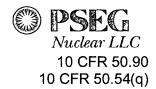
PSEG Nuclear LLC P.O. Box 236, Hancocks Bridge, NJ 08038-0236



NOV 3 0 2012

LR-N12-0289 LAR S12-04

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

Salem Generating Station – Unit 1 and Unit 2

Renewed Facility Operating License Nos. DPR-70 and DPR-75

NRC Docket Nos. 50-272 and 50-311

Subject:

License Amendment Request: Change to PSEG Nuclear LLC Emergency Plan to Remove the Salem Backup R45 Plant Vent Radiation Monitor Indications

Pursuant to 10 CFR 50.54(q) and 10 CFR 50.4(b)(5), PSEG Nuclear LLC (PSEG) hereby submits a proposed change to the PSEG Emergency Plan. As required by 10 CFR 50.54(q)(ii)(4), PSEG requests an amendment to the facility operating license listed above in accordance with 10 CFR 50.90. In accordance with 10 CFR 50.91(b)(1), a copy of this request for amendment has been sent to the State of New Jersey.

This Emergency Plan change requests the removal of the back up plant vent extended range noble gas radiation monitoring (R45) indication, recording, and alarm capability in the emergency response facilities. The R45 indicators have become obsolete and unreliable. The R45 is a backup to the R41 for plant vent intermediate and high range noble gas radiation monitoring indicators. The accident sampling function of the R45 will be maintained.

Affected sections of the Emergency Plan will be changed to reflect the removal of the back up plant vent radiation monitoring (R45) indication capability in the emergency response facilities upon approval of this request.

The proposed change has been reviewed considering the requirements of 10 CFR 50.54(q), the planning standards of 10 CFR 50.47(b), 10 CFR 50 Appendix E and the Emergency Plan. The review determined that removing the installed back up plant vent radiation monitoring (R45) indication capability would result in a potential 'reduction in effectiveness' of the Emergency Plan and therefore requires prior NRC review and approval. Radiological effluent backup indication capabilities provided by the R45 are not required to meet the emergency planning standards or Regulatory Guide 1.97. The R41 radioactive effluent monitoring meets



the required plant vent monitoring capabilities for emergency response (dose assessment and Emergency Action Level assessment).

No new regulatory commitments are established by this submittal.

Attachment 1 to this letter provides an evaluation supporting the proposed changes including the reason for the change, the regulatory basis for the proposed change and basis for concluding that the proposed change continues to meet the requirements of Appendix E and the planning standards of 10 CFR 50.47(b). Attachment 2 provides the mark up of the Emergency Plan pages reflecting the proposed changes. PSEG requests approval of the proposed change by November 30, 2013, with the amendment being implemented within 60 days of issuance.

If you have any questions or require additional information, please do not hesitate to contact Mr. Brian Thomas at (856) 339-2022.

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

Executed on ______(date)

Sincerely,

Robert C. Braun

Senior Vice President – Nuclear Operations

Attachments (2)

cc:

W. Dean, Regional Administrator - NRC Region I

J. Hughey, Project Manager - USNRC

NRC Senior Resident Inspector – Salem Unit 1 and Unit 2

P. Mulligan, Manager IV, NJBNE Commitment Coordinator – Salem

PSEG Commitment Coordinator – Corporate

LICENSE AMENDMENT REQUEST (LAR) S12-04 – Change to PSEG Nuclear LLC Emergency Plan to Remove the Salem Backup R45 Plant Vent Radiation Monitor Indications

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1.0 DESCRIPTION

This license amendment request (LAR S12-04) proposes changes to PSEG Nuclear LLC (PSEG) Emergency Plan in accordance with 10CFR50.54(q). PSEG proposes to remove the Salem Unit 1 and 2 redundant plant vent intermediate (medium) range and high range noble gas indicators, referred to as R45, from the Emergency Plan. The R45 monitors serve as backup to the R41 plant vent intermediate range and high range noble gas indicators. The accident sampling capability of the R45 will remain.

2.0 PROPOSED CHANGE

Remove references to the R45 plant vent intermediate range and high range noble gas indicators from Emergency Plan Section 6, Notification Methods – Response Organizations, Figure 6-5 and Section 10, Accident Assessment, Table 10-1 (See Attachment 2 for mark ups). Upon approval of the change to the Emergency Plan, the impacted implementing procedures will be revised accordingly.

3.0 BACKGROUND

As discussed in Section 2.1.8.b of Appendix A to the Salem Updated Final Safety Analysis (UFSAR), the R45 plant vent intermediate range and high range noble gas indicators were originally installed to comply with post-TMI noble gas monitoring extended range requirements outlined in NUREG-0578, TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations. NUREG-0578 Appendix A short term recommendation, *Increased Range of Radiation Monitors (Section 2.1.8.b)* regulatory position stated in part:

"The requirements associated with this recommendation should be considered as advanced implementation of certain requirements to be included in a revision to Regulatory Guide 1.97, 'Instrumentation to Follow the Course of an Accident,' which has already been initiated, and in other Regulatory Guides, which will be promulgated in the near-term.

- Noble gas effluent monitors shall be installed with an extended range designed to function during accident conditions as well as during normal operating conditions; multiple monitors are considered to be necessary to cover the ranges of interest.
 - a. Noble gas effluent monitors with an upper range of 10⁵ μCi/cc (Xe-133) are considered to be practical and should be installed in all operating plants.
 - b. Noble gas effluent monitoring shall be provided for the total range of concentration extending from a minimum of 10⁻⁷ μCi/cc (Xe-133). Multiple monitors are considered to be necessary to cover the ranges of interest. The range capacity of individual monitors shall overlap by a factor of ten.
- 2. Since iodine gaseous effluent monitors for the accident condition are not considered to be practical at this time, capability for effluent monitoring of radioiodines for the accident condition shall be provided with sampling conducted by adsorption on charcoal or other media, followed by onsite laboratory analysis."

Attachment 1 LR-N12-0289

The R45 radiation monitors were installed to provide a range of 10⁻³ to 10⁵ μCi/cc and accident sampling capability with the R41 normal range channel providing a range of 10⁻⁷ to 10⁻¹ μCi/cc.

In the middle to late 1990s, the R41 normal range noble gas indicator was replaced with a "wide range noble gas monitor" which included low, intermediate, and high range noble gas indicators, duplicating the R45 extended range indicators. The R41B (intermediate range) and R41C (high range) channels were then designated as the channels meeting the requirements of regulatory guide (RG) 1.97. The R45 intermediate and high range indicators were then declared as back-up noble gas indicators. When the modification was performed to replace the R41 channels, PSEG decided to retain the back-up R45 channels in the Emergency Plan. Over time, the R45 indicators and supporting equipment have become obsolete and unreliable. PSEG will be replacing the R45 sampling skid to maintain the ability to take accident samples from the plant vent but will be removing the redundant backup medium and high range noble gas indication channels.

4.0 TECHNICAL ANALYSIS

The Emergency Plan is developed using the guidance of NUREG-0654/FEMA-REP-1, Rev. 1 (November 1980), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." The following Section II, "Planning Standards and Evaluation Criteria," from NUREG-0654/FEMA-REP-1 Rev.1 are applicable to the Salem plant vent effluent radiation monitoring:

- H.5.b: Section H, 'Emergency Facilities and Equipment,' Item 5, "Each licensee shall
 identify and establish onsite monitoring systems that are to be used to initiate
 emergency measures in accordance with appendix 1, as well as those to be used for
 conducting assessment." Item 5.b, "radiological monitors (e.g., process area,
 emergency, effluent, wound and portable monitors and sampling equipment)."
- I.2: Section I, 'Accident Assessment,' Item 2, "Onsite capability and resources to
 provide initial values and continuing assessment through the course of an accident shall
 include accident sampling capability, radiation and effluent monitors, in-plant iodine
 instrumentation, and containment radiation monitoring in accordance with NUREG-0578,
 as elaborated in the NRC letter to all power reactor licensees dated October 30, 1979."
- I.3: Section I, 'Accident Assessment,' Item 3, "Each licensee shall establish methods and techniques to be used for determining:' Item 3.b, "the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors."
- I.4: Section I, 'Accident Assessment,' Item 4, "Each licensee shall establish the relationship between effluent monitor readings and onsite and offsite exposures and contamination for various meteorological conditions."

Section II.H and Section II.I of NUREG-0654/FEMA-REP-1 provide guidance for meeting the emergency planning standards set forth in 10 CFR 50.47(b)(8) & (9).

As provided in section 3 of this submittal, NUREG-0578 required the installation of noble gas effluent monitors with an extended range designed to function during accident conditions as well as during normal operating conditions and the capability for effluent monitoring of radioiodines for the accident condition with sampling conducted by adsorption on charcoal or other media, followed by onsite laboratory analysis. The requirements of NUREG-0578 were subsequently incorporated into Regulatory Guide (RG) 1.97, 'Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following An Accident."

The change proposed by this request is the removal of the back up plant vent extended range noble gas radiation monitoring (R45) indication, recording, and alarm capability in the emergency response facilities. The RG 1.97, Revision 2, variables that are associated with the plant vent radiation monitoring are as follows

- Type C Variable, Category 2- Containment Effluent Radioactivity Noble Gases from Identified Release Points - 10⁻⁶ μCi/cc to 10⁻² μCi/cc (identified as variable 18 in Salem UFSAR Table 7.5-4).
- Type C Variable, Category 2 Effluent Radioactivity Noble Gases 10⁻⁶ μCi/cc to 10³ μCi/cc (Identified as variable 72 in Salem UFSAR Table 7.5-4).
- Type E Variable, Category 2 Common Plant Vent Noble Gas 10⁻⁶ μCi/cc to 10³ μCi/cc (identified as variable 58 in Salem UFSAR Table 7.5-4).
- Type E Variable, Category 2 All Other Identified Release Points 10⁻⁶ μCi/cc to 10² μCi/cc (identified as variable 61 in Salem UFSAR Table 7.5-4).

The above listed Category 2 variables do not require redundancy. As discussed in section 3, the R41 plant vent radiation monitor was upgraded from the normal effluent channel to a wide range noble gas effluent monitor covering the required accident ranges specified in RG 1.97. At that time the R41 radiation monitor was incorporated into the Emergency Plan as the primary plant vent effluent instrument for satisfying the emergency planning standards for 'emergency facilities and equipment' and 'accident assessment'. Although redundancy of the plant vent noble gas effluent pathway was not required, the R45 noble gas effluent indication was retained in the emergency plan as a backup to the R41. The accident iodine sampling remained with the R45 sampling skid.

This proposed change requests the removal of the back up plant vent extended range noble gas radiation monitoring (R45) indication, recording, and alarm capability in the emergency response facilities. The accident sampling function of the R45 will be maintained. This proposed change has been reviewed considering the requirements of 10 CFR 50.54(q), 10 CFR 50.47(b), 10 CFR 50 Appendix E and the Emergency Plan. The review determined that removing the installed back up plant vent radiation monitoring (R45) indication capability would result in a potential 'reduction in effectiveness' of the Emergency Plan and therefore require prior NRC review and approval. The reduction of effectiveness was determined as the delay that would exist in obtaining accident grab samples if the R41 was out of service and not able to provide noble gas effluent indication. Accident sampling and analysis of the plant vent effluent is estimated to take approximately 90 minutes from directing the sample to be taken until results are provided to the emergency response facility.

The R45 indication capability is not used in any EAL classifications so the removal of this indication would not impact any of the current EALs. Since the R45 plant vent sampling abilities will be retained, the EAL classifications associated with sampling of the plant vent are not impacted by the proposed change.

The R41 radiation monitor is used in the following emergency action levels (EALs):

- RU1.1: Any release of gaseous or liquid radioactivity to the environment greater than 2 times the ODCM for 60 minutes or longer.
- RA1.1: Any release of gaseous or liquid radioactivity to the environment greater than 200 times the ODCM for 15 minutes or longer.
- RS1.1: Off-site dose resulting from an actual or imminent release of gaseous radioactivity greater than 100 mRem TEDE or 500 mRem thyriod CDE for the actual or projected duration of the release.
- RG1.1: Off-site dose resulting from an actual or imminent release of gaseous radioactivity greater than 1000 mRem TEDE or 5000 mRem thryroid CDE for the actual or projected duration of the release.
- RA2.1: Damage to irradiated fuel or loss of water level that has resulted or will result in the uncovering of irradiated fuel outside the reactor vessel.

Although the above EALs would be directly impacted by the loss of the R41 plant vent noble gas effluent monitor other EALs could and would be used to make timely classifications (e.g., Barrier Table, in-plant radiation level increases).

The R41 radioactive effluent monitoring meets the required plant vent monitoring capabilities for emergency response (dose assessment and Emergency Action Level assessment) and the accident sampling function of the R45 will be maintained. Radiological effluent backup indication capabilities provided by the R45 are not required to meet the emergency planning standards or RG 1.97.

The Salem Unit 1 and 2 Technical Specifications (TS) Section 3/4.3.3, *Monitoring Instrumentation*, requires operability of one (1) medium range (10^{-3} - 10^{1} µCi/cc) (TS Table Item 2.b.1) and one (1) high range (10^{-1} – 10^{5} µCi/cc) (TS Table Item 2.b.2) noble gas effluent monitor. The R41 wide range gas monitor intermediate and high range channels meet the TS requirement. Therefore there are no proposed changes to the Salem TS. It should be noted that currently the Salem Unit 1 TS Bases credits the R41 channels and the Salem Unit 2 TS Bases credit the R45 channels for this requirement. The TS bases for Salem Unit 2 will be revised under 10CFR50.59 to credit the R41 noble gas effluent monitors as part of the design change package that removes the R45 noble gas indicators.

Conclusion

The removal of the R45 intermediate range and high range noble gas indicators while maintaining the R41 intermediate and high range noble gas indicators and the R45 accident sampling capability continues to meet the planning standards in 10 CFR 50.47(b)(8) & (9) and the requirements in Appendix E to 10 CFR Part 50.

5.0 REGULATORY ANALYSIS

5.1 Applicable Regulatory Requirements/Criteria

• 10CFR50.54(q) – Conditions of Licenses - Emergency Plans

Requires that a License Amendment Request be submitted to the NRC for approval prior to implementation for changes to the Emergency Plan which are considered to constitute a "reduction in effectiveness".

• 10CFR50.47 – Emergency Plans

Paragraph (b) requires that the emergency response plans for nuclear power reactors must meet the following standard:

- (8) Adequate emergency facilities and equipment to support the emergency response are provided and maintained.
- (9) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.
- 10CFR50 Appendix E Emergency Planning and Preparedness for Production and Utilization Facilities.

Section E, *Emergency Facilities and Equipment*, requires that equipment for determining the magnitude of and for continuously assessing the impact of the release of radioactive materials to the environment be provided.

 NUREG-0578 – TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations

Short-term recommendation 2.1.8.b, Increased Range of Radiation Monitors, states in part:

- 1. Noble gas effluent monitors shall be installed with an extended range designed to function during accident conditions as well as during normal operating conditions; multiple monitors are considered to be necessary to cover the ranges of interest.
 - a. Noble gas effluent monitors with an upper range capacity of $10^5 \,\mu\text{Ci/cc}$ (Xe-133) are considered to be practical and should be installed in all operating plants.
 - b. Noble gas effluent monitoring shall be provided for the total range of concentration extending from a minimum of 10⁻⁷ μCi/cc (Xe-133) to a maximum of 10⁵ μCi/cc (Xe-133). Multiple monitors are considered to be necessary to cover the ranges of interest. The range capacity of individual monitors shall overlap by a factor of ten.
- 2. Since iodine gaseous effluent monitors for the accident condition are not considered to be practical at this time, capability for effluent monitoring of radioiodines for the accident condition shall be provided with sampling conducted by adsorption on charcoal or other media, followed by onsite laboratory analysis.

 NUREG-0654 - Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

Requires identification and establishment of onsite monitoring systems that are to be used to initiate emergency measures as well as those to be used for conducting assessment. The equipment shall include radiological effluent monitors.

- Regulatory Guide 1.97, Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following An Accident, Revision 2:
 - Type C Variable, Category 2- Containment Effluent Radioactivity Noble Gases from Identified Release Points - 10⁻⁶ μCi/cc to 10⁻² μCi/cc (identified as variable 18 in Salem UFSAR Table 7.5-4).
 - Type C Variable, Category 2 Effluent Radioactivity Noble Gases 10⁻⁶ μCi/cc to 10³ μCi/cc (Identified as variable 73 in Salem UFSAR Table 7.5-4).
 - Type E Variable, Category 2 Common Plant Vent Noble Gas 10⁻⁶ μCi/cc to 10³ μCi/cc (identified as variable 58 in Salem UFSAR Table 7.5-4).
 - Type E Variable, Category 2 All Other Identified Release Points 10⁻⁶ μCi/cc to 10² μCi/cc (identified as variable 61 in Salem UFSAR Table 7.5-4).
- Regulatory guide 1.219, Guidance On Making Changes to Emergency Plans For Nuclear Power Reactors.

The proposed change to the Emergency Plan continues to implement the monitoring of noble gas effluents in the required ranges for determination of magnitude of release, accident assessment, and dose projections as required by the regulations cited above. Therefore, the revised Emergency Plan provides reasonable assurance that public health and safety is not endangered by operation of the Salem Nuclear Generation Facility and continues to satisfy the planning standards set forth in 10CFR50.47(b) and 10CFR50 Appendix E.

5.2 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," PSEG Nuclear LLC (PSEG) requests an amendment to Renewed Facility Operating License No. DPR-70, Salem Unit 1, and Renewed Facility Operating License No. DPR-75, Salem Unit 2. The proposed amendment would revise the Emergency Plan to remove references to the R45 plant vent intermediate range and high range noble gas indicators from:

- Emergency Plan Section 6, Notification Methods Response Organizations, Figure 6-5
- Emergency Plan Section 10, Accident Assessment, Table 10-1

PSEG has evaluated whether a significant hazards consideration is involved with the proposed amendment by focusing on the three conditions set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

The plant vent noble gas indicators are not an initiator of or a precursor to any accident or transient. The proposed change to the Emergency Plan to delete the backup (R45) noble gas indicators does not impact any design function of the Salem Radiation Monitoring System. The backup (R45) plant vent radiation monitors do not perform any accident mitigating function. The modification of the R45 noble gas indicators does not alter or modify the function of systems used to mitigate the consequences of any design basis accident.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed changes to the Emergency Plan to delete the backup plant vent noble gas indicators (R45) does not introduce any new accident precursors and does not involve any physical plant alterations or changes in the methods governing normal plant operation that could initiate a new or different kind of accident. The R45 noble gas indicators only provide indication of the effluent release through the plant vent release path.

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

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

Response: No.

Margin of safety is related to the ability of the fission product barriers (fuel cladding, reactor coolant system, and primary containment) to perform their design functions during and following postulated accidents. The proposed amendment does not alter setpoints or limits established or assumed by the accident analyses. The R45 plant vent radiation monitor provides indication only. The elimination of the backup R45 noble gas indicator does not reduce the margin of safety since the remaining R41 noble gas indicator will continue to provide the accident indication capability. The accident sampling capability of the R45 will remain.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, PSEG concludes that the proposed amendment does not involve a 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.

5.3 Conclusions

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

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a 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.

7.0 REFERENCES

None

Mark-up of Emergency Plan Pages

The following Emergency Plan pages for Salem Unit 1 and 2 are affected by this change request

Emergency Plan Section	
Section 6, Figure 6-5	6.14
Section 10, Table 10-1	10.13 10.14

FIGURE 6-5 (cont) TYPICAL STATION STATUS CHECKLIST

STATION STATUS CHECKLIST (PAGE 2 OF 2) RADIOLOGICAL INFORMATION

		RADIOLO	GICAL INFOR	RMATION	
SALEM GENE	RATING STAT	ION UNIT NUME	BER: CALC	ULATION TIME:	DATE:
		CH SPEC (T/S) L E+05 µCi/sec NG		Ci/sec IODINE)	
YES: [NO: [EASE START TIN	ЛЕ:	DATE:	
B. ANTICIPATOR TYPE OF ID. ADJUSTEI E. STABE. VENTOR NG RICH. I-131 II. TOTAL REL	TED OR UNKN RELEASE: D WIND SPEE! ILITY CLASS: PATH OF REL ELEASE RATE RELEASE RATE!	OWN DURATION GROUN D:(mph(.EASE: R41 [: R41 R46 TE: R41 R46 IOBLE GAS:	N OF RELEASE D [] ELE n)(m A-G) DEL] R45 B/G (µCi/s 	R DEFAULT (μCi/sec) (μCi/sec)	IOURS [] eg from) C) · R46 [] 44
J. TOTAL RE	LEASE RATE	ODINE-131:		(µCi/sec)	
DISTANCE FROM VENT	XU/Q	RATE	DOSE (4 DAY)	TEDE THYROID- CDE RATE (MREM/HR)	CDE DOSE
MEA 0.79 2.00 LPZ 5.00 EPZ 10.00					
3. OTHER PE	RTINENT INF	ORMATION:			
— 4. UPDATE T	O STATES (IF	VERBALLY TRA NAM	•	TIME	INITALS
STAT	E OF NEW JE	RSEY:			
STAT	E OF DELAWA				
AGEN					
			APF	PROVED:	
			- .		EC or RAC or R

TABLE 10-1 SALEM GENERATING STATION RADIATION MONITORS UNIT ONE

; :

CHANNEL	DECORIDATION OF MONITOR
CHANNEL	DESCRIPTION OF MONITOR
R1A	CONTROL ROOM INTAKE BLIGT
R1B	CONTROL ROOM INTAKE DUCT
R2	LOW RANGE GENERAL AREA CTMT 130'
R3	CHEMISTRY LAB
R4	CHARGING PUMP GENERAL AREA
R5	SPENT FUEL POOL GEN AREA FUEL HANDLING BLDG
R6A	PRIMARY SAMPLE LAB
R7	INCORE SEAL TABLE CTMT 100'
R9	NEW FUEL STORAGE FUEL HANDLING BLDG
R10A	PERSON HATCH GEN AREA CONTAINMENT 100'
R10B	PERSON HATCH GEN AREA CONTAINMENT 130'
R11A	CONTAINMENT PARTICULATE
R12A	CONTAINMENT NOBLE GAS
R12B	CONTAINMENT IODINE
R13A & B	CFCU SW LOCAL MONITOR
R15	CONDENSER AIR EJECTOR
R17A & B	COMPONENT COOLING
R18	LIQUID RAD WASTE
R19A, B, C, & D	STEAM GENERATOR BLOWDOWN
R20B	CHEMISTRY COUNT ROOM
R23	P.S. CONTROL POINT
R26	REACTOR COOLANT FILTER
R31A	LETDOWN HX FAILED FUEL (GROSS)
R32A	FUEL HANDLING CRANE
R34A	MECHANICAL PENETRATION GENERAL AREA
R36	EVAP & FDWTER PREHEAT CONDENSATE
R40	CONDENSATE FILTER
R41A	PLANT VENT LOW RANGE NOBLE GAS
R41B	PLANT VENT MID RANGE NOBLE GAS
R41C	PLANT VENT HIGH RANGE NOBLE GAS
R44A	CONTAINMENT GENERAL AREA HIGH RANGE 130'
R44B	CONTAINMENT GENERAL AREA HIGH RANGE 100'
R45A	PLANT VENT NOBLE GAS BKGD SUBTRACT
R45B	PLANT VENT NOBLE GAS MEDIUM RANGE
R45C	PLANT VENT NOBLE GAS HIGH RANGE
R45D	PLANT VENT FILTER MONITOR
R46A, B, C, & D	MAIN STEAM LINES
R47	ELECTRICAL PEN. GENERAL AREA HIGH RANGE
R51	TECHNICAL SUPPORT CENTER INDUCT
R53A, B, C, & D	N16 MAIN STEAMLINE MONITOR

TABLE 10-1 (cont.) SALEM GENERATING STATION RADIATION MONITORS UNIT TWO

CHANNEL	DESCRIPTION OF MONITOR			
R1A	CONTROL ROOM GENERAL AREA			
R1B	CONTROL ROOM INTAKE DUCT			
R2	LOW RANGE GENERAL AREA CTMT 130'			
R4	CHARGING PUMP GENERAL AREA			
R5	SPENT FUEL POOL GENERAL AREA			
R7	INCORE SEAL TABLE CTMT 100'			
R9	NEW FUEL STORAGE FUEL			
R10A	PERSONNEL HATCH GENERAL AREA CTMT 100'			
R10B	PERSONNEL HATCH GENERAL AREA CTMT 130'			
R11A	CONTAINMENT PARTICULATE			
R12A	CONTAINMENT NOBLE GAS			
R12B	CONTAINMENT IODINE			
R13A & B	CFCU SW LOCAL MONITOR			
R15	CONDENSER AIR EJECTOR			
R17A & B	#21 & 22 COMPONENT COOLING			
R18	LIQUID RAD WASTE			
R19A, B, C, & D	STEAM GENERATOR BLOWDOWN			
R26	REACTOR COOLANT FILTER			
R31	LETDOWN HX FAILED FUEL			
R32A	FUEL HANDLING CRANE			
R34	MECHANICAL PENETRATION GENERAL AREA			
R37	NON-RADIOACTIVE LIQUID WASTE BASIN			
R40	CONDENSATE FILTER			
R41A	PLANT VENT LOW RANGE NOBLE GAS			
R41B	PLANT VENT MID RANGE NOBLE GAS			
R41C	PLANT VENT HIGH RANGE NOBLE GAS			
R44A	CONTAINMENT GENERAL AREA HIGH RANGE 130'			
R44B	CONTAINMENT GENERAL AREA HIGH RANGE 100'			
R45A	PLANT VENT NOBLE GAS BKGD SUBTRACT			
R45B	PLANT VENT NOBLE GAS MEDIUM RANGE			
R45C	PLANT VENT NOBLE GAS HIGH RANGE			
R45D	PLANT VENT FILTER MONITOR			
R46A, B, C, & D	MAIN STEAM LINES			
R47	ELECTRICAL PEN. GENERAL AREA HIGH RANGE			
R52	PASS RM (LOCAL)			
R53A, B, C, & D	N16 MAIN STEAMLINE MONITOR			