PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE UNDER 10 CFR 2.390

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a joint venture of
Constellation Energy · EDF

March 26, 2014

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: R.E. Ginna Nuclear Power Plant
Renewed Facility Operating License No. DPR-18
Docket No. 50-244

Response to Request for Additional Information regarding License Amendment Request on Revising Section 3.6.5 of the Technical Specifications, "Containment Air Temperature"

REFERENCES:

(a) Letter from J.E. Pacher (REG) to NRC Document Control Desk, 'License Amendment Request, Revise Section 3.6.5 of the Technical Specifications, "Containment Air Temperature,"' dated February 28, 2013 (ML13067A328).

(b) E-mail from M.C. Thadani (NRC) to T. Harding, Jr. (REG), "FW: Ginna TS change to Increase Containment Air Temperature," dated February 4, 2014 (ML14042A357).

By Reference (a), R.E. Ginna Nuclear Power Plant (REG) submitted a License Amendment Request to revise Section 3.6.5 of the Technical Specifications, "Containment Air Temperature," to increase the allowable containment average air temperature from 120°F to 125°F.

By Reference (b), the U.S. Nuclear Regulatory Commission (NRC) requested additional information (RAI) from REG to complete its review. Conference calls were held with the NRC on February 6, and February 27, 2014, to clarify the RAI. During the conference call on February 6, 2014, REG clarified Questions 2. and 3. by referring to responses previously submitted. The NRC concurred that REG does not need to submit additional information. Therefore, only the response to Question 1. in Reference (b) is hereby provided.

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ATTACHMENT 1A CONTAINS PROPRIETARY INFORMATION. WHEN SEPARATED FROM ATTACHMENT 1A, THIS DOCUMENT IS DECONTROLLED.

The response to Question 1. in Reference (b) is provided in Attachment (1A). A redacted, non-proprietary version of Attachment (1A) is provided in Attachment (1). Attachment (2) is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-14-3925 accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Attachment (1A) contains information proprietary to Westinghouse Electric Company LLC, 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 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.

Should you have any other questions regarding this submittal, please contact Thomas Harding at 585-771-5219.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 26 day of March 2014.

Sincerely,

JEP/JPO

Attachments:
(1) Response to Question in Request for Additional Information (Non-Proprietary Version) (4 Pages)
(1A) Response to Question in Request for Additional Information (Proprietary Version) (4 Pages)
(2) 10 CFR 2.390 Affidavit of Westinghouse - CAW-14-3925 (7 Pages)

cc: NRC Regional Administrator, Region I
NRC Project Manager, Ginna
NRC Senior Resident Inspector

ATTACHMENT (1)

RESPONSE TO QUESTION IN

REQUEST FOR ADDITIONAL INFORMATION

(NON-PROPRIETARY VERSION)

Response to Follow-Up NRC RAI Regarding the R.E. Ginna BE LBLOCA Evaluation of Elevated Initial Containment and Accumulator Temperature, NP-Attachment

(4 pages including this cover page)

Westinghouse Electric Company LLC
1000 Westinghouse Drive
Cranberry Township, PA 16066

RAI) The RAI response does [not] include any evaluation of how the accumulator temperature affects the PCT pre-TCD. Westinghouse has previously stated that TCD changes everything. They should have data about the high accumulator temperature cases pre-TCD followed by the effect of TCD after the accumulator temperature has been corrected.

Response:

The Ginna analysis of record (AOR) was performed without explicit consideration of fuel thermal conductivity degradation (TCD). A summary of the cases and select sampled input parameters and results can be found in Reference 1 Table 1. There were a total of 124-cases run [ ]^{a,c} for the AOR in accordance with the approved methodology, i.e., ASTRUM evaluation methodology. The maximum peak cladding temperature (PCT) calculated to exist for the AOR was 1870°F.

From the 124-scenarios for the AOR, a subset of 30 cases [

]^{a,c}

The maximum PCT from the TCD evaluation was determined to be 2041°F (Reference 2). The maximum increase from the AOR for any one TCD case was 304°F. The minimum PCT case from the AOR that was re-analyzed for TCD was 1500°F. Of the AOR cases that were not re-run for TCD, [

]^{a,c}

From the 30-cases run for the TCD evaluation, 10 cases were chosen to be re-run for the change in accumulator temperature (Reference 3). This case selection is consistent with recent evaluations performed by Westinghouse for both pre-TCD and post-TCD

errors or changes to an acceptable evaluation model. Similar examples include Reference 4 (page 15-39), Reference 5 (enclosure 3), and Reference 6. However, in other cases, design inputs were changed to partially offset the effects of TCD and the input changes were directly coupled with the estimated effect of TCD such that it was necessary to start at the AOR analysis in order to re-assess the effect of TCD (Reference 7). The majority of these changes were for low-margin plants that were within 100-200°F of the 10 CFR 50.46 PCT limit of 2200°F pre-TCD; whereas Ginna did not have low margin when compared with these plants pre-TCD.

[

]^{a,c}

In addition, it is noted that the 10 cases that were re-analyzed for the change in accumulator temperature included all cases within 250°F of the maximum PCT case from the TCD evaluations, i.e. all TCD cases with a PCT between 1790°F and 2041°F. The resulting maximum PCT for the change in accumulator temperature is 2116°F, which is an increase in maximum PCT of 75°F from the TCD evaluation. The maximum total increase in PCT from the AOR run set to the accumulator temperature increase run set (including TCD) was 380°F. For the cases re-analyzed, [

]^{a,c}.

TCD was evaluated for all of the AOR cases with a PCT equal to, or greater than, 1500°F [

]^{a,c}

Therefore, the cases chosen capture all potentially limiting cases when considering the effects of fuel TCD and elevated initial accumulator temperature conditions, and are

consistent with current Westinghouse standards for evaluating errors or changes to an acceptable evaluation model both pre-TCD and post-TCD.

References:

1. Letter from J.E. Pacher (R.E. Ginna) to NRC Document Control Desk, 'Response to Request for Additional Information regarding License Amendment Request on Revising Section 3.6.5 of the Technical Specifications, "Containment Air Temperature,"' dated November 11, 2013 (ML13323A082).
2. Letter from T. Mogren (R.E. Ginna) to NRC Document Control Desk, "ECCS 30-Day Report for the Thermal Conductivity Degradation Impact on R.E. Ginna Large Break Loss of Coolant Accident Analysis with ASTRUM," dated August 16, 2012 (ML12233A621).
3. Letter from J.E. Pacher (R.E. Ginna) to NRC Document Control Desk, 'License Amendment Request, Revise Section 3.6.5 of the Technical Specifications, "Containment Air Temperature,"' dated February 28, 2013 (ML13067A328).
4. NUREG-1793 Supplement 2, Chapter 15, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Plant Design," August 2011 (ML112061231).
5. Letter from L. J. Weber (Cook) to NRC Document Control Desk, "Donald C. Cook Nuclear Plant Unit 1, Response to Request for Additional Information Regarding Reanalysis of Large Break Loss-of-Coolant Accident (TAC No. MD7556)," dated July 14, 2008 (ML082040584).
6. Letter from J. P. Gebbie (Cook) to NRC Document Control Desk, "Donald C. Cook Nuclear Plant Unit 1, 30-Day Report of Changes to or Errors in an Evaluation Model," dated August 30, 2013 (ML13247A174).
7. Letter from J. P. Gebbie (Cook) to NRC Document Control Desk, "Donald C. Cook Nuclear Plant Unit 1, Docket No. 50-315, License Amendment Request Regarding Restoration of Normal Reactor Coolant System Operating Pressure and Temperature Consistent with Previously Licensed Conditions," dated October 8, 2013 (ML13283A121).

ATTACHMENT (2)

10 CFR 2.390 AFFIDAVIT OF WESTINGHOUSE – CAW-14-3925

CAW-14-3925

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared James A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

James A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 17th day of March 2014

Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Anne M. Stegman, Notary Public
Unity Twp., Westmoreland County
My Commission Expires Aug. 7, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

(1) I am Manager, Regulatory Compliance, in Engineering, Equipment and Major Projects, 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 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 constitutes Westinghouse policy and provides 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, it 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 "Response to Follow-Up NRC RAIs Regarding the R.E. Ginna BE LBLOCA Evaluation of Elevated Initial Containment and Accumulator Temperature, P-Attachment" (Proprietary) for submittal to the Commission, being transmitted by Constellation Energy letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with NRC approval of a revision to Technical Specification 3.6.5, and may be used only for that purpose.

(a) This information is part of that which will enable Westinghouse to:

(i) Provide input to Constellation Energy to provide to the U. S. Nuclear Regulatory Commission in response to NRC Request for Additional Information Regarding Amendment to Revise Technical Specification 3.6.5.

(ii) Provide licensing support for customer submittal.

(b) Further this information has substantial commercial value as follows:

(i) Westinghouse plans to sell the use of the information to its customers for the purpose of obtaining license changes for a Westinghouse pressurized water reactor (PWR).

(ii) Westinghouse can sell support and defense of the technology to its customer in the licensing process.

(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/or non-proprietary versions of documents 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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