



**MAY 06 2016**

L-2016-104  
10 CFR 50.90

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

Re: St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
RAI Reply - Application for Technical Specification Change Regarding Moderator Temperature Coefficient (MTC) Surveillance Test Elimination at the End of Cycle.

References:

1. FPL letter L-2016-008 dated January 19, 2016, "Application for Technical Specification Change Regarding Moderator Temperature Coefficient (MTC) Surveillance Test Elimination at the End of Cycle." Accession No. ML16033A472
2. NRR E-mail Capture dated March 28, 2016, "Request for Additional Information - St. Lucie SRXB MTC Surv - MF7269 & MF7270." Accession No. ML16089A005

In Reference 1, Florida Power & Light Company (FPL) requested proposed amendments that would modify the Technical Specifications (TS) to implement elimination of the end-of-cycle moderator temperature coefficient (MTC) surveillance testing and add a previously NRC approved Westinghouse PARAGON Topical Report WCAP-16045-P-A, Revision 0 to the list of COLR methodologies in TS 6.9.1.11.b. The NRC requested additional information (RAI) in Reference 2.

FPL's response to the RAI is provided in the Enclosure to this letter. Note that Attachment 1 of the Enclosure contains proprietary information, Attachment 2 of the Enclosure provides the non-proprietary response, and Attachment 3 of the Enclosure provides an Affidavit supporting the proprietary nature of information contained in Attachment 1.

The original no significance hazards evaluation bounds the RAI response. This letter contains no new or revised regulatory commitments.

Please contact Mr. Mike Snyder, Licensing Manager at 772-467-7036 if there are any questions about this submittal.

ADD  
NRR

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

Executed on **MAY 06 2016**

Sincerely,

A handwritten signature in black ink, reading "Christopher R. Costanzo". The signature is written in a cursive style with a large initial 'C'.

Christopher R. Costanzo  
Site Vice President  
St. Lucie Plant

CRC/KWF

Enclosure

cc: NRC Region II Administrator  
St. Lucie Plant NRC Senior Resident Inspector  
Ms. Cindy Becker, Florida Department of Health

**REQUEST FOR ADDITIONAL INFORMATION**  
**ST. LUCIE, UNITS 1 AND 2**  
**LICENSE AMENDMENT REQUEST TO ELIMINATE EOC MTC**  
**SURVEILLANCE TEST AND ADD COLR METHODOLOGY TO TS**  
**DOCKET NOS. 50-335 AND 50-389**  
**CACs MF7269 & MF7270**

By letter dated January 19, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16033A472), Florida Power & Light (the licensee) submitted a license amendment request (LAR) for NRC approval to eliminate the St. Lucie Plant Unit Nos. 1 and 2 end-of-cycle moderator temperature coefficient (MTC) surveillance test, and to add Westinghouse PARAGON to the Units 1 and 2 Technical Specification list of Core Operating Limits Report (COLR) methodologies. The staff review of the licensee's 1/19/16 LAR has resulted in the following requests for additional information:

**RAI-MF7269/70-SRXB-01**

Use of Topical Report CE NPSD-911-A and Amendment 1-A with PHOENIX-P/ANC and PARAGON/ANC for St. Lucie is based on benchmarking performed by Westinghouse and recent cycles of St. Lucie moderator temperature coefficient (MTC) measured to predicted differences. With DIT/ROCS, the CE NPSD-911-A methodology uses a MTC bias. CE NPSD-911-A Section I states, "The best estimate value is defined as the calculated value using the current ABB-CE methodology augmented by a bias term" and also states "...the most negative raw calculated design MTC at EOC must be less negative than the Tech Spec MTC by an amount equal to the bias plus total uncertainty." Please provide any bias used with PHOENIX-P/ANC and PARAGON/ANC to calculate the St. Lucie best estimate design MTC values for CE NPSD-911-A. Also provide any bias used with the MTC data in Tables 1 and 2 of the license amendment request.

**Response to RAI-MF7269/70-SRXB-01**

- 1) *The bias used with PHOENIX-P/ANC and PARAGON/ANC to calculate the St. Lucie best estimate design MTC values for CE NPSD-911-A is provided in Attachment 1 (Proprietary). Also included in this response is the Non-Proprietary version in Attachment 2 and Westinghouse's Affidavit to the Proprietary version in Attachment 3.*
- 2) *The bias used with the MTC data in Tables 1 and 2 of the License Amendment Request provided in Reference 1 is the same as that above based on PHOENIX-P/ANC.*

**References:**

1. *Letter from C. R. Costanzo (Florida Power and Light) to U.S. Nuclear Regulatory Commission, L-2016-008, "St. Lucie Units 1 and 2, Docket No. 50-335 and 50-389, Application for Technical Specification Change Regarding Moderator Temperature Coefficient (MTC) Surveillance Test Elimination at the End of Cycle," dated January 19, 2016 [ADAMS Accession No.:ML16033A472].*

Westinghouse Non-Proprietary Class 3

NF-NEXT-16-51, Revision 1  
March 29, 2016

## **ATTACHMENT 2**

“St. Lucie Units 1 and 2 ANC8 ITC Bias”  
(Non-Proprietary)

(1 page attached)

Westinghouse Non-Proprietary Class 3

NF-NEXT-16-51, Rev. 1, Attachment 2  
Page 1 of 1

Shown below are the the current biases for ANC8/PHOENIX-P and ANC8/PARAGON calculations of ITC applicable to St. Lucie. We understand that this information will be used in an RAI response on the submittal to eliminate the EOC MTC Tech Spec surveillance for St. Lucie Units 1 and 2.

The uncertainty based on 61 benchmarks to plant measurements including St. Lucie 1 and 2 for ITC calculations using ANC8 with PHOENIX-P or PARAGON cross sections is:

$$\left[ \begin{array}{c} \text{ITC/MTC Bias} \\ \\ \text{Where rod worth is positive and power is in \% of RTP} \end{array} \right]_{a,c}$$

Westinghouse Non-Proprietary Class 3

NF-NEXT-16-51, Revision 1  
March 29, 2016

**ATTACHMENT 3**

CAW-16-4390, "St. Lucie Units 1 and 2 ANC8 ITC Bias"

(8 pages attached)

Westinghouse Non-Proprietary Class 3



Westinghouse Electric Company  
1000 Westinghouse Drive  
Cranberry Township, Pennsylvania 16066  
USA

U.S. Nuclear Regulatory Commission  
Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

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CAW-16-4390

March 29, 2016

APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE

Subject: St. Lucie Units 1 and 2 ANC8 ITC Bias (Proprietary)

The Application for Withholding Proprietary Information from Public Disclosure is submitted by Westinghouse Electric Company LLC (Westinghouse), pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-16-4390 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The Affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by Florida Power and Light Company.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference CAW-16-4390, and should be addressed to James A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 3 Suite 310, Cranberry Township, Pennsylvania 16066.

James A. Gresham, Manager  
Regulatory Compliance

CAW-16-4390

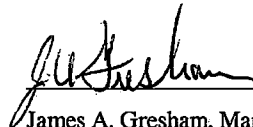
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF BUTLER:

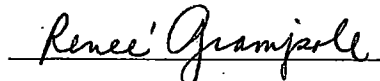
Before me, the undersigned authority, personally appeared James A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



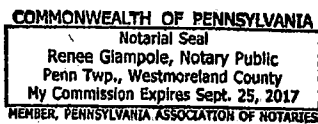
James A. Gresham, Manager

Regulatory Compliance

Sworn to and subscribed before me  
this 29th day of March 2106.



Notary Public





- (1) I am Manager, Regulatory Compliance, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
  - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
  - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute Westinghouse policy and provide the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
  - (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
  - (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
  - (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
  - (f) It contains patentable ideas, for which patent protection may be desirable.
- (iii) There are sound policy reasons behind the Westinghouse system which include the following:
- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
  - (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
  - (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
  - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
  - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iv) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, is to be received in confidence by the Commission.
- (v) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (vi) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in NF-NEXT-16-51, Revision 1, Attachment 1, "St. Lucie Units 1 and 2 ANC8 ITC Bias" (Proprietary) for submittal to the Commission, being transmitted by Florida Power and Light Company letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with current biases for ANC8/PHOENIX-P and ANC8/PARAGON calculations of ITC applicable to St. Lucie for RAI response support, and may be used only for that purpose.
- (a) This information is part of that which will enable Westinghouse to provide license amendment request support to St. Lucie.
  - (b) Further, this information has substantial commercial value as follows:

- (i) Westinghouse plans to sell the use of similar information to its customers for the purpose of providing license amendment request support.
- (ii) Westinghouse can sell support and defense of industry guidelines and acceptance criteria for plant-specific applications.
- (iii) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar technical evaluation justifications and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

### PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and non-proprietary versions of a document, furnished to the NRC in connection with current biases for ANC8/PHOENIX-P and ANC8/PARAGON calculations of ITC applicable to St. Lucie for RAI response support, and may be used only for that purpose.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the Affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

### COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

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

Executed on **MAY 06 2016**

Sincerely,

A handwritten signature in black ink, reading "Christopher R. Costanzo". The signature is written in a cursive style with a large initial 'C'.

Christopher R. Costanzo  
Site Vice President  
St. Lucie Plant

CRC/KWF

Enclosure

cc: NRC Region II Administrator  
St. Lucie Plant NRC Senior Resident Inspector  
Ms. Cindy Becker, Florida Department of Health