

October 14, 2005

Mr. Michael R. Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING PRESSURIZER WATER LEVEL
REQUIREMENTS (TAC NO. MC7061)

Dear Mr. Kansler:

On May 25, 2005, Entergy Nuclear Operations, Inc. (Entergy), submitted a request for an amendment to the Technical Specifications for Indian Point Nuclear Generating Unit No. 2 which proposed a change to the existing pressurizer water level requirement for plant operation in hot standby (Mode 3).

The Nuclear Regulatory Commission staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). During a telephone call on October 5, 2005, the Entergy staff indicated that a response to the RAI would be provided within 45 days of receipt of this letter.

Please contact me at (301) 415-2901 if you have any questions on this issue.

Sincerely,

/RA/

John P. Boska, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosure: RAI

cc w/encl: See next page

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Enclosure: RAI

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING PRESSURIZER WATER LEVEL REQUIREMENTS
ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2
DOCKET NO. 50-247

On May 25, 2005, Entergy Nuclear Operations, Inc. (Entergy or the licensee), submitted a request for an amendment to the Technical Specifications (TSs) for Indian Point Nuclear Generating Unit No. 2 (IP2) which proposed a change to the existing pressurizer water level requirement for plant operation in hot standby (Mode 3). The Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has the following questions:

1. In its amendment request, Entergy proposed to add a new requirement to TS Limiting Condition for Operation (LCO) 3.4.9, "Pressurizer." The new requirement would establish a maximum actual level in the pressurizer of 90 percent during Mode 3 operation. The current TS LCO 3.4.9 maximum indicated pressurizer level for Modes 1 and 2 is 65.1 percent. Title 10 of the *Code of Federal Regulations*, Section 50.36, "Technical Specifications," defines a "Limiting Condition for Operation" as "the lowest functional capability or performance level of equipment required for safe operation of the facility." A TS LCO based on actual level as opposed to indicated level does not account for known uncertainties and establishes an allowable value for pressurizer water level that is inconsistent with the current (Modes 1 and 2) licensing basis for the pressurizer water level at IP2. The NRC staff requests that Entergy provide additional information to demonstrate that the proposed TS change satisfies NRC regulations regarding the allowable values for LCOs.

2. Entergy provided a technical justification for the proposed change to TS LCO 3.4.9 in its amendment request. Specifically, the licensee stated that "In Mode 3, the rate of volumetric expansion of reactor coolant in the event of a loss of decay heat removal would be much less than that resulting from a loss-of-load or loss-of-normal feedwater, with the plant at full power." Since the purpose of TS LCO 3.4.9 is to preclude a water solid condition that results in water relief through the pressurizer safety valves, the NRC staff requests the licensee provide its analysis that demonstrates that a loss of decay heat removal will not result in a water solid condition in the pressurizer. Additionally, the staff requests that the licensee determine the peak pressure reached in the reactor coolant system for a loss of decay heat removal capability under the proposed TS LCO changes and verify that it meets the IP2 safety limit for peak reactor coolant system pressure.

Enclosure

3. The licensee stated in its amendment request that the instrument channel indicators for the pressurizer level must be adjusted by plant operators using density compensation curves when the pressurizer is not at the temperature used for the instrument channel calibration. Since the temperature range for the Mode 3 operation is defined in the TSs, the licensee should be able to calculate the maximum uncertainty in the indicated pressurizer level under the most limiting Mode 3 conditions. The NRC staff requests that the licensee identify the maximum uncertainty, describe the methodology used to perform the calculation, and provide a technical justification for why this uncertainty is bounding.
4. In its amendment request, Entergy stated that, as part of the proposed TS changes, administrative controls, implemented in plant procedures, will require that an operator be assigned for operating and controlling the chemical and volume control system, including monitoring pressurizer level, whenever the pressurizer level, in Mode 3, is above 65.1 percent. However, the licensee did not provide any description of the operator's responsibilities with regard to normal and accident conditions. The NRC staff is concerned that there may be undue reliance on operator actions to ensure the safe operation of IP2 under the proposed TS limits. The staff requests that the licensee provide a summary of operator responsibilities, training, and procedures that will be used to ensure the continued safe operation of IP2 under the proposed TS changes.

Indian Point Nuclear Generating Unit No. 2

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Indian Point Nuclear Generating Unit No. 2

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