



L-2018-039  
10 CFR 54.17  
10 CFR 2.390

February 9, 2018

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555-0001

Re: Florida Power & Light Company  
Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Turkey Point Units 3 and 4 Subsequent  
License Renewal Application - Supplement 1

Reference:

1. FPL Letter L-2018-004 to NRC dated January 30, 2018, Turkey Point Units 3 and 4 Subsequent License Renewal Application

Florida Power & Light Company (FPL) submitted a subsequent license renewal application (SLRA) for Turkey Point Units 3 and 4 to NRC on January 30, 2018 (Reference 1). Following discussions with NRC staff concerning apparent discrepancies between the affidavits and the associated proprietary enclosures, FPL performed an additional review of the affidavits and enclosures and identified discrepancies involving some of the reference documents.

Attachment 1 to this letter includes a marked-up copy of the affected non-proprietary pages with corrections.

Attachment 2 to this letter includes a marked-up copy of the affected proprietary pages with corrections.

In addition, based on discussions with EPRI, the original version of SLRA Enclosure 2, Attachment 4 (the EPRI Affidavit) is compliant with 10 CFR 2.390 because the letter provides a unique identifier for the withheld report referenced in the EPRI Affidavit.

FPL has reviewed these changes to the SLRA and determined that they do not have a material impact on the reference evaluations.

FPL will provide a revised submittal which will include a complete version of each of the affected SLRA Enclosures identified in this letter prior to the end of the NRC acceptance review period.

FPL requests Attachment 2 of this letter to be withheld from public disclosure under 10 CFR 2.390. The affected page markups are excerpts from the proprietary vendor reports included with the FPL SLRA and are covered by affidavits included with the January 30, 2018 SLRA submittal (Reference 1) Enclosure 2 Affidavits, as amended by this submittal.

A084  
NRR

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If you have any questions, or need additional information, please contact William Maher,  
Senior Licensing Director, at 561-691-2294.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 9, 2018.

Sincerely,



William D. Maher  
Senior Licensing Director  
Florida Power & Light Company

Attachments:

1. Non-proprietary Affected Pages, FPL Letter L-2018-004 dated 01-30-2018
2. Proprietary Affected Pages, FPL Letter L-2018-004 dated 01-30-2018 Withhold  
under 10 CFR 2.390

WDM/GRM

cc: w/o Attachment 2

Regional Administrator, USNRC, Region II  
Project Manager, USNRC, Turkey Point Nuclear Plant  
Project Manager, USNRC, SLRA  
Senior Resident Inspector, USNRC, Turkey Point Nuclear Plant  
Project Manager, USNRC, SLRA Environment  
Ms. Cindy Becker, Florida Department of Health



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| <b>Non-proprietary Affected Pages</b><br><b>FPL Letter L-2018-004 dated 01-30-2018</b> |   |
|--|---|
| 1  | Encl. 1, Listing for Enclosure 4 Item k., Title of Attachment 11 - (1 Page)   |
| 2  | Encl. 2, Att. 4, Cover Page - (1 Page)  |
| 3  | Encl. 2, Att. 6, Framatome (nee, AREVA) Replacement Affidavit - (4 Pages)   |
| 4  | Encl. 3, SLRA Section 4, Reference 4.7.7.6 – (1 Page)   |
| 5  | Encl. 4, Att. 4, SIA Report No.1700109.402P.R3 - REDACTED, Reference 26 – (1 Page)                                      |
| 6  | Encl. 4, Att. 5, SIA Report No. 1700109.401P.R3 - REDACTED, References 22, 32, 33, 35, 36, 37, 38, 39, & 40 – (2 Pages) |
| 7  | Encl. 4, Att. 6, SIA Calculation No. 1700804-313P - REDACTED, Revision 1 References 5 & 9 – (1 Page)                    |
| 8  | Encl. 4, Att. 6, SIA Calculation No. 1700804-315P - REDACTED, Revision 1, Reference 10 – (1 Page)                       |
| 9  | Encl. 4, Att., 11, Cover Page – (1 Page)  |
| 10   | Encl. 5, Att. 1, SLRA Section 4, Reference 4.7.7.6 – (1 Page)   |

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- f. **Attachment 6** – SIA Environmentally Assisted Fatigue Calculations
  - i. Pressurizer Lower Head – 1700804.316P Revision 0 REDACTED, 1700804.317 Revision 0, and 1700804.318 Revision 0,
  - ii. Pressurizer Spray – 1700804.313P Revision 1 REDACTED, 1700804.314P Revision 1 REDACTED, and 1700804.315P Revision 1 REDACTED
- g. **Attachment 7** – Westinghouse Environmentally Assisted Fatigue Calculations
  - i. LTR-SDA-II-17-13-NP, Rev. 2, Pressurizer Upper Head, RV Core Support Blocks
  - ii. LTR-CECO-17-025-NP, Rev. 1, Replacement Steam Generators
- h. **Attachment 8** – Areva Environmentally Assisted Fatigue Calculations: Areva Letter No. AREVA-17-02742, dated December 6, 2017, Final CUFEN Results – Turkey Point 3 & 4 – SLR EAF Analyses
  - i. 32-9280707, Rev. 0, CRDM Nozzle to Adapter Weld Connection
  - ii. 32-9280708, Rev. 0, Replacement RVCH J Groove
  - iii. 32-9280709, Rev. 0, CRDM Latch Housing
  - iv. 32-9280710, Rev. 0, Vent Nozzle
  - v. 32-9280711, Rev. 0, Reactor Vessel Flange
  - vi. 32-9280712, Rev. 0, CRDM Lower Joint
- i. **Attachment 9** – PWROG-17031-NP, Rev. 0 – Update for Subsequent License Renewal: WCAP-15338-A
- j. **Attachment 10** – PWROG-17011-NP, Rev. 0 – Update for Subsequent License Renewal: WCAP-14535A and WCAP-15666-A
- k. **Attachment 11** – WCAP-15354-NP, Rev. 1, Technical Justification for Eliminating Primary Loop Pipe Rupture as **a the** Structural Design Basis
- l. **Attachment 12** – SIA Leak-Before-Break Evaluation for Auxiliary Lines 0901350-401 Rev. 3 and 0901350-304 Rev. 3
- m. **Attachment 13** – PWROG-17033-NP, Rev. 0, Update for Subsequent License Renewal: WCAP-13045

**Enclosure 5** – 10 CFR 2.390 Withheld Proprietary Documents

- a. **Attachment 1** – Turkey Point Nuclear Plant Units 3 and 4 Subsequent License Renewal Application (Proprietary Version)
- b. **Attachment 2** – Areva Topical Report ANP-3646P Revision 0
- c. **Attachment 3** – Areva Topical Report ANP-3647P Revision 0
- d. **Attachment 4** – SIA Task 1 Report – SIA Report No. 1700109.402P Revision 3
- e. **Attachment 5** – SIA Task 2 Report – SIA Report No. 1700109.401P Revision 3
- f. **Attachment 6** – SIA EAF Calculations



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**Applications for Withholding  
Proprietary Information from Public Disclosure  
Pursuant to 10 CFR 2.390(a)(4)**

**Attachment 4:**

Affidavit for withholding for  
EPRI letter dated December 14, 2017, Affidavit for MRP 2017-038

(Enclosure 5 Attachment 1- SLRA Appendix C & Attachment 11)

1. Materials Reliability Program Letter MRP 2017-038 to MRP members, entitled, Transmittal of Preliminary Results from MRP-191 Expert Panel Review in Support of Subsequent License Renewal at U.S. PWR Plants.

This is a request under 10 C.F.R. §2.390(a)(4) that the U.S. Nuclear Regulatory Commission (NRC) withhold from public disclosure the information identified in the enclosed Affidavit consisting of the commercial information owned by Electric Power Research Institute, Inc. (EPRI) identified above (the "Report"). Copies of the Report and the Affidavit in support of this request are enclosed.

EPRI desires to disclose these preliminary results in confidence to supplement previously submitted information as requested by the NRC in a letter dated 9/6/2017 [Ref. ML 17220A008]. The preliminary results reported herein are not to be divulged to anyone outside of the NRC nor shall any copies be made of the information provided herein. EPRI welcomes any discussions and/or questions relating to the information enclosed.

If you have any questions about the legal aspects of this request for withholding, please do not hesitate to contact Steven Swilley at (704) 595-2630. Questions on the content of the Report should be directed to Kyle Amberge of EPRI at (704) 595-2039.

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**Enclosure 2**  
**Applications for Withholding**  
**Proprietary Information from Public Disclosure**  
**Pursuant to 10 CFR 2.390(a)(4)**

**Attachment 6:**

Affidavit dated ~~December 15, 2017~~ **February 8, 2018** for withholding for  
Areva CUFs in SLRA tables  
(Enclosure 5 Attachment 1- SLRA Section 4, Attachment 4 & Attachment 5)



AFFIDAVIT

COMMONWEALTH OF VIRGINIA    )  
  ) ss.  
CITY OF LYNCHBURG            )

1. My name is Gayle Elliott. I am Deputy Director, Licensing & Regulatory Affairs, for Framatome Inc. (Framatome) and as such I am authorized to execute this Affidavit.
2. I am familiar with the criteria applied by Framatome to determine whether certain Framatome information is proprietary. I am familiar with the policies established by Framatome to ensure the proper application of these criteria.
3. I am familiar with the Framatome information contained in Table 4.3-1, "PTN Unit 3 and Unit 4 60-Year Fatigue Cumulative Usage Factors for Reactor Coolant System Components," Table 4.3.3-2, "80-Year Environmentally Assisted Fatigue CUFs," and pages 4.3-22 and 4.3-23 of Section 4, "Time-Limited Aging Analyses," of Turkey Point Units 3 and 4 Subsequent License Renewal Application and referred to herein as "Document." Information contained in this Document has been classified by Framatome as proprietary in accordance with the policies established by Framatome for the control and protection of proprietary and confidential information.
4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by Framatome and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.
5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information."

6. The following criteria are customarily applied by Framatome to determine whether information should be classified as proprietary:

- (a) The information reveals details of Framatome's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for Framatome.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for Framatome in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by Framatome, would be helpful to competitors to Framatome, and would likely cause substantial harm to the competitive position of Framatome.

The information in this Document is considered proprietary for the reasons set forth in paragraphs 6(d) and 6(e) above.

7. In accordance with Framatome's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside Framatome only as required and under suitable agreement providing for nondisclosure and limited use of the information.

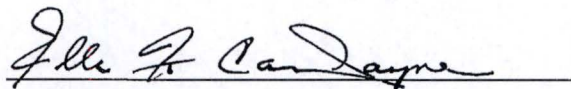
8. Framatome policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.



9. The foregoing statements are true and correct to the best of my knowledge,  
information, and belief.

A handwritten signature in black ink, appearing to be 'A. P. H.', written over a horizontal line.

SUBSCRIBED before me this 8<sup>th</sup>  
day of February, 2018.

A handwritten signature in black ink, appearing to be 'Ella Carr-Payne', written over a horizontal line.

Ella Carr-Payne  
NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA



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Section 4 – Time-Limited Aging Analyses

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- 4.7.7.5 WCAP-15354, "Technical Justification for Eliminating Large Primary Loop Pipe Rupture as the Structural Design Basis for the Turkey Point Units 3 and 4 Nuclear Power Plant For the 60 Year Plant Life (License Renewal Program)," Revision 0, January 2000.
- 4.7.7.6 WCAP-15354-P/NP, "Technical Justification for Eliminating Primary Loop Pipe Rupture as ~~a the~~ Structural Design Basis for Turkey Point Units 3 and 4 Nuclear Power Plants for the Subsequent License Renewal Time-Limited Aging Analysis Program (80 Years) Leak-Before-Break Evaluation," Revision 1, ~~September~~ August 2017 (Enclosure 4, Attachment 11).
- 4.7.7.7 NUREG/CR-4513, "Estimation of Fracture Toughness of Cast Stainless Steels During Thermal Aging in LWR Systems," Revision 2, U.S. Nuclear Regulatory Commission, Washington, DC, May 2016.
- 4.7.7.8 Structural Integrity Associates Engineering Report No. 0901350.401, Revision 3, "Leak-Before-Break Evaluation - Accumulator, Pressurizer Surge, and Residual Heat Removal Lines, Turkey Point Units 3 and 4," September 2017 (Enclosure 4, Attachment 12).
- 4.7.7.9 NUREG-1061, Volumes 1-5, "Report of the U. S. Nuclear Regulatory Commission Piping Review Committee," prepared by the Piping Review Committee, NRC, April 1985.
- 4.7.7.10 NUREG-0800, "U.S. Nuclear Regulatory Commission Standard Revision Plan, Office of Nuclear Reactor Regulation, Section 3.6.3, Leak-Before-Break Evaluation Procedure," August 1987.
- 4.7.7.11 ASME Boiler and Pressure Vessel Code, Section XI, 2001 Edition with Addenda through 2003.
- 4.7.7.12 WCAP-13045, Compliance to ASME Code Case N-481 of the Primary Loop Pump Casings of Westinghouse Type Nuclear Steam Supply Systems.
- 4.7.7.13 WCAP-15355, A Demonstration of Applicability of ASME Code Case N-481 to the Primary Loop Pump Casings of the Turkey Point Units 3 and 4.
- 4.7.7.14 PWROG-17033-P/NP, Revision 0, Update for Subsequent License Renewal: WCAP-13045, "Compliance to ASME Code Case N-481 of the Primary Loop Pump Casings of Westinghouse Type Nuclear Steam Supply Systems", October 2017 (Enclosure 4, Attachment 13).
- 4.7.7.15 Specification E.O.C.I.-61, Electric Overhead Crane Institute, Inc., 1961.
- 4.7.7.16 AISC, Manual of Steel Construction, 6th Edition.
- 4.7.7.17 Specification CMAA -70, Crane Manufacturers Association of America, Inc., 1994.



Turkey Point Units 3 and 4  
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L-2018-004 Enclosure 4 Attachment 11

**Enclosure 4**  
**Non-proprietary Reference Documents**  
**and**  
**Redacted Versions of Proprietary**  
**Reference Documents**  
**(Public Version)**  
**Attachment 11**

**WCAP-15354-NP, Revision 1**

**Technical Justification for Eliminating Primary Loop Pipe  
Rupture as ~~a~~ **the** Structural Design Basis for Turkey Point  
Units 3 and 4 Nuclear Power Plants for the Subsequent  
License Renewal Time-Limited Aging Analysis Program  
(80 Years) Leak-Before-Break Evaluation, August 2017**

**(59 Total Pages, including cover sheets)**

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Section 4 – Time-Limited Aging Analyses

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- 4.7.7.5 WCAP-15354, "Technical Justification for Eliminating Large Primary Loop Pipe Rupture as the Structural Design Basis for the Turkey Point Units 3 and 4 Nuclear Power Plant For the 60 Year Plant Life (License Renewal Program)," Revision 0, January 2000.
- 4.7.7.6 WCAP-15354-P/NP, "Technical Justification for Eliminating Primary Loop Pipe Rupture as ~~a~~ **the** Structural Design Basis for Turkey Point Units 3 and 4 Nuclear Power Plants for the Subsequent License Renewal Time-Limited Aging Analysis Program (80 Years) Leak-Before-Break Evaluation," Revision 1, ~~September~~ **August** 2017 (Enclosure 5, Attachment 9).
- 4.7.7.7 NUREG/CR-4513, "Estimation of Fracture Toughness of Cast Stainless Steels During Thermal Aging in LWR Systems," Revision 2, U.S. Nuclear Regulatory Commission, Washington, DC, May 2016.
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- 4.7.7.10 NUREG-0800, "U.S. Nuclear Regulatory Commission Standard Revision Plan, Office of Nuclear Reactor Regulation, Section 3.6.3, Leak-Before-Break Evaluation Procedure," August 1987.
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| <b>Proprietary Affected Pages<br/>FPL Letter L-2018-004 dated 01-30-2018</b> |   |
|--|---|
| 1  | Encl. 5, Proprietary Document List – (1 Page)   |
| 2  | Encl. 5, Att. 4, SIA Report No.1700109.402P.R3, Reference 26 – (1 Page)   |
| 3  | Encl. 5 Att. 5, SIA Report No. 1700109.401P.R3, References 22, 32, 33, 35, 36, 37, 38, 39, & 40 – (2 Pages)                 |
| 4  | Encl. 5, Att. 6, SIA Calculation No. 1700804-313P, Revision 1 References 5 & 9 - (1 Page)                                   |
| 5  | Encl. 5, Att. 6, SIA Calculation No. 1700804-315P, Revision 1, Reference 10 – (1 Page)                                      |
| 6  | Encl. 5, Att. 9, Cover Page – (1 Page)  |
| 7  | Encl. 5, Att. 11, EPRI Letter No. MRP 2017-038 dated 12-15-2017, Added 10 CFR 2.390 Withholding header & footer – (8 Pages) |