

B. H. Whitley
Director
Regulatory Affairs

Southern Nuclear
Operating Company, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242



February 1, 2017

Docket Nos.: 52-025
52-026

ND-17-0113
10 CFR 50.55a

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4
Response to Requests for Additional Information Related to
Preservice Inspection Requirements for Steam Generator Nozzle to
Reactor Coolant Pump Casing Welds (VEGP 3&4-PSI-ALT-05) Rev. 1 Supplement 1

Ladies and Gentlemen:

By letter dated June 24, 2016, Southern Nuclear Operating Company (SNC) submitted a request for an alternative in accordance with 10 CFR 50.55a for preservice inspection of the Steam Generator Nozzle to Reactor Coolant Pump Casing Welds [ML16176A312]. On August 5, 2016, the Nuclear Regulatory Commission (NRC) staff issued two draft requests for additional information (RAIs) [ML16218A439]. A clarification call was held in a public meeting on August 25, 2016 to provide clarification on the RAIs. On September 30, 2016, SNC submitted the response to the RAIs [ML16274A358]. A post-submittal clarification call was conducted on October 13, 2016, during which the NRC requested clarification on the smallest detectable flaw size used in the flaw evaluation and clarification on the figure to which the inspection is requested to be performed. On December 20, 2016, SNC submitted Response to Requests for Additional Information Related to Preservice Inspection Requirements for Steam Generator Nozzle to Reactor Coolant Pump Casing Welds (VEGP 3&4-PSI-ALT-05) Rev. 1 [ML16355A222] which revised the RAI response to provide the requested clarification and amended the requested approval date. On December 22, 2016, SNC issued replacement pages for Enclosure 1 to include revision bars which were inadvertently omitted [ML16357A406].

On January 13, 2017, a clarification call was conducted and SNC agreed to provide additional information justifying the use of constant flaw aspect ratios for axial and circumferential flaws included in Enclosure 3 of Response to Requests for Additional Information Related to Preservice Inspection Requirements for Steam Generator Nozzle to Reactor Coolant Pump Casing Welds (VEGP 3&4-PSI-ALT-05) Rev. 1 [ML16355A222]. In addition, SNC agreed to provide additional information justifying why only flaw depth was evaluated in determining flaw growth acceptability in the same enclosure.

In addition, the requested approval date of the alternative is amended. Approval is requested by April 28, 2017.

Enclosures 1 and 2 provide the additional information.

Enclosure 1 contains the Non-Proprietary Response.

Enclosure 2 contains the Proprietary response and is subject to withholding under 10 CFR 2.390.

Enclosure 3 provides an affidavit from SNC supporting withholding the Proprietary information under 10 CFR 2.390.

Enclosure 4 is Westinghouse's Proprietary Information Notice, Copyright Notice, and CAW-17-4534, Application for Withholding Proprietary Information from Public Disclosure and Affidavit. The affidavit sets forth the basis upon 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, it is respectfully requested that the information that is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-17-4534 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. Correspondence with respect to proprietary aspects of this letter and its enclosures should also be addressed to B. H. Whitley at the contact information within this letter.

The supplemental information provided in this letter does not impact the scope or conclusions of the original alternative.

This letter contains no regulatory commitments.

Should you have any questions, please contact Mr. Corey Thomas at (205) 992-5221.

(Affirmation and signature are provided on the following page)

Mr. Brian H. Whitley states that: he is the Regulatory Affairs Director of Southern Nuclear Operating Company; he is authorized to execute this oath on behalf of Southern Nuclear Operating Company; and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY


B. H. Whitley

BHW//BCT/ljs



Sworn to and subscribed before me this 1 day of February, 2017

Notary Public: Cynthia R. McCombs

My commission expires: October 11, 2020

- Enclosure 1: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Westinghouse LTR-PAFM-17-6, Rev. 0, NP-Enclosure 1 (Non-Proprietary) - Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation
- Enclosure 2: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Westinghouse LTR-PAFM-17-6, Rev. 0, P-Enclosure 2 (**Proprietary**) - Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation
- Enclosure 3: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Affidavit from Southern Nuclear Operating Company for Withholding Under 10 CFR 2.390
- Enclosure 4: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-17-4534, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice

cc:

Southern Nuclear Operating Company / Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosures)

Mr. M. D. Rauckhorst

Mr. D. G. Bost (w/o enclosures)

Mr. M. D. Meier (w/o enclosures)

Mr. D. H. Jones (w/o enclosures)

Ms. K. D. Fili (w/o enclosures)

Mr. D. L. McKinney (w/o enclosures)

Mr. T.W. Yelverton (w/o enclosures)

Mr. B. H. Whitley

Mr. C. R. Pierce

Ms. A. G. Aughtman

Mr. D. L. Fulton

Mr. M. J. Yox

Mr. E. W. Rasmussen

Mr. T. R. Takats

Mr. W. A. Sparkman

Mr. J. P. Redd

Ms. A. C. Chamberlain

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Nuclear Regulatory Commission

Mr. W. Jones (w/o enclosures)

Mr. S. Lee (w/o enclosures)

Mr. L. Burkhardt (w/o enclosures)

Ms. J. Dixon-Herrity

Mr. P. Kallan

Mr. C. Patel

Mr. W. C. Gleaves

Ms. R. Reyes

Ms. J. M. Heisserer

Mr. G. Khouri

Mr. J. D. Fuller

Ms. S. Temple

Ms. V. Ordaz

Mr. T. E. Chandler

Ms. P. Braxton

Mr. T. Brimfield

Mr. C. J. Even

Mr. A. Lerch

State of Georgia

Mr. R. Dunn (w/o enclosure 2)

Oglethorpe Power Corporation

Mr. M. W. Price (w/o enclosure 2)

Mr. K. T. Haynes (w/o enclosure 2)

Ms. A. Whaley (w/o enclosure 2)

Municipal Electric Authority of Georgia

Mr. J. E. Fuller (w/o enclosure 2)
Mr. S. M. Jackson (w/o enclosure 2)

Dalton Utilities

Mr. T. Bundros (w/o enclosure 2)

Westinghouse Electric Company, LLC

Mr. R. Easterling (w/o enclosures)
Mr. G. Koucheravy (w/o enclosures)
Mr. C. D. Churchman (w/o enclosures)
Mr. P. A. Russ
Mr. A. F. Dohse
Mr. M. L. Clyde
Mr. C. A. Castell
Ms. K. Chesko
Mr. J. Hopkins
Mr. D. Hawkins

Other

Mr. J. E. Hesler, Bechtel Power Corporation
Ms. L. A. Matis, Tetra Tech NUS, Inc. (w/o enclosure 2)
Dr. W. R. Jacobs, Jr., Ph.D., GDS Associates, Inc. (w/o enclosure 2)
Mr. S. Roetger, Georgia Public Service Commission (w/o enclosure 2)
Ms. S. W. Kernizan, Georgia Public Service Commission (w/o enclosure 2)
Mr. K. C. Greene, Troutman Sanders (w/o enclosure 2)
Mr. S. Blanton, Balch Bingham
Mr. R. Grumbir, APOG
Mr. N. R. Kellenberger, South Carolina Electric & Gas Company
Mr. D. Kersey, South Carolina Electric & Gas Company
NDDocumentinBox@duke-energy.com, Duke Energy
Mr. S. Franzone, Florida Power & Light

Southern Nuclear Operating Company

ND-17-0113

Enclosure 1

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Westinghouse LTR-PAFM-17-6, Rev. 0, NP-Enclosure 1 (Non-Proprietary) - Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation

(Enclosure consists of 5 pages, not including this cover page.)

Enclosure 1

NP-Enclosure (Non-Proprietary)

**Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3
Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation**

This document contains Westinghouse Electric Company LLC proprietary information and data which has been identified by brackets. Coding ^(a,c,e) associated with the brackets sets forth the basis on which the information is considered proprietary. These codes are listed with their meanings in WCAP-7211 Revision 8 (September 2015), "Proprietary Information and Intellectual Property Management Policies and Procedures."

The proprietary information and data contained in this report were obtained at considerable Westinghouse expense and its release could seriously affect our competitive position. This information is to be withheld from public disclosure in accordance with the Rules of Practice 10CFR2.390 and the information presented herein is to be safeguarded in accordance with 10CFR2.903. Withholding of this information does not adversely affect the public interest.

This information has been provided for your internal use only and should not be released to persons or organizations outside the Directorate of Regulation and the ACRS without the express written approval of Westinghouse Electric Company LLC. Should it become necessary to release this information to such persons as part of the review procedure, please contact Westinghouse Electric Company LLC, which will make the necessary arrangements required to protect the Company's proprietary interests.

The proprietary information in the brackets has been deleted in this report. The deleted information is provided in the proprietary version of this report.

1. Additional information regarding justification of the constant flaw aspect ratios (AR) of 2 and 6 for axial and circumferential flaws in Reference 1 is provided below.

Axial Flaw

For the postulated axial flaw, the analysis in Reference 1 considers an $AR = 2$ (flaw length/flaw depth). This flaw shape is based on the understanding that in the DM (dissimilar metal) weld, the axial flaw will follow the characteristic shape of the DM weld width and thickness. The DM weld inspection volume consists of the width of the dissimilar metal weld and the Heat Affected Zone (HAZ) – see Figure 1. The width of the dissimilar metal weld is approximately []^{a,c,e} based on the AP1000 steam generator and pump drawings. The inspection volume includes the ¼” examination zones adjacent to the weld on either side to account for the HAZ. Therefore, the total width of the DM weld inspection region is approximately []^{a,c,e}. The weld thickness is []^{a,c,e} (Reference 1). Therefore the shape or aspect ratio of the weld is 0.6 []^{a,c,e}, thus an aspect ratio of 2 is sufficiently large to account for any existing and hypothetical axial flaws.

Also, based on the fabrication ultrasonic testing (UT) results, the flaw aspect ratios that are observed are bounded by the analyzed aspect ratio of 2 for axial flaws. For example, based on the available axial flaw UT results for the AP1000 Vogtle and V. C. Summer units, [

] ^{a,c,e} This particular

detected aspect ratio is bounded by the axial flaw aspect ratio of 2 analyzed in Reference 1.

Trademark Note:

AP1000 is a trademark or registered trademark of Westinghouse Electric Company LLC, its affiliates and/or its subsidiaries in the United States of America and may be registered in other countries throughout the world. All rights reserved. Unauthorized use is strictly prohibited. Other names may be trademarks of their respective owners.

Circumferential Flaw

For the postulated circumferential flaw, the analysis in Reference 1 considers $AR = 6$ (flaw length/flaw depth). This flaw shape is a typical aspect ratio for various applications in fracture mechanics. For instance, the Pressure Temperature (P-T) limits evaluation in ASME Section XI Appendix G also considers postulated flaw shapes to have an aspect ratio of 6:1. Industry experiences have also shown that the flaws found in-service are typically below $AR = 6$ (on the order of $AR = 2$ to 4 or even less). It should be noted that the AP1000 steam generator to pump DM weld region does not experience any high thermal stratification, as evident by the minimal fatigue usage discussed in Section 3 of Reference 1; therefore, there is low susceptibility for any fatigue crack initiations or propagation of existing fabrication indications. Therefore, the aspect ratio of 6 is sufficient to account for any existing and hypothetical circumferential flaws.

Also, based on the fabrication ultrasonic testing results, the circumferential flaw aspect ratios that are observed are bounded by the analyzed aspect ratio of 6 for circumferential flaws. For example, based on the available circumferential flaw UT results for the AP1000 Vogtle and V. C. Summer units, [

J^{a,c,e} This

particular detected aspect ratio is bounded by the circumferential aspect ratio of 6 in the analysis (Reference 1).

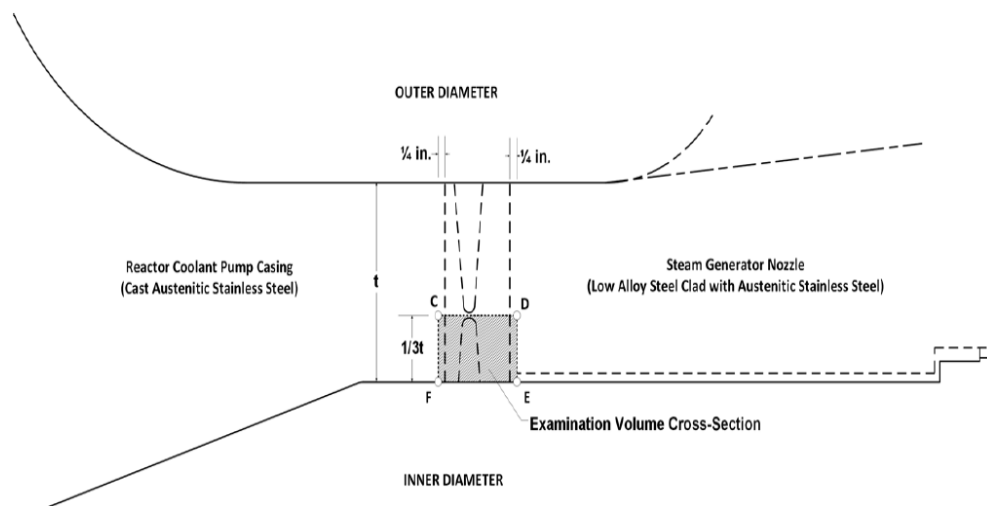


Figure 1: Schematic of AP1000 Steam Generator and Reactor Coolant Pump Inspection Region

2. Appendix C, Paragraph C-5300, requires that the allowable flaw depth and length be evaluated to determine acceptability. However, only flaw depth was evaluated. Additional information justifying this approach is provided below.

For the Appendix C-5000 evaluation, the evaluation is per fully-plastic fracture mechanics using limit load. The limiting allowable flaw parameter for failure of this type is the flaw depth which was reported in the analysis (Reference 1). The allowable flaw length was not reported as it is not the limiting flaw parameter. However, based on the maximum end-of-evaluation allowable flaw sizes that were calculated (see Table 1), the allowable axial and circumferential flaw lengths can be calculated by multiplying the allowable flaw depths by the aspect ratios (see Table 1).

Table 1: Maximum End-of-Evaluation Allowable Flaw Size, Depth, and Length

Flaw Orientation	AR (flaw length /flaw depth)	Maximum End of Evaluation Allowable Flaw size (a/t)	Thickness (in.)	Allowable Flaw Depth (in.)	Allowable Flaw Length (in.)
Axial	2	0.75 (Reference 1, Table 3)	[] ^{a,c,e}	[] ^{a,c,e}	[] ^{a,c,e}
Circumferential	6	0.47 (Reference 1, Table 3)	[] ^{a,c,e}	[] ^{a,c,e}	[] ^{a,c,e}

a = flaw depth, t = wall thickness

The axial and circumferential maximum end-of-evaluation allowable flaw lengths are [

]^{a,c,e} Therefore, the detected flaw lengths are below the calculated maximum end-of-evaluation allowable flaw lengths.

If fatigue crack growth is considered, then the maximum allowable initial flaw depths and lengths for 60 years of growth are shown in Table 2.

Table 2: Maximum Allowable Initial Flaw Size, Depth, and Length Accounting for 60 Years of Fatigue Crack Growth

Flaw Orientation	AR	Maximum Allowable Initial Flaw Size for 60 Years (a/t)	Thickness (in.)	Allowable Flaw Depth- 60 years (in.)	Allowable Flaw Length- 60 years (in.)
Axial	2	0.60 (Reference 1, Fig 2)	[] ^{a,c,e}	[] ^{a,c,e}	[] ^{a,c,e}
Circumferential	6	0.30 (Reference 1, Fig 3)	[] ^{a,c,e}	[] ^{a,c,e}	[] ^{a,c,e}

a = flaw depth, t = wall thickness

The maximum allowable initial flaw lengths for 60 years are [

]^{a,c,e}

Reference:

1. LTR-PAFM-16-59-P, Revision 1, "NRC RAI Response Regarding Inspection of AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld," November 2016.

Southern Nuclear Operating Company

ND-17-0113

Enclosure 3

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Affidavit from Southern Nuclear Operating Company for Withholding Under 10 CFR 2.390

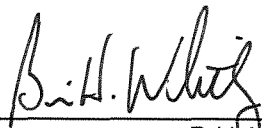
(Enclosure consists of 2 pages, not including this cover page.)

Affidavit of B. H. Whitley

1. My name is B. H. Whitley. I am the Regulatory Affairs Director, Nuclear Development, for Southern Nuclear Operating Company (SNC). I have been delegated the function of reviewing proprietary information sought to be withheld from public disclosure and am authorized to apply for its withholding on behalf of SNC.
2. I am making this affidavit on personal knowledge, in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations, and in conjunction with Westinghouse Electric Company document LTR-PAFM-17-6, Rev 0, which is the Westinghouse Electric Company document titled, "Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation." I have personal knowledge of the criteria and procedures used by SNC to designate information as a trade secret, privileged, or as confidential commercial or financial information.
3. Based on the reason(s) at 10 CFR 2.390(a)(4), this affidavit seeks to withhold from public disclosure Enclosure 2 of SNC letter ND-17-0113 for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, Westinghouse LTR-PAFM-17-6, Rev. 0, P-Enclosure 2 (Proprietary) - Additional Information Regarding AP1000 Vogtle Units 3 & 4 and V. C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation.
4. The following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - a. The information sought to be withheld from public disclosure has been held in confidence by SNC and Westinghouse Electric Company.

- b. The information is of a type customarily held in confidence by SNC and Westinghouse Electric Company and not customarily disclosed to the public.
 - c. The release of the information might result in the loss of an existing or potential competitive advantage to SNC and/or Westinghouse Electric Company.
 - d. Other reasons identified in Enclosure 4 of SNC letter ND-17-0113 for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-17-4534, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice, and those reasons are incorporated here by reference.
5. Additionally, release of the information may harm SNC because SNC has a contractual relationship with the Westinghouse Electric Company regarding proprietary information. SNC is contractually obligated to seek confidential and proprietary treatment of the information.
6. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
7. To the best of my knowledge and belief, 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.

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



B.H. Whitley

Executed on 2/1/17
Date

Southern Nuclear Operating Company

ND-17-0113

Enclosure 4

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-17-4534, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice

(Enclosure consists of 8 pages, not including this cover page.)



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

Direct tel: (412) 374-4643
Direct fax: (724) 940-8560
e-mail: greshaja@westinghouse.com

CAW-17-4534

January 19, 2017

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-PAFM-17-6 P-Attachment, "Additional Information Regarding **AP1000** Vogtle Units 3 & 4 and V.C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation" (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 Nuclear Regulatory Commission's ("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-17-4534 signed by the owner of the proprietary information, Westinghouse. 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 Southern Nuclear Operating Company and South Carolina Electric and Gas Company.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference CAW-17-4534, 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.

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.
James A. Gresham, Manager
Regulatory Compliance

CAW-17-4534

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

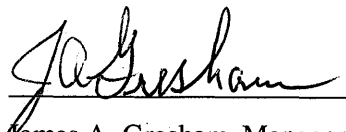
SS

COUNTY OF BUTLER:

I, James A. Gresham, am authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC ("Westinghouse") and declare that the averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief.

Executed on:

1/19/17

A handwritten signature in cursive script, appearing to read "JA Gresham", written over a horizontal line.

James A. Gresham, Manager
Regulatory Compliance

- (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 Nuclear Regulatory Commission’s (“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 LTR-PAFM-17-6, P-Attachment, "Additional Information Regarding **AP1000** Vogtle Units 3 & 4 and V.C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation" (Proprietary), for submittal to the Commission, being transmitted by Southern Nuclear Operating Company and South Carolina Electric & Gas Company letter. The proprietary information as submitted by Westinghouse is that associated with technical justification to support inspection coverage for **AP1000**¹ plant steam generator to reactor coolant pump dissimilar metal weld at Vogtle Units 3 and 4 and V.C. Summer Units 2 and 3, and may be used only for that purpose.

¹ **AP1000** is a trademark or registered trademark of Westinghouse Electric Company LLC, its affiliates and/or its subsidiaries in the United States of America and may be registered in other countries throughout the world. All rights reserved. Unauthorized use is strictly prohibited. Other names may be trademarks of their respective owners.

- (a) This information is part of that which will enable Westinghouse to provide technical justification to support inspection coverage for **AP1000** plant steam generator to reactor coolant pump dissimilar metal weld at Vogtle Units 3 and 4 and V.C. Summer Units 2 and 3.
- (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 technical justification to support extended volumetric examination interval for reactor vessel nozzle to safe end dissimilar metal welds.
 - (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.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and non-proprietary versions of a document, furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

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).

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Southern Nuclear Operating Company and South Carolina Electric & Gas Company

Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC Document Control Desk:

Enclosed are:

1. LTR-PAFM-17-6 P-Attachment, "Additional Information Regarding **AP1000** Vogtle Units 3 & 4 and V.C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation" (Proprietary)
2. LTR-PAFM-17-6 NP-Attachment, "Additional Information Regarding **AP1000** Vogtle Units 3 & 4 and V.C. Summer Units 2 & 3 Steam Generator to Reactor Coolant Pump Suction Nozzle Weld Flaw Evaluation" (Non-Proprietary)

Also enclosed are the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-17-4534, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC ("Westinghouse"), it is supported by an Affidavit signed by Westinghouse, the owner of the information. The Affidavit sets forth the basis on which the information may be withheld from public disclosure by the Nuclear Regulatory Commission ("Commission") and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse Affidavit should reference CAW-17-4534 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.