BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Cost Recovery Clause

DOCKET NO. 120009-EI
Submitted for filing: April 30, 2012

DIRECT TESTIMONY OF JEFF LYASH

ON BEHALF OF PROGRESS ENERGY FLORIDA

COM 5
APA 1
ECR 6
GCL 1
RAD 1
SRC
ADM
OPC
CLK
Ct. Rep 1

IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 120009-EI

DIRECT TESTIMONY OF JEFF LYASH

I. INTRODUCTION AND QUALIFICATIONS.

Q. Please state your name and business address.

A. My name is Jeff Lyash. My business address is 410 South Wilmington Street, Raleigh, North Carolina, 27601.

Q. By whom are you employed and in what capacity?

A. I am currently employed by Progress Energy, Inc. ("Progress Energy") as the Executive Vice President-Energy Supply. I assumed my current position on June 1, 2010. Prior to this appointment, I was employed by Progress Energy as the Executive Vice President of Corporate Development. I also held the position of President and Chief Executive Officer ("CEO") of Progress Energy Florida, Inc. ("PEF" or the "Company") from 2006 until July 6, 2009. In this role, I had overall responsibility for the operations of PEF.

Q. What is your role with respect to the development of the Levy nuclear power plants?

A. As the Executive Vice President-Energy Supply for Progress Energy, I have senior management oversight responsibility for the Levy nuclear power plant project ("LNP") and program. The LNP program oversight and enterprise governance charter provides program execution oversight, including ongoing review of performance and decision making on the LNP. John Elnitsky, as Vice President- New Generation Programs and Projects ("NGPP"), leads the Levy Nuclear Power Plant Project and quarterly Levy Program Performance Reviews. The Levy Program Performance Review includes the following functional areas with respect to the LNP: transmission planning; finance; regulatory; external relations; communications; and nuclear operations, safety, and quality. In terms of this governance and execution oversight role, John Elnitsky continues to report to me as the Executive Sponsor of the Levy Program. As a result, I have direct line accountability for the LNP development. Also, I am a member of the Senior Management Committee ("SMC"), which has senior management responsibility for the LNP. I have briefed the SMC and participated in the SMC's decisions with respect to the LNP, and I have briefed the Progress Energy Board regarding the LNP.

Q. Please describe your educational background and professional experience.

A. I graduated with a bachelor's degree in mechanical engineering from Drexel University in 1984. Prior to joining Progress Energy, I worked with the Nuclear Regulatory Commission ("NRC") in a number of capacities. While with the NRC, I

served as a senior resident inspector, a project manager, a project engineer, and a section chief. In 1993, I joined Progress Energy, and spent eight years at the Brunswick Nuclear Plant in Southport, North Carolina, ultimately becoming Director of Site Operations. In January 2002, I assumed the position of Vice President of Transmission/Energy Delivery in the Carolinas. On November 1, 2003, I was promoted to Senior Vice President of Energy Delivery-Florida. On June 1, 2006, I was promoted to President and CEO of PEF. On July 6, 2009, I was appointed the Executive Vice President of Corporate Development for Progress Energy. As I indicated above, I assumed my current position as the Executive Vice President-Energy Supply on June 1, 2010, which is the position I currently hold.

II. PURPOSE AND SUMMARY OF DIRECT TESTIMONY.

Q. Can you explain the purpose of your direct testimony and summarize it for the Commission?

A. Yes. The purpose of my direct testimony is to explain the Company's decision to shift the expected in-service dates for the Levy nuclear power plants to 2024 and 2025. This decision was made by the SMC. This decision reflects the Company's prudent management of the LNP in the best interests of the Company and its customers.

The decision to shift the executed in-service dates for Levy Unit 1 to 2024 and Levy Unit 2 to 2025 mitigates the current uncertainty and increased near term enterprise risks while preserving the long-term benefits of nuclear energy generation for PEF, its customers, and the State of Florida. This decision provides additional time for Florida economic conditions to improve for PEF and its customers, for natural

gas demand and supply to align in fuel markets, and for more certainty with respect to environmental emission costs, including carbon costs, as a result of developing energy and environmental legislation and regulation, before PEF must decide to commence construction of the LNP. There is no fundamental change in these enterprise risks that prevent this risk mitigation strategy from being successful. The LNP remains the preferred future base load generation resource decision for the Company. The Company still intends to build the LNP and place the Levy nuclear power plants in service in 2024 and 2025.

III. PRUDENCE OF PEF MANAGEMENT LNP IMPLEMENTATION DECISION.

Q. Did the Company make a decision this year that affects implementation of the LNP?

A. Yes. The Company decided to place the Levy nuclear units in service in 2024 and 2025. This decision means that the Company will continue work to obtain the Combined Operating License ("COL") from the NRC for the LNP, but the Company will not commence construction of the LNP next year. Instead, the Company will continue with work on the LNP to commence construction in time to place the first Levy nuclear unit in service in 2024 and the second Levy unit in service eighteen-months later, in 2025. This is the best project implementation decision for PEF and its customers and retains the flexibility to commence construction earlier if enterprise risks and economic conditions warrant.

Q. Why is this decision the best LNP implementation decision for PEF's customers?

A. Completion of the LNP will still furnish the Company and its customers the long term benefits that additional base load nuclear generation provides. The LNP will provide customers long-term fuel savings benefits from a relatively low-cost, fuel source. Nuclear is still the lowest cost fuel source to produce electrical energy, even now with historically low natural gas prices in the utility industry. Nuclear is a clean emission fuel source. The production of energy from the LNP will always be essentially carbon free energy generation. The LNP will also enhance fuel diversity for the Company and the State of Florida. Fuel portfolio diversity will always be a long term benefit of the LNP. The addition of the LNP to PEF's system will reduce PEF's reliance on fossil fuels, especially fossil fuels from foreign sources, for energy production. The reduction in the reliance on fossil fuels for energy generation will always be a benefit for PEF and the State. The LNP will further provide PEF and its customers unparalleled base load energy generation. These long-term benefits of nuclear generation still exist for PEF, its customers, and the State of Florida. There has been no fundamental change in the benefits of nuclear generation.

Also, completion of the LNP is still feasible, whether the Company commences construction of the LNP next year or decides, as it did at this time to commence construction later, in order to complete the Levy nuclear units in 2024 and 2025. From both a qualitative and quantitative feasibility perspective, as explained in detail in Mr. Elnitsky's direct testimony in this proceeding, the Company can complete the LNP.

Near term, however, there is greater uncertainty and, therefore, increased near term enterprise risks associated with the commencement of construction of the LNP next year. Florida economic conditions for customers and the Company have not significantly improved, near term natural gas prices reflect these economic and current over supply conditions, and the economic conditions affect the near term development of clear legislative climate control and greenhouse gas ("GHG") emission policy and regulation at the federal and state government levels. These circumstances represent greater near term uncertainty and, thus, increased enterprise risk with the commencement of construction of the LNP next year.

Under such circumstances, prudent project management requires a strategy to mitigate the increased near term enterprise risks. The only meaningful way for the Company to mitigate the increased near term uncertainty and enterprise risks is to extend the time to commence construction of the LNP. This decision provides the Company additional time prior to commencement of construction for economic conditions in Florida to improve for PEF's customers and the Company, for natural gas markets to respond to current over supply conditions, and for energy and environmental legislative and regulatory policy to develop with respect to climate control and GHG emissions.

Q. When will the Company commence construction of the LNP?

A. One of the benefits of the Company's decision to build the LNP later is that the decision provides the Company the near term flexibility to determine the best time to commence construction. The Company has the flexibility to advance construction if

near term uncertainty improves and the enterprise risks diminish. The Company also has the flexibility to extend the construction date until sometime later in order to complete the LNP by 2024 and 2025.

Q. Does the Company expect the current uncertainty and increased enterprise risks associated with the development of new nuclear generation to change?

A. Yes. Continued uncertainty and thus increased enterprise risks over the long term evaluation period for new nuclear generation realistically cannot be expected. We emphasized when we petitioned this Commission for the need determination for the LNP that this was a long-term project, requiring up to a decade to site, license, design, engineer, and construct two base load nuclear power plants, that will generate electrical energy for PEF and its customers for an estimated sixty years. The Company takes into account the long-term nature of this project when it makes management decisions affecting implementation of the LNP. Near term uncertainty and increased enterprise risk must be evaluated in light of the time it takes to develop, construct, and operate the LNP.

The current uncertainty and increased near term enterprise risks associated with the LNP cannot realistically be expected to continue over the extended period of time required to build and operate the LNP. Economic conditions in Florida will not remain stagnant forever, but must begin to improve, as they nascent appear to be doing now. Natural gas prices cannot remain depressed. Near term, historic low natural gas prices will increase as suppliers and purchasers in the market respond to the historic low prices resulting from low demand and oversupply and capacity storage conditions.

The market response to current gas prices will lead to higher demand, diminished oversupply, and reduced storage conditions and, thus, higher, long term natural gas prices. Eventually too, there must be increased certainty in energy and environmental legislative and regulatory policy. Some form of legislation or regulation of fossil fuel emissions that benefits nuclear generation is inevitable. The current trend and pace of regulation in fact is toward more, not less, constraints on fossil fuel emissions and, thus, increased costs to generate electrical energy with fossil fuels.

For all these reasons, the Company reasonably believes that there is no long term fundamental shift in the enterprise risks associated with the development of new nuclear generation in Florida. The current uncertainty and increased enterprise risks reflect transient economic and fuel market conditions and a transitional period in the economy and energy and environmental policy. Current economic and fuel market conditions will change, economic growth will return, and uncertain environmental policy affecting generation decisions in the utility industry will end. For these reasons, over the long-term, the Company expects economic and fuel market conditions and energy and environmental policy to favor the development of new nuclear generation in Florida.

Q. Is the Company still committed to the development of new nuclear generation?

A. Yes. The development of new nuclear generation is part of the Company's Balanced Solution Strategy. Our Balanced Solution Strategy is a comprehensive plan to change the way we generate electrical energy and meet our customers' future energy demands. This is a three-pronged corporate strategy designed to deliver reliable,

clean, and affordable power to our customers in the future. The corporate strategy includes the development of energy efficiency and Demand-Side Management Programs, the development of alternative and renewable energy, and the development of a state-of-the-art power system to meet future customer energy demands.

Nuclear generation is a key component of our strategy to develop a state-of-the-art power system. The cost to produce energy from power plants using fossil fuels is increasing for the Company and our customers. Electrical energy generation from fossil fuels faces growing emission regulations. The Environmental Protection Agency ("EPA") has issued increasingly stringent regulations to reduce nitrous oxide ("NOx"), sulfur dioxide ("SO2"), mercury, and particulate emissions from fossil-fueled power plants. These regulations adversely impact the cost to produce electrical energy from power plants using fossil fuels. The Company must install emissions controls and continue to invest in fleet modernization projects to meet the current and expanding emission regulations. Additionally, all fossil-fuel power plants emit GHG, including carbon. Today, nuclear energy generation is the only technology capable of producing carbon-free electricity on a utility scale, twenty-four hours a day, for continuous, base load operation. Nuclear power plants also produce electrical energy without NOx, SO2, mercury, particulate or any other emissions associated with the production of energy from fossil-fueled power plants. For these reasons, nuclear energy generation is an important element of our Balanced Solution Strategy.

Under our Balanced Solution Strategy, the LNP is the Company's preferred future base load generation resource in its future generation resource plan. The Company's current LNP implementation decision does not change the Company's

preference for the LNP in its future resource plan. The Company still intends to build the LNP. The Company simply plans to build the LNP later by shifting the expected in-service dates for the Levy nuclear power plants to 2024 and 2025.

Q. Does the development of new nuclear generation still benefit the State of Florida?

A. Yes, it does. The long-term benefits of nuclear generation were recognized by the Florida Legislature. The Commission was specifically required to consider these benefits -- fuel portfolio diversity, reduced reliance on fossil fuels and fossil fuels from foreign sources, reduced air emission compliance costs, and long-term, electric grid reliability -- in need determinations for nuclear power plants. These benefits are the reason the Florida Legislature wanted to encourage utility investment in nuclear power plants. The alternative cost recovery provisions for nuclear power plant costs were established to encourage utility investment in nuclear power plants to achieve these benefits for the State and its residents. The legislative policy has not changed. The Florida Legislature remains committed to the legislation recognizing the long-term benefits of new nuclear generation in Florida for the benefit of the State and its residents.

Q. What was the status of the LNP when PEF made its current implementation decision?

A. The Company focused LNP work on obtaining the COL for the LNP from the NRC after its decision in 2010 to proceed with the LNP on a slower pace. This 2010 decision continued the project by extending the partial suspension that was

implemented when the NRC did not issue the Limited Work Authorization ("LWA") for the LNP in 2009. The Company extended the partial suspension of the Engineering, Procurement, and Construction ("EPC") Agreement for the LNP through an amendment to the EPC Agreement that focused work on obtaining the LNP COL. The Commission agreed this decision was reasonable in Order No. PSC-11-0095-FOF-EI in Docket No. 100009-EI. As a result of this decision, the Company planned to commence construction of the LNP after the licensing of the Levy nuclear power plants is complete.

Q. Does the Company still expect to complete the licensing of the LNP in 2013?

A. Yes. The Company expects to obtain the LNP COL from the NRC in the second quarter of 2013. There is no reason to believe that the Company will not receive the COL for the LNP from the NRC. The NRC has nearly completed all three parts to the NRC's review of the LNP Combined Operating License Application ("COLA"). These parts are the environmental review, the safety review, and the hearing process. With respect to the environmental review, the LNP draft environmental impact statement ("DEIS") was issued, the public comment period has concluded, and the NRC has completed its review of the public comments to the LNP DEIS. PEF also completed its responses to U.S. Army Corps of Engineers ("USACE") information requests for the USACE review for the final environmental impact statement ("FEIS"). The LNP FEIS is expected to be issued on April 27, 2012.

The NRC Staff completed its safety review of the LNP COLA when the NRC Staff issued its Advanced Safety Evaluation Report ("ASER") with no open items in

September 2011. The Advisory Committee on Reactor Safeguards ("ACRS") completed its review of the ASER early this year. Upon completion of the ASER review and report all that remains to complete the safety review for the LNP COLA is the NRC review and issuance of the Final Safety Evaluation Report ("FSER"). Issuance of the LNP FSER is expected by September 2012.

The NRC will also complete the formal hearing process for the LNP COLA this year. This is the last step prior to the NRC's issuance of the LNP COL. There is a contested hearing process before the NRC's Atomic Safety Licensing Board ("ASLB") to resolve the one remaining contention at issue in the LNP COLA. All other admitted contentions have been dismissed by the ASLB. The ASLB hearing is scheduled for October of 2012. There is also a mandatory hearing before the NRC that focuses on the adequacy of the NRC Staff review of the LNP COLA. This mandatory hearing process also will be conducted later this year, possibly extending into early 2013. The completion of this hearing process will complete the NRC's LNP COLA review. The Company still expects the NRC to issue the LNP COL in the second quarter of 2013.

Q. Does the Fukushima event in Japan last year cast doubt on the NRC's expected issuance of the COL for the LNP?

A. No. The Fukushima events in Japan delayed issuance of the LNP FSER from April to later this year to allow time for the Company to address the Fukushima Near Term Task Force recommendations in the LNP COLA, but we do not expect the incorporation of these recommendations into the LNP COLA to adversely impact the

FSER for the LNP or the LNP COL. The impact of these recommendations on the LNP COLA is explained in more detail in Mr. Elnitsky's direct testimony in this proceeding; however, the Company expects to address these recommendations in a timely fashion to permit the NRC to issue the FSER in September and the LNP COL in the second quarter of 2013. Addressing these task force recommendations is just a natural extension of the Company's consistent practice of incorporating operating experience ("OE") from around the world into the Company's best practices. The Company has already taken steps to incorporate the OE from the Fukushima events in Japan last year in the management and operation of its existing and planned nuclear power units. The incorporation of the Fukushima Near Term Task Force recommendations is just another step in this on-going process. We fully expect to incorporate these recommendations into the LNP COLA to the NRC's satisfaction and to obtain the LNP COL from the NRC next year.

Q. Why are you confident that the NRC will issue the LNP COL next year?

A. The NRC did not abandon or delay the NRC's AP1000 license reviews as a result of the Fukushima event in Japan last year. The Fukushima Near Term Task Force did not recommend that the NRC abandon or delay its on-going AP1000 license reviews. The incorporation of lessons learned from the Fukushima event last year and the continuing OE at the affected Japanese nuclear reactors since that event occurred is already an essential aspect of the NRC's regulatory review of the existing and planned nuclear power plants in the United States and the nuclear industry's best practices. As a result, there was no reason for the NRC to abandon or delay its AP1000 license

reviews. In fact, the NRC completed the AP1000 Design Control Document ("DCD") review and issued the final rule approving the AP1000 nuclear reactor design in December last year, subsequent to the Fukushima event in Japan. The NRC also issued the reference COL for the Georgia Power Vogtle AP1000 nuclear power plant site and the COL for the SCANA V.C. Summer nuclear power plant site early this year. Additionally, the NRC is continuing its review of the LNP COLA with the issuance of the LNP FEIS expected to be completed this April, the planned issuance of the FSER in September 2012, and the planned hearing process scheduled for this year. This is an expected result of the existing NRC regulatory process for the U.S. nuclear power industry. There is no reason to think that the OE from the Fukushima event and the task force recommendations will not be successfully incorporated into the LNP COLA and that the NRC will complete its review and issue the LNP COL next year.

Q. If the Company still expects to obtain the NRC license for the LNP in 2013 why has the Company decided not to commence construction of the LNP next year?

A. The ability to obtain the LNP COL is just one factor in the Company's decision to commence construction of the LNP. As I explained above, other factors must be considered in the exercise of the Company's management judgment of the best course of action on the LNP for the Company's customers and the Company. Among these factors are the qualitative and quantitative enterprise risk factors employed each year by the Company to determine if completion of the Levy nuclear power plants is feasible. The ability of the Company to license the LNP is just one of the qualitative enterprise risk factors. Other qualitative enterprise risk factors must be evaluated as

well to determine if it is feasible to build the LNP and to further determine the best implementation schedule if it is feasible. This requires the Company to consider both the short- and long-term costs and benefits of nuclear generation. The Company must evaluate all these factors to determine the best implementation of the LNP for the Company and its customers. This year, the Company concluded as a result of this evaluation that the commencement of construction of the LNP next year is not in the best interests of the Company and its customers. The Company's judgment is that the Company should build the LNP, but later, with a projected in-service date for the Levy nuclear units in 2024 and 2025.

Q. What must Company management do to implement its decision?

A. The Company does not need to take any immediate management action to implement its decision. As I explained above, there currently is a partial suspension of the EPC Agreement until the LNP COL is obtained from the NRC. As I also explained above, the LNP COL is not expected until the second quarter of next year. As a result, the Company does not need to take any action at this time to implement its decision. The Company will continue with the work necessary to obtain the LNP COL this year and next year and the Company will continue to evaluate the project to determine at what point it should commence construction of the LNP.

IV. CONCLUSION.

Q. Do you believe the decision to build the LNP later, with in-service dates for the Levy nuclear units in 2024 and 2025, is a prudent Company decision?

A. Yes. For all the reasons explained in my direct testimony, the Company's decision mitigates the near term uncertainty and increased enterprise risks associated with commencement of LNP construction next year while at the same time preserving the long-term benefits of nuclear generation for the Company, its customers, and the State of Florida. The LNP will provide PEF and its customers fuel savings benefits from a relatively low cost fuel source, and reliable, around-the-clock, base load energy generation without the operational and environmental costs associated with fossil-fuel energy generation. The LNP will enhance fuel portfolio diversity for the Company and the State and it will reduce reliance by the Company and the State on fossil fuels, especially from foreign sources, for electrical energy generation. The LNP is a clean source of energy generation for PEF and its customers. As a result, the LNP is an important element of the Company's Balanced Solution strategic plan to deliver reliable, clean, and affordable power to the Company's customers in the future. The Company intends to build the LNP and plans to build the Levy nuclear power units and expects to place them in service in 2024 and 2025.

Q. Does this conclude your testimony?

A. Yes.