Entergy Nuclear Northeast
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Fred Dacimo
Site Vice President
Administration

December 27, 2005

Re: Indian Point Units 2 and 3
Dockets 50-247 and 50-286

NL-05-137

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

SUBJECT: **Proposed Changes to Indian Point 2 and 3 Technical Specifications: Adoption of TSTF-258, TSTF-308, and Related Administrative Control Changes based on NUREG-1431**

Dear Sir:

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc, (Entergy) hereby requests an amendment to the Operating Licenses for Indian Point Nuclear Generating Units 2 (IP2) and 3 (IP3). The proposed changes consist of:

- Adoption of TSTF-258, Rev 4; regarding changes to Section 5.0, Administrative Controls.
- Adoption of TSTF-308, Rev 1; regarding the determination of cumulative and projected dose contributions in the Radioactive Effluents Control Program (RECP).
- Revision of IP2 definition for dose equivalent I-131 based on NUREG-1431, Rev 3.
- Revision of IP2 RECP requirements based on NUREG-1431, Rev 3.
- Revision of IP3 Explosive Gas and Storage Tank Radioactivity Monitoring Program requirements based on NUREG-1431.

These proposed changes are being requested to facilitate the integration of programs and common procedures for use at IP2 and IP3.

Entergy has evaluated the proposed change in accordance with 10 CFR 50.91 (a)(1) using the criteria of 10 CFR 50.92 (c) and Entergy has determined that this proposed change involves no significant hazards considerations, as described in Attachment 1. The proposed changes to the

A001

Technical Specifications are shown in Attachment 2. A copy of this application and the associated attachments are being submitted to the designated New York State official.

Entergy requests approval of the proposed amendment by September 2006. There are no new commitments being made in this submittal. If you have any questions or require additional information, please contact Mr. Kevin Kingsley at 914-734-6695.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 12/27/05.

Sincerely,

For

Fred R. Dacimo
Site Vice President
Indian Point Energy Center

Attachments:
1. Analysis of Proposed Technical Specification Changes
2. Proposed Technical Specification Changes (markup)

cc: Mr. John P. Boska, Senior Project Manager, NRC NRR
Mr. Samuel J. Collins, Regional Administrator, NRC Region 1
NRC Resident Inspector, IP2
NRC Resident Inspector, IP3
Mr. Peter R. Smith, President, NYSERDA
Mr. Paul Eddy, New York State Dept. of Public Service

ATTACHMENT 1 TO NL-05-137

ANALYSIS OF PROPOSED

TECHNICAL SPECIFICATION CHANGES REGARDING

ADMINISTRATVE CONTROLS

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNITS NO. 2 and 3
DOCKET NO. 50-247 and 50-286

1.0 DESCRIPTION

This letter requests amendments to Operating License DPR-26, Docket No. 50-247 for Indian Point Nuclear Generating Unit No. 2 (IP2) and Operating License DPR-64, Docket No. 50-286 for Indian Point Nuclear Generating Unit No. 3 (IP3).

The proposed changes, listed below, are being requested to facilitate the integration of administrative programs and common procedures for use at IP2 and IP3.

- Adoption of TSTF-258, Rev 4; regarding changes to Section 5.0, Administrative Controls
- Adoption of TSTF-308, Rev 1; regarding the determination of cumulative and projected dose contributions in the Radioactive Effluents Control Program (RECP)
- Revision of IP2 definition for dose equivalent I-131 based on NUREG-1431, to be consistent with the existing IP3 definition
- Revision of IP2 RECP requirements based on NUREG-1431, to be consistent with existing IP3 requirements
- Revision of IP3 Explosive Gas and Storage Tank Radioactivity Monitoring Program requirements based on NUREG-1431.

2.0 PROPOSED CHANGES

The proposed changes are listed in Table One. Refer to Attachment 2, Technical Specification markup pages, for the specific wording for the proposed changes. There are no Bases associated with the technical specification sections affected by the proposed changes. Therefore there are no Bases changes required for this license amendment request.

3.0 BACKGROUND

A. TSTF-258 / IP2

Conversion to ITS for IP2 (Reference 1) was based on Revision 2 of NUREG-1431. Since TSTF-258 was incorporated in Revision 2 of NUREG-1431, IP2 currently has the provisions of this TSTF, except for four plant-specific deviations that were requested during ITS conversion. This LAR proposes to eliminate those deviations. One deviation involved use of a plant-specific title (Watch Engineer). Two of the deviations involved retaining wording of limits based on 10 CFR 20, prior to the 1991 rule change. The fourth deviation justified the elimination of administrative controls for high radiation areas, as further explained below.

Requirements regarding access to high radiation areas are provided in 10 CFR 20, Section 20.1601. Paragraph 20.1601(c) provides for licensee requests to the Commission for approval

TABLE ONE (Page 1 of 2)
DESCRIPTION OF PROPOSED TECHNICAL SPECIFICATION CHANGES

TSTF Line Item	IP2 Disposition	IP3 Disposition
A. TSTF-258, Rev 4; "Changes to Section 5.0, Administrative Controls" NRC approved June 29, 1999 Markup on STS Rev 1, incorporated in STS Rev 2		
1. STS Section 5.2.2; Unit Staff	Previously approved in ITS conversion, except adoption of 5.2.2.f is proposed in this LAR. The requirement for coverage during Core Alteration is also deleted. (Markup page 5.2-2)	Adoption proposed in this LAR. (Markup pages 5.0-3, and 5.0-4)
2. STS Section 5.3; Unit Staff Qualif.	Previously approved in ITS conversion.	Adoption proposed in this LAR. (Markup page 5.0-5)
3. STS Section 5.5.4; Radioactive Effluent Controls Program	(IP2 ITS Section 5.5.3) Previously approved in ITS conversion, except adoption of 5.5.4.b is proposed in this LAR. (Markup page 5.5-3)	Limits consistent with TSTF-258 were approved in Feb 2000, Amendment 199. Changes are proposed in this LAR to match the TSTF wording for 5.5.3.g and 5.5.3.j. Also adopting statement regarding surveillance frequency. (Markup pages 5.0-10 and 5.0-11)
4. STS Section 5.6.4; Monthly Operating Reports	N/A; This section has been eliminated from IP2 / IP3 Technical Specifications by Amendments 242 / 227, respectively.	
5. STS Section 5.7; High Radiation Area	Adoption proposed in this LAR. (New Section for IP2)	Adoption proposed in this LAR. (Markup pages 5.0-37 and 5.0-38)
B. TSTF-308, Rev 1; "Determination of Cumulative and Projected Dose Contributions in RECP" NRC approved July 6, 2000 Markup on STS Rev 1, incorporated in STS Rev 2		
1. STS Section 5.5.4; Radioactive Effluent Controls Program	Previously approved in ITS conversion.	Adoption proposed in this LAR. (Markup page 5.0-10)

TABLE ONE (Page 2 of 2)
DESCRIPTION OF PROPOSED TECHNICAL SPECIFICATION CHANGES

C.	Other Proposed Changes
1. Section 1.1; DEI Definition (IP2 only)	Delete 'I-130' consistent with STS and IP3 definition. (IP2 Markup page 1.1-2)
2. Section 5.5.3; Radioactive Effluent Controls Program (IP2 only)	Revise the following sections to adopt STS wording of limits: • 5.5.3.d (public dose limit from liquid effluents) • 5.5.3.f (capability and use of effluent treatment systems) • 5.5.3.h (noble gases in gaseous effluents) • 5.5.3.i (particulate radionuclides in gaseous effluents) • 5.5.3.j (releases from uranium fuel cycle sources) (IP2 Markup pages 5.5-3, 5.5-4, and 5.5-5)
3. Section 5.5.10 / .11 Explosive Gas and Storage Tank Radioactivity Monitoring Program (IP2 and IP3)	Revise IP3 section to be consistent with STS and IP2 wording. Modify STS wording used in existing IP2 section and proposed new IP3 section regarding radioactivity limitation for liquid radwaste tanks, based on an extension of the intent of TSTF-258 changes to STS 5.5.4.b. (IP2 Markup page 5.5-11, Section 5.5.10) (IP3 Markup page 5.0-26, Section 5.5.11) (The associated STS Section is 5.5.12)
4. Section 5.5.4; Radioactive Effluent Controls Program (IP3 only)	Editorial changes to 5.5.4.g, to be consistent with STS and IP2: • Change 'mrems' to 'rem' • Change 'total body' to 'whole body' (IP3 Markup page 5.0.10)

3.0 BACKGROUND (continued)

of alternative methods for controlling access to high radiation areas. In 1995 NRC approved (Reference 2) alternate controls for IP2, based on Regulatory Position 2.4 of Regulatory Guide 8.38 (Reference 3). A license amendment was subsequently approved (Reference 4) to delete radiation area access controls from the IP2 technical specifications on the basis that these requirements are incorporated in the licensee's radiation protection program procedures.

NUREG 1431, Section 5.7 describes alternate requirements pursuant to 20.1601(c). The wording of Section 5.7 from Revision 1 of NUREG 1431 was adopted during the conversion to ITS for IP3 (Reference 5). The Section 5.7 wording was not adopted during the conversion to ITS for IP2, because of the 'current licensing basis' in effect at the time per Reference 4. The current wording of Section 5.7 in the STS (Revision 2 and 3 of NUREG 1431) is based on TSTF 258, Revision 4. The TSTF-258 version of Section 5.7 provides for the use of remote monitoring technology as an additional acceptable alternative to controlling access to radiation areas. This amendment request proposes to incorporate this latest version of Section 5.7 into the IP2 and IP3 technical specifications.

These new controls for access to high radiation areas will also be applicable to Indian Point 1 (IP1), however a License Amendment for IP1 is not required. Reference 4 approved elimination of Technical Specification sections 4.1.7 and 6.11 for IP1 and IP2, respectively regarding access to high radiation areas because these controls are provided for in the radiation protection program procedures. As stated in the NRC SE, "... the IP1 restricted areas are completely enclosed within the protected area for IP2 and the radiation protection function for both units is controlled and performed by a single organization." Consequently, the access controls for IP1 are governed by the approved controls in effect for IP2, and a separate license amendment is not required for those controls to be applicable to IP1.

Entergy is also proposing to modify the IP2 current licensing basis regarding advisory technical support on shift during Core Alterations (Specification 5.2.2.f). NRC Generic Letter 80-061 issued July 2, 1980 requested all PWR licensees to submit license amendments to incorporate TMI-2 Category A lessons learned into their plants technical specifications. One of the items involved establishing the Shift Technical Advisor (STA) position to augment minimum shift staffing. The model specifications provided with the generic letter specified STA coverage during Modes 1, 2, 3, and 4. The resulting license amendments approved by NRC for IP2 and IP3 were issued August 24, 1981 (Amendment 72) and October 7, 1981 (Amendment 38), respectively. The amendment for IP3 reflected coverage during Modes 1, 2, 3, and 4 however the amendment for IP2 included coverage during Core Alterations. Entergy is proposing to revise IP2 specification 5.2.2.f to provide the same coverage as approved for IP3, consistent with the model specification included in the generic letter.

TSTF-258 / IP3

Conversion to ITS for IP3 (Reference 5) was based on Revision 1 of NUREG-1431. Since TSTF-258 was not available until the later stages of the IP3 ITS development effort, that TSTF was not incorporated. This amendment request proposes to now adopt the approved TSTF for IP3 as summarized in Table One and detailed in the markup pages provided in Attachment 2.

B. TSTF-308

Since TSTF-308 was incorporated in Revision 2 of NUREG-1431, IP2 currently has the provisions of this TSTF, without exception. This TSTF was not available until the later stages of the IP3 ITS development effort and was not incorporated. This amendment request proposes to now adopt the approved TSTF for IP3.

C. Other Proposed Changes

1. Definition for Dose Equivalent I-131 (IP2)

The current definition of DOSE EQUIVALENT I-131 (DEI-131) for IP2 was established in License Amendment 241 (Reference 6). The definition was made to reflect assumptions and analyses related to the alternate source term (AST) dose assessment methodology. The definition was modeled after the Standard Technical Specification definition, with the exception that the isotope I-130 was included as one of the components in the mixture of isotopes used to calculate DEI-131. This isotope was included because it was identified as a dose contributor in the AST calculations for IP2. This same definition, for the same reason, was proposed by Entergy in a license amendment request for IP3 (Reference 7). In response to NRC questions, Entergy agreed (Reference 8) to remove I-130 from the definition. Therefore, the proposed change to remove I-130 from the definition for IP2 is being made to achieve consistency with NUREG-1431 and the definition approved for IP3.

2. Radioactive Effluent Controls Program (IP2)

Limitations and requirements regarding effluent concentrations and dose limits resulting from effluents are specified in 10 CFR 20 – Standards for Protection Against Radiation. The existing IP2 technical specification requirements for the Radioactive Effluent Controls Program were retained as 'current licensing basis' in the conversion to ITS for IP2 (Reference 9). The stated program controls maintained the current licensing basis and the justification for differences compared to the STS NUREG 1431 program controls was provided in Reference 9. The current licensing basis reflected certain limitations and requirements that pre-date the 'revised Part 20' that was published as a final rule in 1991, as allowed by 10 CFR 20.1008.

The comparable program controls for IP3, established through References 10 and 11, are based on the 'revised Part 20'. When the IP3 technical specifications were converted to ITS in February 2001, the program controls of STS NUREG 1431 were adopted.

The proposed changes to the IP2 technical specification section 5.5.3 adopt the IP3 and STS program controls to facilitate the use of a common effluent controls program for the two units located at the same site.

3. Explosive Gas and Storage Tank Radioactivity Monitoring Program (IP2 and IP3)

During the IP3 conversion to ITS, the following current licensing basis differences compared to NUREG 1431 were maintained:

- NUREG 1431 identifies Branch Technical Position ETSB 11-5 and Standard Review Plan Section 15.7.3 as reference documents for the methodology to be used for determining quantities of radioactivity in waste gas holdup tanks and liquid radwaste storage tanks, respectively. The IP3 ITS was approved with a reference to the facility off-site dose calculation manual (ODCM) instead of the above references.
- NUREG 1431 identifies the limit on radioactivity in waste gas holdup tanks in terms of dose (0.5 rem whole body). The IP3 ITS was approved with a limit based on curies (50,000 curies noble gas, Dose Equivalent Xe-133).

- NUREG 1431 identifies the limit on radioactivity in liquid radwaste tanks in terms of concentration values tied to 10 CFR 20. The IP3 ITS was approved with a limit based on curies (10 curies, excluding tritium and dissolved or entrained noble gases).

During the conversion to ITS for IP2 the wording of NUREG 1431 for this section was adopted. In order to support integration of plant procedures, programs, and practices for IP2 and IP3 operated as one site, this proposed change will adopt the NUREG 1431 wording for this section for IP3 also, with one exception described below.

STS 5.5.12.c (IP2 5.5.10.c and IP3 5.5.11.c) specifies limitations on the quantity of radioactivity contained in certain outdoor liquid radwaste tanks. The STS limitation, which was also adopted for IP2 during ITS conversion, is based on concentration values from Table 2 of 10 CFR 20, Appendix B. The licensing basis for IP3, which was maintained during conversion to ITS, is a limit of 10 curies which is derived from Section 4.4 of NUREG-0133 (Reference 12) and is a default value for temporary tanks. The STS limit was initially set prior to the 1991 rule change to 10 CFR 20, using the concentration values from Appendix B, Table II. As explained in TSTF-258 for the accepted revision of STS 5.5.12.c, the appropriate current wording based on the post-1991 version of 10 CFR 20 should be '10 times the concentration values of Appendix B, Table 2'. Therefore, this amendment request proposes to also apply that wording to the IP2 / IP3 versions of STS Section 5.5.12.c.

4.0 TECHNICAL ANALYSIS

The technical basis for these changes is addressed by the supporting information provided in the referenced TSTF Travelers (258 and 308) or in Section 3.0, Background for items classified as 'Other Proposed Changes'.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

Entergy Nuclear Operations, Inc. (Entergy) has evaluated the safety significance of the proposed changes to the Administrative Controls section of the Indian Point 2 (IP2) and Indian Point 3 (IP3) technical specifications and a proposed change to a definition for IP2. The proposed changes adopt wording based on the Standard Technical Specifications for Westinghouse plants (STS, NUREG-1431) and are being requested to facilitate the integration of administrative programs and common procedures for use at the two plants. The Administrative Controls Sections affected by the proposed changes include Unit Staff, Unit Qualifications, Radioactive Effluent Controls, Explosive Gas and Storage Tank Radioactivity Monitoring, and High Radiation Areas. These proposed changes have been evaluated according to the criteria of 10 CFR 50.92, "Issuance of Amendment". Entergy has determined that the subject changes do not involve a Significant Hazards Consideration as discussed below:

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

   Response: No

   The proposed changes are administrative in nature and have no affect on accident scenarios previously evaluated. Affected sections include Unit Staff requirements, the Radioactive Effluent Controls Program (RECP), and High Radiation Areas. In addition, a definition is being revised for IP2. The proposed changes will result in consistent wording for the affected sections in the Indian Point 2 and Indian Point 3 Technical Specifications, based on wording used in the latest version of the Standard Technical Specifications This will facilitate the implementation of common programs and administrative procedures for the Indian Point site. The proposed changes do not affect initiating events for accidents previously evaluated and do not affect modify plants systems or procedures used mitigate the progression or outcome of those accident scenarios.

   Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated?

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 changes do not involve the installation of new plant equipment or modification of existing plant equipment. No system or component setpoints are being changed and there are no changes being proposed for the way that the plant is operated. There are no new accident initiators or equipment failure modes resulting from the proposed changes. The proposed changes are

administrative in nature and support the implementation of common programs and administrative procedures for the two nuclear units located at the same site.

Therefore, the proposed changes do 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 changes revise a definition and the description of certain administrative control programs. There are no changes proposed to equipment operability requirements, setpoints, or limiting parameters specified in the plant Technical Specifications.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, Entergy Nuclear Operations, Inc. concludes that the proposed amendments to the Indian Point 2 and Indian Point 3 Technical Specifications presents no significant hazards consideration under the standards set forth in 10 CFR 50.92 (c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements / Criteria

A. TSTF-258
B. TSTF-308

The regulatory basis for these changes is addressed by the supporting information provided in the referenced TSTF Travelers.

C. Other Proposed Changes

1. Definition for Dose Equivalent I-131 (IP2)

General Design Criterion 19 (Control Room) and 10 CFR 50.67 (Accident Source Term) are regulatory requirements pertaining to the Technical Specification definition for DEI-131. GDC 19 requires, in part, that doses to control room personnel under hypothetical accident conditions be limited to 5 rem whole body, or for licensees using alternative source term per 10 CFR 50.67, the limit is 5 rem Total Effective Dose Equivalent as defined in 10 CFR 50.2. IP2 and IP3 are licensed using alternate source term so that the Technical Specification definition for DEI-131 is to be based on the thyroid dose conversion factors applicable to the dose analysis methodology. The proposed deletion of I-130 from the isotope mixture included in the definition of DEI-131 is consistent with the Standard Technical Specification definition of DEI-131. The specified regulatory criteria will continue to be met for IP2 with the use the STS definition of DEI-131.

2. Radioactive Effluent Controls Program (IP2)

10 CFR 20, Subpart D (Standards for Protection Against Radiation, Radiation Dose Limits for Individual Members of the Public) provides for limits on concentrations of gaseous and liquid effluents at the boundary of the unrestricted area. The current licensing basis for the IP2 effluent controls program uses the version of 10 CFR 20 that was in effect prior to the 1991 rule change, as allowed by 10 CFR 20.1008. The proposed amendment will adopt the current version of the Standard Technical Specifications which implements the 1991 rule change to 10 CFR 20. Therefore this regulatory criterion will continue to be met by the proposed license amendment.

General Design Criteria 60 (Control of releases of radioactive materials to the environment) and 64 (Monitoring Radioactive Releases) are also relevant to Technical Specification 5.5.3. Compliance to General Design Criteria applicable to Indian Point 2 is discussed in the Final Safety Analysis Report, Section 1.3 and in a study (Reference 13) performed in response to NRC Order dated February 11, 1980. The proposed changes to Technical Specification 5.5.3 do not alter the method or degree of compliance with these GDCs.

3 Explosive Gas and Storage Tank Radioactivity Monitoring Program (IP2 and IP3)

The regulatory basis for the proposed change to IP3 Section 5.5.11 is that it adopts the wording of NUREG 1431 with one exception. The regulatory basis for the exception that is being requested for IP2 and IP3 is the same as that which applies to the changes to STS 5.5.4.b supported by TSTF-258.

4. Editorial Change (IP3)

IP3 Specification 5.5.4.g uses the term 'total body' when referring to site boundary dose rate limits for gaseous effluents. The term is being changed to 'whole body' to be consistent with the *equivalent* STS and IP3 Specifications (5.5.4.g and 5.5.3.g, respectively). This does not result in any change to the specified dose limit. In addition, the term 'mrems/yr' is being corrected to read 'mrem/yr'.

5.3 Environmental Considerations

The proposed changes to the IP2 and IP3 Technical Specifications do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 PRECEDENCE

Proposed changes are consistent with the current version of the Standard Technical Specifications, NUREG 1431, which include TSTF-258 and 308. The proposed extension of TSTF-258 to the radioactivity limit in liquid radwaste tanks was previously approved in Reference 14.

7.0 REFERENCES

1. NRC letter to Entergy, dated November 21, 2003; "Indian Point Nuclear Generating Unit No. 2 – Amendment [238] RE: Conversion to Improved Technical Specifications"

2. NRC letter to Con Edison, dated May 16, 1995; "Alternate High Radiation Area Controls at Indian Point 2 (TAC M92070).

3. NRC Regulatory Guide 8.38; "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," dated June 1993.

4. NRC letter to Entergy, dated October 10, 2001: "Indian Point Units 1 and 2 Amendments [51 / 221] RE: High Radiation Area Controls".

5. NRC letter to Entergy, dated February 27, 2001; "Indian Point Nuclear Generating Unit No. 3 – Amendment [205] RE: Conversion to Improved Technical Specifications"

6. NRC letter to Entergy, dated October 27, 2004; "Indian Point Nuclear Generating Unit No. 2 – Issuance of Amendment [241] RE: 3.26 Percent Power Uprate (TAC MC1865).

7. Entergy letter (NL-04-068) to NRC, dated June 2, 2004; "Proposed Change to Technical Specifications Regarding Full Scope Adoption of Alternate Source Term"

8. Entergy letter (NL-05-036) to NRC, dated March 14, 2005; "Additional Information Regarding Indian Point 3 License Amendment Request Alternate Source Term"

9. Entergy letter (NL-02-016) to NRC, dated March 26, 2002; "License Amendment Request – Conversion to Improved Standard Technical Specifications" (for IP2).

10. New York Power Authority letter (IPN-98-018) to NRC, dated February 19, 1998; "Proposed Changes to [IP3] Technical Specifications Incorporating Recommendations of Generic Letter 89-01 and Draft Part 20 Generic Letter"

11. NRC letter to New York Power Authority, dated February 7, 2000; "Issuance of Amendment [199] for Indian Point Nuclear Generating Unit No. 3 RE: Radioactive Effluent Technical Specifications (TAC MA6225)"

12. NUREG-0133, "Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants," dated October 1978.

13. Consolidated Edison letter to NRC dated August 11, 1980 regarding response to NRC Order of February 11, 1980.

14. NRC letter to Entergy, dated July 3, 2003; "James A. FitzPatrick Nuclear Power Plant Amendment [274] RE: Conversion to Improved Technical Specifications"

ATTACHMENT 2 TO NL-05-137

MARKUP OF TECHNICAL SPECIFICATION PAGES

FOR PROPOSED CHANGES REGARDING

ADMINISTRATIVE CONTROLS

Bold, italics for added text ~~Strikeout~~ for deleted text

AFFECTED PAGES (IP2)

1.1-2
5.2-2
5.5-3
5.5-4
5.5-5
5.5-11
5.7-1 to -4 (new pages for new section 5.7)

AFFECTED PAGES (IP3)

5.0-3
5.0-4
5.0-5
5.0-10
5.0-11
5.0-26
5.0-37 to -38 (replace with new pages)

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNITS NO. 2 and 3
DOCKET NO. 50-247 and 50-286

1.1 Definitions

CHANNEL OPERATIONAL TEST (COT)	A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY of all devices in the channel required for channel OPERABILITY. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints required for channel OPERABILITY such that the setpoints are within the necessary range and accuracy. The COT may be performed by means of any series of sequential, overlapping, or total channel steps.
CORE ALTERATION	CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude *completion of movement of a component to a safe position.*
CORE OPERATING LIMITS REPORT (COLR)	The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.
DOSE EQUIVALENT I-131	DOSE EQUIVALENT I-131 shall be that amount of I-131 (Curies) that alone would produce the same committed effective dose equivalent (CEDE) dose as the quantity and isotopic mixture of ~~I-130,~~ I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table 2.1 of EPA Federal Guidance Report No. 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," 1988.
$\overline{E}$ - AVERAGE DISINTEGRATION ENERGY	$\overline{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives > 30 minutes, making up at least 95% of the total noniodine activity in the coolant.

Proposed Change C.1
STS - NUREG 1431

5.2 Organization

5.2.2 Unit Staff (continued)

b. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

c. A radiation protection technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

d. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety related functions (e.g., licensed Senior Reactor Operators (SROs), licensed Reactor Operators (ROs), health physicists, auxiliary operators, and key maintenance personnel).

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the above guidelines shall be authorized in advance by the plant manager or the plant manager's designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

e. The operations manager or assistant operations manager shall hold an SRO license.

f. ~~A Watch Engineer~~ ***An individual*** shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. ~~The Watch Engineer~~ ***This*** position must be manned only when in MODES 1, 2, 3, ~~and~~ ***or*** 4 ~~and during CORE ALTERATIONS~~.

Proposed Change A.1 TSTF-258 and modify CLB from Amend 72.

NO CHANGES THIS PAGE --- FOR INFORMATION ONLY

5.5 Programs and Manuals

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include:

a. Residual Heat Removal System (RHR);

b. Chemical and Volume Control System (CVCS);

c. Safety Injection System (SIS);

d. Primary Sampling System (PSS) / Post Accident Sampling System (PASS) (until such time that a modification eliminates the PASS as a potential leakage path);

e. Post Accident Containment Air Sampling System (PACAS) (until such time that a modification eliminates the PASS as a potential leakage path);

f. Post Accident Containment Vent System (PACVS);

g. Gaseous Waste Disposal System (WDS); and

h. Secondary Boiler Blowdown Purification System (SBBPS) High Pressure Test.

The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements and

b. Integrated leak test requirements for each system at least once per 24 months.

The provisions of SR 3.0.2 are applicable.

5.5.3 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

5.6 Programs and Manuals

5.5.3 Radioactive Effluent Controls Program (continued)

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ~~concentrations specified in 10 CFR Part 20, Appendix B, Table II, Column 2, for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2×10^{-4} microcuries/ml.~~ ***ten times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 – 20.2402,***

Proposed Change A.3
TSTF-258 (insert C)

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM,

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, ~~such that:~~ ***conforming to 10 CFR 50, Appendix I,***

Proposed Change C.2
STS - NUREG 1431

~~1. The dose or dose commitment during any calendar quarter is less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ, and~~

~~2. The dose or dose commitment during any calendar year is less than or equal to 3 mrem to the total body and to less than or equal to 10 mrem to any organ.~~

e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days,

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed ~~the following:~~ ***2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I,***

Proposed Change C.2
STS - NUREG 1431

~~1. For liquid effluent treatment systems, projected dose due to liquid effluent releases from each reactor unit would exceed 0.06 mrem to the total body or 0.2 mrem to any organ, and~~

5.7 Programs and Manuals

5.5.3 Radioactive Effluent Controls Program (continued)

Continued from prior page

~~2. For gaseous effluent treatment systems, projected dose due to gaseous effluent releases from each reactor unit would exceed 0.2 mrem for gamma radiation and 0.4 mrem for beta radiation, and~~

~~3. For ventilation exhaust treatment systems, projected dose due to gaseous effluent releases from each reactor unit would exceed 0.3 mrem to any organ.~~

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:

1. For noble gases: a dose rate ≤ 500 mrem/yr to the whole body and a dose rate ≤ 3000 mrem/yr to the skin and

2. For iodine-131, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: a dose rate ≤ 1500 mrem/yr to any organ,

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, ~~such that:~~ ***conforming to 10 CFR 50, Appendix I,***

Proposed Change C.2 STS - NUREG 1431

~~1. During any calendar quarter, the dose is less than or equal to 5 mrem to the whole body from gamma radiation and less than or equal to 10 mrem to the skin from beta radiation, and~~

~~2. During any calendar year: the dose is less than or equal to 10 mrem to the whole body from gamma radiation and less than or equal to 20 mrem to the skin from beta radiation.~~

i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, ~~such that:~~ ***conforming to 10 CFR 50, Appendix I, and***

Proposed Change C.2 STS - NUREG 1431

~~1. During any calendar quarter, the dose is less than or equal to 7.5 mrem to any organ, and~~

~~2. During any calendar year: the dose is less than or equal to 15 mrem to any organ.~~

5.7 Programs and Manuals

5.5.3 Radioactive Effluent Controls Program (continued)

Proposed Change C.2
STS - NUREG 1431

j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, ~~to less than or equal to 25 mrem to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem.~~ ***conforming to 40 CFR 190.***

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

5.5.4 Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Section 4.1, cyclic and transient occurrences to ensure that components are maintained within the design limits.

5.5.5 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel using ultrasonic methods. The program shall include inspection frequencies and acceptance criteria. The inspection frequency will ensure that each reactor coolant pump flywheel was inspected during one of the four most recent refueling outages.

5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities	Required Frequencies for performing inservice testing activities
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

5.5 Programs and Manuals

5.5.10 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion),

b. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents, and

c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System is less than the amount that would result in concentrations ***that are 10 times the values*** ~~less than the limits~~ of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

Proposed Change C.3
Extension of TSTF-258

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

5.5.11 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established for the onsite DG fuel oil storage tanks and the DG reserve fuel oil storage tanks. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable ASTM Standards. The purpose of the program is to establish the following:

a. Verification of the acceptability of new fuel oil for use prior to addition to the DG fuel oil onsite storage tanks by determining that the fuel oil has:

1. Relative density within the limits of 0.83 to 0.89;

2. Kinematic viscosity within the limits of 1.8 to 5.8; and

INSERT NEW SECTION 5.7 PER TSTF-258, INSERT F

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation

a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area; or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

INSERT NEW SECTION 5.7 PER TSTF-258, INSERT F

5.7 High Radiation Area

5.7.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

INSERT NEW SECTION 5.7 PER TSTF-258, INSERT F

5.7 High Radiation Area

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation

a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:

1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

5.7 High Radiation Area

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 Meter from the Radiation Source or from any Surface Penetrated by the Radiation (continued)

3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. In those cases where options (2) and (3), above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4.

~~b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.~~

~~c.~~ ***b.*** Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.~~g~~ ***f*** for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

~~d.~~***c.*** A radiation protection technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

~~e.~~***d.*** Administrative procedures shall be developed and implemented to limit the working hours of ~~unit staff~~ ***personnel*** who perform safety related functions (e.g., licensed ~~SROs,~~ ***Senior Reactor Operators (SROs),*** licensed ROs, ***Reactor Operators (ROs),*** ~~radiation protection technician,~~ ***health physicists,*** auxiliary operators, and key maintenance personnel).

~~Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work an 8 or 12 hour day, nominal 40 hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:~~

(continued)

Proposed Change A.1, Continued from prior page

5.2.2 Unit Staff (continued)

~~1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;~~

~~2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;~~

~~3. A break of at least 8 hours should be allowed between work periods, shift turnover can be included in the break;~~

~~4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.~~

TSTF 258 INSERT A →

Any deviation from the above guidelines shall be authorized in advance by the plant manager or ~~his~~ ***the plant manager's*** designee, in accordance with approved administrative procedures, ~~or by higher levels of management, in accordance with established procedures~~ and with documentation of the basis for granting the deviation.

~~Controls shall be included in the procedures such that individual overtime shall be reviewed periodically by the plant manager or his designee to ensure that excessive hours have not been assigned.~~ Routine deviation from the ~~above~~ ***working hour*** guidelines ~~is not~~ ***shall not be*** authorized.

TSTF 258 INSERT G →

~~f.~~***e.*** The operations manager or assistant operations manager shall hold an SRO license.

~~g.~~ ***f.*** ~~The Shift Technical Advisor (STA)~~ ***An individual*** shall provide advisory technical support to the ~~Shift Supervisor (SS)~~ ***unit operations shift crew*** in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. ~~In addition, the STA~~ ***This individual*** shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. ~~The STA~~ ***This*** position must be manned in Mode 1, 2, 3 or 4 only.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the following:

a. The radiation protection manager shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975; and

b. The operations manager shall meet or exceed the minimum qualifications of ANSI N18.1-1971 except for the SRO license requirement which shall be in accordance with Technical Specification 5.2.2.~~f.~~ *e.*

Proposed Change A.2 TSTF-258

TSTF 258 INSERT B →

TSTF 258 INSERT A

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

TSTF 258 INSERT B

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed reactor operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

TSTF 258 INSERT G

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

NO CHANGES THIS PAGE - FOR INFORMATION ONLY

5.5 Programs and Manuals

~~5.5.3 NOT USED~~

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 times the concentration values in 10 CFR 20, Appendix B, Table 2, Column 2;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

(continued)

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative ~~and projected~~ dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. ***Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days***;

Proposed Change B.1 TSTF 308

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents ***from the site*** to areas ***at or*** beyond the site boundary shall be limited to the following:

Proposed Change A.3 TSTF 258

a. For noble gases: Less than or equal to a dose rate of 500 mrem~~s~~/yr to the ~~total~~ ***whole*** body and less than or equal to a dose rate of 3000 mrem~~s~~/yr to the skin, and

Proposed Change C.4

Editorial

b. For iodine-131, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to dose rate of 1500 mrem~~s~~/yr to any organ.

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

(continued)

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

j. Limitations on the annual dose or dose commitment to any member of the public , ***beyond the site boundary*** due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

Proposed Change A.3 TSTF 258

TSTF 258 INSERT E →

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section 4.1.5, cyclic and transient occurrences to ensure that components are maintained within the design limits.

5.5.6 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel. The program shall include inspection frequencies and acceptance criteria. The inspection frequency will ensure that each reactor coolant pump flywheel is surface and volumetrically inspected at 20-year intervals.

TSTF 258 INSERT E

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluents Controls Program surveillance frequency

(continued)

5.5 Programs and Manuals

5.5.11 Explosive Gas and Storage Tank Radioactivity Monitoring Program

~~This program provides controls for potentially explosive gas mixtures contained in the Waste Gas Holdup System, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The quantities of radioactivity in gas and liquid radwaste storage tanks shall be determined in accordance with methodology and parameters specified in the ODCM.~~

Insert X →

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);

b. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank shall be limited to less than ~~or equal to 50,000 curies noble gases (considered as DOSE EQUIVALENT Xe-133); and~~

Insert Y →

c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System is less than ~~or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.~~

Insert Z →

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

Proposed Change C.3 STS - NUREG 1431

INSERTS FOR SECTION 5.5.11, page 5.0-26

Insert X

This program provides controls for potentially explosive gas mixtures contained in the Waste Gas Holdup System, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure." The liquid radwaste quantities shall be determined in accordance with Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures."

Insert Y

the amount that would result in a whole body exposure of $\geq$ 0.5 rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents; and

Insert Z

Proposed Change C.3
Extension of TSTF-258

the amount that would result in concentrations ***that are 10 times the values*** ~~less than the limits~~ of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply beyond the site boundary, in the event of an uncontrolled release of the tanks' contents.

REPLACE EXISTING SECTION 5.7 WITH TSTF 258 INSERT F
(SEE IP2 MARKUP PAGE FOR WORDING OF NEW SECTION)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technicians) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates < 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.

c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the radiation protection manager in the RWP.

(continued)

REPLACE EXISTING SECTION 5.7 WITH TSTF 258 INSERT F
(SEE IP2 MARKUP PAGE FOR WORDING OF NEW SECTION)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the shift supervisor on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

5.7.3 For individual high radiation areas with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.