

April 25, 2002

Mr. Michael Kansler
Senior Vice President and
Chief Operating Officer
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440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF
AMENDMENT TO REVISE THE POST ACCIDENT MONITORING
INSTRUMENTATION TECHNICAL SPECIFICATIONS (TAC NO. MB2947)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 211 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Unit No. 3. The amendment consists of changes to the Technical Specifications (TSS) in response to your application transmitted by letter dated September 7, 2001, as revised December 17, 2001.

The amendment revises the Post Accident Monitoring Instrumentation Technical Specifications to ensure that licensee commitments to Regulatory Guide 1.97 are properly reflected.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

/RA/

Patrick D. Milano, Sr. Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosures: 1. Amendment No. 211 to DPR-64
2. Safety Evaluation

cc w/encls: See next page

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Accession Number: ML020090379

*Safety Evaluation provided 12/26/2001 and no major changes were made

OFFICE	PDI-1\PM	PDI-1\LA	OGC	PDI-1\SC	EEIB:DE\SC *
NAME	PMilano	SLittle	AHodgdon	RLaufer	EMarinos
DATE	04/10/02	04/10/02	04/15/02	04/22/02	12/26/01

Official Record Copy

DATED: April 25, 2002

AMENDMENT NO. 211 TO FACILITY OPERATING LICENSE NO. DPR-64 INDIAN POINT
UNIT 3

PUBLIC

PDI R/F

RLauffer

SLittle

PMilano

OGC

GHill (2)

WBeckner

BMarcus

ACRS

BPlatchek, RI

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Indian Point Nuclear Generating Unit No. 3

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ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 211
License No. DPR-64

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Nuclear Operations, Inc. (the licensee) dated September 7, 2001, as revised December 17, 2001, 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-64 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 211, are hereby incorporated in the license. The licensee 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 within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief, Section I
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 25, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 211

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3.3.3-1
3.3.3-2
3.3.3-4
3.3.3-5

Insert Pages

3.3.3-1
3.3.3-2
3.3.3-4
3.3.3-5

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 211 TO FACILITY OPERATING LICENSE NO. DPR-64
ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

1.0 INTRODUCTION

By letter dated September 7, 2001, as revised by letter dated December 17, 2001, Entergy Nuclear Operations, Inc. (the licensee) submitted a request for changes to the Indian Point Nuclear Generating Unit No. 3 (IP3) Technical Specifications (TSs). The requested changes would revise the Post Accident Monitoring (PAM) Instrumentation TSs to ensure that licensee commitments to Regulatory Guide 1.97 are properly reflected. The December 17, 2001, letter provided a revised no significant hazards consideration determination and further revisions to the TSs.

2.0 EVALUATION

The licensee has requested changes to the PAM TS for: a) Core Exit Thermocouples (CETs), b) Steam Generator (SG) Water Level (Wide Range), c) Auxiliary Feedwater Flow, d) Reactor Coolant System (RCS) Hot Leg Temperature (T_{hot}), e) RCS Cold Leg Temperature (T_{cold}), and f) Main Steam Line Radiation.

The design of the PAM instrumentation is that SG Water Level (Wide Range), Auxiliary Feedwater Flow, T_{hot} , T_{cold} , and Main Steam Line Radiation have one channel of instrumentation per loop, SG, or steam line. Each of these functions has alternate instrumentation designated as a diverse channel.

For all of the PAM Functions entry into Condition A is "One or more Functions with one required channel inoperable" and entry into Condition C is "One or more Functions with two required channels inoperable." Separate condition entry is allowed for each function.

- a) There are ten qualified CETs in each of two trains with a minimum of two CETs per channel in each of the four core quadrants. The location of the CETs is such that an evaluation can be made of core radial decay heat distribution. Table 3.3.3-1 includes a separate CET Function for each quadrant (Functions 18, 19, 20, and 21).

The licensee has proposed to change the names of Functions 18, 19, 20, and 21 from "Core Exit Thermocouples..." to "Core Exit Temperature...". These name changes adopt the wording in NUREG-1431, Revision 2, "Standard Technical Specifications Westinghouse Plants" (STS) and are editorial in nature.

The licensee has proposed to change the Required Channels for each Core Exit Temperature Function from "2 per train" to "2" with a note that reads, "A channel consists of two core exit thermocouples (CETs)."

The existing wording "2 per train" could be interpreted to mean two channels per train and since there are two trains, this would imply that four channels are required. This would result in a requirement that is unintentionally more restrictive than the STS and not consistent with the design of the plant, which has two trains, which are intended to be the required two channels.

The proposed wording follows the wording in the STS and correctly reflects the design of the plant and the number of channels required.

- b & c) There is one SG Water Level (Wide Range) channel in each SG and one Auxiliary Feedwater Flow channel in each SG. SG Water Level (Wide Range) and Auxiliary Feedwater Flow in the same SG are diverse channels to each other.

The required number of channels for the SG Water Level (Wide Range) Function (Function 14) is one channel per SG of SG Water Level (Wide Range) and one channel per SG of Auxiliary Feedwater Flow for the same SG. The required number of channels for the Auxiliary Feedwater Flow Function (Function 15) is one channel of Auxiliary Feedwater Flow for each SG and one channel of SG Water Level (Wide Range) for the same SG.

However, the note that specifies Auxiliary Feedwater Flow as the diverse channel for SG Water Level (Wide Range) (note f) which reads, "The redundant channel in each steam generator is the auxiliary feedwater flow rate channel for that steam generator," does not also specify that SG Water Level (Wide Range) is the diverse channel for Auxiliary Feedwater Flow. Additionally, this note is not referenced by the Auxiliary Feedwater Flow Function.

The use of notes to provide information about diverse channels is an unnecessarily complex method of providing this information in the TSs. Therefore, the licensee has proposed to include both SG Water Level (Wide Range) and Auxiliary Feedwater Flow in the same function (Function 14) and delete note f. The Function would be structured as "SG Water Level (Wide Range) and Auxiliary Feedwater Flow" with the Required Channels as "1 each per SG." This would allow the use of standard Condition entry statements. Function 15 would not be used, to avoid having to renumber other functions in Table 3.3.3-1.

The SR 3.3.3.2 surveillance frequency is 24 months for SG Water Level (Wide Range) and 18 months for Auxiliary Feedwater Flow. The licensee has proposed an editorial change to Table 3.3.3-1 to insure that these surveillance frequencies are properly indicated in the combined Function 14.

The proposed wording follows the wording in the STS and the TS of other plants with single channels of instrumentation and correctly reflects the design of the plant and number of channels required.

- d) There is one channel of T_{hot} per loop. The diverse channel for T_{hot} in each loop is any qualified Core Exit Temperature channel in the quadrant associated with that loop. There are a minimum of two Core Exit Temperature channels per quadrant. The required number of channels for the T_{hot} Function (Function 2) is one channel per loop of T_{hot} and any qualified Core Exit Temperature channel in the quadrant associated with that loop.

However, the note that specifies the diverse channel for T_{hot} as any qualified CET in the quadrant associated with that loop (note a) which reads, "The redundant channel in each of four loops is any qualified CET in the quadrant associated with that loop," is incorrect. The diverse channel is "any qualified Core Exit Temperature channel" not "any qualified CET."

The use of notes to provide information about diverse channels is an unnecessarily complex method of providing this information in the TSs. Therefore, the licensee has proposed to include this information in the Condition entry statements and delete note a. The proposed revision to the Condition C entry statement would add "OR One required T_{hot} channel and two required Core Exit Temperature channels inoperable."

The proposed wording follows the wording in the STS and the TS of other plants with single channels of instrumentation and correctly reflects the design of the plant and number of channels required.

The licensee has also proposed to change the name of Function 2 from "RCS Hot Leg Temperature (Wide Range)" to "RCS Hot Leg Temperature (Wide Range) (T_{hot})."

This change in name is editorial in nature and provides consistency throughout TS 3.3.3.

- e) There is one channel of T_{cold} per loop. The diverse channel for T_{cold} in each loop is any channel of SG Pressure in the associated SG. There are three channels of SG Pressure in each SG. The required number of channels for the T_{cold} Function (Function 3) is one channel per loop of T_{cold} and one channel per SG of SG Pressure for the associated SG.

Note b specifies the diverse channel for T_{cold} as SG Pressure. It reads, "The redundant channel in each of four loops is any channel of steam generator pressure for that loop." The use of notes to provide information about diverse channels is an unnecessarily complex method of providing this information in the TSs. Therefore, the licensee has proposed to include this information in the Condition entry statements and delete note b. The proposed revision to the Condition C entry statement would add "OR One required T_{cold} channel and two required SG Pressure channels inoperable."

The proposed wording follows the wording in the STS and the TS of other plants with single channels of instrumentation and correctly reflects the design of the plant and number of channels required.

The licensee has also proposed to change the name of Function 3 from "RCS Cold Leg Temperature (Wide Range)" to "RCS Cold Leg Temperature (Wide Range) (T_{cold})," and change the name of Function 16 from "Steam Generator Pressure" to "SG Pressure." These name changes are editorial in nature and are duplicated throughout TS 3.3.3.

- f) There is one channel of Main Steam Line Radiation per steam line. The diverse channel for Main Steam Line Radiation in each steam line is any SG Water Level (Narrow Range) channel in the associated SG. There are three channels of SG Water Level (Narrow Range) in each SG. The required number of channels for the Main Steam Line Radiation Function (Function 22) is one channel per steam line of Main Steam Line Radiation and one channel per SG of SG Water Level (Narrow Range) for the associated SG.

However the note that specifies SG Water Level (Narrow Range) as the diverse channel for Main Steam Line Radiation (note g), which reads, "The redundant channel in each steam line is any one steam generator narrow range level indicator for that loop," is not referenced by the Main Steam Line Radiation Function.

The use of notes to provide information about diverse channels is an unnecessarily complex method of providing this information in the TS. Therefore, the licensee has proposed to include this information in the Condition entry statements and delete note g. The proposed revision to the Condition C entry statement would add "OR One required Main Steam Line Radiation channel and two required SG Water Level (Narrow Range) channels inoperable."

The proposed wording follows the wording in the STS and the TS of other plants with single channels of instrumentation and correctly reflects the design of the plant and number of channels required.

The deletion of notes (a), (b), and (f) require the renumbering of the remaining notes. Note (c) becomes note (a), note (d) becomes note (b), and note (e) becomes note (c). The new note added for Core Exit Temperature becomes note (d). The change of the note names is editorial in nature.

Based on the above review and the licensee's justification for IP3 TS changes, the NRC staff concludes that the proposed revision of TS 3.3.3 is consistent with NRC regulations, the guidelines in Chapter 7 of the Standard Review Plan, and the STS. The staff, therefore, finds the proposed TS changes acceptable.

3.0 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.

4.0 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 previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 5328). Accordingly, 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.

5.0 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: B. Marcus

Date: April 25, 2002