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Docket Nos.: 50-424

NL-18-1565

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

Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner's Activity Report for Outage 1R21

Ladies and Gentlemen:

ASME Section XI Code Case N-532-5 OAR-1 Owner's Activity Report for the 1R21 Refueling Outage is provided as Enclosure 1 to this letter. Table 1, "Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service," lists evaluations performed for continued service, and is provided as Enclosure 2. Table 2, "Abstract of Repairs, Replacement or Corrective Measures Required for Continued Service," lists repair/replacement activities, and is provided as Enclosure 3.

The flaw evaluation of the Unit 1 boron injection tank line nozzle weld overlay is provided as Enclosure 4. This enclosure contains proprietary information as defined by 10 CFR 2.390. Westinghouse Electric Company LLC ("Westinghouse"), as the owner of the proprietary information, has executed the enclosed affidavit, which identifies that the enclosed proprietary information has been withheld from public disclosure. The proprietary information was provided to Southern Nuclear (SNC) in a Westinghouse transmittal which included the affidavit included in Enclosure 5 to this letter. The proprietary information has been faithfully reproduced in the enclosed documentation, such that, the affidavit remains applicable. Westinghouse hereby requests that the enclosed proprietary information provided in Enclosure 4 to this letter be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390.

This report is for the first period of the 4th Interval ISI activities (Interval 4, Period 1, Outage 1).

This letter contains no NRC commitments. If you have any questions, please contact Jamie Coleman at (205) 992-6611.

Enclosure 4 to this letter contains Proprietary Information to be withheld from public disclosure per 10 CFR 2.390. When separated from Enclosure 4 this transmittal document is decontrolled.

Respectfully submitted,



Cheryl A. Gayheart
Regulatory Affairs Director

CAG/kgj/sm

- Enclosures:
1. 1R21 Form OAR-1 Owner's Activity Report, (Non-Proprietary)
 2. 1R21 Form OAR-1 Owner's Activity Report, Table 1, Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service, (Non-Proprietary)
 3. 1R21 Form OAR-1 Owner's Activity Report, Table 2, Abstract of Repairs, Replacement or Corrective Measures Required for Continued Service, (Non-Proprietary)
 4. Flaw evaluation of the Unit 1 boron injection tank line nozzle weld overlay, (PROPRIETARY)
 5. CAW-18-4839, "Application for Withholding Proprietary Information from Public Disclosure," (Non-Proprietary)

Cc: Regional Administrator
NRR Project Manager – Vogtle 1 & 2
Senior Resident Inspector – Vogtle 1 & 2
RType: CVC7000

Enclosure 4 to this letter contains Proprietary Information to be withheld from public disclosure per 10 CFR 2.390. When separated from Enclosure 4 this transmittal document is decontrolled.

**Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner’s Activity Report for Outage 1R21**

Enclosure 1

**1R21 Form OAR-1 Owner’s Activity Report,
(Non-Proprietary)**

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number 1-4-1-1 (Unit 1, 4th Interval, 1st Period, 1st Report)

Plant Alvin W. Vogtle Electric Generating Plant

Unit No. 1 Commercial service date May 31, 1987 Refueling outage no. 1R21
(if applicable)

Current inspection interval 4th (Also includes 3rd Interval activities performed after refueling outage 1R20)
(1st, 2nd, 3rd, 4th, other)

Current inspection period 1st (Also includes 3rd Period activities performed after refueling outage 1R20)
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans: The 2001 Edition through 2003 Addenda is applicable to the 3rd Inspection Interval. The 2007 Edition through 2008 Addenda is applicable to the 4th Inspection Interval.

Date and revision of inspection plans: 3rd Inspection Interval Inspection Plans – Volume 1 - 03/01/2017 (Version 10.0), Volume 2 – 03/09/2017 (Version 8.0), Volume 3 – 03/09/2017 (Version 4.0), Volume 5 – 03/08/2017 (Version 9.0) and Volume 6 - 03/08/2017 (Version 8.0). 4th Inspection Interval Inspection Plans - Volume 1 - 09/12/2018 (Version 2.0), Volume 3 – 09/12/2018 (Version 2.0), Volume 4 – 12/19/2018 (Version 3.0), and Volume 5 – 10/10/2018 (Version 3.0). 1R21 Outage Plan – 09/13/2018 (Version 1.0) with 1R21 Outage Plan Scope Change SC-001 -09/27/2018

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans: Same

Code Cases used for inspection and evaluation: N-716-1, N-722-1, N-729-4, and N-770-2
(if applicable, including cases modified by Case N-532 and later revisions)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 1R21 conform to the requirements of Section XI. (refueling outage number)

Signed S. J. Kowalski [Signature] Engineering Director Date 1/3/2019
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of Hartford, CT. have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Jerome Barthelemy [Signature] Commission NB15817 AI, N, I, R / GA-1192
Inspector's Signature (National Board Number and Endorsement)
Date 1/3/2019

**Vogle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner’s Activity Report for Outage 1R21**

Enclosure 2

**1R21 Form OAR-1 Owner’s Activity Report, Table 1, Items with Flaws or
Relevant Conditions that Required Evaluation for Continued Service,
(Non-Proprietary)**

Table 1

Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
Code Case N-716-1 Examination Category R-A Item Number R.11	During the ultrasonic examination of weld 11204-246-35 (1.5" Pipe to 3" x 1.5" Reducer Weld), ultrasonic reflectors were recorded in the reducer side of the weld close to the fusion line of the weld. This is the high head safety injection piping connected to the Loop 4 Reactor Coolant System Cold Leg. This component was inspected under the MRP-146 surveillance for thermal fatigue cracking only. The indications were evaluated to the applicable ASME acceptance standard (Table IWB-3514-2) and determined to be rejectable.	An "Analytical Evaluation" was performed on this flaw in accordance with IWB-3640 "Evaluation Procedures and Acceptance Criteria for Flaws in Austenitic and Ferritic Piping" and determined to be acceptable for continued service. The Analytical Evaluation is limited to one refueling cycle. Per the requirements of IWB-3640, specific details are provided to the Nuclear Regulatory Commission in Enclosure 4 "Flaw evaluation of the Unit 1 boron injection tank line nozzle weld overlay".

**Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner’s Activity Report for Outage 1R21**

Enclosure 3

**1R21 Form OAR-1 Owner’s Activity Report, Table 2, Abstract of Repairs,
Replacement or Corrective Measures Required for Continued Service,
(Non-Proprietary)**

Table 2
Abstract of Repair / Replacement Activities Required for Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
1	Code Case N-716-1 Examination Category R-A Item Number R.11H During the ultrasonic (UT) examination of weld 11201-046-3 (2" Elbow to Pipe Weld) a circumferential ultrasonic reflector was recorded in the heat affected zone of the weld in the elbow side. This intermediate drain line is connected to the Loop 3 Reactor Coolant System Intermediate Leg. This indication was found during the scheduled MRP-146 examinations for detection of thermal fatigue. This location was also selected for examination per Code Case N-716-1; Category Number R-A; Item Number R1.11H. The indication was evaluated to the applicable ASME acceptance standard (Table IWB-3514-2) and was determined to be rejectable.	To eliminate this MRP-146 thermal fatigue location the 2" drain line pipe was removed and replaced with a plug that was inserted into the socket weld branch and welded with a fillet weld.	10/03/2018	969639-T1
1	Examination Category B-Q, Steam Generator 2 Tubing (Location 11201B6002)	Mechanical plugs were installed in applicable tubes due to degradation detected during eddy current examinations	09/27/2018	854745-T1
1	Examination Category B-Q, Steam Generator 4 Tubing (Location 11201B6004)	Mechanical plugs were installed in applicable tubes due to degradation detected during eddy current examinations	09/29/2018	925521-T1

**Vogtle Electric Generating Plant – Unit 1
Inservice Inspection Program Owner’s Activity Report for Outage 1R21**

Enclosure 5

**CAW-18-4839, “Application for Withholding Proprietary Information from
Public Disclosure,”
(Non-Proprietary)**



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USA

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CAW-18-4839

November 20, 2018

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Vogtle Unit 1 BIT Line Nozzle Weld Overlay 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 subject report is further identified in Affidavit CAW-18-4839 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.

The subject document was prepared and classified as Westinghouse Proprietary Class 2. It contains proprietary information throughout, for the reasons set forth in Sections 4(ii) (a) (b) and (f) of this Affidavit. Accordingly, a redacted version would be of no value to the public and a non-proprietary version will not be issued.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by Southern Nuclear.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference CAW-18-4839, and should be addressed to Camille T. Zozula, Manager, Infrastructure & Facilities Licensing, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 2, Suite 259, Cranberry Township, Pennsylvania 16066.

A handwritten signature in black ink, appearing to read 'Paul A. Russ'.

Paul A. Russ, Director
Licensing and Regulatory Affairs

Enclosures:

1. Affidavit CAW-18-4839
2. Proprietary Information Notice and Copyright Notice
3. Vogtle Unit 1 BIT Line Nozzle Weld Overlay Flaw Evaluation

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF BUTLER:

I, Paul A. Russ, 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: 11/20/18



Paul A. Russ, Director
Licensing and Regulatory Affairs

- (1) I am Director, Licensing and Regulatory Affairs, 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-SDA-18-090, Rev. 0 P-Attachment, "Vogtle Unit 1 BIT Line Nozzle Weld Overlay Flaw Evaluation" (Proprietary), for submittal to the Commission, being transmitted by Southern Nuclear letter. The proprietary information as submitted by Westinghouse is that associated with fracture analyses pertaining to the Vogtle Unit 1 boron injection tank nozzle attached to the reactor vessel cold leg and weld overlay repair applied to the nozzle, and may be used only for that purpose.
- (a) This information is part of that which will enable Westinghouse to perform future analyses of Vogtle Unit 1 boron injection tank nozzle and weld overlay repair.
 - (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 fracture analysis and weld overlay repair.
- (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 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).

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.