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September 15, 2004

Docket No. 50-271
BVY 04-098
TAC No. MC0761

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

Subject: **Vermont Yankee Nuclear Power Station**
Technical Specification Proposed Change No. 263 – Supplement No. 14
Extended Power Uprate – Response to Request for Additional Information

Reference: 1) U.S. Nuclear Regulatory Commission letter to Entergy, "Request for Additional Information – Extended Power Uprate, Vermont Yankee Nuclear Power Station (TAC No. MC0761)," September 1, 2004

This letter provides additional information in support of the application by Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Entergy) for a license amendment to increase the maximum authorized power level of the Vermont Yankee Nuclear Power Station (VYNPS) from 1593 megawatts thermal (MWt) to 1912 MWt. Reference 1 requests that Entergy submit certain information to support independent calculations being performed by the NRC staff. In this regard, conference calls were held between the staffs of the NRC and Entergy to clarify the information needs of the NRC staff. Some modifications were made to the information request based on those discussions. The information provided herein is consistent with those understandings. Attachments 1 and 2 respond to the two requests made in Reference 1.

Attachment 1 is a RELAP5 nodalization diagram representation of the VYNPS nuclear steam supply system.

Attachment 2 is a proprietary compact disk (CD) containing the limiting case, large break LOCA, SAFER outputs for extended power uprate. The attached CD has been designated as Proprietary Information in its entirety in accordance with 10CFR2.390. An affidavit that constitutes a request for withholding of Attachment 2 from public disclosure in accordance with NRC regulations is provided by the owner of the proprietary information (General Electric Company (GE)) as Attachment 3. Because the entire CD is proprietary, the disk provided as Attachment 2 carries the notation, "GE Proprietary Information ⁽³⁾." The superscript notation, ⁽³⁾, refers to paragraph (3) of the affidavit provided in Attachment 3, which provides the basis for the proprietary determination. The attached affidavit states that the designated proprietary information has been handled and classified as proprietary by GE. The proprietary information

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contained in the attached was provided to Entergy in a GE transmittal that is referenced by the affidavit. The proprietary information has been faithfully reproduced such that the affidavit remains applicable. GE requests that the proprietary information be withheld from public disclosure in accordance with the provisions of 10CFR2.390 and 10CFR9.17.

This supplement to the license amendment request provides additional information to clarify Entergy's application for a license amendment and does not change the scope or conclusions in the original application, nor does it change Entergy's determination of no significant hazards consideration.


There are no new regulatory commitments contained in this submittal.

If you have any questions or require additional information, please contact Mr. James M. DeVincentis at (802) 258-4236.

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

Executed on September 15, 2004.

Sincerely,



Jay K. Thayer
Site Vice President
Vermont Yankee Nuclear Power Station

Attachments (3)

cc: (see next page)

cc: Mr. Richard B. Ennis, Project Manager (w/attachments)
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
Mail Stop O 8 B1
Washington, DC 20555

Mr. Samuel J. Collins (w/o attachments)
Regional Administrator, Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

USNRC Resident Inspector (w/o attachments)
Entergy Nuclear Vermont Yankee, LLC
P.O. Box 157
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner (w/o proprietary information)
VT Department of Public Service
112 State Street – Drawer 20
Montpelier, Vermont 05620-2601

Attachment 1

Vermont Yankee Nuclear Power Station

Proposed Technical Specification Change No. 263 – Supplement No. 14

Extended Power Uprate – Response to Request for Additional Information

RELAP5 Nodalization Diagram

Total number of pages in Attachment 1
(excluding this cover sheet) is 1.

VYC-262
page 10

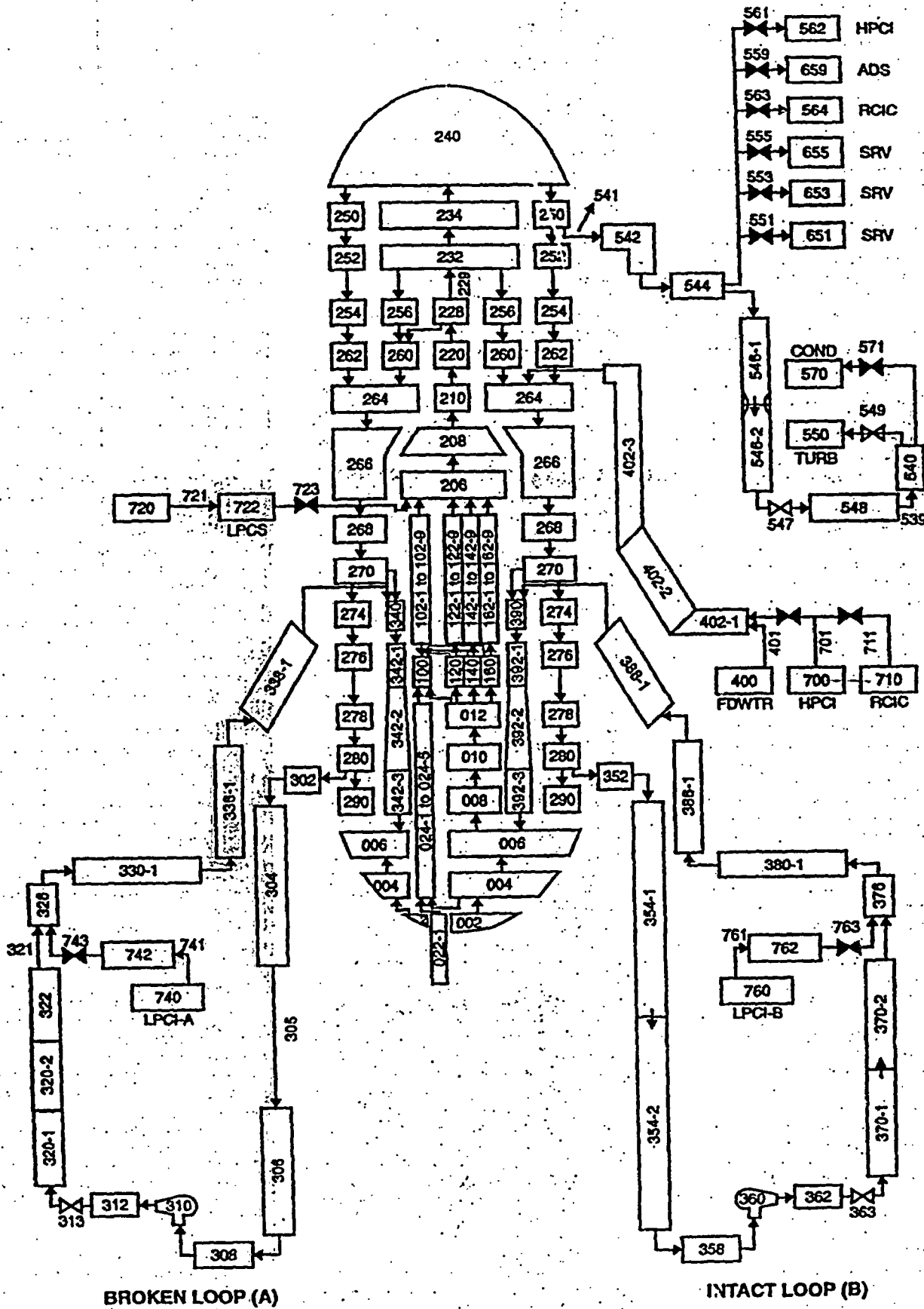


FIGURE
Vermont Yankee NSSS RELAP5 Model

Attachment 2

Vermont Yankee Nuclear Power Station

Proposed Technical Specification Change No. 263 – Supplement No. 14

Extended Power Uprate – Response to Request for Additional Information

Compact Disk of SAFER Outputs

PROPRIETARY INFORMATION

Total number of pages in Attachment 2
(excluding this cover sheet) is 0. The
Attachment is a CD-ROM disk.

Attachment 3

Vermont Yankee Nuclear Power Station

Proposed Technical Specification Change No. 263 – Supplement No. 14

Extended Power Uprate – Response to Request for Additional Information

GE Affidavit

**Total number of pages in Attachment 3
(excluding this cover sheet) is 3.**

General Electric Company

AFFIDAVIT

I, George B. Stramback, state as follows:

- (1) I am Manager, Regulatory Services, General Electric Company ("GE") 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 Attachment 2 to GE letter GE-VYNPS-AEP-361, Michael Dick (GE) to Craig Nichols (ENOI), *VYNPS Extended Power Uprate - Response to NRC Request for Additional Information, Proprietary and Non-Proprietary Versions*, dated September 13, 2004. The proprietary information is the entire Attachment 2 CD labeled *GE-VYNPS-AEP-361, GE RESPONSES TO NRC RAIs (SRXB-A-2) - GE Proprietary Information*⁽³⁾. In each case, the 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, GE 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, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (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 General Electric's competitors without license from General Electric 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 General Electric customer-funded development plans and programs, resulting in potential products to General Electric;
 - 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 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 GE, 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 GE, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to 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. Access to such documents within GE is limited on a "need to know" basis.
- (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 GE 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 information in support of NEDC-33090P, *Safety Analysis Report for Vermont Yankee Nuclear Power Station Constant Pressure Power Uprate*, Class III (GE Proprietary Information), Revision 0, dated September 2003, which was submitted to the NRC. This power uprate report contains detailed results and conclusions from evaluations of the safety-significant changes necessary to demonstrate the regulatory acceptability for the power uprate of a GE BWR, utilizing analytical models, methods and processes, including computer codes, which GE has developed, obtained NRC approval of and applied to perform evaluations of the transient and accident events in the GE Boiling Water Reactor ("BWR"). The development and approval of these system, component, and thermal hydraulic models and computer codes was achieved at a significant cost to GE, on the order of several million dollars.

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 GE asset.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GE'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 GE.


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.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE 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 GE 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 GE of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Executed on this 13th day of September 2004.


George B. Stramback
General Electric Company