

**Proprietary Information Withhold from Public Disclosure  
Under 10 CFR 2.390  
This letter is decontrolled when separated from Enclosure 1**



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-18-106

August 13, 2018

10 CFR 50.4  
10 CFR 2.390

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

Browns Ferry Nuclear Plant, Unit 3  
Renewed Facility Operating License No. DPR-68  
NRC Docket No. 50-296

Subject: **Extended Power Uprate – Browns Ferry Unit 3 Replacement Steam  
Dryer Core Flow Sweep Test Report**

Reference: NRC Letter to TVA, "Browns Ferry Nuclear Plant, Units 1, 2, and 3 –  
Issuance of Amendments Regarding Extended Power Uprate  
(CAC Nos. MF6741, MF6742, and MF6743)," dated August 14, 2017  
(ML17032A120)

In accordance with 10 CFR 50.92, the Nuclear Regulatory Commission (NRC) issued the referenced document, License Amendment Nos. 299, 323 and 283 to the Browns Ferry Nuclear Plant (BFN) Units 1, 2 and 3 Renewed Facility Operating Licenses (RFOLs) to increase the authorized maximum power level from 3458 megawatts thermal (MWt) to 3952 MWt. This change to power level is considered an extended power uprate (EPU).

The amended RFOLs contain specific license conditions that control the monitoring, evaluating, and taking prompt action in response to potential adverse flow effects as a result of the EPU on plant structures, systems, and components (including verifying the continued structural integrity of the replacement steam dryer (RSD)) during initial EPU power ascension. The BFN Unit 3 License Condition 2.C(14)(b)4.b requires performance of a core flow sweep test to determine any compounding effect due to alignment of Vane Passing Frequency and Safety Relief Valve resonance frequencies. The core flow sweep test results are required to be provided to the NRC within 30 days after completion of the test at EPU conditions. BFN Unit 3 completed the core flow sweep test at EPU conditions on July 13, 2018. This letter satisfies BFN Unit 3 License Condition 2.C(14)(b)4.b by providing the BFN Unit 3 core flow sweep test results. Thirty days from July 13, 2018, is August 12, 2018, which is a Sunday. In accordance with 10 CFR 50.4(a), if a submission due date falls on a Saturday, Sunday, or Federal holiday, the next Federal working day becomes the official due date. As a result, the official due date for submittal of the BFN Unit 3 core flow sweep test results is August 13, 2018.

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General Electric - Hitachi Nuclear Energy Americas LLC (GEH) considers the information provided in Enclosure 1 of this letter to be proprietary and, therefore, exempt from public disclosure pursuant to 10 CFR 2.390. An affidavit for withholding information, executed by GEH, is provided in Enclosure 2. Therefore, on behalf of GEH, TVA requests that Enclosure 1 be withheld from public disclosure in accordance with the GEH affidavit and the provisions of 10 CFR 2.390.

There are no new regulatory commitments associated with this submittal. If there are any questions or if additional information is needed, please contact Mr. Edward Schrull at (423) 751-3850.

Respectfully,

A handwritten signature in blue ink, appearing to read "E. K. Henderson", with a long horizontal flourish extending to the right.

E. K. Henderson  
Director, Nuclear Regulatory Affairs

Enclosures:

1. NEDC-33893P, Browns Ferry Nuclear Plant Unit 3 Replacement Steam Dryer Power Ascension Monitoring Core Flow Sweep Test Report (proprietary)
2. Affidavit

cc (Enclosures):

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant  
State Health Officer, Alabama State Department of Public Health

Enclosure 1

Browns Ferry Nuclear Plant Unit 3 Replacement Steam Dryer Power Ascension Monitoring  
Core Flow Sweep Test Report  
(proprietary)

Enclosure 2

Affidavit

# GE-Hitachi Nuclear Energy Americas, LLC

## AFFIDAVIT

I, **Lisa K. Schichlein**, state as follows:

- (1) I am a Senior Project Manager, NPP/Services Licensing, Regulatory Affairs, GE-Hitachi Nuclear Energy Americas LLC (GEH), and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in GEH report NEDC-33893P Revision 0, "Browns Ferry Nuclear Plant Unit 3 Replacement Steam Dryer Power Ascension Monitoring Core Flow Sweep Test Report," August 2018. This document is deemed proprietary in its entirety. The header of each page in this document carries the notation "GEH Proprietary Information – Class II (Internal)<sup>{3}</sup>." The superscript notation <sup>{3}</sup> refers to Paragraph (3) of this affidavit, which provides the basis for the proprietary determination.
- (3) In making this application for withholding of proprietary information of which it is the owner or licensee, GEH relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), and 2.390(a)(4) for "trade secrets" (Exemption 4). The material for which exemption from disclosure is here sought also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975 F.2d 871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704 F.2d 1280 (DC Cir. 1983).
- (4) Some examples of categories of information which fit into the definition of proprietary information are:
  - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by GEH's competitors without license from GEH constitutes a competitive economic advantage over other companies;
  - b. Information which, if used 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 of a similar product;
  - c. Information which reveals aspects of past, present, or future GEH customer-funded development plans and programs, resulting in potential products to GEH;
  - d. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a. and (4)b. above.

- (5) To address the 10 CFR 2.390 (b) (4), the information sought to be withheld is being submitted to the NRC in confidence. The information is of a sort customarily held in

## **GE-Hitachi Nuclear Energy Americas, LLC**

confidence by GEH, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GEH, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge, or subject to the terms under which it was licensed to GEH.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GEH are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information identified in paragraph (2) above, is classified as proprietary because it contains detailed GEH design information of the methodology used in the design, analysis, and testing of the steam dryers for the GEH Boiling Water Reactor (BWR). Development of these methods, techniques, and information and their application for the design, modification, testing, and analyses methodologies and processes was achieved at a significant cost to GEH.

The development of the evaluation process along with the interpretation and application of the analytical results is derived from the extensive experience database that constitutes a major GEH asset.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GEH's competitive position and foreclose or reduce the availability of profit-making opportunities. The fuel design and licensing methodology is part of GEH's comprehensive BWR safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

The research, development, engineering, analytical, and NRC review costs comprise a substantial investment of time and money by GEH.

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The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GEH's competitive advantage will be lost if its competitors are able to use the results of the GEH experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GEH would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GEH of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing and obtaining these very valuable analytical tools.

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

Executed on this 9<sup>th</sup> day of August 2018.



Lisa K. Schichlein  
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