July 28, 2006

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

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - ISSUANCE OF EMERGENCY AMENDMENT RE: CONTAINMENT SUMP LEVEL INDICATION (TAC NO. MD2655)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 249 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated July 26, 2006.

The amendment reduces the number of channels required by the plant TSs for the containment sump water level from three channels to two channels.

A copy of the related Safety Evaluation (SE) is enclosed. The SE describes the emergency circumstances under which the amendment was issued and the final determination of no significant hazards. The Notice of Issuance, addressing the final no significant hazards determination and opportunity for a hearing, will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

/RA/

John P. Boska, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosures:
1. Amendment No. 249 to DPR-26
2. Safety Evaluation

cc w/encls: See next page

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Accession Number: ML062080088

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Official Record Copy

DATED: July 28, 2006

AMENDMENT NO. 249 TO FACILITY OPERATING LICENSE NO. DPR-26 INDIAN POINT UNIT 2

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Indian Point Nuclear Generating Unit Nos. 2 & 3

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ENTERGY NUCLEAR INDIAN POINT 2, LLC

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-247

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 249
License No. DPR-26

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Entergy Nuclear Operations, Inc. (the licensee) dated July 26, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-26 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 249, are hereby incorporated in the license. ENO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented prior to the expiration of the current 7-day allowed outage time for inoperable containment sump water level channels, which was entered on July 24, 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License and
Technical Specifications

Date of Issuance: July 28, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 249

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Replace the following page of the License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Page	Insert Page
3	3

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Page	Insert Page
3.3.3-4	3.3.3-4

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 249 TO FACILITY OPERATING LICENSE NO. DPR-26

ENTERGY NUCLEAR OPERATIONS, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

DOCKET NO. 50-247

1.0 INTRODUCTION

By letter dated July 26, 2006, Entergy Nuclear Operations, Inc. (the licensee) submitted a request for an emergency license amendment for a change to the Indian Point Nuclear Generating Unit No. 2 (IP2) Technical Specifications (TSs). The proposed change would revise TS Table 3.3.3, Function 6, by reducing the number of channels required for the containment sump water level from three channels to two channels.

Under the current requirements of TS Limiting Condition for Operation (LCO) 3.3.3, three level channels (LT-940, LT-941, and LT-3300) are required for the containment sump water level. One level channel, LT-940, was discovered to be inoperable by the licensee during the spring 2006 refueling outage when the licensee discovered that the channel was not environmentally qualified. LT-940 has been removed from service. With one level channel inoperable, after 30 days, the licensee is required to submit a report to the Nuclear Regulatory Commission (NRC) in accordance with TS 5.6.6, "Post Accident Monitoring Report," outlining alternative methods of monitoring, the cause of the inoperability, and the plans and schedules for restoring the instrumentation channels. On June 22, 2006, the licensee submitted this report to the NRC (see the Agencywide Documents Access and Management System [ADAMS], accession number ML061800305). The licensee's plan was to prepare a change to the TSs to revise the requirements for level channels so that LT-940 would no longer be required by the TSs. This was based on the NRC's Standard TSs, which only require two channels for the containment sump water level.

On July 24, 2006, the licensee declared a second level channel inoperable (LT-3300) because the instrument was not responding as expected. With two of the three channels inoperable, LCO 3.3.3 requires one of the inoperable channels to be repaired within 7 days, or the reactor must be shutdown. If TS Table 3.3.3 is revised such that only two level channels are required, then with one level channel operable (LT-941), and one level channel inoperable (LT-3300), after 30 days the licensee is required to submit a report to the NRC in accordance with TS 5.6.6. This will avoid a plant shutdown. The inoperable level transmitter (LT-3300) is located near the containment sump inside the bioshield wall. As a result, radiation levels are high in this area, especially during power operation. Also, air temperature inside the containment building during the summer months is usually over 100 EF. It would be preferable

to schedule maintenance on LT-3300 during a period when the plant was shut down, to reduce radiation exposure and heat stress to employees.

2.0 REGULATORY EVALUATION

The NRC's regulations at Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.91 contain provisions for issuance of an amendment where the NRC finds that an emergency situation exists in that failure to act in a timely way would result in shutdown of a nuclear power plant. In such a situation, the NRC may issue a license amendment involving no significant hazards consideration without prior notice and then provide opportunity for a hearing and for public comment. In such a situation, the NRC will not publish a notice of proposed determination on a no significant hazards consideration (NSHC), but will publish a notice of issuance under 10 CFR 2.106.

The NRC issued detailed descriptions of instrumentation for post-accident monitoring (PAM) in NRC Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident." The introduction section of RG 1.97 describes it as a means to show compliance with 10 CFR Part 50, Appendix A, General Design Criteria (GDC) 13, 19, and 64. Although IP2 was originally licensed to the draft GDC published by the Atomic Energy Commission in the Federal Register on July 11, 1967, there were similar GDC to those listed in RG 1.97. IP2 is committed to meeting the intent of RG 1.97, Revision 2, as stated in the IP2 Updated Final Safety Analysis Report (UFSAR), Section 7.1.5, "Regulatory Guide 1.97 Compliance." The IP2 PAM instrumentation is in IP2 TSs, Section 3.3.3, "Post-Accident Monitoring Instrumentation."

3.0 TECHNICAL EVALUATION

RG 1.97, Revision 2, describes the criteria for containment water level post-accident monitoring. At IP2 the containment water level is measured by instrumentation monitoring water level from the bottom of the sump to the design post-accident flood level in two sumps inside containment named the Recirculation Sump and the Containment Sump. The current TS includes a requirement for two redundant level instrumentation channels for the Recirculation Sump water level measurement and three redundant instrumentation channels for the Containment Sump water level measurement. One of the three instrumentation channels for the Containment Sump water level measurement is a wide range, continuous monitoring instrument (LT-3300) providing a calibrated sump level span that is continuously indicated. Each of the other two channels (LT-940 and LT-941) provide a series of five lights that are energized from the associated instrument when a preset level is exceeded.

The criteria in RG 1.97 state that all PAM instrumentation listed in the plant TSs should have redundant channels and provide continuous indication. Removal of LT-940 from service would still meet the criteria of RG 1.97 as the remaining two instrumentation channels (LT-3300 and LT-941) provide acceptable redundancy. Additionally, the use of two monitors for the Recirculation Sump level measurement is approved in the current TSs which is consistent with NUREG-1431, Revision 3, "Standard Technical Specifications, Westinghouse Plants," and meets the RG 1.97 criteria. The licensee stated that LT-3300 and LT-941, the water level monitors for the Containment Sump, are electrically separated (the electrical train 2A/3A powers LT-3300 from instrument bus 22, while electrical train 5A powers LT-941 from instrument bus 21A), and are seismically and environmentally qualified.

The licensee further stated that LT-941 provides a readout in the central control room using five indicator lights associated with specific levels. Although LT-941 provides discrete level indications, the display is continuous in the sense that the lights associated with each level stay on as long as the level remains above the setpoint and goes off if the water level falls below the setpoint. The lights go on or off in series as the sump level rises or falls. These lights provide clear indication when a specific setpoint has been reached providing sufficient information about the sump level to the operator for actions. Additionally, the TS required Recirculation Sump water level and Refueling Water Storage Tank water level indications provide confirmatory information to the operator about the Containment Sump water level.

The NRC staff's review of the licensee's submittal concludes that the removal of LT-940 from the IP2 TSs does not adversely affect the IP2 Containment Sump water level monitoring, as two level channels will be required, which is consistent with NUREG-1431 and provides redundant instrumentation for the operators during an accident. The remaining two channels meet the criteria in RG 1.97, Revision 2. The NRC staff finds that the proposed change to the IP2 TS from the current requirement of three channels to two channels for Containment Sump water level instrumentation is therefore acceptable.

4.0 EMERGENCY CIRCUMSTANCES

The NRC's regulations at 10 CFR 50.91 contain provisions for issuance of an amendment where the Commission finds that an emergency situation exists, in that failure to act in a timely way would result in shutdown of a nuclear power plant.

In this instance, an emergency situation exists in that the proposed amendment is needed to allow the licensee to preclude an unnecessary plant shutdown. The licensee removed LT-940 from service near the end of the spring refueling outage, which ended on May 19, 2006. On June 22, 2006, in accordance with TS 5.6.6, the licensee submitted to the NRC their plan to request a license amendment to remove the requirement for LT-940 from the IP2 TSs. The second level indicator, LT-3300, was declared inoperable on July 24, 2006, because the instrument was not responding as expected. The licensee, in its application dated July 26, 2006, stated:

> The provisions of 10 CFR 50.91(a)(5) apply because Entergy could not have foreseen the inoperability of a second channel in the relatively short time during which the planned amendment request was being developed. A shutdown to repair an inoperable instrument is unnecessary since the TS requirement for three water level monitors is unnecessarily restrictive. Regulatory Guide 1.97 and the Standard Technical Specifications require only two monitors for this function.

The Commission expects licensees to apply for license amendments in a timely fashion. In this situation, however, the NRC staff has determined that the licensee has explained, as set forth above, why this emergency situation occurred and why it could not have avoided this situation. Accordingly, the NRC staff has determined that the licensee made a timely application for the amendment, has not abused the emergency provisions of 10 CFR 50.91(a)(5), and did not itself create the emergency.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulation at 10 CFR 50.92(c) states that the Commission may make a final determination that a license amendment involves NSHC if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) result in a significant reduction in a margin of safety.

The NRC staff reviewed the following NSHC evaluation that was provided by the licensee in its submittal dated July 26, 2006.

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No. The proposed change will revise the requirements for water level monitors for the Containment Sump from three to two. These level instruments are provided for monitoring the post-accident water level in the bottom of the containment to aid operator action to initiate recirculation and to assess the potential for excessive level. The presence or absence of the LT-940 instrument has no bearing on accident precursor conditions or events. The proposed requirements will maintain redundancy and will continue to use diverse instruments to provide information to the plant operators to monitor and manage accident conditions. Therefore, the proposed change does not involve a significant increase in the probability or consequences of previously evaluated accidents.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No. The proposed change will revise the requirements for water level monitors for the Containment Sump from three to two. The change reduces the number of channels required but retains redundancy and diversity of indication. The Technical Specification does not require the LT-940 instrument for normal plant operations and does not affect how the plant is operated. The removal of one channel does not create the possibility of any equipment failure or any effect on other equipment. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No. The proposed change will revise the requirements for water level monitors for the Containment Sump. The revised requirement will remain consistent with the requirements found in the Standard Technical Specification for level monitors provided for monitoring the post-accident water level. Other instrument channels will remain in service and provide redundant / diverse indication for operator response to support existing accident mitigation strategies. The proposed change does not involve changes to existing setpoints for automatic or operator actions. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the NRC staff's review of the licensee's analysis, the staff concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that NSHC is involved for the proposed amendment and that the amendment should be issued as allowed by the criteria contained in 10 CFR 50.91.

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final finding that the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Iqbal Ahmed

Date: July 28, 2006