

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**In re: Nuclear Cost Recovery
Clause**

DOCKET NO. 140009-EI
Submitted for filing: March 3, 2014

REDACTED

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

**ON BEHALF OF
DUKE ENERGY FLORIDA, INC.**

IN RE: NUCLEAR COST RECOVERY CLAUSE

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO. 140009-EI

DIRECT TESTIMONY OF CHRISTOPHER M. FALLON

1 **I. INTRODUCTION AND QUALIFICATIONS.**

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

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

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Duke Energy Corporation (“Duke Energy”) as Vice President
8 of Nuclear Development. Duke Energy Florida, Inc. (“DEF” or the “Company”)
9 is a fully owned subsidiary of Duke Energy.

10
11 **Q. Please summarize your educational background and work experience.**

12 A. I received Bachelor of Science and Master of Science degrees in electrical
13 engineering from Clemson University in 1989 and 1990, respectively. I am also a
14 registered professional engineer in North Carolina. I began my career with Duke
15 Energy’s predecessor company Duke Power in 1992 as a power quality engineer.
16 After a series of promotions, I was named manager of transmission planning and
17 engineering studies in 1999, general manager of asset strategy and planning in
18 2006, and the managing director of strategy and business planning for Duke
19 Energy starting in 2007. In this role, I had responsibility for developing the

1 strategy for the company’s operating utilities; commercial support for operating
2 utility activities such as acquisition of generation assets and overseeing Requests
3 for Proposals for renewable generation resources; and major project/initiative
4 business case analysis. In 2009, I was named Vice President, Office of Nuclear
5 Development for Duke Energy. In that role, I was responsible for furthering the
6 development of new nuclear generation in the Carolinas and Midwest. This
7 included identifying and developing nuclear partnership opportunities, as well as
8 integrating and advancing Duke Energy’s plans for the proposed Lee Nuclear
9 Station in Cherokee County, S.C. I was promoted to my current position on July
10 1, 2012.

11
12 **Q. Please describe your responsibilities for the Levy Nuclear Project (“LNP”) as**
13 **Vice President of Nuclear Development.**

14 A. As Vice President of Nuclear Development, I am responsible for the licensing and
15 engineering design for the Levy nuclear power plant project (“LNP” or “Levy”).
16 I am also responsible for the direct management of the Engineering, Procurement,
17 and Construction (“EPC”) Agreement for the LNP with Westinghouse
18 Corporation (“WEC”) and Stone & Webster, Inc. Together, WEC and Stone &
19 Webster are the Consortium under the EPC Agreement. In addition to these
20 responsibilities, I am responsible for the LNP project control functions. I
21 provided direct testimony to the Florida Public Service Commission (“PSC” or
22 the “Commission”) in the 2013 nuclear cost recovery clause (“NCRC”) docket for
23 the Company with respect to the LNP.

1 **II. PURPOSE AND SUMMARY OF TESTIMONY.**

2 **Q. What is the purpose of your direct testimony?**

3 A. My direct testimony supports DEF’s request for cost recovery and a prudence
4 determination by the Commission for (1) the Company’s LNP generation and
5 transmission costs incurred from January 2012 through December 2012, and (2)
6 DEF’s 2012 LNP project management, contracting, and cost controls, pursuant to
7 (i) the Nuclear Cost Recovery Rule, Rule 25-6.0423, Florida Administrative Code
8 (F.A.C.); and (ii) the Commission’s Order No. PSC-13-0598-FOF-EI approving
9 the Revised and Restated Stipulation and Settlement Agreement (“2013
10 Settlement Agreement”). The prudence determinations of DEF’s 2012 LNP costs
11 and its 2012 LNP project management, contracting, and oversight controls, were
12 deferred from the 2013 NCRC docket to the 2014 NCRC docket when the
13 Commission granted DEF’s Motion to Defer and Alternative Petition for a
14 Temporary Variance or Waiver of Rule 25-6.0423(5)(c)2, F.A.C. (“Motion to
15 Defer”) in Order No. PSC-13-0493-FOF-EI in the 2013 NCRC docket.

16 My direct testimony also supports DEF’s request for cost recovery and a
17 prudence determination for (1) the Company’s LNP generation and transmission
18 costs incurred from January 2013 through December 2013, and (2) DEF’s 2013
19 LNP project management, contracting, and cost controls pursuant to Rule 25-
20 6.0423(7), F.A.C. and Order No. PSC-13-0598-FOF-EI.

21 Lastly, I will explain that the Company elected not to complete the LNP in
22 the 2013 Settlement Agreement and describe how DEF is implementing a prudent
23 LNP long lead equipment (“LLE”) disposition plan and project wind-down

1 subsequent to Commission approval of the 2013 Settlement Agreement in
2 October 2013.

3
4 **Q. Do you have any exhibits to your testimony?**

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

- 6 • Exhibit No. ____ (CMF-1), the confidential Direct Testimony and Exhibits of
7 Christopher M. Fallon in Support of Actual Costs on behalf of Progress
8 Energy Florida, Inc. in Docket No. 130009-EI;
- 9 • Exhibit No. ____ (CMF-2), a confidential chart of the Company's LNP LLE
10 purchase order disposition status entering 2013;
- 11 • Exhibit No. ____ (CMF-3), the confidential Mangiarotti LNP LLE final
12 disposition settlement memo;
- 13 • Exhibit No. ____ (CMF-4), the confidential November 7, 2013 DEF letter to
14 the Consortium accepting the Mangiarotti LNP LLE final disposition
15 settlement offer;
- 16 • Exhibit No. ____ (CMF-5), the confidential LNP LLE Disposition Plan
17 memo;
- 18 • Exhibit No. ____ (CMF-6), a confidential memorandum and attachments
19 addressing the process for LLE disposition and wind down of the LNP with
20 WEC subsequent to DEF's decision not to complete the LNP with the
21 execution of the 2013 Settlement Agreement; and
- 22 • Exhibit No. ____ (CMF-7), a list of the merged and reconciled Duke Energy
23 and Progress Energy Project Management and Fleet Operating Procedures
24 applicable to the LNP in 2013.

1 In addition, as reflected in my March 2013 direct testimony which is incorporated
2 and made a part of my current testimony in Exhibit No. ____ (CMF-1), I co-
3 sponsor the cost portions of the Schedules for the 2012 LNP Nuclear Filing
4 Requirements (“NFRs”), and sponsor capital expenditure variances and contract
5 information, which are included as Exhibit No. ____ (TGF-1) to Mr. Thomas G.
6 Foster’s testimony. I will also be co-sponsoring the cost portions of the 2013
7 Detail Schedule, and sponsor Appendices D and E, which are included as part of
8 Exhibit No. ____ (TGF-2) to Mr. Foster’s testimony. Appendix D is a description
9 of the major tasks and reflects capital expenditure variance explanations.
10 Appendix E is a list of the contracts executed in excess of \$1.0 million and
11 provides details for those contracts.

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

13
14 **Q. Do you have any changes to your direct testimony regarding the prudence of**
15 **the 2012 LNP costs and the LNP project management, contracting, and cost**
16 **oversight controls that you included as an exhibit to your current testimony?**

17 A. Yes, I have one change. Progress Energy Florida, Inc. is now Duke Energy
18 Florida, Inc. as a result of the merger between Duke Energy and Progress Energy,
19 Inc. Otherwise, the information in my March 2013 direct testimony attached as
20 Exhibit No. ____ (CMF-1) to my current testimony remains true and accurate.

21
22 **Q. What is the current status of the LNP?**

23 A. The Company elected not to complete construction of the LNP pursuant to the
24 nuclear cost recovery statute and rule, Section 366.93(6), Florida Statutes, and

1 Rule 25-6.0423(7), F.A.C., as amended, with its execution of the 2013 Settlement
2 Agreement in late July 2013. Subsequent to execution of and until Commission
3 approval of the 2013 Settlement Agreement, DEF commenced development of the
4 process to start winding down the LNP in an orderly fashion. This process was
5 fully put in place after the Commission voted to approve the 2013 Settlement
6 Agreement on October 17, 2013. The major component of the LNP wind down
7 process is the LLE disposition.

8 DEF, however, continues its work to obtain the LNP Combined Operating
9 License (“COL”) from the Nuclear Regulatory Commission (“NRC”) pursuant to
10 DEF’s agreement in the 2013 Settlement Agreement to exercise reasonable and
11 prudent efforts to obtain the COL from the NRC by March 31, 2015. As a result,
12 DEF managed the work necessary to obtain the LNP COL throughout 2013
13 pursuant to the Company’s project management, contracting, and cost control
14 policies and procedures for the LNP.

15

16 **Q. What impact does this decision have on this docket?**

17 A. Because the Company decided not to complete the LNP at the end of July 2013,
18 when it executed the 2013 Settlement Agreement, and that Agreement was not
19 approved by the Commission until mid-October 2013, this decision had minimal
20 impact on most of DEF’s 2013 LNP costs which were committed to or incurred
21 during the first ten months of 2013. DEF did commence the process to wind
22 down the LNP after execution of the 2013 Settlement Agreement, including the
23 development of a LLE disposition plan, but that process was not fully
24 implemented until the Commission approved that Agreement. Consequently, the

1 bulk of DEF's 2013 LNP costs were committed to or incurred at a time when the
2 project status and the Company's project management, contracting, and cost
3 control policies and procedures were similar to those used in 2012 that the
4 Commission has previously reviewed.

5 DEF did incur some LNP wind down costs in 2013 related to the
6 disposition of some LLE and DEF seeks to recover its prudent LNP wind down or
7 exit costs pursuant to Section 366.93(6), Rule 25-6.0423(7), and the 2013
8 Settlement Agreement approved by the Commission in Order No. PSC-13-0598-
9 FOF-EI. These LNP LLE disposition and wind down or project exit costs will
10 continue to be incurred in 2014.

11 DEF also incurred continued costs to obtain the LNP COL from the NRC
12 in 2013. DEF is permitted to recover its prudent 2013 COL costs pursuant to the
13 2013 Settlement Agreement and DEF, accordingly, seeks recovery of its prudent
14 2013 LNP COL costs. DEF will continue to incur COL costs for the LNP in
15 2014, but DEF is not permitted under the 2013 Settlement Agreement to recover
16 these costs from customers under Section 366.93 and Rule 25-6.0423. DEF
17 therefore will not seek to recover LNP COL costs after 2013 in the NCRC docket.

18

19 **Q. Please summarize your testimony.**

20 A. DEF prudently incurred its LNP costs in 2012 and 2013. DEF prudently incurred
21 necessary licensing and engineering costs in 2012 and 2013 to advance the
22 licensing and permitting processes to obtain the COL and required environmental
23 permits for the LNP. DEF further incurred costs in 2012 and 2013 pursuant to its
24 contractual commitments under the EPC Agreement and other LNP contracts for

1 strategic transmission corridor real estate acquisitions and wetland mitigation, and
2 corresponding project management activities. DEF appropriately minimized
3 these costs when DEF decided not to complete construction of the LNP with the
4 2013 Settlement Agreement. Unnecessary project activities were eliminated and
5 a LLE disposition plan was developed and implemented. DEF incurred only
6 those contractually committed or necessary costs for the LNP in 2013 after DEF's
7 decision not to complete construction of the LNP. DEF has prudently managed
8 the LNP in 2012 and 2013, consistent with merged policies and procedures that
9 implement best practices for Duke Energy, that in substance are similar to the
10 project management, contracting and cost control policies and procedures
11 previously audited by the Commission Staff and reviewed and approved by the
12 Commission.

13
14 **III. 2013 LNP CAPITAL COSTS.**

15 **Q. What were the total LNP actual 2013 costs?**

16 A. Total actual LNP costs for 2013, inclusive of transmission and generation costs,
17 were [REDACTED]. This is about [REDACTED] less than DEF's actual/estimated
18 costs for 2013. The reasons for this variance are described below.

19
20 **Q. Please describe the categories of work that were performed for the LNP in**
21 **2013 to incur these costs.**

22 A. DEF performed work and incurred generation preconstruction and generation and
23 transmission construction costs in the following categories of expenditures for the
24 LNP in 2013: (1) licensing, (2) engineering, design and procurement, (3) real

1 estate acquisition and mitigation, (4) power block engineering and procurement,
2 and (5) other.

3
4 **A. GENERATION COSTS.**

5 **i. Preconstruction Generation Costs Incurred.**

6 **Q. Did the Company incur any Generation preconstruction costs for the LNP in**
7 **2013?**

8 A. Yes. As reflected on the 2013 Detail Schedule, the Company incurred
9 preconstruction costs in the categories of (1) License Application and (2)
10 Engineering, Design, and Procurement.

11
12 **Q. For the License Application costs, please identify what those costs are and**
13 **why the Company had to incur them.**

14 A. As reflected on Line 1a of the 2013 Detail Schedule, the Company incurred
15 License Application costs of [REDACTED] in 2013. These costs were incurred for
16 licensing and permitting activities supporting the LNP Combined Operating
17 License Application (“COLA”).

18 DEF continued to work with the NRC on the LNP COLA in 2013 to
19 advance the COLA and obtain final NRC approval and issuance of the LNP COL.
20 This included work for the NRC Advisory Committee on Reactor Safeguards
21 (“ACRS”) subcommittee review of the Levy evaluation of the updated Central
22 Eastern United States (“CEUS”) seismic source data. In 2013, the ACRS
23 subcommittee reviewed the Levy CEUS evaluation and determined there were no
24 outstanding issues.

1 DEF also performed the licensing and engineering work necessary to
2 respond to additional NRC Requests for Additional Information (“RAIs”) and
3 NRC Bulletins that affected the LNP COLA. DEF further performed the
4 licensing and technical engineering work necessary to submit revisions and
5 supplements to LNP design information for the LNP COLA. All of this work in
6 2013 was necessary to advance NRC review of the LNP COLA and ultimate
7 issuance of the LNP COL. This work will continue in 2014, but DEF will not
8 recover the costs incurred after 2013 for this work from customers in the NCRC
9 docket, and therefore DEF has already taken steps to ensure that future COL costs
10 are not included in the NCRC docket after 2013.

11
12 **Q. What is the status of NRC review of the LNP COLA?**

13 A. The LNP COLA environmental review was completed in April 2012 when the
14 final Environmental Impact Statement (“FEIS”) was issued for the LNP. With
15 respect to the LNP Safety Review, the ACRS review of the advanced Final Safety
16 Evaluation Report (“SER”) was completed in January 2012 and, as I explained
17 above, the review of the CEUS evaluation was completed in January 2013.
18 Another ACRS review is expected in late 2014 to address emergent design issue
19 updates to the Levy COLA. Based on WEC’s delay in providing information
20 requested on the condensate return to the NRC, DEF now estimates that the Final
21 SER for the LNP is not expected until February 2015.

22 One part of the two-part formal hearing process for the LNP COLA was
23 completed in March 2013 when the NRC Atomic Safety Licensing Board
24 (“ASLB”) issued its ruling on the remaining contested contention to the LNP

1 COLA regarding the environmental impacts of dewatering and salt drift as a result
2 of the LNP. Following an evidentiary hearing in October and November 2012,
3 and the submission of Findings of Fact and Conclusions of Law in December
4 2012, the NRC ASLB unanimously resolved all issues in DEF's favor in March
5 2013. The ASLB concluded that the LNP FEIS complied with all legal and
6 regulatory requirements.

7 The second part of the two-part formal hearing process is the LNP COLA
8 mandatory hearing before the NRC Commissioners. The LNP COLA mandatory
9 hearing process cannot commence until the LNP FSER is issued, which is not
10 expected before February 2015, and the mandatory hearing for the LNP COLA
11 has not been scheduled by the NRC.

12 The NRC will not issue the LNP COL, however, until the NRC has
13 resolved the issues with respect to the NRC Waste Confidence Decision and Rule.
14 The LNP COLA, similar to other pending license applications for new nuclear
15 power plants, relied on the NRC Waste Confidence Decision and Rule.

16 The NRC Waste Confidence Decision and Rule represent the NRC's
17 generic determination that spent nuclear fuel can be stored safely and without
18 significant environmental impacts for a period of time past the end of the licensed
19 life of a nuclear power plant. The NRC relied on this generic Decision and Rule
20 to satisfy the NRC's obligations under the National Environmental Policy Act
21 ("NEPA") to evaluate the potential environmental impacts for the storage of spent
22 nuclear fuel on site after the nuclear power plant license terminates.

23 In June 2012, the United States Court for the District of Columbia Court
24 of Appeals invalidated the NRC's Waste Confidence Decision and Rule. In

1 August 2012, the NRC decided that the NRC will not issue any COL for a new
2 nuclear power plant until the NRC addressed the Court's concerns regarding the
3 evaluation of potential environmental impacts due to long-term storage of spent
4 nuclear fuel on power plant sites. Later, in September 2012, the NRC directed the
5 NRC Staff to develop a generic environmental impact statement ("EIS") to
6 support a new Waste Confidence Decision and Rule in two years or no later than
7 September 2014. The 2013 federal shutdown delayed the decision date by one
8 month to October 2014.

9

10 **Q. What is the status of the NRC process to develop a new Waste Confidence**
11 **Decision and Rule?**

12 A. The NRC conducted an EIS scoping period and published a scoping summary
13 report for the proposed Waste Confidence Rule in March 2013 and published a
14 draft generic EIS and proposed Rule in September 2013. The NRC is continuing
15 its public comment period for the draft generic EIS and proposed Waste
16 Confidence Rule through late December 2013. The NRC expects to publish a
17 final generic EIS and final Waste Confidence Rule in October 2014. Based on
18 this schedule, issuance of the Levy COL is not expected before 2015.

19

20

21 **Q. What permitting work was performed for the Levy COLA in 2013?**

22 A. DEF continued its work with the United States Army Corps of Engineers
23 ("USACE") for the Section 404 permit for the Levy site. The USACE Section
24 404 permit allows for and regulates the construction of structures in wetlands and

1 regulated waterways. This work included discussions and the development of
2 information for USACE regarding mitigation on government lands, the
3 assessment of secondary wetlands impacts, and revisions to the Environmental
4 Monitoring Plan (“EMP”). Further engineering and permitting work was
5 performed to revise Section 404 permit drawings for the USACE and to address
6 issues regarding the EMP, specifically with respect to the timing of potential
7 alternative water supply from desalination, to determine the use of ground water
8 for the LNP. DEF expects to resolve these remaining Section 404 permit issues
9 this year to allow for USACE issuance of the Section 404 permit for the LNP.
10 Likewise, while this work will continue in 2014, costs included in 2014 and
11 beyond will not be included in the NCRC.

12
13 **Q. For the Engineering, Design and Procurement costs, please identify what**
14 **those costs are and why the Company had to incur them.**

15 A. As reflected on Line 1b of the 2013 Detail Schedule, the Company incurred
16 Engineering, Design, and Procurement costs of [REDACTED] in 2013. The break-
17 down of these costs includes: (1) approximately [REDACTED] in contractual
18 payments to the Consortium for project management, quality assurance, purchase
19 order disposition support, and other home office services such as accounting and
20 project controls; and (2) approximately [REDACTED] for direct DEF oversight of
21 engineering activities of the Consortium including project management, project
22 scheduling, legal support, and cost estimating.

23

1 **Q. What Engineering, Design, and Procurement work was performed for the**
2 **LNP in 2013?**

3 A. The Levy team conducted Hold Point surveillance for Certified Mill Test Report
4 (“CMTR”) Data Package information for the Levy steam generator tubing at
5 various pre-determined stages during the tubing manufacturing process. A Hold
6 Point is a mandatory verification point beyond which work cannot proceed
7 without authorization by the Duke Energy contract administrator under the terms
8 of the EPC Agreement.

9 The Levy team also conducted Witness Point surveillance for eddy current
10 testing and the packing of the Levy steam generator tubing during the
11 manufacturing process. A Witness Point is an identified point in the
12 manufacturing process where the contract administrator may review or inspect
13 any component, or process of the work, while the work proceeds.

14 The Levy team reviewed and evaluated the Quality Plans for these steam
15 generator tubing Witness Points and Hold Points. The Quality Plans were
16 prepared by WEC and WEC provided on-going project management, quality
17 assurance, and other services for the Levy steam generator tubing.

18 The Levy steam generator tubing is one of the fourteen LNP Long Lead
19 Equipment (“LLE”) items. In 2010, the Company decided to continue to
20 manufacture the steam generator tubing when the Company evaluated the costs
21 and benefits of continuing or suspending LLE manufacturing following the NRC
22 decision not to issue the Limited Work Authorization for the Levy project. The
23 chart summarizing the Company’s LLE disposition decisions previously provided

1 to the Commission is included as Exhibit No. ____ (CMF-2) to my direct
2 testimony.

3 As a result of this prior decision, the manufacture of the Levy steam
4 generator tubing was completed and placed in storage in 2013 prior to DEF's
5 decision not to complete construction of the LNP. The Levy team reviewed and
6 evaluated the steam generator tubing and packing procedure and provided input to
7 WEC prior to the storage of the steam generator tubing.

8 The Levy team also addressed LLE fabrication issues and follow-up
9 actions with WEC regarding the LLE. The Levy engineering team completed its
10 review of the LLE design documents in 2013. It also included engineering and
11 project management support for meetings with WEC regarding the LNP LLE that
12 was in the manufacturing process prior to the decision not to complete
13 construction of the LNP. The 2013 costs include WEC's costs for WEC's project
14 management and engineering services with respect to the LNP LLE under the
15 EPC Agreement.

16
17 **Q. Was all this Engineering, Design, and Procurement work necessary in 2013?**

18 A. Yes. Prior to the 2013 Settlement Agreement, DEF was proceeding with the
19 engineering, design, and procurement work consistent with the LLE disposition
20 decisions summarized in Exhibit No. ____ (CMF-2) and the LNP project schedule
21 for completion of construction of the Levy units in 2024 and 2025. WEC was
22 supporting this work with its project management, quality assurance, purchase
23 order disposition support, and other home office services, such as accounting and
24 project controls, consistent with the EPC Agreement.

1 DEF continued this LLE project management work when DEF executed
2 the 2013 Settlement Agreement and decided not to complete construction of the
3 LNP. At that time, the fourteen LNP LLE items were at various stages of
4 development. For some LLE, like the steam generator tubing discussed above,
5 the manufacturing process was well under way and in fact completed prior to
6 execution of the 2013 Settlement Agreement. Other LLE was at various stages in
7 the manufacturing process at that time, and still other LLE had previously been
8 suspended and the partially completed LLE was in storage. DEF had to determine
9 what to do with the completed and partially completed LLE items after DEF
10 decided not to complete construction of the LNP.

11 To make the final LLE disposition decision that was in the best interests of
12 DEF's customers DEF needed information from WEC and WEC's LLE vendors.
13 DEF needed to know how DEF might avoid or reduce LLE costs based on
14 potential disposition options and DEF needed market and salvage value
15 information. DEF needed WEC's continued engineering and project management
16 support to preserve the LLE, obtain this information from WEC and WEC's
17 vendors, and make a final disposition decision.

18 DEF did take steps to ensure that only the engineering, design and
19 procurement work that was necessary to disposition the LLE and wind down the
20 project was performed after DEF's decision not to complete the LNP with the
21 execution of the 2013 Settlement Agreement. These efforts resulted in DEF
22 incurring less engineering, design and procurement expenditures than DEF
23 estimated it would incur in 2013.

24

1 **Q. How did Generation preconstruction actual capital expenditures for January**
2 **2013 through December 2013 compare to DEF's estimated/actual costs for**
3 **2013?**

4 A. LNP preconstruction generation costs were [REDACTED], or [REDACTED] less
5 than DEF's actual/estimated costs for 2013. The reasons for the major (more than
6 \$1.0 million) variances are provided below.

7 **License Application:** License Application capital expenditures were [REDACTED]
8 [REDACTED] which was about [REDACTED] less than the actual/estimated
9 License Application costs for 2013. This variance is attributable to
10 deferral of environmental permitting work and remaining project
11 contingency funds.

12
13 **Engineering, Design, and Procurement:** Engineering, Design, and
14 Procurement capital expenditures were [REDACTED], which was about [REDACTED]
15 [REDACTED] less than the actual/estimated Engineering, Design, and
16 Procurement costs for 2013. This variance is driven primarily by (1)
17 lower than estimated internal labor and expenses and WEC expenses
18 related to the reduced scope of engineering activities for the LNP COLA
19 and environmental permits, including the USACE Section 404 permit and
20 deferral of conditions of certification scope; and (2) lower than estimated
21 internal labor and expenses and WEC expenses as a result of the
22 Company's decision not to complete construction of the LNP with the
23 execution of the 2013 Settlement Agreement at the end of July 2013.

24

1 **ii. Construction Generation Costs Incurred.**

2 **Q. Did the Company incur Generation construction costs for the LNP in 2013?**

3 A. Yes. As reflected on the 2013 Detail Schedule, the Company incurred generation
4 construction costs in the categories of Real Estate Acquisition, Power Block
5 Engineering and Procurement, and Disposition of LLE.

6
7 **Q. For the Real Estate Acquisition costs, please identify what those costs are and
8 why the Company had to incur them.**

9 A. As reflected on Line 16a of the 2013 Detail Schedule, the Company incurred Real
10 Estate Acquisition costs of approximately ██████████ in 2013. The majority of
11 these costs were related to an extension payment for the required barge slip
12 easement for the LNP based on the delay in COL receipt. Additional costs were
13 incurred for environmental and survey work for the Dunnellon to Chiefland trail.

14
15 **Q. For the Power Block Engineering and Procurement costs, please identify
16 what those costs are and why the Company had to incur them.**

17 A. As reflected on Line 16c of the 2013 Detail Schedule, the Company incurred
18 Power Block Engineering and Procurement costs of ██████████ in 2013. These
19 costs included contractually committed construction milestone payments for
20 partially completed or completed LLE for the Steam Generator Tubing, Reactor
21 Coolant Loop Piping, Pressurizers, Passive Residual Heat Removal (“PRHR”)
22 Heat Exchangers, Accumulator Tanks, and Core Make-Up Tanks. These costs
23 also included contractually committed incremental LLE costs, including storage
24 and shipping, insurance, and warranty costs for the Steam Generator Tubing,

1 Steam Generator Balance, Reactor Vessel, Squib Valves, and Variable Frequency
2 Drives.

3
4 **Q. Was DEF contractually obligated to make the LLE construction milestone
5 payments prior to DEF's decision not to complete the LNP?**

6 A. Yes. DEF was contractually obligated to make these LLE payments under the
7 EPC Agreement when it was amended to address disposition of the LNP LLE
8 after the partial suspension of the EPC Agreement. These amendments are
9 reflected in change orders to the EPC Agreement.

10
11 **Q. What final LLE disposition costs were incurred in 2013?**

12 A. As reflected on Line 16d of the 2013 Detail Schedule the Company incurred LLE
13 Disposition costs of [REDACTED] in 2013. DEF accepted a final settlement offer
14 to terminate the LLE purchase orders with Mangiarotti and settle all costs with
15 respect to the Accumulator Tanks, Core Make-Up Tanks, Pressurizers, and PRHR
16 Heat Exchangers LLE for the LNP. Fabrication of these LLE items was
17 underway at Mangiarotti's facility in 2013. After Commission approval of the
18 2013 Settlement Agreement, DEF authorized WEC to contact Mangiarotti to
19 determine the feasibility and cost impact of placing a manufacture hold on these
20 LLE items while DEF analyzed the costs and benefits of various LNP LLE
21 disposition options. When Mangiarotti replied that there was a cost to place a
22 manufacturing hold on the LLE, DEF inquired further through WEC about the
23 cost to DEF to terminate the LNP LLE purchase orders and cancel manufacturing
24 of the LLE.

1 Mangiarotti responded with a final offer to settle the disposition of the
2 LNP LLE purchase orders. This offer included all costs, including cancellation
3 charges to third parties, demobilization costs, and costs to scrap or salvage the
4 LLE materials, and it included all credits, including salvage or scrap value. DEF
5 evaluated this offer against the costs and benefits of other available LLE
6 disposition options. DEF determined that it should accept the offer because it
7 resulted in net savings for DEF's customers. Exhibit No. ____ (CMF-3) to my
8 direct testimony is the DEF memo evaluating the Mangiarotti settlement offer.
9 This memo explains DEF's evaluation and the net savings to DEF's customers if
10 DEF accepted the settlement offer. Exhibit No. ____ (CMF-4) to my direct
11 testimony is DEF's letter to WEC confirming that DEF accepted the Mangiarotti
12 LNP LLE disposition settlement offer.

13
14 **Q. How did DEF evaluate the final LNP LLE disposition settlement offer with**
15 **Mangiarotti?**

16 A. DEF evaluated the Mangiarotti LNP LLE disposition settlement offer pursuant to
17 DEF's LLE Disposition Plan. A copy of this Plan is included as Exhibit No. ____
18 (CMF-5) to my direct testimony. The date of the Plan memorandum in Exhibit
19 No. ____ (CMF-5) is in January 2014, but the substance of this Plan was approved
20 and the Plan was implemented after the Commission approved the 2013
21 Settlement Agreement in October 2013.

22 DEF's LLE disposition objectives were consistent with the 2013
23 Settlement Agreement. DEF's objectives were to disposition the LNP LLE in a
24 manner that (i) minimized the financial cost and risks of the LLE disposition to

1 DEF's customers; (ii) minimized other costs to DEF and its customers; and (iii)
2 evaluated the potential future use of the LNP LLE for other AP1000 nuclear
3 power plant projects. Minimizing LLE disposition costs and risks included
4 minimizing LLE evaluation costs and purchase order or contract termination
5 costs, minimizing the risks of financial loss associated with the LNP LLE, and
6 maximizing the LNP LLE disposition cash value.

7 To achieve these objectives, DEF considered six LLE disposition options.
8 Four of these disposition options flowed from the decision to dispose of the LLE
9 rather than to store the LLE. These included: (1) reusing the LNP LLE at an
10 existing or planned Duke Energy nuclear power plant other than the LNP; (2)
11 salvaging the LNP LLE for scrap value by recycling the LLE base materials; (3)
12 selling the LNP LLE to other AP1000 nuclear power plant project owners; or (4)
13 selling the LNP LLE to the WEC vendors for vendor purposes. The option to
14 store the LNP LLE was two-fold, either (1) consignment of the LNP LLE to
15 WEC, in an arrangement that shared costs and risks between DEF and WEC, until
16 WEC could sell or re-use the LLE; or (2) storage of the LNP LLE for DEF's
17 future use.

18 As explained in Exhibit No. ____ (CMF-5), DEF storage of the LNP LLE
19 for future DEF use was not a viable option. DEF determined at the time of the
20 2013 Settlement Agreement that the external risks to the LNP fundamentally
21 changed with the 2013 amendments to the nuclear cost recovery statute, resulting
22 in substantial uncertainty and unacceptable risk to DEF and its customers to
23 proceed with construction of the LNP. The same uncertainty and unacceptable
24 risk exists with the DEF storage option for potential DEF future use. DEF cannot

1 determine under the statutory amendments when the sequential regulatory
2 approvals required by those amendments would be obtained in the future and
3 when the project would be constructed. As a result, DEF cannot determine with
4 any accuracy the storage period necessary for potential future construction of
5 AP1000 nuclear power plants at the Levy site. For these reasons, as more fully
6 explained in Exhibit No. ____ (CMF-5), storage of the LNP LLE by DEF for
7 potential future construction at the Levy site was not a viable LLE disposition
8 option and it was not considered further by DEF.

9 All other potential LNP LLE disposition options were evaluated for the
10 Mangiarotti LNP LLE based on the Company's LLE disposition objectives. This
11 evaluation is explained in detail in the confidential memo included as Exhibit No.
12 ____ (CMF-3) to my direct testimony. Based on this evaluation, DEF decided to
13 accept Mangiarotti's offer that resulted in termination of the LNP LLE purchase
14 orders and LLE disposition by salvaging the LLE for scrap value of the LLE base
15 materials. This LLE disposition option resulted in a net savings to DEF's
16 customers compared to the other viable LLE disposition options.

17
18 **Q. Does DEF intend to use this LLE disposition plan to evaluate the disposition**
19 **of the other LNP LLE?**

20 A. Yes. DEF started the process of collecting information necessary to evaluate the
21 LNP LLE disposition from WEC at about the same time the 2013 Settlement
22 Agreement was executed. DEF is still collecting the information necessary to
23 conduct that evaluation from WEC and its vendors consistent with the schedule
24 included in the LLE Disposition Plan included as Exhibit No. ____ (CMF-3) to my

1 direct testimony. This process with WEC is explained in the confidential
2 memorandum included as Exhibit No ____ (CMF-6) to my direct testimony.

3 DEF does not have direct contracts with the LLE vendors. DEF's
4 contractual relationship is with WEC and WEC has contracts or purchase orders
5 with the LNP LLE vendors. DEF must deal with the LNP LLE vendors through
6 WEC who has the contractual relationship with them. DEF also does not have
7 possession of the completed LLE or the incomplete LLE and LLE material. The
8 WEC vendors maintain storage and insurance for the LLE and LLE material and
9 WEC provides the quality assurance to maintain the quality of the LLE and LLE
10 material pursuant to WEC's contracts or purchase orders with the WEC vendors.
11 WEC's vendors, as the manufacturers of the LLE, are also in the best position to
12 determine the market and salvage value of the LLE and LLE material. DEF needs
13 WEC's assistance to maintain the quality of the LLE and LLE material and to
14 obtain the necessary market and salvage information from WEC's vendors to
15 make prudent final LLE disposition decisions. DEF must therefore work with
16 WEC and is proceeding to do so as I have described in Exhibit No. ____ (CMF-
17 6).

18
19 **Q. Has DEF terminated the EPC Agreement with the Consortium?**

20 A. DEF did not terminate the EPC Agreement in 2013. As expressed in the 2013
21 Settlement Agreement approved by the Commission, DEF agreed to terminate the
22 EPC Agreement at the earliest reasonable and prudent time. DEF determined in
23 January 2014 that it was prudent to terminate the EPC Agreement and DEF has
24 now terminated the EPC Agreement. DEF, however, still needs WEC's

1 assistance with the remaining LLE disposition and will continue to incur some
 2 costs with WEC for that work in 2014.

3
 4 **Q. How did actual Generation construction capital expenditures for January**
 5 **2013 through December 2013 compare to DEF’s actual/estimated costs for**
 6 **2013?**

7 A. LNP construction Generation costs were [REDACTED] or about [REDACTED] greater
 8 than DEF’s estimated projected costs for 2013. The reasons for the variances are
 9 provided below.

10 **Power Block Engineering and Procurement:** Power Block Engineering
 11 and Procurement capital expenditures were [REDACTED], which was [REDACTED]
 12 [REDACTED] less than the actual/estimated Power Block Engineering and
 13 Procurement costs for 2013. This variance is attributable to the deferral of
 14 LLE milestones as well as the cancellation of manufacturing on certain
 15 LLE components.

16
 17 **Real Estate Acquisitions:** Expenditures for LNP real estate acquisitions
 18 were [REDACTED], which was about [REDACTED] more than the actual/estimated
 19 real estate acquisition costs for 2013. The reason for this variance is a
 20 payment for extension of the barge slip easement due to the delay in
 21 receipt of the LNP COL.

22 **B. TRANSMISSION.**

23 **Q. Please describe what transmission work and activities were performed in**
 24 **2013 for the LNP.**

1 A. The transmission work in 2013 related to Real Estate Acquisitions and Mitigation
2 was for strategic land acquisitions for the Levy Common Transmission Corridor
3 and wetland mitigation. There were also Levy transmission labor and related
4 expenses to perform general project management associated with these
5 acquisition activities prior to DEF's decision not to complete construction of the
6 LNP.

7
8 **i. Preconstruction Transmission Costs Incurred.**

9 **Q. Did the Company incur Transmission-related preconstruction costs for the**
10 **LNP in 2013?**

11 A. No. As reflected on Line 3 of the 2013 Detail Schedule, the Company did not
12 incur Transmission-related preconstruction costs in 2013. DEF also estimated
13 that it would not incur any preconstruction transmission capital costs in 2013.

14
15 **ii. Construction Transmission Costs Incurred.**

16 **Q. Did the Company incur any transmission-related construction costs for the**
17 **LNP in 2013?**

18 A. Yes, as reflected on the 2013 Detail Schedule, the Company incurred
19 Transmission-related construction costs in the categories of Real Estate
20 Acquisition and Mitigation and Other.

21
22 **Q. For the Real Estate Acquisition and Mitigation costs, please identify what**
23 **those costs are and why the Company had to incur them.**

1 A. As reflected on Line 18b of the 2013 Detail Schedule, the Company incurred Real
2 Estate Acquisition and Mitigation costs of approximately [REDACTED]. These
3 costs were incurred for the strategic land acquisitions in the Levy Common
4 Transmission Corridor prior to DEF's decision not to complete construction of the
5 LNP and for contractually committed to wetland mitigation payments.

6
7 **IV. OPERATION & MAINTENANCE COSTS INCURRED IN 2013 FOR THE**
8 **LNP.**

9 **Q. What Operation & Maintenance ("O&M") costs did the Company incur for**
10 **the LNP in 2013?**

11 A. As reflected on the 2013 Detail Schedule, page 2, the Company incurred O&M
12 expenditures in the amount of about \$477,000 for internal labor and outside legal
13 services that were necessary for the LNP in 2013. There were no major (more
14 than \$1.0 million) variances between the actual/estimated O&M costs and the
15 actual O&M costs incurred.

16
17 **Q. To summarize, were all of the costs that the Company incurred in 2013 for**
18 **the LNP reasonable and prudent?**

19 A. Yes, the specific cost amounts for the LNP contained in the NFR schedules,
20 which are attached as exhibits to Mr. Foster's testimony, reflect the reasonable
21 and prudent costs DEF incurred for LNP work in 2013. All of these activities and
22 associated costs were necessary for the LNP.

23
24

1 **V. PROJECT MANAGEMENT, CONTRACTING, AND COST OVERSIGHT.**

2 **Q. Can you explain the Company's 2013 LNP project management, contracting,**
3 **and cost control oversight policies and procedures?**

4 A. Yes. As I explained in my 2013 March testimony -- see Exhibit No. ____ (CMF-
5 1) to my current direct testimony -- subsequent to completion of the merger
6 between Duke Energy and Progress Energy, the combined company formally
7 integrated the policies and procedures of the two companies. The on-going
8 integration of the two companies brought about a comprehensive review of all
9 processes and procedures to determine that best practices from both companies
10 are retained.

11 As I also explained previously, this integration is a gradual, on-going
12 process to ensure continual, effective project management while the policies and
13 procedures are merged and reconciled into best practices for the new, combined
14 company. Substantial progress has been made, but the merger and reconciliation
15 process continues at this time. Maintaining best practices within the Company,
16 however, is always an on-going process even beyond the merger and
17 reconciliation of the policies and procedures of the two companies. DEF will
18 continue to update its policies and procedures applicable to the management of its
19 nuclear projects as best practices evolve over time with industry developments
20 and Duke Energy and industry experience.

21 Nuclear Development ("ND") is responsible for the LNP management.
22 As a result, ND is responsible for the process of implementing best practices and
23 lessons learned for the two companies for the LNP and other nuclear development
24 projects. The process of merging and reconciling policies and procedures means

1 that some Progress Energy policies and procedures have been adopted or revised
2 and merged into revised Duke Energy policies and procedures and some have
3 been deleted because they were duplicative of or substantially similar to existing
4 Duke Energy policies. Exhibit No. ____ (CMF-7) to my direct testimony contains
5 a table listing the results of the process of merging and reconciling the Progress
6 Energy policies and procedures with the Duke Energy policies and procedures.
7 This Exhibit also contains tables describing the new Nuclear Development and
8 fleet wide policies and procedures applicable to the LNP. These project
9 management policies and procedures reflect the collective experience and
10 knowledge of the combined company, Duke Energy.

11
12 **Q. Are the Company's 2013 LNP project management, contracting, and cost**
13 **control oversight policies and procedures substantially the same as the**
14 **Company's prior project management, contracting, and cost control**
15 **oversight policies and procedures?**

16 A. Yes. The integration process revealed that the two companies' nuclear
17 development processes and procedures were similar. Consequently, the 2013
18 LNP project management, contracting, and cost oversight control policies and
19 procedures changed more in structure than substance. The Company's 2013 LNP
20 project management, contracting, and cost control oversight policies and
21 procedures reflect the best practices and lessons learned of the two companies in
22 policies and procedures that efficiently and effectively provide for prudent LNP
23 management and prudent oversight of the LNP costs.

24

1 **Q. Are the Company's 2013 LNP project management, contracting, and cost**
2 **control oversight policies and procedures reasonable and prudent?**

3 A. Yes, they are. As I explain above, although Duke Energy merged and reconciled
4 the policies and procedures of the two companies, the LNP 2013 project
5 management, contracting, and cost control policies and procedures are
6 substantially the same as the collective policies and procedures that have been
7 vetted in the annual project management audit in this docket and previously
8 approved as prudent by the Commission. *See* Order No. PSC-09-0783-FOF-EI,
9 issued Nov. 19, 2009; Order No. PSC-11-0095-FOF-EI, issued Feb. 2, 2011;
10 Order No. PSC-11-0547-FOF-EI, issued Nov. 23, 2011; and Order No. PSC-12-
11 0650-FOF-EI, issued Dec. 11, 2012. We believe, therefore, that the LNP project
12 management policies and procedures are consistent with best practices for capital
13 project management in the industry and continue to be reasonable and prudent.

14
15 **Q. Have the Company's project management, contracting, and cost control**
16 **oversight policies and procedures changed as a result of the Company's**
17 **decision not to complete construction of the LNP?**

18 A. No, the Company's ND project management, contracting, and cost control
19 oversight policies and procedures have not changed. These are Duke Energy-
20 wide policies and procedures, applicable to all nuclear generation development,
21 and in some cases such as the fleet-wide policies and procedures, existing
22 operating nuclear power plants. Duke Energy did not change its ND project
23 management, contracting and cost control oversight policies and procedures
24 because of the Company's decision not to complete construction of the LNP.

1 Some of these policies and procedures are no longer applicable to the LNP going
2 forward as a result of this decision. Some new processes like the LLE Disposition
3 Plan included as Exhibit No. ____ (CMF-5) to my testimony were developed and
4 implemented as a result of this decision. But the Company is still managing the
5 LNP to LNP COL receipt and the LLE disposition and wind down of the LNP,
6 and as a result, the Company is still following all applicable project management,
7 contracting, and cost control oversight policies and procedures for the LNP.

8 For example, the Duke Energy Nuclear Oversight Organization (“NOS”)
9 completed several Nuclear Quality Assurance reviews for the LNP after the
10 Company’s decision not to complete construction of the LNP consistent with
11 ND’s policies and procedures with respect to quality assurance. NOS participated
12 in Nuclear Procurement Issues Committee (“NUPIC”) audits of (1) WEC
13 regarding the NPP (AP1000) on July 29 to August 2, 2013; (2) Sargent and
14 Lundy, LLC on October 21 to October 25, 2013; and (3) Worley Parsons on
15 November 18 to November 22, 2013. Sargent and Lundy and Worley Parsons are
16 part of the joint venture team who contracted with the Company for engineering
17 and licensing support for the Levy COLA. Another member of the joint venture
18 team, CH2M Hill, was audited by Duke Energy from October 14 to October 16,
19 2013. Additionally, NOS conducted its annual assessment of ND activities on
20 September 23 to September 30, 2013. As these examples demonstrate, DEF is
21 continuing to actively manage the LNP in a prudent manner consistent with its
22 applicable project management, contracting, and cost control oversight policies
23 and procedures.

24

1 **Q. What process have you implemented in 2013 to ensure that future costs**
2 **related to the LNP COL are not included in the NCRC as of January 1,**
3 **2014?**

4 A. From a project team perspective, DEF has always segregated project costs
5 incurred by specific project code. Accordingly, this will not change and for 2014
6 the team continues to charge COL-related labor, NRC fees, vendor invoices and
7 all other COL-related cost items to the applicable COL project codes. Thereafter,
8 as discussed in the testimony of Mr. Foster, the Regulatory Accounting and
9 Regulatory Strategy groups will ensure that the COL-related project codes and
10 associated costs incurred in 2014 and beyond are not included in the Company's
11 NCRC Schedules, and thus not presented for nuclear cost recovery. These COL-
12 related costs will however continue to be tracked as I discussed for accounting
13 purposes consistent with the 2013 Settlement Agreement.

14
15 **Q. Does this conclude your testimony?**

16 A. Yes, it does.

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.**

IN RE: NUCLEAR COST RECOVERY CLAUSE
BY PROGRESS ENERGY FLORIDA, INC.
FPSC DOCKET NO. 130009-EI

DIRECT TESTIMONY OF CHRISTOPHER M. FALLON

1 **I. INTRODUCTION AND QUALIFICATIONS.**

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

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

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Duke Energy, Corporation (“Duke Energy”) as Vice President
8 of Nuclear Development. Progress Energy Florida, Inc. (“PEF” or the
9 “Company”) is a fully owned subsidiary of Duke Energy as a result of the merger
10 between Duke Energy and Progress Energy, Inc. which was finalized on July 2,
11 2012.

12
13 **Q. Please summarize your educational background and work experience.**

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

17

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

16
17 **Q. Please describe your responsibilities for the Levy Nuclear Project ("LNP") as**
18 **Vice President of Nuclear Development.**

19 A. As Vice President of Nuclear Development, I am responsible for the licensing and
20 engineering design for the Levy nuclear power plant project ("LNP" or "Levy"),
21 including the direct management of the Engineering, Procurement, and
22 Construction ("EPC") Agreement with Westinghouse and Shaw, Stone & Webster
23 (the "Consortium") and the project control functions for the LNP.
24

1 **II. PURPOSE AND SUMMARY OF TESTIMONY.**

2 **Q. What is the purpose of your direct testimony?**

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

12
13 **Q. Do you have any exhibits to your testimony?**

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

- 15 • Exhibit No. ____ (CMF-1), Project Management and Fleet Operating
16 Procedures applicable to the LNP, revised in 2012;
17 • Exhibit No. ____ (CMF-2), Project Management and Fleet Operating
18 Procedures, new to the LNP in 2012;

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

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

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

5
6 **Q. Please summarize your testimony.**

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

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

REDACTED

1 reasonable and prudent by the Commission in prior dockets. PEF's 2012 project
2 management policies and procedures reflect the collective experience and
3 knowledge of the Company and its new parent Duke Energy, and they have been
4 and will continue to be vetted, enhanced, and revised to reflect industry leading
5 best project management and cost oversight policies, practices, and procedures.
6 Therefore, the Company respectfully requests that the Commission approve PEF's
7 2012 project management, contracting, and cost oversight policies and procedures
8 as reasonable and prudent.

9
10 **III. 2012 LNP CAPITAL COSTS.**

11 **Q. What were the total LNP actual 2012 costs?**

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

15
16 **Q. Please describe the categories of work that were performed for the LNP in**
17 **2012 to incur these costs.**

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

1 **A. GENERATION COSTS.**

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

3 A. During 2012, the LNP team worked with the NRC to advance the LNP COLA
4 toward final approval and issuance. A significant milestone was achieved in
5 April 2012 when the NRC issued the Final Environmental Impact Statement
6 (“FEIS”). In addition, the Advisory Committee on Reactor Safeguards (“ACRS”) review of the Advanced Final Safety Evaluation Report (“SER”) was completed
7 on January 24, 2012. The Final SER schedule is currently under review.
8

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

17 In early 2012, the Atomic Safety and Licensing Board (“ASLB”) conducted a site visit of the Levy site prior to its scheduled contested hearings.
18 The LNP team facilitated this site visit and also prepared testimony and supported
19 the ASLB evidentiary hearings for environmental Contention 4A. These hearings
20 were completed on October 31, 2012 and November 1, 2012 in Bronson, Florida.
21 PEF submitted its Findings of Fact and Conclusions of Law brief related to
22 environmental Contention 4A to the ASLB on December 5, 2012. A decision
23 from the ASLB panel is expected in the first quarter of 2013.
24

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

21
22 **Q. Was any environmental work for the Levy COLA performed in 2012?**

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

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

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

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

3
4 **Q. What licenses and permits are required for the LNP?**

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

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

20 The Final EIS was prepared by the NRC with the USACE as a cooperating
21 agency. The NRC and USACE published the Draft EIS for comment in August
22 2010. The USACE will use the Final EIS as a basis for their Record of Decision
23 granting the Clean Water Act Section 404 Dredge and Fill Permit, which will be
24 needed to allow construction activities in waters of the State. The 404 Permit can

1 be issued after publication of the Final EIS. The Final EIS was published in April
2 2012, so the 404 Permit is expected around mid-2013. All necessary permits will
3 be obtained prior to and during the pre-construction and construction phases of
4 the project.

5
6 **Q. What engineering work was performed for the LNP in 2012?**

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

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

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

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

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

6
7 **Q. Please describe in general the Generation-related Real Estate Acquisitions**
8 **for the LNP in 2012.**

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

13
14 **i. Preconstruction Generation Costs Incurred.**

15 **Q. Did the Company incur any Generation preconstruction costs for the LNP in**
16 **2012?**

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

20
21 **Q. For the License Application costs, please identify what those costs are and**
22 **why the Company had to incur them.**

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

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

3
4 **Q. For the Engineering, Design and Procurement costs, please identify what**
5 **those costs are and why the Company had to incur them.**

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

14
15 **Q. How did Generation preconstruction actual capital expenditures for January**
16 **2012 through December 2012 compare to PEF's estimated/actual costs for**
17 **2012?**

18 A. LNP preconstruction generation costs were [REDACTED], or [REDACTED] less
19 than PEF's actual/estimated costs for 2012. The reasons for the major (more than
20 \$1.0 million) variances are provided below.

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

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

4
5 **Engineering, Design, and Procurement:** Engineering, Design, and
6 Procurement capital expenditures were [REDACTED], which was [REDACTED]
7 [REDACTED] less than the actual/estimated Engineering, Design, and
8 Procurement costs for 2012. This variance is driven primarily by lower
9 than estimated internal labor and expenses and deferral of Conditions of
10 Certification (“CoC”) engineering scope into future years.

11
12 **ii. Construction Generation Costs Incurred.**

13 **Q. Did the Company incur any Generation construction costs for the LNP in**
14 **2012?**

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

18
19 **Q. For the Real Estate Acquisition costs, please identify what those costs are and**
20 **why the Company had to incur them.**

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

REDACTED

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

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

7
8 **Q. How did actual Generation construction capital expenditures for January**
9 **2012 through December 2012 compare to PEF's actual/estimated costs for**
10 **2012?**

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

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

1 **B. TRANSMISSION.**

2 **Q. Please describe what transmission work and activities were performed in**
3 **2012 for the LNP.**

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

10
11 **i. Preconstruction Transmission Costs Incurred.**

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

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

16
17 **Q. Were actual Transmission-related preconstruction capital expenditures for**
18 **January 2012 through December 2012 consistent with PEF's**
19 **actual/estimated costs for 2012?**

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

1 **ii. Construction Transmission Costs Incurred.**

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

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

6
7 **Q. For the Real Estate Acquisition costs, please identify what those costs are and**
8 **why the Company had to incur them.**

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

13
14 **Q. For the Other costs, please identify what those costs are and why the**
15 **Company had to incur them.**

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

20
21
22

REDACTED

1 **Q. How did actual Transmission-related construction capital expenditures for**
2 **January 2012 through December 2012 compare to PEF's actual/estimated**
3 **2012 costs?**

4 A. LNP transmission construction actual costs were [REDACTED], or approximately
5 [REDACTED] less than PEF's actual/estimated construction transmission costs for
6 2012. Consequently, there were no major (more than \$1.0 million) variances
7 between the actual/estimated costs and the actual costs incurred for 2012.

8

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

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

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

17

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

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

24

1 **V. PROJECT MANAGEMENT, CONTRACTING, AND COST OVERSIGHT.**

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

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

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

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

5
6 **Q. Explain how this integration process was implemented for the LNP in 2012.**

7 A. After the merger was completed in July, the Levy project was managed by Duke
8 Energy's Energy Supply Project Management and Construction ("PMC") group.
9 The PMC group was analogous to the former Progress Energy group known as
10 New Generation Programs and Projects ("NGPP"). Consequently, during this
11 period in 2012, Duke Energy was in the process of integrating the Levy project
12 management, contracting, and cost oversight policies and procedures with Duke
13 Energy project management governance, but for all practical purposes the LNP
14 project management, contracting, and cost oversight policies and procedures
15 remained the same. Later, Duke Energy decided to move management of LNP
16 from the Energy Supply Department to the Nuclear Generation Department. This
17 decision aligned accountability for contract management and project management
18 of the LNP with the organization that is responsible for licensing of the LNP as
19 well as the licensing and project management of all new nuclear projects within
20 Duke Energy. As a result, all new nuclear projects reside in a single organization
21 which facilitates the transfer of best practices and lessons learned.
22
23

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

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

19
20 **Q. Is there still senior management oversight responsibility for the LNP?**

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

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

9
10 **Q. Please provide an overview of other, applicable LNP project management**
11 **processes, in particular, the cost control oversight processes.**

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

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

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

11
12 **Q. Please explain how the Company ensures that its selection and management**
13 **of outside vendors is reasonable and prudent.**

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

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

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

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

17
18 **Q. Does the Company verify that the Company's project management and cost**
19 **control policies and procedures are followed?**

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

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

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

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

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

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

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

20
21 **Q. Are these project management and costs control oversight procedures**
22 **described applicable to both transmission and generation projects?**

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

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

3 A. Yes, they are. These project management policies and procedures reflect the
4 collective experience and knowledge of the Company and now the Combined
5 Company, Duke Energy. The on-going integration of the two companies brought
6 about a comprehensive review of all processes and procedures to determine that
7 best practices from both companies are retained. The integration process to date
8 has revealed that the companies' nuclear development processes and procedures
9 are substantively similar. Consequently, the 2012 LNP project management
10 changed more in structure than substance. As a result, the LNP 2012 project
11 management, contracting, and cost control policies and procedures are
12 substantially the same as the collective policies and procedures that have been
13 vetted in the annual project management audit in this docket and approved as
14 prudent by the Commission. *See* Order No. PSC-09-0783-FOF-EI, issued Nov.
15 19, 2009; Order No. PSC-11-0095-FOF-EI, issued Feb. 2, 2011; Order No. PSC-
16 11-0547-FOF-EI, issued Nov. 23, 2011; and Order No. PSC-12-0650-FOF-EI,
17 issued Dec. 11, 2012. We believe, therefore, that the LNP project management
18 policies and procedures are consistent with best practices for capital project
19 management in the industry and continue to be reasonable and prudent.

20
21 **Q. Does this conclude your testimony?**

22 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.

THIS DOCUMENT IS REDACTED IN ITS ENTIRETY

REDACTED

Background:

On October 21, 2013 DEF authorized WEC to contact Mangiarotti regarding the feasibility and potential cost impact (if any) to place a manufacturing hold on the four components currently in manufacturing, ACT, CMT, PRHR Hx and the PZR (LLE), to allow DEF time to analyze the disposition of the equipment. Mangiarotti responded that there would be a cost associated with a manufacturing hold and that a change order would need to be negotiated. On October 25, 2013, DEF authorized WEC to contact Mangiarotti regarding Mangiarotti's cost should DEF terminate the purchase order and cancel manufacturing of the LLE. On November 4, 2013 Mangiarotti has provided WEC with an all-inclusive cancellation cost of [REDACTED] for the four components which they are manufacturing for Levy Unit 1 and 2. These all inclusive costs include such items as cancelling all material orders, purchase orders and existing contracts, bringing work to an orderly conclusion, demobilization costs, any cancellation charges to third parties, costs to scrap or salvage materials and a credit for the salvage or scrap value, etc. If this offer is accepted, DEF and WEC shall have no further liability to Mangiarotti for these POs and Mangiarotti has no further liability to DEF and WEC. Mangiarotti indicated that [REDACTED]

[REDACTED] The table below discusses the potential outcomes for the LLE to provide a framework for a decision on the Mangiarotti offer.

Option	Costs	Comments
Terminate PO- stop manufacturing	Cost to terminate PO - [REDACTED]	Salvage value is included in net cost. DEF and WEC shall have no further liability to Mangiarotti for these POs
Complete manufacturing and store LLE – sell when market recovers	Cost to complete manufacturing - [REDACTED] ¹ Storage/Extended Warranty Costs - [REDACTED] ² Shipping fixtures - [REDACTED] ³ WEC PMO costs - [REDACTED] Shipping costs - [REDACTED] Duties and Customs - [REDACTED]	Nuclear market is speculative at this point. Great uncertainty concerning the market for this equipment or any reasonable expectation of equipment value [REDACTED]
Complete manufacturing and store LLE – unable to sell, scrap at end of storage period	Cost to complete manufacturing - [REDACTED] Storage/Extended Warranty Costs - [REDACTED] Shipping fixtures - [REDACTED] WEC PMO costs - [REDACTED] Shipping costs - [REDACTED] Duties and Customs - [REDACTED]	Scrap value estimated to be approximately [REDACTED] ⁴ .
Complete manufacturing and store LLE – Use at Levy	Cost to complete manufacturing - [REDACTED] Storage/Extended Warranty Costs - [REDACTED] ⁵ Shipping fixtures - [REDACTED] WEC PMO costs - [REDACTED] Develop long-term storage plans - [REDACTED] Shipping costs - [REDACTED] Duties and Customs - [REDACTED]	New Florida nuclear cost recovery legislation raises concerns over the feasibility of new nuclear in Florida. Need to develop a long-term storage plans. Earliest in-service date is beyond 2025 requiring long-term storage of LLE. [REDACTED]

Other considerations:

¹ [REDACTED]

² From Levy EPC [REDACTED]

³ From email from Linda Iller (WEC) on October 31, 2013.

⁴ Estimate derived from weight of materials and current market price for scrap metal.

⁵ Have not been provided an estimate for long-term storage, escalated 5 year storage costs for an additional 7 years.



CHRISTOPHER M. FALLON
Vice President
Nuclear Development

REDACTED

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christopher.fallon@duke-energy.com

November 7, 2013
LNP-EPC-2013-0023

Response (Action) Required YES X / NO

Stone & Webster, Inc.
Attn: Robert Dulin
Consortium Project Manager
CB&I Stone & Webster
128 S. Tryon Street
Charlotte, NC 28202

- References: 1) E-mail from Linda Iller (WEC) to Christopher Fallon (DEF), Mangiarotti POs – Cancellation Offer, sent November 4, 2013
2) Levy Nuclear Plant Project EPC Agreement PEF Contract No. 414310

Subject: Levy Long Lead Equipment Disposition for the Mangiarotti Manufactured Equipment

Dear Mr. Dulin:

The purpose of this letter is to inform the Consortium of Duke Energy Florida's (DEF) acceptance of the cancellation offer for all components Mangiarotti is manufacturing for Levy Units 1 and 2 as provided in Reference 1. This offer includes all cancellation costs from Mangiarotti in the total amount of [REDACTED]

[REDACTED] After payment of this amount, DEF will have no further liability to Mangiarotti or the Consortium for the long lead equipment to be supplied by Mangiarotti for Levy Units 1 and 2.

We ask that you proceed with cancellation of the Mangiarotti orders, pending the issuance of a Change Order to formalize our agreement as required by Section 22.1(h) of Reference 2 (which was added by Amendment Number Three).

DEF appreciates the Consortium's assistance in this matter. Should you have any questions, please contact either Mike Franklin (919-546-6967) or myself.

LNP-EPC-2013-0023
Page 2 of 2

Sincerely,



Christopher M. Fallon
Owner's Project Director
Vice President, Nuclear Development

cc: Dhiaa Jamil (DE)
John Thrasher (DE)
Bob Morgan (DE)
Bob Kitchen (DE)
Betsy Solakoglu (DE)
Erik Wagner (DE)
Mike Franklin (DE)
David Conley (DE)
Patricia C. Smith (DE)
Matthew Martin (DE)
Kate Nolan (DE)
John Burnett (DE)
Tom Weir (WEC)
Linda Iller (WEC)
Lee Stern (WEC)
Linda Williams (WEC)
Cheryl Halaszynski (WEC)
Joni Falascino (WEC)
LevyProjectCorrespondenceInbox@westinghouse.com
LNP-EPCInbox@pgnmail.com

**MEMORANDUM**

Date: January 16, 2014
To: Chris Fallon
cc: LNP-EPCInbox@pgnmail.com
From: Lawrence Denney
Subject: Levy Nuclear Plant Long-lead Equipment Disposition Plan

Introduction

This memo describes the methodology DEF is using to disposition the long-lead equipment (LLE) purchased for the Levy Nuclear Plant (Levy) pursuant to the Engineering, Procurement, and Construction (EPC) Agreement executed by Florida Power Corporation (d/b/a Duke Energy Florida) and a consortium of Westinghouse Electric Company and Chicago Bridge & Iron (the Consortium). This memorandum describes the general process for the financial quantification, risk assessment and other qualitative assessments to support a final disposition decision for long-lead equipment (LLE) components. As such, this memo describes the principles and general process that are being employed to achieve the below stated objectives for LLE disposition.

On December 31, 2008 the EPC agreement was executed and on April 30, 2009 was partially suspended, due to a slip in the NRC licensing schedule. Current Levy project work is limited to activities required to obtain the COL and major environmental permits and to resolve certain long-lead equipment procurement activities associated with the eventual termination of the EPC agreement. Presently, the EPC agreement as amended maintains the existing terms and conditions of the EPC agreement and allows the orderly cancellation or disposition of long-lead equipment procurement activities once DEF has completed its evaluation of available options.

On July 31, 2013 a Revised and Restated Settlement Agreement (the Settlement) was reached resolving "certain future actions regarding" Levy and on November 12, 2013 was approved by the Florida Public Service Commission. Among the stipulations in the Settlement is the requirement that DEF will terminate the Levy EPC agreement at the "earliest reasonable and prudent time" and "use its reasonable and prudent efforts to curtail avoidable future LNP costs, to sell or otherwise salvage LNP assets, or otherwise refund any costs that can be recaptured for the benefit of the customers." This plan addresses these regulatory requirements insofar as they are associated with the disposition of LLE for the Levy project.

LLE Disposition Objectives

To support and fulfil the responsibilities and obligations for DEF stated in the Settlement the following are the objectives of the Levy LLE disposition:

- Minimize the financial cost and risks associated with the disposition of LLE
 - Minimize LLE evaluation costs and contract termination costs
 - Maximize Levy LLE cash value
 - Minimize risks of financial loss associated with LLE

- Minimize other costs to Duke Energy
- Evaluate the possibility for future use of LLE to AP1000 projects.

Scope

This plan covers the process of reaching and approving disposition decisions on the LLE components as well as the execution of the decisions. The specific LLE components which are covered by this plan are listed in Table 1. Levy project activities associated with receipt of the COL and other major permits are not within the scope of this plan.

Component	Status	Manufacturer
VFDs	Complete – In storage	Siemens
Steam Generator Tubing	Complete – In storage	Doosan
Reactor Vessel	Suspended- Materials in storage	Doosan
Steam Generator Balance	Suspended- Materials in storage	Doosan
Squib Valves	Suspended- Materials in storage	SPX
Reactor Coolant Pumps	Suspended- Materials in storage	EMD
RCL Pipe	Terminated	Tioga/IBF
CRDM	Not started	WEC
Reactor Vessel Internals	Not started	WEC
Turbine Generator	Not started	Toshiba
Accumulator Tank	Terminated	Mangiarotti
Core Make-Up Tank	Terminated	Mangiarotti
Pressurizer	Terminated	Mangiarotti
PRHR Hx	Terminated	Mangiarotti

Table 1. List of LLE Components

Schedule

Table 2 provides an approximate schedule for the activities associated with the disposition of the LLE. Given the complexity and the many entities, e.g. WEC, various sub-contractors to WEC, which are involved in this analysis providing precise schedule dates is not possible at this time. Therefore, general timeframes when certain major activities are expected to occur are presented in Table 2. This schedule projection supports the evaluation and disposition decision of each LLE component by the June-July timeframe.

Schedule Projection	EPC Contract Wind-Down Activities
TBD	Formal EPC Contract termination
July – Nov 2013	DEF requests information from Westinghouse; refer to letters LNP-EPC-2013-0016, LVP_LVG_000401, LVP_LVG_000421, LNP-EPC-2013-0024

Oct – Dec 2013	Westinghouse develops RFQs for sub-contractors
Oct 2013 – May 2014	Westinghouse works with suppliers for RFQ responses
Oct 2013 – June 2014	Westinghouse reviews RFQ results with Duke
Nov 2013– July 2014	Duke Energy finalizes decisions on LLE components

Table 2. Approximate schedule for EPC contract wind-down activities

Disposition Decision Methodology

There are six disposition options currently being considered for the LLE which can be grouped into two categories: (1) options which permanently dispose of the LLE today and (2) options which store the LLE for future use or disposition. Each LLE component will be analyzed for which option best meets the LLE disposition objectives. A schematic representation of the LLE disposition evaluation process is presented in Figure 1 and each disposition option is described more fully below.

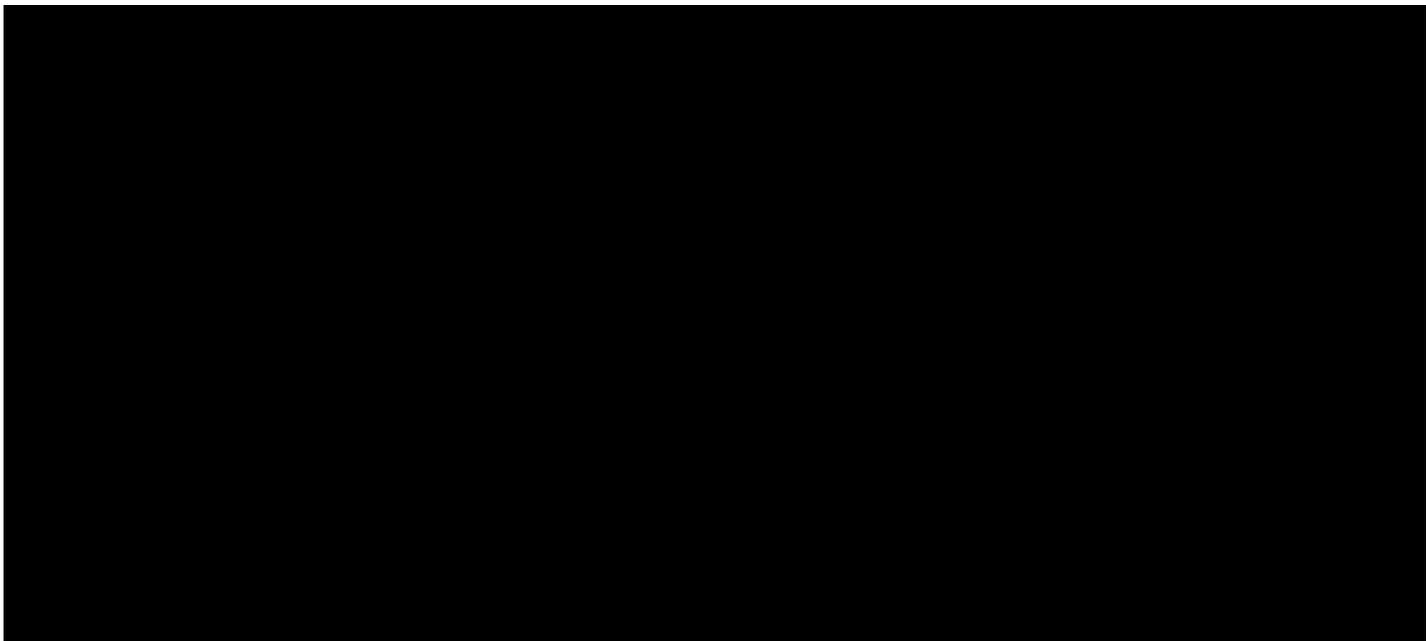


Figure 1. Schematic illustration of the LLE disposition evaluation process¹

Options which permanently dispose of LLE²

Reuse: For some LLE components there could be an alternate application beyond use at Levy or another AP1000 station. [Redacted]

¹ Grey shading indicates the option is no longer under consideration.

² [Redacted]

[REDACTED]

Salvage: The constituent materials of each LLE component have residual value as a raw material. These constituent materials can be sold for recycling, with an offsetting cost to prepare the raw materials for salvage. For this option [REDACTED]

Sell: The LLE components could be used on another AP1000 project which is either under construction or in the planning stage. DEF requested [REDACTED]

Purchase: Because some LLE components are in fabrication and are not complete there is the possibility for reuse of the in-process material for an alternate use. [REDACTED]

Options which store LLE for later disposition

Consignment: Given the costs incurred to produce the LLE and the opportunity of future use at either Levy or another AP1000 project in the future, DEF proposed a [REDACTED]

Continue storage: The final option considered is to continue the status quo with DEF continuing to pay for storage of the LLE. Initially, there were two possibilities which, if realized, would provide value for this option: construction of Levy or future sale of the LLE if the market for AP1000s improves. If neither of these options could be realized, then the LLE would have to be disposed of through one of the disposition options listed in the "Options which permanently dispose of LLE" section.

Dispose of LLE: This option will occur if no future use for the LLE is realized and DEF chooses to either storage or consign the LLE. Permanent disposition of the LLE will occur if there is no future use for the LLE. The continue storage option for potential future construction of Levy was considered and rejected as a viable option at this time based on the qualitative analysis of the risks of proceeding with this option under the 2013 statutory amendments to the nuclear cost recovery statute, Section 366.93, F.S. DEF determined at the time of the Settlement that the statutory amendments to Section 366.93 fundamentally changed the external risks to the Levy Nuclear Project, resulting in substantial uncertainty and unacceptable risk to DEF and its customers to proceed with the Levy Nuclear Project. The same analysis results in the determination that the disposition of LLE by continuing to store LLE for potential future construction of Levy is not at this time a viable option.

The statutory amendments to Section 366.93 sequentially stage regulatory approval to proceed with the project, precluding preconstruction and construction work until the COL is obtained, and requiring Commission approval based upon untested and in some cases undefined statutory standards to proceed with preconstruction, certain material and equipment purchases for the project, and then construction of the project. Receipt of the required regulatory approvals therefore is uncertain, and the time required to obtain them and address any potential appeals during the regulatory approval process is unknown. In addition, the statutory amendments establish new, undefined, and potentially subjective requirements for the utility to demonstrate annually its intent to build the nuclear power plants. For these reasons, DEF determined that the statutory amendments qualitatively result in additional uncertainty and therefore

unacceptable additional risk to the schedule and cost of the Levy Nuclear Project. As a result of this determination, DEF elected not to complete construction of the Levy nuclear power plants pursuant to Section 366.93(6) and Rule 25-6.0423(6). That decision is reflected in the Settlement provisions providing for the recovery of prudent Levy Nuclear Project wind down costs, including the cost to prudently disposition LLE.

The disposition of LLE by continuing to store LLE for future construction of Levy presents DEF and its customers with the same uncertainty and unacceptable risk that resulted in the election not to complete the Levy Nuclear Project that is reflected in the Settlement. Under the statutory amendments DEF cannot determine if and when the sequential regulatory approvals would be obtained and the project constructed, precluding DEF from determining with any accuracy the period necessary to store LLE for potential future construction of Levy. As a result of this uncertainty, there is substantial risk and therefore additional cost to DEF and customers to continue to store LLE for potential future construction of Levy. For all these reasons, this was not considered a viable LLE disposition option.

Decisional process

DEF is in the process of gathering the information needed to accomplish the LLE disposition objectives for each Levy LLE component. Once this information is accumulated, a financial analysis will be prepared for each LLE component that will compare the future costs of each proposed option. Additionally, the risks and other qualitative considerations will be described for each option and each component. For each LLE component the option which minimizes both the financial cost and risks given the qualitative constraints will be selected by the Levy project team.

The approval of the decision on each LLE component will follow the requirements of the appropriate internal policy as provided in the Nuclear Development Project Governance Procedure, PD-BO-NDP-0001. The best effort will be made to aggregate the decisions on each component into a single decision for all of the LLE components, but, at times, the optimal path may prevent such aggregation.

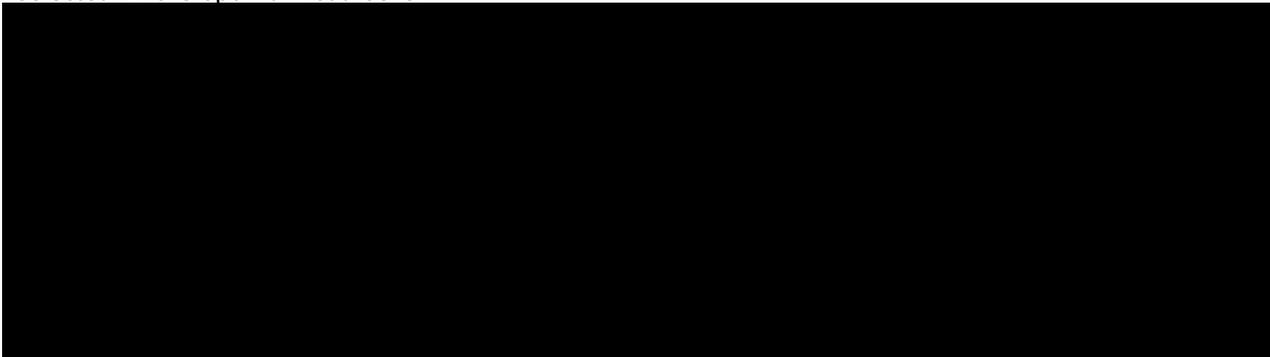
Equipment in fabrication

Mangiarotti supplied components: The LLE components supplied by Mangiarotti have been dispositioned consistent with this LLE disposition plan. The permanent disposition of these LLE components has been completed as documented in letter LNP-EPC-2013-0023.

Tioga equipment: The reactor coolant loop piping supplied by Tioga has been dispositioned consistent with this LLE disposition plan. The permanent disposition of this LLE component has been completed as documented in letter LNP-EPC-2014-00001.

Post-decision activities

For each LLE component the execution of the optimal disposition decision will depend on which option is selected. If the optimum course is:



Levy LLE Disposition

I. General Scope

This section outlines the asset pricing requirements and minimum reviews and approvals required for the execution of transactions and the record keeping requirements necessary for the disposition of LLE assets for Levy.

Transactions under this section must conform to all existing applicable company policies. It is essential that asset divestiture records of all transactions are documented and preserved.

All transactions will comply with tax regulations. Internal transfers within DEF, or to DEC, DEP, DEO, DEI, and DEK do not require a tax surcharge as these entities have a Direct Pay Permit.

II. Disposition Path*a. Internal Disposition*

Generally, capital assets are transferred among regulated affiliated utilities at Net Book Value (NBV). However, asymmetrical pricing is used for transfers between regulated affiliates and non-regulated utility affiliates and/or non-utility affiliates – the higher of NBV or Fair Market Value (FMV).

For regulated utility to regulated utility transfers, there may be instances where NBV may be at a higher value than FMV, in these cases, Commission(s) approval will be required to transfer at less than NBV.

b. External Bids

If not transferred internally, determine the FMV by obtaining external bids.

The bidding process for the disposition of materials and equipment shall be conducted as follows:

The bidding process shall follow MCP-NGGC-0001.

The Power Advocate sourcing tool should be used for all bid events, thereby maintaining consistency with all bid event sales and document retention.

The standard approved legal form contracts shall be used for all third party asset contract sales in accordance with MCP-NGGC-0001.

III. Approvals

Levy LLE internal sales will follow the Intercompany Affiliate Asset Transfer Agreement (IATA) utilizing the Affiliate Asset Transfer e-form found on the PORTAL. If the value is over \$10 M dollars or an internal sale/transfer is proposed at a value less than NBV, then commission(s) approval may be necessary for a transfer/sale to an internal Regulated Entity. Any internal transfer to a non-regulated internal entity must comply with FERC 107, asymmetrical pricing, and/or Rule 25-6.1351, Florida Administrative Code.

All Levy LLE asset external sales will follow the company's DOA guidance for the Business Unit (Nuclear Development) and Supply Chain. Additionally, each sale will be reviewed by the DEF Rates and Regulatory Strategy Director or designee, the DEF Regulatory Legal Associate General Counsel or designee, and the Tax Manager.

Docket No. 140009-EI
Duke Energy Florida
Exhibit No. _____ (CMF-6)
Pages 1 through 112

EXHIBIT No. _____ (CMF-6)
Pages 1 through 112

REDACTED IN ITS ENTIRETY

**DUKE ENERGY AND PROGRESS ENERGY PROJECT MANAGEMENT AND FLEET
OPERATING PROCEDURES APPLICABLE TO THE LNP IN 2013**

The ND procedures issued in 2013 or to be issued in 2014 are shown in Table 1.10.1 below. The ND EPC procedures are excluded from Table 1.10.1 and are included in Table 1.10.3.

Table 1.10.1

Procedure Number	Procedure Title
AD-AD-NDP-1000	Conduct of Nuclear Development
AD-LS-NDP-0100	ND 10 CFR 50.59/Departure Evaluation Process
AD-LS-NDP-0108	ND Applicability Determinations and 10 CFR 50.59/Departure Screening
AD-LS-NDP-0106	ND Inspections, Tests, Analyses and Acceptance Criteria Control Program
AD-LS-NDP-0201	ND ISG-11 Evaluation and Acceptance Review Process
AD-LS-NDP-0202	ND Screening of Preconstruction Activities
AD-LS-NDP-0204	ND License Configuration Program
AD-TQ-NDP-1000	ND Conduct of Training
AD-EG-NDP-0101	ND Design Review Requirements
AD-EG-NDP-0102	ND Design Control of Structures, Systems, and Components
AD-EG-NDP-0300	ND Configuration Management Program
AD-PI-NDP-0300	ND Construction Experience Program

Table 1.10.2 identifies nuclear fleet wide policies and procedures that are applicable to Nuclear Development initially issued in 2013.

Table 1.10.2

Procedure Number	Procedure Title
AD-DC-ALL-0102	Writer's Manual for Nuclear Department Manual Documents
AD-DC-ALL-0202	Writer's Manual for Controlled Procedure Manual Procedures
AD-DC-ALL-0204	Nuclear Procedure Writer Qualification Program
AD-HU-ALL-0004	Procedure and Work Instruction Use and Adherence

In September 2012, the decision was made to move the responsibilities for completing the LNP to the Nuclear Generation Department's Nuclear Development (ND) group. With the turnover of the Levy EPC Project Management policies and procedures to the Nuclear Development group, all of the EPC procedures were revised or deleted in 2013.

Table 1.10.3 shows the migration of EPC procedures over to the ND group. All 2013 EPC procedures are attached.

Table 1.10.3

2012 EPC Procedures		2013 EPC Procedures	
NGGS-EPC-0100	EPC Contract Contractor's Organization	Deleted	
NGGS-EPC-0101	EPC Contract Records Management	Deleted	
NGGS-EPC-0102	EPC Contract Agreement Notices	Deleted	
NGGS-EPC-0103	EPC Contract Routine and General Correspondence	AD-BO-NDP-0103	Engineering, Procurement and Construction Contract Routine and General Correspondence
NGGS-EPC-0104	EPC Contract Establishment of Project Policies and Procedures	AD-BO-NDP-0104	Engineering, Procurement and Construction Contract Establishment of Project Policies and Procedures
NGGS-EPC-0105	EPC Contract Facility Licenses, Permits and Approvals Responsibility	AD-BO-NDP-0105	Engineering, Procurement and Construction Contract Facility Licenses, Permits, and Approvals Responsibility
NGGS-EPC-0106	EPC Contract Periodic Updates	AD-BO-NDP-0106	Engineering, Procurement and Construction Contract Periodic Updates
NGGS-EPC-0108	EPC Contract Dispute Resolution	Deleted	
NGGS-EPC-0112	EPC Contract Approval Authority for Change Orders and Addenda	Deleted	

2012 EPC Procedures		2013 EPC Procedures	
NGGS-EPC-0200	EPC Contract Invoice Validation and Processing	AD-BO-NDP-0200	Engineering, Procurement and Construction Contract Invoice Validation and Processing
NGGS-EPC-0201	EPC Contract Sales and Use Tax Compliance	AD-BO-NDP-0201	Engineering, Procurement and Construction Contract Sales and Use Tax Compliance
NGGS-EPC-0202	EPC Contract Consortium Subcontracting	Deleted	
NGGS-EPC-0203	EPC Contract Change Control	Deleted	
NGGS-EPC-0204	EPC Contract Price Adjustment Provisions	AD-BO-NDP-0204	Engineering, Procurement and Construction Contract Price Adjustment Provisions
NGGS-EPC-0300	EPC Contract Engineering Document Reviews	Deleted	
NGGS-EPC-0301	EPC Contract Intellectual Property and Proprietary Information	Deleted	
NGGS-EPC-0400	EPC Contract Consortium Schedule Performance Oversight	Deleted	

Additionally, Table 1.10.4 identifies new and revised Nuclear Fleet Procedures that are not specifically identified as being applicable to Nuclear Development, but are expected to be used.

Table 1.10.4

Procedure Number	Procedure Title
AD-PI-ALL-0003	Change Management
AD-PI-ALL-0004	Nuclear Safety Culture Program
AD-PI-ALL-0300	Self-Assessment and Benchmark Program
AD-NO-ALL-0203	Differing Professional Opinion Process (DPO)
AD-LS-ALL-0002	Regulatory Correspondence
AD-HU-ALL-0001	Human Performance Program
AD-HS-ALL-0102	Reporting Safety Incidents and Injury Case Management
AD-EG-ALL-1011	Engineering Technical Task Rigor: Pre-Job Brief and Risk Management
AD-EG-ALL-1001	Conduct of Plant Engineering