DUKE ENERGY®

Brunswick Nuclear Plant
P.O. Box 10429
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Letter Enclosure 1 Contains Proprietary Information
Withhold in Accordance with 10 CFR 2.390(a)(6)

November 17, 2016

Serial: BSEP 16-0108

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-71 and DPR-62
Docket Nos. 50-325 and 50-324
Information Transmittal for NRC Model Development

References:
1. Letter from William R. Gideon (Duke Energy) to the U.S. Nuclear Regulatory Commission Document Control Desk, *Request for License Amendment Regarding Core Flow Operating Range Expansion*, dated September 6, 2016, ADAMS Accession Number ML16257A418.
2. NRC E-mail Capture, *Regulatory Audit Plan for Brunswick Steam Electric Plant Unit Nos. 1 and 2 to Support Review of the License Amendment Request Regarding Core Flow Operating Range Expansion Maximum Extended Load Line Limit Analysis Plus, Docket Nos. 50-325 and 50-324*, dated October 19, 2016, ADAMS Accession Number ML16294A273.
3. Letter from Annette H. Pope (Duke Energy) to the U.S. Nuclear Regulatory Commission Document Control Desk, *Information Transmittal for NRC Model Development*, dated October 27, 2016.

Ladies and Gentlemen:

By letter dated September 6, 2016 (i.e., Reference 1), Duke Energy Progress, LLC (Duke Energy), submitted a license amendment request (LAR) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, to support an expansion of the core power-flow operating range (i.e., Maximum Extended Load Line Limit Analysis Plus (MELLLA+)). Subsequently, the NRC initiated an audit (i.e., Reference 2) to support their review of the LAR by conducting confirmatory calculations using the TRACE computer code.

Prior to issuance of the NRC audit plan, a telephone call was held on September 20, 2016, to discuss the feasibility of Duke Energy providing certain BSEP core-modelling information to support NRC development of a TRACE computer model. During the call, Duke Energy identified two items that could be used to support the NRC's model development efforts. The first item was AREVA NP (AREVA) Document Number 51-9173927-000, *ATRIUM™ 10XM Data for Brunswick MELLLA+ LAR Support*. Duke Energy provided this information by letter dated October 27, 2016 (i.e., Reference 3).

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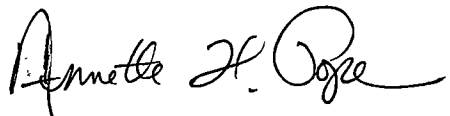
The second item was the General Electric Hitachi (GEH) TRACG computer code base deck that supports the BSEP MELLLA+ license amendment request, and the associated TRACG User's Manual. Enclosure 1 (i.e., a CD-ROM) contains the BSEP Unit 1 TRACG computer code base desk used for the MELLLA+ Anticipated Transient Without Scram Instability (ATWS-I) analysis. The BSEP Unit 1 TRACG computer code base desk is proprietary in its entirety. Enclosure 1 also contains the TRACG User's Manual at the time of the Brunswick ATWS-I TRACG analysis. The TRACG User's Manual is also proprietary in its entirety.

The enclosed TRACG computer code base deck and TRACG User's Manual contain proprietary information as defined by 10 CFR 2.390. GEH, as the owner of the proprietary information, has executed the enclosed affidavit (i.e., Enclosure 2), which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. The proprietary information was provided to Duke Energy in a GEH transmittal that is referenced by the affidavit. The proprietary information has been faithfully reproduced in the enclosed such that the affidavit remains applicable. GEH hereby requests that the enclosed proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. All AREVA proprietary information contained in the TRACG base deck has been removed.

No regulatory commitments are contained in this letter.

Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager – Regulatory Affairs, at (910) 457-2487.

Sincerely,



Annette H. Pope
Director – Organizational Effectiveness
Brunswick Steam Electric Plant

WRM/wrm

Enclosures:
1. CD-ROM titled *TRACG Basedeck & User's Manual* **(Proprietary Information – Withhold from Public Disclosure in Accordance With 10 CFR 2.390)**
2. GE-Hitachi Affidavit Regarding Withholding CD-ROM Titled *TRACG Basedeck & User's Manual*

cc (with Enclosures 1 and 2):

U.S. Nuclear Regulatory Commission
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cc (without enclosures):

U.S. Nuclear Regulatory Commission, Region II
ATTN: Ms. Catherine Haney, Regional Administrator
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Chair - North Carolina Utilities Commission **(Electronic Copy Only)**
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CD-ROM titled *TRACG Basedeck & User's Manual*

(Proprietary Information – Withhold from Public Disclosure in Accordance With 10 CFR 2.390)

GE-Hitachi Affidavit Regarding Withholding CD-ROM
Titled *TRACG Basedeck & User's Manual*

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 Enclosure 1 of GEH letter, GEH-PGN-MPLUS-144, "Brunswick Steam Electric Plant TRACG Basedeck for ATWSI Evaluations and the TRACG User's Manual," dated November 4, 2016. The GEH proprietary information in Enclosure 1, which are contained in a CD-ROM entitled "TRACG Basedeck & User's Manual," is proprietary in its entirety. The label on the CD-ROM carries the notation "GEH Proprietary Information – Class II (Internal)$^{\{3\}}$." The superscript notation $^{\{3\}}$ 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 U.S.C. Sec. 552(b)(4), and the *Trade Secrets Act*, 18 U.S.C. 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 qualifies 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 (D.C. Cir. 1992), and Public Citizen Health Research Group v. FDA, 704 F.2d 1280 (D.C. Cir. 1983).

(4) The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a. and (4)b. Some examples of categories of information that 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 that, if used by a competitor, would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;

c. Information that reveals aspects of past, present, or future GEH customer-funded development plans and programs, resulting in potential products to GEH;

d. Information that discloses trade secret or potentially patentable subject matter for which it may be desirable to obtain patent protection.

(5) To address 10 CFR 2.390(b)(4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in 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, not been disclosed publicly, and not been made 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 or confidentiality agreements that provide for maintaining the information in confidence. The initial designation of this information as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in the following paragraphs (6) and (7).

(6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, who is the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge, or who is the person most likely to be 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 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 or confidentiality agreements.

(8) The information identified in paragraph (2), above, is classified as proprietary because it contains detailed information regarding the analytical models and methods, including computer codes, which GEH has developed, obtained NRC approval of, and applied to perform evaluations of Maximum Extended Load Line Limit Analysis Plus for a GEH BWR.

The development of the evaluation processes along with the interpretation and application of the analytical results is derived from the extensive experience and information databases that constitute 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 information 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. 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 4th day of November 2016.

Lisa K. Schichlein
Senior Project Manager, NPP/Services Licensing
Regulatory Affairs
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