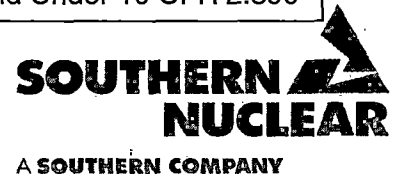


Charles R. Pierce
Regulatory Affairs Director

Southern Nuclear
Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, AL 35242

Tel 205.992.7872
Fax 205.992.7601

Proprietary Information -
Withhold Under 10 CFR 2.390



November 12, 2015

Docket Nos.: 50-321
50-366

NL-15-2034

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

Edwin I. Hatch Nuclear Plant
Response to Request for Additional Information Regarding Application for
Amendment to Technical Specifications for Relocation of Pressure and
Temperature (P-T) Curves to the Pressure and Temperature Limits Report
(PTLR) Consistent with TSTF-419-A

Ladies and Gentlemen:

By letter dated April 2, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15092A856), Southern Nuclear Operating Company (SNC) submitted a license amendment request for the Edwin I. Hatch Nuclear Plant (HNP). This request would modify the Unit 1 and Unit 2 Technical Specifications (TS) Section 1.0 ("Definitions"), Limiting Conditions for Operation and Surveillance Requirement Applicability Section 3.4.9 ("RCS Pressure and Temperature (P/T) Limits"), and Section 5.0 ("Administrative Controls") to delete reference to the pressure and temperature curves, and to include reference to the Pressure and Temperature Limits Report (PTLR). By letter dated October 13, 2015, the Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI).

Enclosure 1 provides the SNC response to the NRC RAI. Enclosure 2 provides the supporting affidavit from Electric Power Research Institute (EPRI), the owner of the proprietary information in the Enclosure 3 response, requesting withholding of proprietary information. This affidavit sets forth the basis on which the information in Enclosure 3 may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.390 of the Commission's regulations. Accordingly, it is respectfully requested that the information, which is proprietary to EPRI, be withheld from public disclosure in accordance with 2.390 of the Commission's regulations. Enclosure 3 provides the proprietary version of the EPRI information requested in RAI 1, while Enclosure 4 provides the corresponding non-proprietary version of this EPRI information. Enclosure 5 provides the requested Structural Integrity Associates (SIA) calculations requested in RAI 1 and RAI 5. SIA calculation 1001527.303 contains information that is proprietary to General Energy Hitachi. This information has been redacted from the SIA calculation

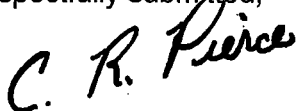
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included in Enclosure 5 but can be provided to the NRC upon request. Enclosure 6 provides the TransWare fluence evaluation reports requested in RAI 1. Please note that the TransWare reports state "Southern Nuclear Proprietary Information" at the top header. SNC considers the reports to be intellectual property belonging to SNC, but does not consider these reports proprietary. As such, SNC does not request withholding of this information under 10 CFR 2.390. Enclosure 7 provides the corrected Table 3 to the Unit 1 PTLR that was provided in Enclosure 5 to the April 2, 2015 letter.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Mr. C. R. Pierce states he is Regulatory Affairs Director of Southern Nuclear Operating Company, 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,



C. R. Pierce
Regulatory Affairs Director

CRP/RMJ

Sworn to and subscribed before me this 12 day of November, 2015.



Laura L. Curot
Notary Public

My commission expires: 10-8-2017

- Enclosures:
1. SNC Response to NRC RAI
 2. Electric Power Research Institute (EPRI) affidavit requesting withholding of proprietary information
 3. Proprietary Version of the EPRI Information Requested in RAI 1
 4. Non-Proprietary Version of the EPRI Information Requested in RAI 1
 5. Structural Integrity Associates (SIA) Calculations Requested in RAI 1 and RAI 5
 6. TransWare Fluence Evaluation Reports Requested in RAI 1
 7. Corrected Table 3 to the Unit 1 PTLR

cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

Mr. D. R. Vineyard, Vice President – Hatch

Mr. M. D. Meier, Vice President – Regulatory Affairs

Mr. D. R. Madison, Vice President – Fleet Operations

Mr. B. J. Adams, Vice President – Engineering

Mr. G. L. Johnson, Regulatory Affairs Manager - Hatch

RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission

Mr. L. D. Wert, Regional Administrator (Acting)

Mr. R. E. Martin, NRR Senior Project Manager – Hatch

Mr. D. H. Hardage, Senior Resident Inspector – Hatch

State of Georgia

Mr. J. H. Turner, Environmental Director Protection Division

Edwin I. Hatch Nuclear Plant
Response to Request for Additional Information Regarding Application for
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Enclosure 1

SNC Response to NRC RAI

Enclosure 1 to NL-15-2034
SNC Response to NRC RAI

References:

1. Letter from Mr. Bob Martin (U.S. NRC) to Mr. C. R. Pierce (SNOC), Subject: Edwin I. Hatch Nuclear Plant, Units 1 and 2 – Request for Additional Information (TAC NOS. MF6063 and MF6064), October 13, 2015, ADAMS Accession Number: ML15271A336.
2. Sommerville, D.V., "Pressure-Temperature Limits Report Methodology for Boiling Water Reactors," SIR-05-044, Rev. 1-A, June 2013.
3. Structural Integrity Associates Calculation No. 1001527.304, Revision 2, "Hatch Unit 1 P-T Curve Calculation for 38 and 49.3 EFPY", September 2014.
4. Structural Integrity Associates Calculation No. 1001527.305, Revision 2, "Hatch Unit 2 P-T Curve Calculation for 37 and 50.1 EFPY", September 2014.
5. BWRVIP-135, Revision 2: BWR Vessel and Internals Project, Integrated Surveillance Program (ISP) Data Source Book and Plant Evaluations. EPRI, Palo Alto, CA: 2009. 1020231.
6. Combustion Engineering Report No. CE NPSD-1119, Revision 01, "Updated Analysis for Combustion Engineering Fabricated Reactor Vessel Welds Best Estimate Copper and Nickel Content," July 1998. SI File No. 1001527.207.

NRC RAI 1

Provide the following references from Enclosures 5 and 6 of the April 2, 2015, submittal to afford the NRC staff supporting information regarding the data and methodology necessary for determining best estimate chemistries, material chemistry factors, and neutron fluence:

- i. Enclosure 5, Reference 7: Structural Integrity-Associates Calculation No. 1001527.301, Revision 1, "Hatch Unit 1 RPV Material Summary and ART Calculation," July 2014.
- ii. Enclosure 5, Reference 12: Hatch 1 specific portions of EPRI Report No. 1020231, "BWRVIP-135, Revision 2: BWR Vessel and Internals Project, Integrated Surveillance Program (ISP) Data Source Book and Plant Evaluations," Palo Alto, CA, 2009, and any related follow-on documents containing data specific to Hatch 1.
- iii. Enclosure 6, Reference 7: Structural Integrity-Associates Calculation No. 1001527.302, Revision 1, "RPV Material Summary and ART Calculation," July 2014.
- iv. Enclosure 6, Reference 12: Hatch 2 specific portions of EPRI Report No. 1020231, "BWRVIP-135, Revision 2: BWR Vessel and Internals Project, Integrated Surveillance Program (ISP) Data Source Book and Plant Evaluations," Palo Alto, CA, 2009, and any related follow-on documents containing data specific to Hatch 2.
- v. Enclosure 5, Reference 5: Transware Enterprises Inc. Report No. SNC-HA1-002-R-001 Revision 0, "Edwin I. Hatch Unit 1 Fluence Evaluation at End of Cycle 25 and 49.3 EFPY."
- vi. Enclosure 6, Reference 5: Transware Enterprises Inc. Report No. SNC-HA2-001-R-001 Revision 0, "Edwin I. Hatch Unit 2 Fluence Evaluation at End of Cycle 22 and 50.1 EFPY."

SNC Response to NRC RAI 1

The requested additional Structural Integrity Associates references (i., iii.,) are included in Enclosure 5. The requested Hatch-specific portions from BWRVIP-135 (ii., iv.,) are included in Enclosures 3 and 4 representing a proprietary and non-proprietary version of the information extracted as attested in the enclosed affidavit from the Electric Power Research Institute (Enclosure 2). The requested TransWare references (v., vi.) are included as Enclosure 6.

NRC RAI 2

Page 11 of Enclosure 5 of SNC's April 2, 2015 submittal states the following:

The following summarizes the development of the thermal and pressure stress intensity factors for the [core delta-pressure] CDP nozzle [14]:

- *The K_{IT} term is calculated using the ASME XI, Non-mandatory Appendix G, Paragraph G-2214.3 [17] methodology for a heat-up/cool-down rate of 100 °F/hr as described in Reference [14].*

Paragraph G-2214.3 of Section XI, Appendix G, contains methods for calculating the thermal stress intensity factor, K_{IT} , for beltline shell regions of the reactor pressure vessel (RPV) due to radial thermal gradients. Normally, discontinuities (such as the CDP nozzle) would be evaluated based on Paragraph G-2220 of Section XI, Appendix G, "Nozzles, Flanges, and shell Regions near Geometric Discontinuities." However, the NRC staff notes that on page 2-19 of NRC approved Topical Report (TR) BWROG-TP-11-022-A, Revision 1, "Pressure-Temperature Limits Report Methodology for Boiling Water Reactors," June 2013 (ADAMS Accession No. ML13277A557), the following is stated:

A conservative alternative to using Equation 2.5.3-3a or 2.5.3-3b is to use the ASME Code, Section XI, Nonmandatory Appendix G [5] method for calculating a thermal stress intensity factor for an edge cracked plate given in Equation 2.5.1-8, above, where the section thickness is taken as the length of the diagonal path through the nozzle blend radius shown in Figure 2-7.

Equation 2.5.1-8 of TR BWROG-TP-11-022-A, Revision 1 is as follows:

$$K_{IT} = 0.953 \times 10^3 (CR) (t^{2.5})$$

Where CR is the cooldown rate in °F/hr and t is the RPV wall thickness in inches. This equation is identical to the equation in Paragraph G-2214.3 of Section XI, Appendix G for the maximum K_{IT} produced by a radial thermal gradient for a postulated axial or circumferential inside surface defect in a shell region. However, there are also several other equations contained in Paragraph G-2214.3 of Section XI, Appendix G for computing K_{IT} .

Confirm that Equation 2.5.1-8 of TR BWROG-TP-11-022-A, Revision 1 was used to calculate K_{IT} for the CDP nozzle.

SNC Response to NRC RAI 2

Equation 2.5.1-8 of TR BWROG-TP-11-022-A, Revision 1 was used to calculate K_{IT} for the CDP nozzle.

NRC RAI 3

Page 8 of Enclosure 5 of SNC's April 2, 2015, submittal briefly addresses the water level instrument (WLI) nozzle for Hatch 1. Pages 9 through 11 of Enclosure 5 address the feedwater nozzle for Hatch Nuclear Plant Unit 1 (Hatch 1). Page 11 of Enclosure 5 addresses the CDP nozzle for Hatch 1. A summary of the thermal stress intensity factors, K_{IT} , for all three nozzles is provided in Table 9 of Enclosure 5.

Similar discussions for the WLI and feedwater nozzles for Hatch Nuclear Plant Unit 2 (Hatch 2) are contained on pages 8 through 11 of Enclosure 6; however, discussion of the CDP nozzle is not included in Enclosure 6 for Hatch 2, nor is the CDP nozzle included in the summary of nozzle stress intensity factors for Hatch 2 in Table 9 of Enclosure 6. It is also not clear from the discussion or the Table 9 K_{IT} values contained in either Enclosures 5 or 6 which nozzles are controlling with respect to any of the pressure-temperature (P-T) limit curves shown in Figures 1 through 6 of both enclosures.

Provide the following:

- a. Explain why the CDP nozzle was addressed for Hatch 1 and not for Hatch 2.
- b. Explain whether any of the evaluated nozzles control any portions of the P-T limit curves shown in Figures 1 through 6 of both Enclosures 5 and 6 and, if so, identify which nozzles are limiting and describe the portions of the P-T curves that they control.

SNC Response to NRC RAI 3:

- a. The CDP nozzle is specifically addressed for Hatch 1 because the CDP nozzle in Hatch 1 is located in the thinner shell section of the bottom head; whereas, for Hatch 2 the CDP nozzle is in the thicker shell section of the bottom head. This situation is addressed in SI Calculation Package 1001527.303, Rev. 1, pg. 4 of 29:

The SI P-T Curve LTR [1] addresses the bottom head penetrations by conservatively applying a stress concentration factor (SCF) of 3.0 for a hole in a flat plate to the pressure induced membrane stress in the bottom head shell and using the thermal stress intensity factor solution given in ASME XI, Non-mandatory Appendix G, Paragraph G-2214.3 [8], discussed below. Review of the Hatch Unit 1 general assembly drawing [30] shows that the Core DP nozzle exists in the thinnest section of the bottom head. Based on prior experience from a similar bottom head design, application of the conservative SCF=3.0 methodology to the Core DP nozzle penetration will result in a bottom head P-T curve which controls the entire RPV. Consequently, a

detailed evaluation of the Core DP nozzle is performed to remove excess conservatism.

Where the references cited in the above excerpt are:

1. Sommerville, D.V., "Pressure-Temperature Limits Report Methodology for Boiling Water Reactors," SIR-05-044, Rev. 1-A, June 2013.
8. American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, Non-mandatory Appendix G, "Fracture Toughness Criteria for Protection Against Failure," 2001 Ed. through 2003 Addenda.
30. Core DP Nozzle Drawings:
 - a. SNOC Dwg. S-15227A, Combustion Engineering Drawing 234-244-5, Nozzle Details for 218" I.D. BWR, SI File No. 1001527.208.
 - b. SNOC Sketch 1-BE-2, Rev. 1, "N10 Standby Liquid Control & Core Differential Pressure Nozzle Detail," SI File No. 1001527.208.
 - c. SNOC Dwg. S15523, Combustion Engineering Drawing 234-270, Rev. 3, "General Arrangement Elevation for 218" ID BWR," SI File No. 1001527.208.

The CDP nozzle in Hatch 2 is inherently addressed by applying the bottom head methodology documented in the Reference [2] licensing topical report (LTR). Consequently, it is not specifically discussed in a manner similar to the Hatch 1 CDP nozzle. Similarly, none of the bottom head penetrations are specifically identified and discussed when the conservative methodology of Reference [2] is applied for the bottom head penetrations.

- b. For Hatch 1 the following situation exists:
 - a. Curve A
 - i. 38 EFPY: Water Level Instrument (WLI) nozzle controls from ~450 psig onward
 - ii. 49.3 EFPY: WLI nozzle controls from ~400 psig onward
 - b. Curve B
 - i. 38 EFPY: WLI nozzle controls from ~150 psig onward
 - ii. 49.3 EFPY: WLI nozzle controls from ~125 psig onward
 - c. Curve C
 - i. 38 EFPY: FW nozzle controls from ~100 - ~120 psig, then WLI nozzle controls beyond this point, with the exception of the closure flange "notch".
 - ii. 49.3 EFPY: FW nozzle controls at ~100 psig, then WLI nozzle controls beyond this point, with the exception of the closure flange "notch".

For Hatch 2 the following situation exists:

- a. Curve A
 - i. 37 EFPY: Water Level Instrument (WLI) nozzle controls from ~700 psig onward

Enclosure 1 to NL-15-2034
SNC Response to NRC RAI

- ii. 50.1 EFPY: WLI nozzle controls from ~650 psig onward
- b. Curve B
 - i. 37 EFPY: WLI nozzle controls from ~250 psig onward, with the exception of the closure flange "notch"
 - ii. 50.1 EFPY: WLI nozzle controls from ~240 psig onward, with the exception of the closure flange "notch"
- c. Curve C
 - i. 37 EFPY: WLI nozzle controls from ~150 psig onward, with the exception of the closure flange "notch"
 - ii. 50.1 EFPY: WLI nozzle controls from ~125 psig onward, with the exception of the closure flange "notch"

Individual curves for all nozzles considered are clearly shown in Appendix B of References [3, 4].

NRC RAI 4:

Pages 2-5 and 2-6 of Licensing Topical Report BWROG-TP-11-022-A, Rev. 1 state, in part, the following:

The following information should be included in the PTLR with respect to the ART calculations:

- a. *The IRT_{NDT} for all RPV materials and the method of determining the RT_{NDT} (i.e., ASME Code, Generic Communication, Branch Technical Position MTEB 5-2 in Standard Review Plan 5.3.2 in NUREG-0800, or other NRG-approved methodologies).*
- c. *Identify whether "Procedure 1" or "Procedure 2" from Appendix A was utilized to evaluate the surveillance data. If surveillance data was utilized, provide the surveillance data and the analysis of the surveillance data that was used to determine the ART values. If surveillance data was not utilized, state why it was not utilized.*

Provide the following information in the PTLRs:

- a. The method used to compute the initial RT_{NDT} values for both Hatch units.
- b. Identify whether "Procedure 1" or "Procedure 2" was utilized to evaluate the surveillance data for both Hatch units.

SNC Response to NRC RAI 4:

- a. The initial RT_{NDT} values are taken from surveillance materials test reports, NEDC-30997 and SASR 90-104 for Hatch 1 and Hatch 2 respectively. As indicated in those reports, the values were derived using the GE RT_{NDT} Estimation Method submitted by the BWROG as NEDC-32399-P and assessed in a December 16, 1994 letter from Brian Sheron to R. A. Pinelli. Specifically, Section 3.2.4 in each report provides the initial estimation details.
- b. Procedure 1 was used to evaluate surveillance data for Hatch 1 for the surveillance plate material, procedure 2 for the weld material.

Procedure 2 was used to evaluate surveillance data for Hatch 2 weld and plate material since credible surveillance data was not available.

NRC RAI 5:

The NRC staff is unable to reproduce the P-T limits in the Hatch, Unit 1 and 2, PTLRs within reasonable accuracy. However, many of the inputs needed to determine the P-T limits are not included in the PTLRs.

Provide the necessary P-T limits inputs for both Hatch units similar to the recommendations made in the NRC presentation, "Recommendations for Inputs Related to Pressure-Temperature (P-T) Limits Submittals" (ADAMS Accession No. ML 151558464) presented at the Industry/NRG Materials Programs Technical Information Exchange Meeting that was held at NRC Headquarters on June 2 - 4, 2015. Alternatively, if the inputs are clearly defined in References 8 and 14 of each PTLR, provide copies of those three documents.

SNC Response to NRC RAI 5:

References 8 and 14 of each PTLR are provided as Enclosure 5. SIA calculation 1001527.303 Rev. 0 (Hatch 1 and Hatch 2 PLTR Reference 14) contains information that is proprietary to General Energy Hitachi. This information has been redacted from the SIA calculation included in Enclosure 5 but can be provided to the NRC upon request.

NRC RAI 6:

The Non-Beltline curve in Figure 3, "HNP-1 P-T Curve C (Normal Operation - Core Critical) for 38 EFPY," of the Hatch, Unit 1, PTLR indicates a temperature of ~201°F for pressures greater than 312.6 psig. On the other hand, the tabular values for this curve in Table 3, "HNP-1 P-T Curve C (Normal Operation - Core Critical) for 38 EFPY," of the Hatch, Unit 1, PTLR indicate a temperature of 217 °F for pressures greater than 312.6 psig. The NRC staff could not verify either of these temperature values as appropriate for Curve C for Hatch, Unit 1, using the minimum temperature requirements of Table 1 of Title 10 of the *Code of Federal Regulations*, Part 50 (10 CFR 50), Appendix G, "Fracture Toughness Requirements."

Furthermore, since the Non-Beltline region is unaffected by fluence, the NRC staff expected Curve C for the Non-Beltline region for 38 EFPY to be identical to Curve C for the Non-Beltline region for 49.3 EFPY. The values reflected in Figure 3 and Table 3 of the Hatch, Unit 1, PTLR for 38 EFPY, and Figure 6 and Table 6 of the Hatch, Unit 1, PTLR for 49.3 EFPY do not reflect this expectation.

The NRC staff was able to confirm the Curve C Non-Beltline region temperature values indicated in the Hatch, Unit 2, PTLR for pressures greater than 312.6 psig using the minimum temperature requirements of Table 1 of 10 CFR 50, Appendix G.

Provide the following:

- a. Identify the correct temperature values for Curve C for the Non-Beltline region for Hatch, Unit 1, for pressures greater than 312.6 psig for 38 and 49.3 EFPY,

Enclosure 1 to NL-15-2034
SNC Response to NRC RAI

- b. Provide the basis for the temperature values for Curve C for the Non-Beltline region for Hatch, Unit 1, for pressures greater than 312.6 psig for 38 and 49.3 EFPY.
- c. Explain any discrepancies with the temperature values for Curve C for the Non-Beltline region for Hatch, Unit 1, for pressures greater than 312.6 psig and the temperature values in Figures 3 and 6 and Tables 3 and 6 of the Hatch, Unit 1, PTLR for 38 and 49.3 EFPY.

SNC Response to NRC RAI 6:

- a. The correct Hatch 1, non-beltline region, Curve C temperatures are 197 °F for 38 EFPY, for which 202 °F was conservatively used, and 210 °F for 49.3 EFPY, for which 217 °F was conservatively used.
- b. The basis for the temperatures used is the minimum temperature requirement from 10CFR50 Appendix G, Table 1 Operating Condition 2.d, "Core Critical" for pressures greater than 20% of the preservice hydrotest pressure. For this condition the minimum temperature is the larger of:
 - i. The minimum permissible temperature for the inservice system hydrotest, which is taken as 1250 psig for the Hatch P-T curves, or
 - ii. The highest reference temperature of the material in the closure flange that is highly stressed by the bolt preload + 160 °F.

For the Hatch 1 P-T curves the minimum permissible temperature for the inservice hydrotest becomes the limiting temperature condition. Since the beltline region (WLI-nozzle) controls the inservice hydrotest temperature, T_{IHST} varies with EFPY. For Hatch 2 this condition was not the limiting condition; hence, the difficulty in matching the temperature for the Hatch 1 P-T curves but not the Hatch 2 P-T curves.

- c. The values in Table 3 should list a temperature of 202 °F for pressures greater than 312.6 psig. Table 3 currently lists a temperature of 217 °F, which is conservative; however, it is inconsistent with the corresponding Figure. A revised Table 3 is provided as Enclosure 7.

NRC RAI 7:

In the LAR, the PTLRs contain new P-T Curves for Hydrostatic Pressure and Leak Test (Curve A), Normal Operation Core Not Critical (Curve B), and Normal Operation – Core Critical (Curve C) for Unit 1 at 38 EFPY and 49.3 EFPY, and for Unit 2 at 37 EFPY and 50.1 EFPY. The PTLR P-T curves are different than the deleted P-T curves in the current Technical Specifications. Explain the factors that lead to the differences observed between the PTLR P-T curves and the TS P-T curves.

SNC Response to NRC RAI 7:

The previous P-T curves were based on an earlier set of P-T curves developed using a methodology consistent with the methodology used by the General Electric company. The current methodology, used to develop the curves in the

Enclosure 1 to NL-15-2034
SNC Response to NRC RAI

PTLR, is based on Reference [1] which includes some notable differences from the prior methodology:

1. Water Level Instrument nozzle and Feedwater nozzle curves are developed from plant specific nozzle finite element analysis and Boundary Integral Equation / Influence Function linear elastic fracture mechanics (LEFM) nozzle solutions.
2. The bottom head is treated by applying a conservative SCF = 3.0.

Additional factors listed below may cause differences in the resulting P-T limit curves:

1. The fluence used in the current analysis is higher than the previous fluence and is based on a more recent evaluation.
2. The Adjusted Reference Temperature (ART) calculation in the current analysis uses the latest information in BWRVIP-135, Rev. 2 [5], as well as the Combustion Engineering Owner's Group (CEOG) best estimate chemistry results [6]

Edwin I. Hatch Nuclear Plant
Response to Request for Additional Information Regarding Application for
Amendment to Technical Specifications for Relocation of Pressure and
Temperature (P-T) Curves to the Pressure and Temperature Limits Report
(PTLR) Consistent with TSTF-419-A

Enclosure 2

Electric Power Research Institute (EPRI) affidavit requesting withholding of
proprietary information

Ref. EPRI Project Number 669

November 11, 2015

Document Control Desk
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Request for Withholding of the following Proprietary Information Included in:

Edwin I. Hatch Nuclear Plant, Response to Request for Additional Information Regarding Application for Amendment to Technical Specifications for Relocation of Pressure and Temperature (P-T) Curves to the Pressure and Temperature Limits Report (PTLR) Consistent with TSTF-419-A, Enclosure 3

To Whom It May Concern:

This is a request under 10 C.F.R. §2.390(a)(4) that the U.S. Nuclear Regulatory Commission ("NRC") withhold from public disclosure the report identified in the enclosed Affidavit consisting of the proprietary information owned by Electric Power Research Institute, Inc. ("EPRI") identified in the attached report. Proprietary and non-proprietary versions of the Report and the Affidavit in support of this request are enclosed.

EPRI desires to disclose the Proprietary Information in confidence to assist the NRC review of the enclosed submittal to the NRC by Southern Nuclear. The Proprietary Information is not to be divulged to anyone outside of the NRC or to any of its contractors, nor shall any copies be made of the Proprietary Information provided herein. EPRI welcomes any discussions and/or questions relating to the information enclosed.

If you have any questions about the legal aspects of this request for withholding, please do not hesitate to contact me at (650) 855-2271. Questions on the content of the Report should be directed to Andy McGehee of EPRI at (704) 502-6440.

Sincerely,



Together . . . Shaping the Future of Electricity

AFFIDAVIT

RE: Request for Withholding of the Following Proprietary Information Included In:

Edwin I. Hatch Nuclear Plant, Response to Request for Additional Information Regarding Application for Amendment to Technical Specifications for Relocation of Pressure and Temperature (P-T) Curves to the Pressure and Temperature Limits Report (PTLR) Consistent with TSTF-419-A, Enclosure 3

I, Kurt Edsinger, being duly sworn, depose and state as follows:

I am the Director of PWR and BWR Materials at Electric Power Research Institute, Inc. whose principal office is located at 3420 Hillview Avenue, Palo Alto, CA ("EPRI") and I have been specifically delegated responsibility for the above-listed report that contains EPRI Proprietary Information that is sought under this Affidavit to be withheld "Proprietary Information". I am authorized to apply to the U.S. Nuclear Regulatory Commission ("NRC") for the withholding of the Proprietary Information on behalf of EPRI.

EPRI Proprietary Information is identified in the above referenced report by double brackets. An example of such identification is as follows:

{{This sentence is an example.^{(E)}}

Tables containing EPRI Proprietary Information are identified with double brackets before and after the object. In each case, the superscript notation ^(E) refers to this affidavit as the basis for the proprietary determination.

EPRI requests that the Proprietary Information be withheld from the public on the following bases:

Withholding Based Upon Privileged And Confidential Trade Secrets Or Commercial Or Financial Information (see e.g., 10 C.F.R. § 2.390(a)(4):

a. The Proprietary Information is owned by EPRI and has been held in confidence by EPRI. All entities accepting copies of the Proprietary Information do so subject to written agreements imposing an obligation upon the recipient to maintain the confidentiality of the Proprietary Information. The Proprietary Information is disclosed only to parties who agree, in writing, to preserve the confidentiality thereof.

b. EPRI considers the Proprietary Information contained therein to constitute trade secrets of EPRI. As such, EPRI holds the Information in confidence and disclosure thereof is strictly limited to individuals and entities who have agreed, in writing, to maintain the confidentiality of the Information.

c. The information sought to be withheld is considered to be proprietary for the following reasons. EPRI made a substantial economic investment to develop the Proprietary Information and, by prohibiting public disclosure, EPRI derives an economic benefit in the form of licensing royalties and other additional fees from the confidential nature of the Proprietary Information. If the Proprietary Information were publicly available

to consultants and/or other businesses providing services in the electric and/or nuclear power industry, they would be able to use the Proprietary Information for their own commercial benefit and profit and without expending the substantial economic resources required of EPRI to develop the Proprietary Information.

d. EPRI's classification of the Proprietary Information as trade secrets is justified by the Uniform Trade Secrets Act which California adopted in 1984 and a version of which has been adopted by over forty states. The California Uniform Trade Secrets Act, California Civil Code §§3426 – 3426.11, defines a "trade secret" as follows:

"Trade secret" means information, including a formula, pattern, compilation, program device, method, technique, or process, that:

(1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."

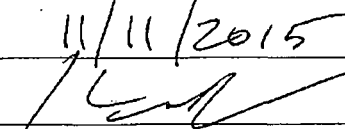
e. The Proprietary Information contained therein are not generally known or available to the public. EPRI developed the Information only after making a determination that the Proprietary Information was not available from public sources. EPRI made a substantial investment of both money and employee hours in the development of the Proprietary Information. EPRI was required to devote these resources and effort to derive the Proprietary Information. As a result of such effort and cost, both in terms of dollars spent and dedicated employee time, the Proprietary Information is highly valuable to EPRI.

f. A public disclosure of the Proprietary Information would be highly likely to cause substantial harm to EPRI's competitive position and the ability of EPRI to license the Proprietary Information both domestically and internationally. The Proprietary Information can only be acquired and/or duplicated by others using an equivalent investment of time and effort.

I have read the foregoing and the matters stated herein are true and correct to the best of my knowledge, information and belief. I make this affidavit under penalty of perjury under the laws of the United States of America and under the laws of the State of North Carolina.

Executed at 1300 W WT Harris Blvd being the premises and place of business of Electric Power Research Institute, Inc.

Date: 11/11/2015



Kurt Edsinger

(State of North Carolina)
(County of Mecklenburg)

Subscribed and sworn to (or affirmed) before me on this 11th day of November, 2015, by
Kurt Edsinger, proved to me on the basis of satisfactory evidence to be
the person(s) who appeared before me.

Signature Deborah H. House (Seal)

My Commission Expires 2nd day of April, 2016.

