BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Cost Recovery Clause

DOCKET NO. 130009-EI
Submitted for filing: March 1, 2013

REDACTED

DIRECT TESTIMONY OF CHRISTOPHER M. FALLON IN SUPPORT OF ACTUAL COSTS

ON BEHALF OF PROGRESS ENERGY FLORIDA, INC.

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IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA, INC.

FPSC DOCKET NO. 130009-EI

DIRECT TESTIMONY OF CHRISTOPHER M. FALLON

I. INTRODUCTION AND QUALIFICATIONS.

Q. Please state your name and business address.

A. My name is Christopher M. Fallon. My business address is 526 South Church Street, Charlotte, North Carolina 28202.

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

A. I am employed by Duke Energy, Corporation ("Duke Energy") as Vice President of Nuclear Development. Progress Energy Florida, Inc. ("PEF" or the "Company") is a fully owned subsidiary of Duke Energy as a result of the merger between Duke Energy and Progress Energy, Inc. which was finalized on July 2, 2012.

Q. Please summarize your educational background and work experience.

A. I received Bachelor of Science and Master of Science degrees in electrical engineering from Clemson University in 1989 and 1990, respectively. I am also a registered professional engineer in North Carolina.

I began my career with Duke Energy's predecessor company Duke Power in 1992 as a power quality engineer. After a series of promotions, I was named manager of transmission planning and engineering studies in 1999, general manager of asset strategy and planning in 2006, and the managing director of strategy and business planning for Duke Energy starting in 2007. In this role, I had responsibility for developing the strategy for the company's operating utilities; commercial support for operating utility activities such as acquisition of generation assets and overseeing Requests for Proposals for renewable generation resources; and major project/initiative business case analysis. In 2009, I was named Vice President, Office of Nuclear Development for Duke Energy. In that role, I was also responsible for furthering the development of new nuclear generation in the Carolinas and Midwest. This included identifying and developing nuclear partnership opportunities, as well as integrating and advancing Duke Energy's plans for the proposed Lee Nuclear Station in Cherokee County, S.C. I was promoted to my current position on July 1, 2012.

Q. Please describe your responsibilities for the Levy Nuclear Project ("LNP") as Vice President of Nuclear Development.

A. As Vice President of Nuclear Development, I am responsible for the licensing and engineering design for the Levy nuclear power plant project ("LNP" or "Levy"), including the direct management of the Engineering, Procurement, and Construction ("EPC") Agreement with Westinghouse and Shaw, Stone & Webster (the "Consortium") and the project control functions for the LNP.

II. PURPOSE AND SUMMARY OF TESTIMONY.

Q. What is the purpose of your direct testimony?

A. My direct testimony supports PEF's request for cost recovery and a prudence determination, pursuant to the Nuclear Cost Recovery Rule, Rule 25-6.0423, Florida Administrative Code, for the Company's LNP generation and transmission costs incurred from January 2012 through December 2012. I will explain the Company's 2012 LNP costs and the major variances between actual LNP costs and actual/estimated costs included in the Company's April 30, 2012 filings in Docket No. 120009-EI. I will also explain the prudence of the Company's 2012 LNP project management, contracting, and cost oversight controls.

Q. Do you have any exhibits to your testimony?

A. Yes, I am sponsoring the following exhibits to my testimony:

- Exhibit No. ___ (CMF-1), Project Management and Fleet Operating Procedures applicable to the LNP, revised in 2012;
- Exhibit No. ___ (CMF-2), Project Management and Fleet Operating Procedures, new to the LNP in 2012;

In addition, I will be co-sponsoring the cost portions of Schedules T-4, T-4A, and T-6 of the Nuclear Filing Requirements ("NFRs"), which are included as part of the exhibits to Mr. Thomas G. Foster's testimony, Exhibit No. ___(TGF-1). I am also sponsoring Schedules T-6A, T-6B, T-7, T-7A, and T-7B and Appendix D of the NFRs. Schedule T-6A is a description of the major tasks. Schedule T-6B reflects capital expenditure variance explanations. Schedule T-7 is a list of the

contracts executed in excess of $1.0 million and Schedule T-7A provides details for those contracts. Schedule T-7B reflects details pertaining to contracts executed in excess of $250,000, but less than $1.0 million.

All of these exhibits, schedules, and appendices are true and accurate.

Q. Please summarize your testimony.

A. PEF requests that the Commission find its actual costs incurred in 2012 for the LNP reasonable and prudent. PEF also requests that the Commission approve such costs for recovery. In 2012, the Company continued to implement the management decision it made to proceed with the LNP on a slower pace for in-service of Unit 1 in 2024 and Unit 2 eighteen (18) months later in 2025. LNP costs were incurred in support of (1) the Levy Combined Operating License Application ("COLA") to the Nuclear Regulatory Commission ("NRC"), (2) engineering activities in support of the COLA, (3) activities under PEF's LNP EPC Agreement with the Consortium, and (4) strategic land acquisitions for Levy transmission needs. PEF took appropriate steps to ensure that its 2012 costs were reasonable and prudent and that all of these costs were necessary to the LNP according to the current integrated project schedule. Therefore, the Commission should approve PEF's 2012 LNP costs as reasonable and prudent pursuant to the nuclear cost recovery rule.

Additionally, the Company used substantially the same project management and contracting procedures and cost oversight controls for the LNP in 2012 that were used in prior years for the LNP. These project management and contracting procedures and cost oversight controls were reviewed and approved as

reasonable and prudent by the Commission in prior dockets. PEF's 2012 project management policies and procedures reflect the collective experience and knowledge of the Company and its new parent Duke Energy, and they have been and will continue to be vetted, enhanced, and revised to reflect industry leading best project management and cost oversight policies, practices, and procedures. Therefore, the Company respectfully requests that the Commission approve PEF's 2012 project management, contracting, and cost oversight policies and procedures as reasonable and prudent.

III. 2012 LNP CAPITAL COSTS.

Q. What were the total LNP actual 2012 costs?

A. Total actual LNP costs for 2012, inclusive of transmission and generation costs, were [redacted]. This is [redacted] more than PEF's actual/estimated costs for 2012. The reasons for this variance are described below.

Q. Please describe the categories of work that were performed for the LNP in 2012 to incur these costs.

A. PEF performed work and incurred generation preconstruction and generation and transmission construction costs in the following categories of expenditures for the LNP in 2012: (1) licensing, (2) engineering, design and procurement, (3) real estate acquisition, (4) power block engineering and procurement, and (5) other.

A. **GENERATION COSTS.**

Q. Please explain what licensing work was done for the LNP in 2012.

A. During 2012, the LNP team worked with the NRC to advance the LNP COLA toward final approval and issuance. A significant milestone was achieved in April 2012 when the NRC issued the Final Environmental Impact Statement ("FEIS"). In addition, the Advisory Committee on Reactor Safeguards ("ACRS") review of the Advanced Final Safety Evaluation Report ("SER") was completed on January 24, 2012. The Final SER schedule is currently under review.

As a result of the Fukushima event in Japan, the NRC required PEF to provide additional information to questions specific to the Fukushima event. This response included detailed evaluations and an update of seismic information to incorporate the updated Central Eastern United States ("CEUS") seismic source data. The team completed this evaluation and update and submitted an update to the Levy COLA to the NRC on July 30, 2012. In addition, supplemental information was provided to the NRC that described the COLA changes that will achieve compliance with the revised NRC Emergency Plan Rule.

In early 2012, the Atomic Safety and Licensing Board ("ASLB") conducted a site visit of the Levy site prior to its scheduled contested hearings. The LNP team facilitated this site visit and also prepared testimony and supported the ASLB evidentiary hearings for environmental Contention 4A. These hearings were completed on October 31, 2012 and November 1, 2012 in Bronson, Florida. PEF submitted its Findings of Fact and Conclusions of Law brief related to environmental Contention 4A to the ASLB on December 5, 2012. A decision from the ASLB panel is expected in the first quarter of 2013.

In 2012 a U.S. Court of Appeals (DC Circuit) court vacated the NRC waste confidence rule regarding spent nuclear fuel storage. As a result of this ruling, on September 6, 2012, the NRC directed its Staff to develop an Environmental Impact Statement ("EIS") and a revised waste confidence decision and rule within 24 months. Evaluation of new reactor license applications and license renewal applications will continue, but no new licenses will be issued until the DC Circuit court's concerns regarding the waste confidence rule are addressed. The NRC's decision to pursue generic resolution of the waste confidence rule will impact the schedule for issuance of the Levy Combined Operating License ("COL"). Assuming the entire 24-month period is required for promulgation of a new waste confidence rule, pending COLs will not be issued until September 2014 at the earliest. As discussed above, the NRC indicated that it will continue with licensing activities, such as conducting mandatory hearings, prior to issuance of the final waste confidence rule; but it has not yet determined a schedule for the Levy mandatory hearings. If the Levy COL application mandatory hearing is conducted in 2013 and the waste confidence issue is resolved within two years as directed by the NRC, the Levy COL can be issued as early as the fourth quarter of 2014. If the waste confidence issue is resolved within this time frame, this licensing issue will not impact the project timeline for commercial operation of Unit 1 by 2024.

Q. Was any environmental work for the Levy COLA performed in 2012?

A. Yes. Major environmental work completed in 2012 for the Levy COLA included satisfactorily addressing U.S. Army Corps of Engineers ("USACE") concerns

regarding potential wetland impacts from groundwater withdrawals by preparing and submitting the Aquifer Performance Test Plan ("APT") and Environmental Monitoring Plans ("EMP"). PEF also finalized the cultural resources review of the accessory parcels at the LNP site (i.e., the triangle, access road parcels) and the blow-down pipeline route and submitted reports to the Division of Historical Resources, Florida Department of State. Thereafter, in February 2012, PEF received concurrence letters from the Division of Historical Resources for the LNP site accessory parcels and the blow-down pipeline. In addition, the draft of the proposed cultural resources education program and unanticipated finds for cultural resources for the LNP required by the Division was completed. This program will remain in draft form until the project construction start date is established and then the program will be finalized in conjunction with Levy contractors.

PEF also worked with the USACE to finalize the approach on cultural resource surveys on the transmission line routes to ensure that the Seminole Tribe of Florida would have the opportunity to review cultural resource surveys when complete. The Levy transmission work plan has now been established and approved by the Division of Historical Resources. The Levy team also continued planning for environmental compliance for construction mobilization in 2012. In addition, the Levy team completed preliminary documents and surveys on the Chiefland-Dunnellon owned right-of-way for compliance with the State of Florida Cross Florida Greenway easement which requires PEF to provide the State with an easement to construct a trail once the Levy COL is issued. PEF also managed

the completion of a Withlacoochee Bay Trail extension on the Cross Florida Greenway which was an easement condition.

Q. What licenses and permits are required for the LNP?

A. PEF must obtain required environmental permits to support the Levy plants construction and operation. Environmental permitting for the LNP involves several basic steps: (1) application to the NRC for a COL; (2) application to the State of Florida for site certification; and (3) applications for certain additional federal environmental permits, including (a) a National Pollutant Discharge Elimination Permit ("NPDES") for water discharge, (b) Prevention of Significant Deterioration ("PSD") air permit, (c) a 316(b) demonstration for the proposed cooling water intake, (d) USACE Section 404 and Section 10 permits to construct structures in wetlands and regulated waterways, (e) hazardous waste management and disposal, and (f) a determination of consistency under the requirements of the Coastal Zone Management Act to ensure the LNP is consistent with existing federal and state coastal zone management plans.

The Site Certification was approved by the State on August 26, 2009. Post-certification activities will be performed in accordance with the Conditions of Certification provided with the Site Certification.

The Final EIS was prepared by the NRC with the USACE as a cooperating agency. The NRC and USACE published the Draft EIS for comment in August 2010. The USACE will use the Final EIS as a basis for their Record of Decision granting the Clean Water Act Section 404 Dredge and Fill Permit, which will be needed to allow construction activities in waters of the State. The 404 Permit can

be issued after publication of the Final EIS. The Final EIS was published in April 2012, so the 404 Permit is expected around mid-2013. All necessary permits will be obtained prior to and during the pre-construction and construction phases of the project.

Q. What engineering work was performed for the LNP in 2012?

A. The LNP team conducted engineering activities in support of its COLA for the LNP. This included ongoing engineering support to assist the licensing activities in response to the NRC Requests for Additional Information ("RAIs").

Further, Levy Engineering accomplishments in 2012 included (1) Owner Acceptance Reviews of the detailed evaluations and calculations to update the Levy site specific seismic information to incorporate the updated CEUS seismic source data and address issues identified from the Fukushima event, and (2) Owner Acceptance Reviews for the conceptual design of a contingency desalination plant for the LNP.

Pursuant to the Levy EPC contract, the Levy team also identified Witness and Hold points to be performed by Duke Energy during the manufacture/fabrication of several items of long lead equipment ("LLE") including the Core Makeup Tanks, Steam Generator tubing, and Pressurizers. A Witness Point is an identified point in the process where the contract administrator may review or inspect any component, or process of the work, while the work proceeds. A Hold Point is a mandatory verification point beyond which work cannot proceed without authorization by the contract administrator. Costs

for engineering activities in 2012 were also attributable to milestone payments for LLE items required for LNP construction.

Finally, PEF also continued its active participation in APOG AP1000 Design Reviews throughout 2012. APOG is the industry group of utilities pursing the deployment of the AP1000 nuclear reactor technology.

Q. Please describe in general the Generation-related Real Estate Acquisitions for the LNP in 2012.

A. The Company incurred surveying and other costs related to the conveyance of an easement for the Dunnellon to Chiefland trail as a condition of the previously required barge slip easement. The Company also incurred internal labor costs for oversight of the Levy plant site.

i. <u>Preconstruction Generation Costs Incurred.</u>

Q. Did the Company incur any Generation preconstruction costs for the LNP in 2012?

A. Yes. As reflected on Schedule T-6.2, the Company incurred preconstruction costs in the categories of (1) License Application and (2) Engineering, Design, and Procurement.

Q. For the License Application costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 3 of Schedule T-6.2, the Company incurred License Application costs of [redacted] in 2012. These 2012 actual costs were

incurred for the licensing activities supporting the LNP COLA and the additional licensing activities that I described above.

Q. For the Engineering, Design and Procurement costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 4 of Schedule T-6.2, the Company incurred Engineering, Design, and Procurement costs of [redacted] in 2012. The costs incurred related specifically to: (1) approximately [redacted] in contractual payments to the Consortium for project management, quality assurance, purchase order disposition support, and other home office services such as accounting and project controls; and (2) approximately [redacted] for direct PEF oversight of engineering activities of the Consortium including project management, project scheduling and cost estimating.

Q. How did Generation preconstruction actual capital expenditures for January 2012 through December 2012 compare to PEF's estimated/actual costs for 2012?

A. LNP preconstruction generation costs were [redacted], or [redacted] less than PEF's actual/estimated costs for 2012. The reasons for the major (more than $1.0 million) variances are provided below.

License Application: License Application capital expenditures were [redacted], which was [redacted] more than the actual/estimated License Application costs for 2012. This variance is attributable to higher than originally estimated NRC review fees and outside legal counsel fees

associated with the LNP COLA activities and regulatory reviews, including the ASLB contested hearings and Fukushima-related RAI responses.

Engineering, Design, and Procurement: Engineering, Design, and Procurement capital expenditures were [redacted], which was [redacted] less than the actual/estimated Engineering, Design, and Procurement costs for 2012. This variance is driven primarily by lower than estimated internal labor and expenses and deferral of Conditions of Certification ("CoC") engineering scope into future years.

ii. **Construction Generation Costs Incurred.**

Q. Did the Company incur any Generation construction costs for the LNP in 2012?

A. Yes. As reflected on Schedule T-6.3, the Company incurred generation construction costs in the categories of Real Estate Acquisition and Power Block Engineering and Procurement.

Q. For the Real Estate Acquisition costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 3 of Schedule T-6.3, the Company incurred Real Estate Acquisition costs of approximately [redacted] in 2012. Costs incurred are related to the conveyance of an easement for the Dunnellon to Chiefland trail and oversight of the LNP site, as I described above.

Q. For the Power Block Engineering and Procurement costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 8 of Schedule T.6-3, the Company incurred Power Block Engineering and Procurement costs of [redacted] in 2012. These costs were for accounting accruals for partially completed LLE milestones under the EPC contract.

Q. How did actual Generation construction capital expenditures for January 2012 through December 2012 compare to PEF's actual/estimated costs for 2012?

A. LNP construction Generation costs were [redacted] or [redacted] greater than PEF's estimated projected costs for 2012. The reasons for the major (more than $1.0 million) variances are provided below.

Power Block Engineering and Procurement: Power Block Engineering and Procurement capital expenditures were [redacted], which was [redacted] greater than the actual/estimated Power Block Engineering and Procurement costs for 2012. This variance is attributable to the accrual of costs for partially completed LLE milestones, which were included as 2013 costs in the prior-year projection, but were actually incurred in 2012 based on the percentage of LLE milestones completed during the year.

B. TRANSMISSION.

Q. Please describe what transmission work and activities were performed in 2012 for the LNP.

A. The majority of transmission work in 2012 related to Real Estate Acquisitions and was for strategic land acquisitions for the Levy Common Transmission Corridor and associated Levy transmission labor and related expenses to perform general project management and acquisition activities. More specifically, the Company negotiated purchase agreements on 19 parcels of land as strategic Right of Ways in the Levy Corridor.

i. Preconstruction Transmission Costs Incurred.

Q. Did the Company incur Transmission-related preconstruction costs for the LNP in 2012?

A. No. As reflected on Schedule T-6.2 the Company did not incur Transmission-related preconstruction costs in 2012.

Q. Were actual Transmission-related preconstruction capital expenditures for January 2012 through December 2012 consistent with PEF's actual/estimated costs for 2012?

A. Yes. PEF did not incur preconstruction capital transmission costs in 2012, which was consistent with PEF's 2012 actual/estimated filing.

ii. **Construction Transmission Costs Incurred.**

Q. Did the Company incur any transmission-related construction costs for the LNP in 2012?

A. Yes, as reflected on Schedule T-6.3, the Company incurred Transmission-related construction costs in the categories of Real Estate Acquisition and Other.

Q. For the Real Estate Acquisition costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 21 of Schedule T-6.3, the Company incurred Real Estate Acquisition costs of approximately [redacted]. These costs were incurred for the strategic land acquisitions in the Levy Common Transmission Corridor, I described above.

Q. For the Other costs, please identify what those costs are and why the Company had to incur them.

A. As reflected on Line 24 of Schedule T-6.3, the Company incurred Other costs of approximately [redacted]. These costs were incurred for Levy transmission labor and expenses related to transmission general project management and the strategic land acquisition activities I described above.

Q. How did actual Transmission-related construction capital expenditures for January 2012 through December 2012 compare to PEF's actual/estimated 2012 costs?

A. LNP transmission construction actual costs were [redacted], or approximately [redacted] less than PEF's actual/estimated construction transmission costs for 2012. Consequently, there were no major (more than $1.0 million) variances between the actual/estimated costs and the actual costs incurred for 2012.

IV. OPERATION & MAINTENANCE COSTS INCURRED IN 2012 FOR THE LNP.

Q. What Operation & Maintenance ("O&M") costs did the Company incur for the LNP in 2012?

A. As reflected on Schedule T-4 the Company incurred O&M expenditures in the amount of $1.1 million for internal labor and outside legal services that were necessary for the LNP. There were no major (more than $1.0 million) variances between the actual/estimated O&M costs and the actual O&M costs incurred.

Q. To summarize, were all of the costs that the Company incurred in 2012 for the LNP reasonable and prudent?

A. Yes, the specific cost amounts for the LNP contained in the NFR schedules, which are attached as exhibits to Mr. Foster's testimony, reflect the reasonable and prudent costs PEF incurred for LNP work in 2012. All of these activities and associated costs were necessary for the LNP.

V. PROJECT MANAGEMENT, CONTRACTING, AND COST OVERSIGHT.

Q. Did the Company use substantially the same Project Management, Contracting, and Cost Oversight policies and procedures in 2012 for the LNP that were used prior to 2012?

A. Yes. The Company used substantially the same project management and contracting procedures and cost oversight controls for the LNP in 2012 that were used in prior years for the LNP. These project management and contracting procedures and cost oversight controls were reviewed and approved as reasonable and prudent by the Commission.

More specifically, in the first six months of 2012, prior to the July 2012 merger between Duke Energy and Progress Energy, the LNP project management and contracting procedures and cost oversight controls for the LNP were exactly the same as the LNP procedures and controls previously reviewed and approved by the Commission. Subsequent to completion of the merger between Duke Energy and Progress Energy, the process of formally integrating the policies and procedures of the two companies commenced; however, this process takes months before the policies and procedures are fully integrated and best practices employed in the new, combined company. This is a gradual process to ensure continual, effective project management while the teams are integrated, the policies and procedures modified, revised, or adopted to implement best practices, and the policies and procedures fully employed by project management team members. In the meantime, the Company continued to implement the existing LNP project management and contracting policies and procedures and cost controls until new policies, procedures, and controls were developed or

implemented, or existing ones were maintained, revised, or modified. As a result, the LNP project management and contracting policies and procedures and cost controls are substantially the same after the merger as they were prior to the merger.

Q. Explain how this integration process was implemented for the LNP in 2012.

A. After the merger was completed in July, the Levy project was managed by Duke Energy's Energy Supply Project Management and Construction ("PMC") group. The PMC group was analogous to the former Progress Energy group known as New Generation Programs and Projects ("NGPP"). Consequently, during this period in 2012, Duke Energy was in the process of integrating the Levy project management, contracting, and cost oversight policies and procedures with Duke Energy project management governance, but for all practical purposes the LNP project management, contracting, and cost oversight policies and procedures remained the same. Later, Duke Energy decided to move management of LNP from the Energy Supply Department to the Nuclear Generation Department. This decision aligned accountability for contract management and project management of the LNP with the organization that is responsible for licensing of the LNP as well as the licensing and project management of all new nuclear projects within Duke Energy. As a result, all new nuclear projects reside in a single organization which facilitates the transfer of best practices and lessons learned.

Q. Describe how this organizational change impacted the LNP project management, contracting, and cost control oversight policies and procedures.

A. My group, the Nuclear Development ("ND") group, assumed responsibility for the LNP and the integration of the LNP project management and contracting policies and procedures with the ND project management and contracting policies and procedures. As an initial phase of the integration and transition process several Progress Energy legacy policies and procedures were revised and updated and new policies and procedures were developed to reflect the assumption of responsibility for the LNP by the Duke Energy ND group and the merger integration of nuclear operations in both companies. A list of the revised and updated policies and procedures is included as Exhibit No. __ (CMF-1) to my direct testimony. A list of the new policies and procedures applicable to the LNP is included as Exhibit No. __(CMF-2) to my direct testimony. These revisions and new policies and procedures are limited, consistent with the prior scope of the policies and procedures to provide reasonable, effective project management and cost control for the LNP and the Levy EPC, and they are necessary to integrate and incorporate the nuclear development, construction, and operational experience of both companies.

Q. Is there still senior management oversight responsibility for the LNP?

A. Yes. There remains and will continue to be senior management oversight responsibility for the LNP. There have been no substantive changes to the project management charter for the LNP since the merger with Duke Energy. The Integrated Project Plan ("IPP") was superseded by the Duke Energy Approval of

Business Transaction ("ABT") process, which is a senior management project oversight process similar to the IPP, but Duke Energy still uses the IPP for senior management guidance regarding evaluation and approval for the LNP. Currently, an updated status report and IPP for the LNP is targeted for presentation to Duke Energy senior management in April 2013. The plan in 2013 is to review the project management charter in light of Duke Energy governance procedures and make any changes as necessary. There will always be, however, appropriate senior management oversight for the LNP.

Q. Please provide an overview of other, applicable LNP project management processes, in particular, the cost control oversight processes.

A. In addition to the procedures mentioned above, other corporate tools are used to support the management of and cost control oversight for the LNP work. The Oracle Financial Systems and Business Objects reporting tools provide monthly corporate budget comparisons to actual cost information, as well as detailed transaction information. This information, along with other financial accounting data, allows PEF to regularly monitor the costs of the LNP work compared to budgets and projections. The project schedule is maintained in the Primavera (P6) scheduling tool. This detailed integrated project schedule is reviewed and updated on a monthly basis and refined as appropriate. Key Performance Indicators ("KPIs") to monitor the status of the LNP are reviewed by the project team on a regular basis, utilizing multiple project and vendor reporting mechanisms and project review forums. Examples of Nuclear Development LNP review meetings include: bi-weekly ND group meetings; monthly ND Integrated

Project Review Meetings; weekly ND Leadership meetings; bi-weekly Project Alignment meetings; monthly ND Cost Review meetings; and weekly COLA Change Management meetings, among others.

In addition, the Company's oversight and management plan for contractors did not change in 2012. As expected, field activity for both generation and transmission continues to be very limited based on the current NRC COLA review status and in-service dates. The Company, however, continued to meet on a quarterly basis with the EPC Consortium, and continued bi-weekly phone calls with the Joint Venture Team (Sargent & Lundy, Worley Parsons, and CH2M Hill) to review and discuss the work supporting the Levy COLA.

Q. Please explain how the Company ensures that its selection and management of outside vendors is reasonable and prudent.

A. First, PEF's policies and procedures for contractors and vendors have not changed materially with the merger. When selecting vendors for the LNP, PEF utilizes bidding procedures through a Request for Proposal ("RFP") when possible for the particular services or materials needed to ensure that the chosen vendors provide the best value for PEF's customers. Once proposals are submitted by potential vendors, formal bid evaluations are completed and a final selection is determined and documented.

When an RFP cannot be used, PEF ensures that contracts with sole source vendors contain reasonable and prudent contract terms with adequate pricing provisions (including fixed price and/or firm price, escalated according to indexes, where possible). When deciding to use a single or sole source vendor,

PEF documents a single or sole source justification for the particular work. The Company requires that all sole or single source contract activity must be justified on the contract requisition and must be approved by the appropriate management level for the dollar value of the contract.

The contract development process starts when a requisition is created in the Passport Contracts module for the purchase of services. The requisition is reviewed by the appropriate Contract Specialist and appropriate technical and management personnel on the Levy project, to ensure sufficient data has been provided to process the contract requisition. The Contract Specialist prepares the appropriate contract document from pre-approved contract templates in accordance with the requirements stated on the contract requisition. Once the requisition is ready to be executed, it is approved online by the appropriate levels of the management. The invoices are validated by the designated representatives/project managers and contract administration team. Payment Authorizations approving payment of the contract invoices are then entered and approved.

Q. Does the Company verify that the Company's project management and cost control policies and procedures are followed?

A. Yes, it does. PEF continues to use internal audits, self assessments, benchmarking, and quality assurance reviews and audits, as appropriate, to verify that its program management and cost oversight controls are in place and being implemented. Internal audits are also conducted on outside vendors.

Each year the Company employs a planning process to identify those areas to be audited in the upcoming year based on relative risk across the Company. This risk-based process identified one potential audit for 2012 associated with the Levy project: an audit of the Levy EPC Contract. However, during 2012, as a result of the revised project schedule, along with results of prior audits, the Company's Audit Services Department revised its assessment of the relative audit priority and the proposed Levy EPC audit was removed from the 2012 plan and deferred for future consideration.

The Audit Services Department also determined that, based on prior years' audit results of the Nuclear Cost Recovery Clause, that an audit for 2012 was not warranted. A key factor in this decision is the determination that the Nuclear Cost Recovery Clause cost control processes were effective in prior Nuclear Cost Recovery Clause financial audits in 2008, 2009, 2010 and 2011. The need for future Nuclear Cost Recovery Clause audits will be assessed each year during the annual audit planning process.

As appropriate, the Company also performs audits of its contractors. An audit of the Shaw, Stone, and Webster ("SSW") invoice process was conducted April 24-25, 2012, at the SSW Charlotte, North Carolina office. The scope of the audit was to (1) assess and test the SSW internal project business processes and controls utilized to develop, review, and approve SSW invoices submitted to PEF to ensure compliance with contract terms and conditions related to financial and invoice or payment, (2) determine that appropriate SSW time, expense, and invoice procedures and processes are approved and followed, and (3) verify the

propriety of the amounts paid for selected invoice periods. Based on the results of the audit, the SSW invoice process was found to be effective.

An audit of the Westinghouse Time and Expense ("T&E") and LLE invoice process was also conducted August 21-22, 2012 at the Westinghouse Cranberry, Pennsylvania office. The scope of the audit was to assess and test the Westinghouse internal project business processes and controls utilized to develop, review, and approve Westinghouse T&E and LLE invoices submitted to PEF, including under the Levy EPC contract. Based on the results of the audit, the Westinghouse T&E and LLE invoice process was found to be effective.

In addition the Nuclear Oversight Organization ("NOS") completed several Nuclear Quality Assurance reviews, including participating in a Nuclear Procurement Issues Committee ("NUPIC") limited scope audit of Westinghouse NPP (AP1000) on August 20-21, 2012; an Internal NOS Assessment of Levy Units 1 and 2 Nuclear Plant Development Activities on September 10-14, 2012; and two NOS surveillance reports associated with Witness Points on October 9-12 and October 30- November 1, 2012, respectively. Duke Energy continues to work with the other APOG utilities to perform these audit and surveillance activities and monitor the performance of these contractors in accordance with the requirements of its Nuclear Quality Assurance Program.

Q. Are these project management and costs control oversight procedures described applicable to both transmission and generation projects?

A. Yes. The generation and transmission projects associated with the LNP are subject to the same Company management, policies, and procedures.

Q. Are the Company's LNP project management, contracting, and cost control oversight policies and procedures reasonable and prudent?

A. Yes, they are. These project management policies and procedures reflect the collective experience and knowledge of the Company and now the Combined Company, Duke Energy. The on-going integration of the two companies brought about a comprehensive review of all processes and procedures to determine that best practices from both companies are retained. The integration process to date has revealed that the companies' nuclear development processes and procedures are substantively similar. Consequently, the 2012 LNP project management changed more in structure than substance. As a result, the LNP 2012 project management, contracting, and cost control policies and procedures are substantially the same as the collective policies and procedures that have been vetted in the annual project management audit in this docket and approved as prudent by the Commission. *See* Order No. PSC-09-0783-FOF-EI, issued Nov. 19, 2009; Order No. PSC-11-0095-FOF-EI, issued Feb. 2, 2011; Order No. PSC-11-0547-FOF-EI, issued Nov. 23, 2011; and Order No. PSC-12-0650-FOF-EI, issued Dec. 11, 2012. We believe, therefore, that the LNP project management policies and procedures are consistent with best practices for capital project management in the industry and continue to be reasonable and prudent.

Q. Does this conclude your testimony?

A. Yes, it does.

Procedure Number	Procedure Revision Number/Date	Procedure Title
ACT-SUBS-00335	Rev 8 (July 2012)	Progress Energy Project Governance Policy. Effective Legal Day 1 of the new Duke Energy, this procedure has been superseded by the new Duke Approval of Business Transactions (ABT) policy. During a transition period, this procedure will remain available as a reference document for Legacy Progress employees; however, the new ABT policy governs approval requirements.
ACT-SUBS-00261	Cancelled (July 2012)	Phased Project Evaluation and Authorization Process. The document has been cancelled from the Procedures and Forms Program effective Legal Day 1 of the Progress Energy – Duke Energy merger.
ACT-SUBS-00262	Cancelled (July 2012)	Economic Evaluation Methodology All Business Units. The document has been cancelled from the Procedures and Forms Program effective Legal Day 1 of the Progress Energy – Duke Energy merger.
ACT-SUBS-00271	Rev 8 (July 2012)	Progress Energy Business Analysis Package. Effective Legal Day 1 of the new Duke Energy, this procedure has been superseded by the new Duke Approval of Business Transactions (ABT) policy. During a transition period, this procedure will remain available as a reference document for Legacy Progress employees; however, the new ABT policy governs approval requirements.
ACT-SUBS-00278	Cancelled (July 2012)	Capitalization Policy. The document has been cancelled from the Procedures and Forms Program effective Legal Day 1 of the Progress Energy –Duke Energy merger.
ADM-SUBS-00080	Rev 8 (July 2012)	Major Projects – Integrated Project Plan (IPP). Effective Legal Day 1 of the new Duke Energy, this procedure has been superseded by the new Duke Approval of Business Transactions (ABT) policy. During a transition period, this procedure will remain available as a reference document for Legacy Progress employees; however, the new ABT policy governs approval requirements.
PJM-SUBS-00002	Rev 2 (May 2012)	Project Integration Management. No impact at this time from the Duke merger.
PJM-SUBS-00006	Rev 1 (June 2012)	Project Quality Management. No impact at this time from the Duke merger.
PJM-NGPX-00001	Rev 1 (June 2012)	Achieving Excellence in Nuclear Projects. No impact at this time from the Duke merger.
NGGM-IA-0047	Cancelled (October 2012)	Interface Agreement Between the Nuclear Generation Group and Corporate Development & Improvement Group Regarding NGG Support for the New Generation Programs and Projects Department.

Procedure Number	Procedure Revision Number/Date	Procedure Title
		Corporate Development & Improvement Group relocated to a different department as a result of the Duke merger.
ADM-NGGC-0102	Rev 9 (October 2012)	Long Range Planning (LRP) and Project Review Group (PRG). This procedure impacted by the new Duke Approval of Business Transactions (ABT) policy. Limited impact on Levy.
ADM-NGGC-0113	Superseded (November 2012)	Superseded by new Duke procedure AD-AD-ALL-0004 Nuclear Generation Department Generation Planning and Communications.
ADM-NGGC-0119	Rev 2 (October 2012)	Nuclear Safety Culture Program. No impact at this time from the Duke merger.
CAP-NGGC-0200	Rev 35 (June 2012)	Condition Identification and Screening Process. No impact at this time from the Duke merger.
CAP-NGGC-0201	Rev 18 (October 2012)	Self Assessment/Benchmark Programs. No impact at this time from the Duke merger.
CAP-NGGC-0202	Rev 21 (September 2012)	Operating Experience and Construction Experience Program. No impact at this time from Duke merger.
CAP-NGGC-0205	Rev 16 (June 2012)	Condition Evaluation and Corrective Action Process. No impact at this time from the Duke merger.
CAP-NGGC-1000	Rev 8 (November 2012)	Conduct of Performance Improvement. Revised to reflect new Duke Fleet Procedure Hierarchy, New Fleet Standard Workday, Clarified acceptance of qualifications from Legacy Duke and Legacy Progress and changed management titles to reflect new Duke.
CAP-NGGC-1000	Rev 7 (June 2012)	Conduct of Performance Improvement. No impact at this time from the Duke merger.
HUM-NGGC-0001	Rev 11 (September 2012)	Human Performance Program. No impact at this time from the Duke merger.
HUM-NGGC-0001	Rev 10 (March 2012)	Human Performance Program. No impact at this time from the Duke merger.
HUM-NGGC-0002	Rev 4 (September 2012)	Observation Program. Revised definition for Paired Observation to align with legacy Duke and newer INPO definition.
OMA-NGGC-0001	Superseded (July 2012)	Nuclear Generation Group Generation Planning and Communication. Superseded by new Duke procedure AD-WC-ALL-0101 Nuclear Generation Department Generation Planning and Communications.
CON-NGPX-00002 R2	Rev 2 (May 2012)	Integrated Project Plan Guidelines.
CSP-NGGC-2505	Rev 14 (July 2012)	Software Quality Assurance and Configuration Control of Business Computer Systems.
EGR-NGGC-0011	Rev 18 (June 2012)	Engineering Rigor.

Procedure Number	Procedure Revision Number/Date	Procedure Title
EGR-NGGC-0017	Rev 8 (June 2012)	Preparation and Control of Design Analyses and Calculations.
EGR-NGGC-0020	Rev 5 (January 2012)	Preparation and Control of Specifications.
HUM-NGGC-0003	Rev 2 (January 2012)	Conduct of Pre-Job Briefings/Post-Job Critiques.
MCP-NGGC-0002	Rev 19 (August 2012)	Purchasing of Materials for NGG.
MCP-NGGC-0004	Rev 6 (August 2012)	Training of Contract Development Personnel.
MCP-NGGC-0402	Rev 20 (September 2012)	Material Management (Storage, Issue and Maintenance).
MCP-NGGC-0403	Rev 20 (August 2012)	Training of Materials Services and PE/Metallurgy Personnel.
MNT-NGGC-0050	Rev 9 (January 2012)	Measuring & Test Equipment Calibration Program.
NGGM-PM-0011	Rev 79 (October 2012)	Nuclear NDE Manual.
NGGM-PM-0020	Rev 2 (June 2012)	Vendor Quality Program for Critical Equipment & Major Purchases.
NGGM-PM-0030	Rev 6	Quality Assurance Plan for New Nuclear Plant Development and Construction Activities
NGGM-PM-0032	Rev 2 (June 2012)	Margin Management.
NGGM-PM-0033	Rev 5 (July 2012)	Progress Energy New Nuclear Plant Quality Assurance Program Description Topical Report
NGGS-EPC-0200	Rev 4	EPC Contract Invoice Validation and Processing
NGGS-EPC-0201	Rev 4	EPC Contract Sales & Use Tax Compliance
NGGS-EPC-0301	Rev 1	EPC Contract Intellectual Property and Proprietary Information Management
NGGS-NPD-0001	Rev 5	Process for Document Reviews and Affirmation
NGGS-NPD-0007	Rev 3	Combined Operating License (COLA) Configuration Management
NOS-NGGC-0100	Rev 13 (October 2012)	Nuclear Oversight Assessment Process. Valid Procedure directly applicable to Levy.
NOS-NGCC-0101	Rev 2 (November 2012)	Independent Management Assessment.
NOS-NGGC-0600	Rev 3 (November 2012)	NOS Training and Development.
NOS-NGCC-1000	Rev 12 (January 2012) Rev 13 (February 2012)	Nuclear Oversight Conduct of Operations.
PRO-NGGC-0200	Rev 15 (July 2012)	Procedure and Work Instruction Use and Adherence.
PRO-NGGC-0201	Rev 26 (July 2012)	NGG Procedure Writer's Guide.

Procedure Number	Procedure Revision Number/Date	Procedure Title
		Limited application/impact on Levy.
PRO-NGGC-0204	Rev 24 (November 2012)	Procedure Review and Approval.
PRO-NGGC-0205	Rev 1 (November 2012)	Procedure Writer Qualification Program. Limited application/impact on Levy.
RDC-NGGC-0001	Rev 27 (January 2012) Rev 28 (January 2012) Rev 29 (February 2012) Rev 30 (September 2012)	NGG Standard Records Management Program.
RDC-NGGC-0002	Rev 25 (December 2011)	Document Control Program.
REG-NGGC-0013	Rev 4 (February 2012)	Evaluating Reporting Defects Noncompliance in Accordance with 10 CFR 21.
REI-CSDX-00015	Rev 4 (February 2012)	Real Estate Transaction Procedure.
SAF-SUBS-00041	Rev 13 (March 2012)	Contractor Safety.
TRN-NGGC-0007	Rev 7 (March 2012)	Engineering Training/Qualification Program & Common Qualification Process.
TRN-NGGC-1000	Rev 6 (May 2012) Rev 7 (October 2012)	Conduct of Training.

Procedure Number	Procedure Revision Number/Date	Procedure Title
PY-AD-ALL-0001	Rev 2 (November 2012)	Fleet Operating Model
ABT	Rev 1 (July 2012)	Approval of Business Transactions Policy
AD-AD-ALL-0001	Rev 0 (December 2012)	Corporate Functional Area Managers (CFAMS) and Peer Group Process.
AD-AD-ALL-0004	Rev 0 (November 2012)	Fleet Standard Workday.
AD-DC-ALL-0102 R1	Rev 1 (July 2012)	Writer's Manual for Nuclear Department Manual Documents.
AD-DC-ALL-0201	Rev 0 (July 2012)	Development and Maintenance of Controlled Procedure Manual Procedures.
AD-DC-ALL-0202	Rev 0 (July 2012)	Writer's Manual for Controlled Procedure Manual Procedures.
AD-PI-ALL-0003	Rev 0 (December 2012)	Change Management.
AD-NO-ALL-1000	Rev 0 (July 2012)	Conduct Of Nuclear Oversight.
ADM-NGGC-0007	Rev 0 (June 2012)	Risk Improvement Process.
BM-100	Rev 5 (September 2012)	Project Funding Approval.
BM-500	Rev 1 (October 2011)	Project Evaluation and Business Case Development.