Entergy Nuclear Operations, Incorporated

Indian Point Nuclear Generating Unit No. 2





1.4-Percent Measurement Uncertainty Recapture Power Uprate License Amendment Request Package



Entergy Nuclear Northeast Entergy Nuclear Operations, Inc Indian Point Energy Center 295 Broadway, Suite 1 PO Box 249 Buchanan, NY 10511-0249

December 12, 2002

Re: Indian Point Unit No. 2 Docket No. 50-247 NL-02-155

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

SUBJECT: Proposed Changes to Technical Specifications: Measurement Uncertainty Recapture Power Uprate Increase of Licensed Thermal Power (1.4%)

References: 1. Caldon, Inc. Topical Report ER-80P, "Improving Thermal Power Accuracy and Plant Safety While Increasing Operating Power Level Using the LEFM Check System," NRC approved March 8, 1999.

- Caldon, Inc. ER-157P Topical Report, Supplement to Topical Report ER-80P, "Basis for a Power Uprate with the LEFM Check or LEFM CheckPlus System," NRC approved December 20, 2001.
- 3. Caldon, Inc. ER-160P Topical Report, Supplement to Topical Report ER-80P, "Basis for a Power Uprate with the LEFM Check System," NRC approved January 19, 2001 as part of the Watts Bar SER approval.
- 4. NRC Regulatory Issue Summary (RIS) 2002-03, "Guidance on the Content of Measurement Uncertainty Recapture Power Uprate Applications," dated January 31, 2002.
- 5. Westinghouse WCAP –10263, "A Review Plan for Uprating the Licensed Power of a Pressurized Water Reactor Power Plant," dated January 1993.

Dear Sir:

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc, (ENO) hereby requests an amendment to the Operating License for Indian Point Nuclear Generating Unit No.2, to increase the maximum authorized reactor core power level from 3071.4 MWt to 3114.4 MWt. The proposed nominal increase of 1.4% in rated thermal power is based on implementing improved plant instrumentation for accurately measuring the secondary plant calorimetric conditions. The feedwater flow measurement system to be used for this purpose is the Caldon Leading Edge Flowmeter (LEFM) Check System. The measurement uncertainty of the plant calorimetric when using the LEFM system is 0.6%. Therefore a reduction in the currently assumed 2% value for measurement uncertainty can be justified in accordance with 10 CFR 50 Appendix K. The design and performance of LEFM system is described in NRC-approved topical reports (References 1, 2, and 3) submitted by Caldon, Inc.

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The proposed change has been evaluated in accordance with 10 CFR 50.91 (a)(1) using the criteria of 10 CFR 50.92 (c) and ENO has determined that this proposed change involves no significant hazards considerations (Attachment I). The proposed changes to the current Technical Specification and Bases pages are provided in Attachment II. ENO is currently in the process of obtaining NRC approval for converting the current Technical Specifications to the Improved Technical Specifications (ITS). Therefore ENO will transmit, under separate cover, the ITS markup pages associated with this proposed power uprate amendment request. Attachment III is the 1.4% Measurement Uncertainty Recapture Report which contains the plant specific analyses and evaluations for the proposed increase in rated thermal power. The evaluation of the proposed increase in rated thermal power has been performed following the guidance of Reference 4 and the methodology described in Reference 5.

The methodology used to determine power calorimetric uncertainties is documented in WCAP-15904-P. Accordingly, ENO is enclosing the following to support NRC review of this aspect of the amendment request:

- Two copies of WCAP-15904-P, Rev 0, "Power Calorimetric Uncertainty for the 1.4 Percent Uprating of Indian Point Unit 2," dated November 2002. (Proprietary)
- Two copies of WCAP-15904-NP, Rev 0, "Power Calorimetric Uncertainty for the 1.4 Percent Uprating of Indian Point Unit 2," dated November 2002. (Non-Proprietary)

Also enclosed is Westinghouse authorization letter dated November 15, 2002 (CAW-02-1575), with the accompanying affidavit, Proprietary Information Notice, and Copyright Notice. As Item 1 contains information proprietary to Westinghouse Electric Corporation, it is accompanied 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 NRC and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations. Accordingly, it is respectfully requested that the information that is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR 2.790 of the Commission's regulations.

Correspondence with respect to the copyright on proprietary aspects of the items listed above or the supporting affidavit should reference CAW-02-1575 and should be addressed to H. A. Sepp, Regulatory and Licensing Engineering, Westinghouse Electric Corporation, P. O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

ENO requests approval of the proposed amendment by April 25, 2003 with implementation to be accomplished within 60 days. There are no new commitments made in this letter. If you have any questions or require additional information, please contact Mr. Kevin Kingsley at 914-734-5581.

I declare under penalty of perjury that the foregoing is true and correct. Executed on [2-12-02

Very truly yours,

Fred Dacimo Vice President – Operations Indian Point 2

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Attachments:

- I. Analysis of Proposed Technical Specification Changes
- II. Proposed Technical Specification and Bases Changes (markup)
- III. 1.4% Measurement Uncertainty Recapture Report

Enclosures: as stated

cc: Mr. Patrick D. Milano, Senior Project Manager Project Directorate I, Division of Reactor Projects I/II U.S. Nuclear Regulatory Commission Mail Stop O 8 C2 Washington, DC 20555

> Mr. Hubert J. Miller (w/o prop. encl) Regional Administrator Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Resident Inspector's Office (w/o prop. encl) Indian Point Unit 2 U.S. Nuclear Regulatory Commission P.O. Box 38 Buchanan, NY 10511

Mr. William M. Flynn (w/o prop. encl) New York State Energy, Research and Development Authority Corporate Plaza West 286 Washington Avenue Extension Albany, NY 12203-6399

Mr. Paul Eddy (w/o prop. encl) New York State Dept. of Public Service 3 Empire Plaza Albany, NY 12223