

October 3, 2002

Mr. Michael R. Kansler  
Senior Vice President and  
Chief Operating Officer  
Entergy Nuclear Operations, Inc.  
440 Hamilton Avenue  
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR  
ADDITIONAL INFORMATION (RAI) REGARDING SECTION 3.8.3 - DIESEL  
FUEL OIL AND STARTING AIR - BEYOND SCOPE ISSUE NO. 8 (TAC NO.  
MB5069)

Dear Mr. Kansler:

The Nuclear Regulatory Commission staff is reviewing your application for a license amendment dated March 27, 2002, to change the format and content of the current Technical Specifications (TSs) for the Indian Point Nuclear Generating Unit No. 2 (IP2) to be generally consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants Technical Specifications," Revision 2, dated April 2001.

On the basis of our review of the changes proposed for improved TS Section 3.8.3, "Diesel Fuel Oil and Starting Air," we find that additional information identified in the enclosure is needed.

We have discussed this with your staff and it was agreeable to your staff to respond to this RAI and provide comments within 60 days from receipt of this letter.

If you have questions regarding this letter or are unable to meet this response schedule, please contact me by phone on (301) 415-1441 or by electronic mail at [gsv@nrc.gov](mailto:gsv@nrc.gov).

Sincerely,

*/RA/*

Guy S. Vissing, Senior Project Manager, Section 1  
Project Directorate 1  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosure: As stated

cc w/encl: See next page

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INDIAN POINT 2

IMPROVED TECHNICAL SPECIFICATIONS

SECTION 3.8.3, DIESEL FUEL OIL AND STARTING AIR

BEYOND SCOPE ISSUE NO. 8

- 1.0 The Energy Nuclear Operations Inc. (ENO) proposed to convert the Indian Point Unit No. 2 (IP2) Current Technical Specifications (CTSs) to the IP2 Improved Technical Specifications (ITSs) based on NUREG-1431, "Standard Technical Specifications (STS) for Westinghouse Plants," Revision 2, dated April 2001. Sections 3.8.3 and Surveillance Requirement (SR) 3.8.3 of the STS include a Limiting Condition for Operation (LCO) and SR, respectively, for the emergency diesel generator (EDG) lube oil inventory required to be maintained in the EDG engine oil sumps. These STS LCO and SRs would be eliminated from the proposed ITS. ENO stated that the required EDG lube oil inventory would be maintained under administrative controls.

With regard to ENO's application requests for removing/relocating existing plant Technical Specifications (TSs) and SRs, the staff's position is that CTS/STS TS and SR that fall within or satisfy any of the four criteria described in 10 CFR 50.36(c)(2)(ii) must be retained in the TS, while those TS sections and SR sections that do not fall within or satisfy any of these criteria may be relocated to other licensee's administratively controlled documents, such as plant Technical Requirements Manuals (TRMs).

The lube oil inventory maintained in EDG engine oil sumps is required to support the operation of EDGs which provide the standby AC power sources to the plant. The STS Sections 3.8.3 and SR 3.8.3, regarding EDG lube oil, have direct impact on EDG operability, and meet the minimum requirement<sup>1</sup> as described in 10 CFR 50.36(c)(2)(ii) for inclusion in the TSs. Therefore, please revise the proposed ITS to retain the STS LCO and SR imposed on the lube oil inventory required to be maintained in the EDG engine sumps.

- 2.0 ENO proposed to re-designate Section LCO 3.8.3.E. and Section SR 3.8.3.4 of the STS as Section LCO 3.8.3.F and Section SR 3.8.3.5, respectively, in the ITS.

Section SR 3.8.3.4 of the STS requires verification that each EDG air start receiver pressure is  $\geq 225$  psig once per 31 days. Also, STS Section LCO 3.8.3.E requires that when one or more diesel generators with starting air receiver pressure  $< 225$  psig and  $\geq 125$  psig, restore the starting air receiver pressure to  $\geq 225$  psig within 48 hours.

ENO proposed to change the range of pressure limits for the air start receivers. Section SR 3.8.3.5 of the proposed ITS requires to verify that each EDG air start receiver pressure is  $\geq 250$  psig once per 31 days. Also, ITS Section LCO 3.8.3.E requires that when one or more diesel generators with starting air receiver pressure  $< 250$  psig and  $\geq 90$  psig, restore the starting air receiver pressure to  $\geq 250$  psig within 48 hours.

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<sup>1</sup> Criterion 3 states: "A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA [Design-Basis Accident] or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier."

ENO has not provided the rationale for the above proposed changes to the pressure limits for the air start receivers. Please provide detailed discussion, including changes to system design, components, etc., to demonstrate the need for the above proposed changes to the pressure limits for the air start receivers. Also, please demonstrate that at the air receiver pressure of 90 psig, there is adequate capacity for at least one EDG start attempt.

- 3.0 With regard to the EDG air starting system, Standard Review Plan (SRP) Section 9.5.6, "Emergency Diesel Engine Starting System," provides the guidance to size the air receivers. SRP Section 9.5.6, in part, states that as a minimum the air starting system should be capable of cranking a cold diesel engine five times without recharging the air receiver(s). The air starting system capacity should be determined as follows: (1) each cranking cycle duration should be approximately 3 seconds; (2) consist of two to three engine revolutions; or (3) air start requirements per engine start provided by the engine manufacturer; whichever air start requirement is larger. Also, the LCO in STS Section B 3.8.3 states: "The starting air system is required to have a minimum capacity for five successive diesel generator start attempts without recharging the air start receivers."

In ITS Section B 3.8.3, regarding sufficient air start capacity for each EDG, ENO proposed to change the above cited "five" starts to "four" starts. It is the staff's position that the proposed ITS Section B 3.8.3, regarding sufficient air start capacity for each EDG, should be consistent with the guidance described in the STS. Therefore, please revise the proposed ITS to retain the "five" start air capacity requirement for the air receivers, and to comply with the STS guidance.