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United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS
RELOCATION OF MOVABLE INCORE DETECTORS AND RADIOACTIVE
GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2
FACILITY OPERATING LICENSES DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311**

In accordance with the requirements of 10 CFR 50.90, PSEG Nuclear LLC (PSEG) hereby transmits a request for amendment of the Technical Specifications (TS) for Salem Generating Station, Unit Nos. 1 and 2. Pursuant to the requirements of 10 CFR 50.91(b)(1), a copy of this request for amendment has been sent to the State of New Jersey.

The proposed changes involve TS 3/4.3.3.2, "Movable Incore Detectors," TS 3/4.3.3.9, "Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation," and TS 3/4.11.2.5, "Explosive Gas Mixture." TS 3/4.3.3.2 and TS 3/4.3.3.9 are proposed to be relocated to the Salem Generating Station Updated Final Safety Analysis Report (UFSAR). A change to TS 3/4.11.2.5 is proposed to reflect the proposed relocation of TS 3/4.3.3.9. These changes are proposed as line-item TS improvements consistent with guidance in NRC Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation." The proposed relocation of TS 3/4.3.3.2 and TS 3/4.3.3.9 from the TS to the UFSAR is also consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants." As a result of the proposed changes, subsequent revisions to Movable Incore Detectors and Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation may be processed in accordance with 10 CFR 50.59 as opposed to 10 CFR 50.90, which minimizes resource demands upon PSEG and the NRC.

Attachment 1 provides an evaluation of the proposed changes. Attachment 2 provides the existing TS pages marked-up to show the proposed changes. For your information, Attachment 3 provides the existing TS Bases pages marked-up to reflect the associated changes to the TS.

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PSEG does not have specific schedule needs for the proposed changes and processing can be pursued in accordance with the normal NRC review schedule for this type of request. PSEG requests implementation within 60 days of receipt of the approved amendment.

If you have any questions concerning this request, please contact Mr. Paul Duke at (856) 339-1466.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on

6/30/06
(Date)

Sincerely,



Thomas P. Joyce
Site Vice President
Salem Generating Station

Attachments (3)

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**SALEM GENERATING STATION – UNIT 1 AND UNIT 2
FACILITY OPERATING LICENSES NOS. DPR-70 AND DPR-75
DOCKET NO. 50-272 AND 50-311**

**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS
RELOCATION OF MOVABLE INCORE DETECTORS AND RADIOACTIVE
GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION**

Table of Contents

1.	DESCRIPTION	1
2.	PROPOSED CHANGE	1
3.	BACKGROUND	1
4.	TECHNICAL ANALYSIS	2
5.	REGULATORY SAFETY ANALYSIS.....	3
5.1	No Significant Hazards Consideration.....	3
5.2	Applicable Regulatory Requirements/Criteria.....	4
6.	ENVIRONMENTAL CONSIDERATION	5
7.	REFERENCES	6

1. DESCRIPTION

The purpose of this amendment is to relocate Salem Generating Station (Salem) Unit 1 and Salem Unit 2 Technical Specification (TS) 3/4.3.3.2, "Movable Incore Detectors," and TS 3/4.3.3.9, "Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation," in accordance with guidance in NRC Generic Letter (GL) 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation." The proposed relocation of TS 3/4.3.3.2 and TS 3/4.3.3.9 from the TS to the Salem Updated Final Safety Analysis Report (UFSAR) is also consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants."

2. PROPOSED CHANGE

The following changes are proposed:

- Relocate TS 3/4.3.3.2 from the TS to the Salem UFSAR.
- Relocate TS 3/4.3.3.9 from the TS to the Salem UFSAR.
- Revise TS Surveillance Requirement (SR) 4.11.2.5 to reflect the relocation of TS Table 3.3-13 from the TS to the Salem UFSAR and to add Table 3.3-13 Action on grab sample requirement.

It is also proposed that the TS Index and Bases sections be revised to reflect these changes. Administrative changes to renumber TS pages to reflect the relocation of TS 3/4.3.3.2 and TS 3/4.3.3.9 from the TS to the UFSAR are proposed, as well as minor format changes to improve consistency.

3. BACKGROUND

In 10 CFR 50.36, "Technical Specifications," the NRC established the regulatory requirements related to the content of TS. The NRC developed criteria to determine which of the design conditions and associated surveillances should be located in the TS as limiting conditions for operation.

On December 15, 1995, the NRC issued GL 95-10 to provide guidance to licensees regarding the relocation of certain TS instrumentation requirements to licensee-controlled documents or programs. The intent of GL 95-10 is to reduce resources spent by licensees by allowing them to remove these requirements from the TS and change these requirements in the future without amending their licenses. The relocation of these requirements will also potentially reduce NRC staff time by decreasing the number of future reviews for plant-specific changes to the affected TS. The relocation of these requirements is based on the NRC staff's conclusion that these instrumentation requirements listed in GL 95-10 are not required under 10 CFR 50.36 to be included in the TS.

The proposed relocation of these instrumentation requirements from the TS is also consistent with the NRC's guidance document NUREG-1431, regarding TS content. In developing NUREG-1431, the NRC staff also concluded these requirements do not meet the 10 CFR 50.36 criteria for inclusion in TS. Therefore, these instrumentation requirements are not in NUREG-1431.

4. TECHNICAL ANALYSIS

The Movable Incore Detectors are used for periodic surveillance of the power distribution, and calibration of the excore detectors, but are not assumed in any design basis accident analysis and do not mitigate an accident. The radioactive gaseous effluent oxygen monitoring instrumentation is provided to monitor the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The radioactive gaseous effluent oxygen monitoring instrumentation requirements address detection of possible precursors to the failure of the waste gas system, but do not prevent or mitigate design basis accidents or transients which assume a failure of, or present a challenge to, a fission product barrier. Acceptable concentrations of explosive gases are actually controlled by another limiting condition for operation (i.e., Explosive Gas Mixture, TS 3/4.11.2.5).

GL 95-10 states that the requirements related to movable incore detectors and explosive gas monitoring instrumentation do not conform to the 10 CFR 50.36 criteria for inclusion in the TS. NUREG-1431 also reflects the staff position that these requirements do not meet the 10 CFR 50.36 criteria for inclusion in TS. The staff concluded that these provisions are not related to dominant contributors to plant risk. The Movable Incore Detectors and oxygen monitoring instrumentation are not used at Salem to meet any other requirements except those stated in GL 95-10, therefore the 10 CFR 50.36 criteria are not applicable to these devices.

Based on the guidance in GL 95-10, PSEG Nuclear LLC (PSEG) proposes relocating movable incore detectors and radioactive gaseous effluent oxygen monitoring instrumentation requirements to the Salem UFSAR. Subsequent changes to movable incore detectors and radioactive gaseous effluent oxygen monitoring instrumentation requirements will be controlled in accordance with 10 CFR 50.59, "Changes, tests and experiments." Submittal of revisions to the Salem UFSAR will be made in accordance with the requirements of 10 CFR 50.71(e).

TS SR 4.11.2.5 references TS Table 3.3-13, which PSEG proposes to relocate from the TS to the Salem UFSAR. Therefore, PSEG proposes to remove the reference to TS Table 3.3-13 from TS SR 4.11.2.5. In addition, the equivalent of Action 35 from Table 3.3-13 is also being added as a note to SR 4.11.2.5. This note allows continued operation of the waste gas system with inoperable monitoring equipment, providing grab samples are taken and sampled periodically (24 hours and 4 hours respectively).

5. REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

PSEG Nuclear LLC (PSEG) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment" 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 amendment would relocate Technical Specification (TS) 3/4.3.3.2, "Movable Incore Detectors," and TS 3/4.3.3.9 from the TS to the UFSAR. Movable Incore Detectors and Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation are not initiators to any accident previously evaluated. Consequently, the probability of an accident previously evaluated is not significantly increased. Movable Incore Detectors and Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation are not accident mitigating structures, systems, or components. No impact on the plant response to accidents will be created. Thus the consequences of accidents previously analyzed are unchanged between the existing TS requirements and the proposed changes.

The proposed revision to TS SR 4.11.2.5 is an administrative change to a reference necessitated by the proposed relocation of TS Table 3.3-13 from the TS to the UFSAR. The proposed revision to the TS Index, page renumbering, and minor format changes to improve consistency are also administrative changes necessitated by the proposed relocation of TS 3/4.3.3.2 and TS 3/4.3.3.9 from the TS to the UFSAR.

Therefore, the proposed changes do not involve a significant increase in the probability or radiological 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 create the possibility of a new or different kind of accident from any accident previously evaluated in the UFSAR.

No new accident scenarios, failure mechanisms, or limiting single failures are introduced as a result of the proposed changes. Specifically, no new hardware is being added to the plant as part of the proposed change, no existing equipment is being modified, and no significant changes in operations are being introduced.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No.

The proposed changes will not alter any assumptions, initial conditions, or results of any accident analyses. The Movable Incore Detectors and oxygen monitoring instrumentation will continue to perform as before. The proposed changes relocate TS 3/4.3.3.2 and TS 3/4.3.3.9 from the TS to the UFSAR consistent with the guidance in NRC Generic Letter 95-10 and 10 CFR 50.36, and make conforming administrative changes to the TS Index, page renumbering, and minor format changes to improve consistency and to TS SR 4.11.2.5 to reflect the relocation of TS 3/4.3.3.9 from the TS to the Salem UFSAR.

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

Based on the above, PSEG concludes that the proposed changes present 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

The following regulatory requirements are applicable:

10 CFR 50.36(c)(2)(ii) – A limiting condition for operation must be included in TS for any item meeting one or more of the following four criteria:

1. installed instrumentation that is used to detect, and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary;
2. a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that

either assumes the failure of or presents a challenge to the integrity of a fission product barrier;

3. a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and
4. a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Existing TS requirements that fall within or satisfy any of the criteria in 10 CFR 50.36 must be retained in the TS, while those TS requirements that do not fall within or satisfy these criteria may be relocated to other licensee controlled documents. Movable Incore Detectors and Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation requirements do not meet any of the criteria set out in 10 CFR 50.36 and may therefore be eliminated from TS.

In conclusion, based on the considerations discussed above:

- 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) Issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6. ENVIRONMENTAL CONSIDERATION

PSEG has determined the proposed amendment relates to changes in a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or relates to changes in an inspection or a surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact

statement or environmental assessment of the proposed change is not required.

7. REFERENCES

1. The NRC has approved a similar license amendment for South Texas Project, Units 1 and 2 when it issued Amendment Nos. 145 and 133 on December 17, 2002 (TAC Nos. MB3588 and MB3592)

TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES

Salem Unit 1 Affected Page List

Index Page IV

The following Technical Specifications for Facility Operating License DPR-70 are affected by this change request:

<u>Technical Specification</u>	<u>Page</u>
3/4.3.3.2	3/4 3-39 through 3/4 3-45
3/4.3.3.9	3/4 3-61 through 3/4 3-69
4.11.2.5	3/4 11-15

Salem Unit 2 Affected Page List

Index Page IV

The following Technical Specifications for Facility Operating License DPR-75 are affected by this change request:

<u>Technical Specification</u>	<u>Page</u>
3/4.3.3.2	3/4 3-41a and 3/4 3-42
3/4.3.3.9	3/4 3-56 through 3/4 3-64
4.11.2.5	3/4 11-15

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AXIAL FLUX DIFFERENCE	3/4 2-1
3/4.2.2 HEAT FLUX HOT CHANNEL FACTOR	3/4 2-5
3/4.2.3 NUCLEAR ENTHALPY HOT CHANNEL FACTOR	3/4 2-9
3/4.2.4 QUADRANT POWER TILT RATIO	3/4 2-11
3/4.2.5 DNB PARAMETERS	3/4 2-13
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION	3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION	3/4 3-14
3/4.3.3 MONITORING INSTRUMENTATION	
Radiation Monitoring Instrumentation	3/4 3-35
----- Movable In-core Detectors -----	3/4 3-39
Remote Shutdown Instrumentation	3/4 3-46
Accident Monitoring Instrumentation	3/4 3-53
Radioactive Liquid Effluent Monitoring Instrumentation	3/4 3-58
----- Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation -----	3/4 3-64
Power Distribution Monitoring System	3/4 3-70
3/4.3.4 DELETED	

INSTRUMENTATION

MOVABLE INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The movable incore detection system shall be OPERABLE with:

- a. At least 75% of the detector thimbles,
- b. A minimum of 2 detector thimbles per core quadrant, and
- c. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the movable incore detection system is used for:

- a. Recalibration of the excore neutron flux detection system,
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of $F_{\Delta H}^N$ and $F_0(Z)$

ACTION:

With the movable incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The movable incore detection system shall be demonstrated OPERABLE by normalizing each detector output to be used during its use when required for:

- a. Recalibration of the excore neutron flux detection system, or
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of $F_{\Delta H}^N$ and $F_0(Z)$

PAGES 3/4 3-40-39 THROUGH 3/4 3-45 ARE DELETED

SALEM - UNIT 1

3/4 3-40-39 through 3/4 3-45

Amendment No. 167

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INSTRUMENTATION

RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.9 The radioactive gaseous effluent oxygen monitoring instrumentation channels shown in Table 3.3-13 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.5 are not exceeded.

APPLICABILITY: As shown in Table 3.3-13

ACTION:

- a. With a radioactive gaseous effluent oxygen monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, declare the channel inoperable and take the ACTION shown in Table 3.3-13.
- b. With less than the minimum number of radioactive gaseous effluent oxygen monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-13. Exert best efforts to return the instrument to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a Special Report pursuant to Specification 6.9.2 to explain why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9 Each radioactive gaseous effluent oxygen monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-13.

TABLE 3.3-13

RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1. WASTE GAS HOLDUP SYSTEM			
a. Not Used			
b. Oxygen Monitor	1	**	35

TABLE NOTATION

ACTION 31 - Not Used

ACTION 32 - Not Used

ACTION 33 - Not Used

ACTION 34 - Not Used

ACTION 35 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of the waste gas holdup system may continue provided grab samples are collected at least once per 24 hours and analyzed within the following 4 hours.

ACTION 36 - Not Used

* Not Used.

** During waste gas holdup system operation.

TABLE 4.3-13

RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. WASTE GAS HOLDUP SYSTEM				
a. Not Used				
b. Oxygen Monitor	D	Q(4)	M	**

TABLE NOTATION

(1) Not Used

(2) Not Used

(3) Not Used

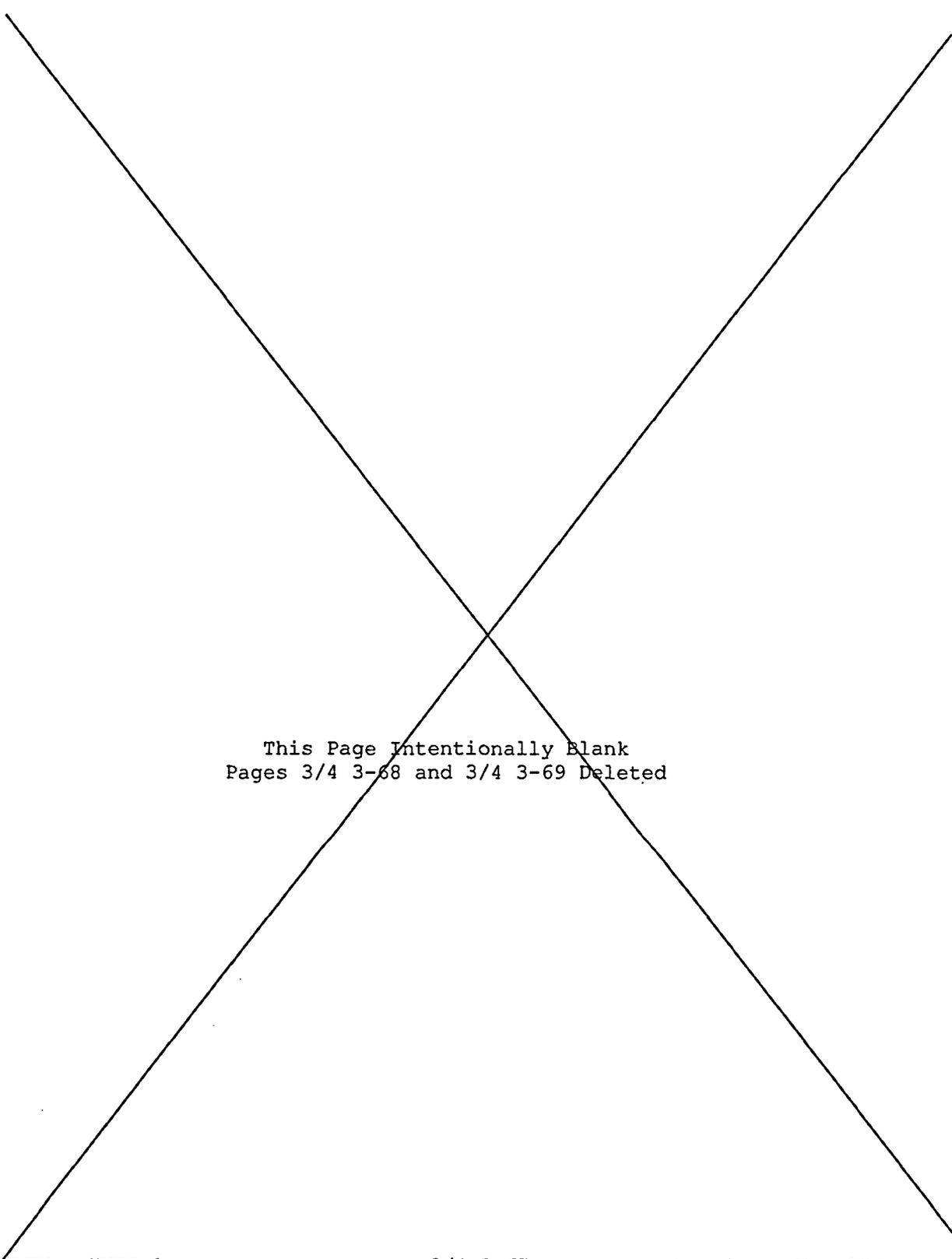
(4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent oxygen, balance nitrogen, and

2. Four volume percent oxygen, balance nitrogen.

* Not Used

** During waste gas holdup system operation.



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RADIOACTIVE EFFLUENTS

EXPLOSIVE GAS MIXTURE

LIMITING CONDITION FOR OPERATION

3.11.2.5 The concentration of oxygen in the waste gas holdup system shall be limited to less than or equal to 2% by volume.

APPLICABILITY: At all times. *

ACTION:

- a. With the concentration of oxygen in the waste gas holdup system greater than 2% by volume but less than or equal to 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.
- b. With the concentration of oxygen in the waste gas holdup system greater than 4% by volume immediately suspend all additions of waste gases to the system and reduce the concentration of oxygen to less than or equal to 2% by volume without delay.
- c. The provision of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.5 The concentration of oxygen in the waste gas holdup system shall be determined to be within the above limits by continuously** monitoring the waste gases in the waste gas holdup system with the oxygen monitor ~~required OPERABLE by Table 3.3-13~~. If hydrogen is not measured, the concentration of hydrogen shall be assumed to exceed 4% by volume.

* Not applicable to portions of the Waste Gas System removed from service for maintenance provided that, the portions removed for maintenance are isolated, and purged of hydrogen to less than 4% by volume.

** Note: If the oxygen monitoring instrumentation is inoperable, operation of the waste gas holdup system may continue provided grab samples are collected at least once per 24 hours and analyzed within the following 4 hours.

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AXIAL FLUX DIFFERENCE	3/4 2-1
3/4.2.2 HEAT FLUX HOT CHANNEL FACTOR	3/4 2-5
3/4.2.3 NUCLEAR ENTHALPY HOT CHANNEL FACTOR	3/4 2-9
3/4.2.4 QUADRANT POWER TILT RATIO	3/4 2-13
3/4.2.5 DNB PARAMETERS	3/4 2-16
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION	3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION	3/4 3-14
3/4.3.3 MONITORING INSTRUMENTATION	
Radiation Monitoring Instrumentation	3/4 3-38
Movable Incore Detectors	3/4 3-42
Remote Shutdown Instrumentation	3/4 3-43
Accident Monitoring Instrumentation	3/4 3-50
Radioactive Liquid Effluent Monitoring Instrumentation	3/4 3-53
Radioactive Gaseous Effluent Oxygen Monitoring Instrumentation	3/4 3-59
Power Distribution Monitoring System	3/4 3-65
3/4.3.4 DELETED	

SALEM - UNIT 2

IV

Amendment No. 215

TABLE 4.3-3 (Continued)
RADIATION MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNELS CHECKS	SOURCE CHECKS	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
2. PROCESS MONITORS					
b. Noble Gas Effluent Monitors					
1) Medium Range Auxiliary Building Exhaust System (Plant Vent)	S	M	R	Q	1, 2, 3 & 4
2) High Range Auxiliary Building Exhaust System (Plant Vent)	S	M	R	Q	1, 2, 3 & 4
3) Main Steamline Discharge (Safety Valves and Atmospheric Dumps)	S	M	R	Q	1, 2, 3 & 4
4) Condenser Exh. Sys.	S	M	R	Q	1, 2, 3 & 4
3. CONTROL ROOM					
a. Air Intake - Radiation Level	S	M	R	Q	**

** ALL MODES and during movement of irradiated fuel assemblies and during CORE ALTERATIONS.

INSTRUMENTATION

MOVABLE INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The movable incore detection system shall be OPERABLE with:

- a. At least 75%* of the detector thimbles,
- b. A minimum of 2 detector thimbles per core quadrant, and
- c. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the movable incore detection system is used for:

- a. Recalibration of the excore neutron flux detection system,
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of $F_{\Delta H}^N$, $F_Q(Z)$ and F_{xy} .

ACTION:

With the movable incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The movable incore detection system shall be demonstrated OPERABLE at least once per 24 hours by normalizing each detector output to be used during its use when required for:

- a. Recalibration of the excore neutron flux detection system, or
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of $F_{\Delta H}^N$, $F_Q(Z)$ and F_{xy} .

*For Cycle 11, when the number of available movable detector thimbles is greater than 50% but less than 75% of the total, the movable incore system can be considered OPERABLE provided the $F_{\Delta H}^N$, $F_Q(z)$ and F_{xy} uncertainties are appropriately adjusted. Also there should be a minimum of four thimbles available per quadrant, where quadrant includes both horizontal-vertical and diagonally-bounded quadrants (eight individual quadrants in total).

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INSTRUMENTATION

RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.9 The radioactive gaseous effluent oxygen monitoring instrumentation channels shown in Table 3.3-13 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.5 are not exceeded.

APPLICABILITY: As shown in Table 3.3-13

ACTION:

- a. With a radioactive gaseous effluent oxygen monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, declare the channel inoperable and take the action shown in Table 3.3-13.
- b. With less than the minimum number of radioactive gaseous effluent oxygen monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-13. Exert best efforts to return the instrument to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a special report pursuant to Specification 6.9.2 to explain why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4, are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION, AND CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-13.

TABLE 3.3-13
RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
1. WASTE GAS HOLDUP SYSTEM			
a. Not Used			
b. Oxygen Monitor	1	**	35

TABLE NOTATION

ACTION 31 - Not Used

ACTION 32 - Not Used

ACTION 33 - Not Used

ACTION 34 - Not Used

ACTION 35 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of the waste gas holdup system may continue provided grab samples are collected at least once per 24 hours and analyzed within the following 4 hours.

ACTION 36 - Not Used

* Not Used

** During waste gas holdup system operation.

TABLE 4.3-13
RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. WASTE GAS HOLDUP SYSTEM				
a. Not Used				
b. Oxygen Monitor	D	Q(4)	M	**

TABLE NOTATION

- (1) Not Used
- (2) Not Used
- (3) Not Used
- (4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
 - 1. One volume percent oxygen, balance nitrogen, and
 - 2. Four volume percent oxygen, balance nitrogen.

* Not Used
 ** During waste gas holdup system operation.

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RADIOACTIVE EFFLUENTS

EXPLOSIVE GAS MIXTURE

LIMITING CONDITION FOR OPERATION

3.11.2.5 The concentration of oxygen in the waste gas holdup system shall be limited to less than or equal to 2% by volume.

APPLICABILITY: At all times. *

ACTION:

- a. With the concentration of oxygen in the waste gas holdup system greater than 2% by volume but less than or equal to 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.
- b. With the concentration of oxygen in the waste gas holdup system greater than 4% by volume immediately suspend all additions of waste gases to the system and reduce the concentration of oxygen to less than or equal to 2% by volume without delay.
- c. The provision of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.5 The concentration of oxygen in the waste gas holdup system shall be determined to be within the above limits by continuously** monitoring the waste gases in the waste gas holdup system with the oxygen monitor ~~required~~ OPERABLE by Table 3.3-13. If hydrogen is not measured, the concentration of hydrogen shall be assumed to exceed 4% by volume.

* Not applicable to portions of the Waste Gas System removed from service for maintenance provided that, the portions removed for maintenance are isolated, and purged of hydrogen to less than 4% by volume.

** Note: If the oxygen monitoring instrumentation is inoperable, operation of the waste gas holdup system may continue provided grab samples are collected at least once per 24 hours and analyzed within the following 4 hours.

PROPOSED CHANGES TO TS BASES PAGES

The following Technical Specifications Bases for Salem Unit 1, Facility Operating License No. DPR-70, are affected by this change request:

Salem Unit 1

<u>Technical Specification</u>	<u>Page</u>
Bases 3/4.3.3	B 3/4 3-2a through B 3/4 3-3a

The following Technical Specifications Bases for Salem Unit 2, Facility Operating License No. DPR-75, are affected by this change request:

Salem Unit 2

<u>Technical Specification</u>	<u>Page</u>
Bases 3/4.3.3	B 3/4 3-3 and B 3/4 3-3a

INSTRUMENTATION
BASES

- (3) 1R41D is the setpoint channel; 1R41B is the measurement channel.
- (4) 1R41D is the setpoint channel; 1R41C is the measurement channel.
- (5) The new release rate channel 1R41D setpoint value of 2E4 uCi/sec is within the bounds of the concentration setpoint values listed in Table 3.3-6 (originally for 1R45) for normal and accident plant vent flow rates.

3/4.3.3.2 MOVABLE INCORE DETECTORS This Section Deleted

~~The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core. The OPERABILITY of this system is demonstrated by irradiating each detector used and normalizing its respective output. The operability requirements of the movable incore detector system for the purposes of calibration of the PDMS is specified in Specification 3.3.3.14.~~

~~For the purpose of measuring $F_q(Z)$ or F_{DH}^n , a full incore flux map or the PDMS is used. Quarter core flux maps, as defined in WCAP 8648, June 1976, may be used in recalibration of the excore neutron flux detection system, and full incore flux maps or symmetric incore thimbles may be used for monitoring the QUADRANT POWER TILT RATIO when one Power Range Channel is inoperable.~~

3/4.3.3.3

THIS SECTION DELETED

3/4.3.3.4

THIS SECTION DELETED

BASES

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

3/4.3.3.6 THIS SECTION DELETED

3/4.3.3.7 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the Recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975.

3/4.3.3.8 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The purpose of tank level indicating devices is to assure the detection and control of leaks that if not controlled could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS.

3/4.3.3.9 This Section Deleted

3/4.3.3.10 This Section Deleted

3/4.3.3.11 This Section Deleted

3/4.3.3.12 This Section Deleted

3/4.3.3.13 This Section Deleted

INSTRUMENTATION
BASES

~~3/4.3.3.9 RADIOACTIVE GASEOUS EFFLUENT OXYGEN MONITORING INSTRUMENTATION~~

~~The radioactive gaseous effluent oxygen monitoring instrumentation is provided to monitor the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60 and 63 of Appendix A to 10 CFR Part 50.~~

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INSTRUMENTATION
BASES

Immediate action(s), in accordance with the LCO Action Statements, means that the required action should be pursued without delay and in a controlled manner.

3/4.3.3.2 MOVABLE INCORE DETECTOR ~~This Section Deleted~~

~~The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core. The OPERABILITY of this system is demonstrated by irradiating each detector used and normalizing its respective output. The operability requirements of the movable incore detector system for the purposes of calibration of the PDMS is specified in Specification 3.3.3.14.~~

~~For the purpose of measuring $F_q(Z)$ or F_{core}^n , a full incore flux map or the PDMS is used. Quarter core flux maps, as defined in WCAP-8648, June 1976, may be used in recalibration of the excore neutron flux detection system, and full incore flux maps or symmetric incore thimbles may be used for monitoring the QUADRANT POWER TILT RATIO when one Power Range Channel is inoperable.~~

3/4.3.3.3

THIS SECTION DELETED

3/4.3.3.4

THIS SECTION DELETED

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of 10 CFR 50.

3/4.3.3.6

THIS SECTION DELETED

3/4.3.3.7 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the Recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

INSTRUMENTATION
BASES

3/4.3.3.8 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The purpose of tank level indicating devices is to assure the detection and control of leaks that if not controlled could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS.

3/4.3.3.9 This Section Deleted

3/4.3.3.10 This Section Deleted

3/4.3.3.11 This Section Deleted

3/4.3.3.12 This Section Deleted

3/4.3.3.13 This Section Deleted

~~3/4.3.3.9 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION~~

~~The radioactive gaseous effluent oxygen monitoring instrumentation is provided to monitor the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60 and 63 of Appendix A to 10 CFR Part 50.~~