Jacobs criticizes FPL for not updating the capital cost of the new nuclear units indicating that not doing so results in a feasibility analysis "of little value to the Commission to determine the long term feasibility of the units". (See Jacobs page 9 lines 25-25).

Q. Why did FPL choose to conduct the feasibility analysis based upon its existing capital cost estimate?

A. Simply stated, the capital cost estimate range developed in 2007 remains a valid estimate of the potential capital cost of the Turkey Point 6 & 7 units and provides an appropriate comparison for the breakeven capital cost produced in the feasibility analysis. FPL developed the cost estimate range through a careful and well-informed process that recognized the potential escalation in materials and labor costs into the future as well as potential differences in project scope. This estimate, developed for the Need Determination filing,

remains a valid cost estimate for the project. The validity of the FPL cost estimate range is confirmed by comparisons to the published cost estimates of other AP-1000 projects at Progress Energy, Georgia Power and SCANA. Exhibit JJR-1 (page 36 of 36) to FPL Witness Reed's May 1, 2009 testimony provides a comparison of these published costs to FPL's cost estimate range. The comparison shows that the high end of FPL's cost estimate range is comparable to recent estimates provided by these leading AP-1000 projects.

Q. Have there been any significant developments in the past year that warrant a revision to FPL's cost estimate range?

A. No. Near term market prices for materials and labor have moderated in the past year, reversing an escalating trend seen prior to 2008. However, given that the project schedule is several years away from considerable expenditures on materials and labor services, these near term fluctuations do not signal a significant or long term trend that would warrant a revision. Further, while FPL's negotiations with Westinghouse/Shaw have yielded progress, a clear and specific proposal (one including cost and schedule commitments tied to a specific set of contract terms) has not been developed. Without such a specific proposal, any updates would not provide an improvement in the clarity of the cost estimate range beyond that in the current cost estimate range. Thus, FPL's cost estimate range is reasonable, appropriate for its use in the feasibility analysis and is based upon the best information currently available.

Q. Does the comparison of this cost estimate to the updated breakeven cost provide the Commission with a valid and current feasibility analysis?

A. Yes. By design, the annual feasibility analysis compares a current breakeven capital cost to the high end of FPL's cost estimate range. This provides an updated comparison of the most competitive generation alternative to a market validated capital cost estimate for new nuclear.

Comparison of the break-even cost under nine scenarios demonstrates that eight of nine scenarios result in a break-even cost (the cost where nuclear is economically equivalent to combined cycle natural gas generation) well above the high end of FPL's cost estimate range, while the ninth scenario is consistent with FPL's high end estimate. FPL Witness Sim provides a complete discussion of the feasibility analysis in his testimony in this docket.

REBUTTAL TO SACE WITNESS GUNDERSEN

Q. Please provide your assessment of Witness Gundersen's testimony on behalf of the Southern Alliance for Clean Energy.

A. In order to form an opinion about a company's management actions and decisions it is necessary to have knowledge of what their actions and decisions are. It is apparent from statements in Witness Gundersen's testimony that he has no specific knowledge of FPL's Turkey Point 6 & 7 project.

Exhibit SDS-6 is an excerpt from the recent deposition taken by Progress Energy Florida (PEF) where Witness Gundersen describes the time he spent reviewing documents and information prior to drafting his testimony. In his deposition Witness Gundersen identifies he invoiced SACE for 31 hours, approximately 80 percent of which was spent reviewing documents. That results in 25 hours of review for both new nuclear projects in this docket. He also states in his deposition that he has not reviewed any of the thousands of FPL documents provided in discovery, including management reports, contracts, schedules, or budgets. Witness Gundersen merely refers to and extrapolates from general press articles which are not specific to FPL's project. The information shown in Exhibit SDS-6 reflects so little review and understanding of FPL's project that his opinions provide no value in assessing the reasonableness of FPL's management decisions with respect to the project in general or its stepwise approach to licensing, schedule and contracting practices.

Q. Please respond to Witness Gundersen's assertion that FPL has failed to consider specific issues in its planning and therefore has not shown the long term feasibility of the project.

A. Among the many uncertainties constantly factored into FPL's project management decisions, FPL has recognized the uncertainties pointed to by Witness Gundersen – namely 1) the untested nature of the NRC's Part 52 licensing process, 2) material and labor challenges for new nuclear construction, and 3) the complex nature of nuclear construction. From the

earliest stages of the project FPL has chosen to manage these issues by developing an approach that mitigates these issues by pursuing resolution of uncertainty at each step of the process, and makes judicious and careful decisions regarding the commitment of funds toward the project. For example, the original project schedule envisioned that FPL would expend funds in late 2008 to secure additional long lead materials for the project. The market forces that would have made that expenditure warranted did not develop. In response, FPL was able to defer approximately $35 million of those costs to later in the project schedule. This approach provides the best opportunity to develop the option for new nuclear generation with transparent decision making and cautious investments.

The annual feasibility analysis sponsored by FPL Witness Sim inherently quantifies the margin between the expected high-end capital cost of the Turkey Point 6 & 7 project and an economically equivalent alternative. The format of the analysis was developed for the Need Determination process. Recognizing the uncertainties in the future, the feasibility analysis considers a range of potential future outcomes. As discussed in FPL Witness Sim's testimony, only when natural gas costs and emission compliance costs are at their lowest does the natural gas fired combined cycle technology come close to competing economically with the high end of the Turkey Point cost estimate range. So, under that single scenario natural gas fueled generation would be about the same cost for customers - without the qualitative fuel

diversity, zero greenhouse gas emissions and energy security benefits offered by nuclear generation. The margin averages 44% (or approximately $2,000/kW) above the high end of FPL's cost estimate range for 8 of 9 scenarios. The cost impacts of delays that may be created by project uncertainties are addressed by FPL's active management approach and the annual cost recovery process that authorizes the next increment of project investment every year following a review of the best information available. By this I mean to point out that the stepwise and transparent process itself allows for the control of commitment in relation to the risks of taking the next step. FPL concludes that the annual feasibility analysis clearly justifies taking the next step in the project.

Q. Please comment on Witness Gundersen's assertion that FPL has not taken into account scheduling uncertainty in licensing delays associated with the AP-1000.

A. FPL has at all times accounted for scheduling uncertainty. For example, in my May 1, 2009 testimony (see Scroggs, May 1, 2009 at page 18-19) I identify the uncertain nature of the license and application review schedules and how that might affect the overall pace of the project. Further, I identify (see Scroggs, May 1, 2009 at page 21) that FPL has slowed the pace of project expenditures and accepted pressure on maintaining the project schedule as a means of responding to this uncertainty. Following the initial reviews of the state and federal license and permit applications submitted on June 30, 2009, state and federal agencies will publish review schedules that will be

incorporated into FPL's overall project schedule. Accordingly, Witness Gundersen's claim is false and should be rejected.

Q. Please comment on Witness Gundersen's assertion that FPL has not taken into account the worldwide demand for construction materials, nuclear grade materials, construction complexity and skilled labor.

A. FPL has at all times taken into account the uncertainties referred to by Witness Gundersen. In fact, FPL's cost estimate range was developed recognizing the potential impacts of all of these issues. In constructing its cost estimate range, FPL reviewed independent government studies, consulted with nuclear vendors, constructors and engineers and applied its own considerable experience in the construction and management of conventional and nuclear generation. This analytical effort resulted in recognizing the need to communicate the estimated cost of the project as a range dependent on many market and regulatory factors. For example, the cost estimate range was developed with a range of assumptions for cost escalation to acknowledge the potential cost impacts of a tight market. The cost estimate range remains a relevant and appropriate way to express the potential for these uncertainties to impact the final cost of the project. Accordingly, Witness Gundersen's claim should be rejected.

Q. Please comment on Witness Gundersen's statement that the "earliest practical" schedule does not imply that it is the most likely schedule to be achieved.

A. Witness Gundersen's statement demonstrates a lack of knowledge concerning FPL's active management of project schedule. The Turkey Point 6 & 7 project is highly complex. FPL's management approach to this project recognizes uncertainty and is designed to take advantage of every opportunity to expedite the delivery of new nuclear generation benefits to our customers when such steps are reasonable, cost-effective and do not introduce unacceptable risks. The project is approached with a sense of urgency so as to continuously identify all reasonable opportunities for schedule improvement and therefore deliver the "earliest practical" schedule. By contrast, approaching the project targeting a "most likely schedule" for a complex and uncertain project would accept potential delays and introduce an excuse for not doing all things reasonably possible to expedite the schedule. For example, FPL has selectively undertaken preconstruction planning efforts to help chart the most efficient path forward and resolve schedule uncertainty. This will place FPL in a position of being able to identify critical path items and needed resources to minimize construction time and cost when those steps are warranted.

Q. Does Witness Gundersen make any statements that lead you to believe that he is not familiar with the Turkey Point site and factors related to the Turkey Point 6 & 7 project?

A. Yes. There are several statements that indicate that Witness Gundersen is poorly informed with respect to the Turkey Point 6 & 7 project. Given these serious and obvious errors, it is not surprising that he reached incorrect

conclusions regarding uncertainties that he identifies as site specific concerns. For example, in his discussion of the site, Witness Gundersen indicates that the two existing reactors share the site with three coal plants (see Gundersen at page 10, lines 11-12) that are all cooled by saltwater through a cooling tower connected to the cooling canals (see Gundersen at page 12, lines 2-3) and connected to the transmission grid through a single coastal transmission corridor (see Gundersen at page 11, lines 20-23). None of these statements are correct. Units 1 and 2 are natural gas and oil fired boilers while Unit 5 is a combined cycle natural gas unit. Units 1 through 4 share the closed loop cooling canal system (without cooling towers) while Unit 5 uses a modern cooling tower with makeup water supplied from a Floridan (non-drinking water) aquifer. The existing units are connected to the transmission grid by two independent transmission corridors; one running north of the plant and a second running west prior to turning north along the western developed areas of Miami-Dade County. It is clear that Mr. Gundersen has not undertaken even the most rudimentary due diligence.

Q. Please comment on Witness Gundersen's concern related to grid stability at Turkey Point.

A. Grid stability is fully addressed in FPL's project analysis. Witness Gundersen's concern may be a result of his extremely limited review of project documents and his lack of understanding about how the site is currently connected to the grid and how the Turkey Point 6 & 7 project is proposed to be interconnected. Grid stability is achieved by careful

engineering design, integration of necessary transmission system improvements and proper interconnections that are not overly reliant on any one substation or transmission corridor. The Transmission Plan for Turkey Point 6 & 7 will meet the reliability standards of the North American Electrical Reliability Corporation (NERC), the Florida Reliability Coordinating Council (FRCC) and the offsite power requirements of the Nuclear Regulatory Commission (NRC). The analyses necessary to establish this plan were conducted early in the site selection process and include an Interconnection and Integration Study, a Grid Stability Analysis Study and a Facilities Study. These thorough and comprehensive studies conducted by FPL's Transmission Planning and Transmission and Substation Engineering departments and expert consultants provide the information necessary to design a robust and reliable interconnection. The interconnection and integration plan will receive peer review through the FRCC. As it historically has, FPL takes seriously its obligations to fully comply with all applicable regulations governing transmission interconnection and integration. Accordingly, Witness Gundersen's assertion should be rejected.

Q. Does Witness Gundersen's CV include experience in transmission system design or Grid Stability analysis subject matters that he discusses?

A. No. In contrast, FPL relies on fully qualified transmission system planning and grid stability experts for the Turkey Point 6 & 7 project.

Q. Please comment on Witness Gundersen's concern related to saltwater intrusion at Turkey Point.

A. The Turkey Point 6 & 7 project will not contribute to saltwater intrusion, a topic that will be reviewed in the state Site Certification process and the NRC Environmental Review. Saltwater intrusion results from a lowered water table on shore being replaced by ocean water transmitted underground through the South Florida geology. The development of the Turkey Point 6 & 7 project has been educated by over 40 years of experience at the site. The design features of the project actually help directly and indirectly address saltwater intrusion. FPL is teaming with Miami-Dade County to redirect treated wastewater away from ocean outfalls and deep well injection to the site to provide the cooling water for the new units and replacing a Floridan aquifer source that serves Unit 5. This indirectly addresses saltwater intrusion by reducing the demand on higher value water sources in the region using "recycled" water. The environmental plan includes projects that would redirect surplus treated reclaimed water to rehydrate historic wetlands in the region, directly addressing the progression of saltwater intrusion. Accordingly, Witness Gundersen's assertion should be rejected.

Q. Does Witness Gundersen's CV include experience in geology, hydrology or saltwater intrusion subject matters that he discusses?

A. No. In contrast, FPL relies on fully qualified experts in geology, hydrology and salt water intrusion for the Turkey Point 6 & 7 project.

REBUTTAL TO SACE WITNESS COOPER

Q. Please provide your assessment of Witness Cooper's testimony on behalf of the Southern Alliance for Clean Energy.

A. Witness Cooper does not provide a competent or accurate review and should not be relied upon, as further discussed in Witness Sim's testimony. In my Need Case testimony (Document number 09467-07, page 37, lines 8-15) I included a discussion of the potential for temporal shifts in markets affecting future feasibility analyses. At that time, I cautioned such shifts "almost certainly will occur, but should be reviewed in the proper perspective for their long term implications." Witness Cooper has taken a selective and skewed view of current trends as they apply to the feasibility analysis, and his claims should be rejected.

Q. Witness Cooper discusses developments in the areas of energy conservation and renewables. Has FPL continued to monitor and evaluate the developments in conservation and renewables?

A. Yes. FPL is a world leader in both areas and has long been involved in the implementation of cost-effective conservation and demand side management programs and the development of wind, solar thermal and solar photovoltaic generation. FPL's experience allows us to recognize the realistic potential for optimizing the use of these resources and incorporate those in our planning. In contrast, Witness Cooper points to developments within the past year or that are expected to occur within the next several years as justification for

abandoning progress on nuclear generation, a known and tested emission free generation source that is available now.

Q. Please comment on Witness Cooper's assertion that FPL's cost estimate of the project was derived from an early low estimate for a different type of reactor and its current estimates remain in the low range of projections.

A. Witness Cooper's testimony fails to reflect any understanding of the function of FPL's non-binding cost estimate in the need determination and NCRC proceedings. The cost estimate was developed prior to the selection of the AP-1000 using the best information developed by industry and government sources. The relevant issue is whether or not the cost estimate range is a sufficient estimate for the Turkey Point 6 & 7 project given what is known today. The answer to this is a resounding "yes". As the project has evolved, FPL has reviewed the adequacy of the cost estimate to represent the anticipated costs of the AP-1000 project at Turkey Point. As discussed earlier in this testimony, the cost estimate incorporates the best information available to represent the range of costs expected. Particularly, the feasibility analysis assumes the high end of that cost estimate range when drawing its conclusions. Also refer to Exhibit JJR-1 (page 36 of 36) to Witness Reed's May 1, 2009 testimony which provides a comparison of the published costs of other AP-1000 costs to the high end of FPL's cost estimate range.

Q. **Should the Commission accept Witness Cooper's assertion that it is unreasonable or imprudent to continue to incur costs to develop the Turkey Point 6 & 7 project?**

A. No. FPL is making prudent management decisions and taking concrete actions that result in the right work being done for the project at a reasonable cost. FPL's approach is helping create contracting options that benefit our customers while deferring decisions that are not required or warranted at this stage of the project. This deliberate, stepwise approach is the best way to make progress towards the many benefits of new nuclear generation recognizing and resolving uncertainties as we proceed.

Q. Does this conclude your testimony?

A. Yes.

FPL-BVZ Engineering Services Agreement
Scope of Work

Redacted

BVZ Costs by Scope and Year:

Redacted

2008 Total Cost:	1,915,714
2009 Total Cost:	4,293,362
Total Expected BVZ Costs:	**6,209,075**

A. Yeah, the -- the preparation of testimony is an hourly rate of $125 an hour.

Q. Is there a different rate for other aspects of the case?

A. Yeah. Deposition testimony is $300.

Q. Is it that painful?

A. I'm sorry.

Q. Is it that painful to answer questions in deposition?

A. Yes, it is. Actually it's -- yeah, my normal deposition rate, and also to the State of Vermont on Public Oversight Panel which I served for the last year, is $300 an hour.

Q. Okay. And I think you mention that you had -- you were contacted two weeks before preparing your testimony. How much time did you spend reviewing the documents and information for the purpose of drafting your testimony?

A. The invoiced amount is 31 hours. That includes drafting the testimony. So that's a combination. So Exhibit 1 is for 31 hours.

Q. Do you have any idea -- any breakdown between reviewing documents and drafting the testimony?

A. I would say approximately 80 percent reviewing documents, 20 percent testimony. Something like that.