SALEM GENERATING STATION UNIT NO. 2
FACILITY OPERATING LICENSE DPR-75
DOCKET NO. 50-311
CHANGE TO TECHNICAL SPECIFICATION BASES
RADIATION MONITOR 2R41

TECHNICAL SPECIFICATION BASES PAGES WITH PROPOSED CHANGES

The following Technical Specification Bases pages for Facility Operating License No. DPR-75 are affected by this supplement:

Technical Specification	Page
B 3/4.3.3.1	3/4 3-2 (double sided)
B 3/4.3.3.8	3/4 3-3 3/4 3-3a (double sided)
B 3/4.3.3.9	3/4 3-3a
B 3/4.3.4*	3/4 3-4 3/4 3-4a (single sided)

* No changes made to information in Turbine Overspeed Protection Bases; pages included due to relocation of information and renumbering of pages.

3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION (Continued)

CROSS REFERENCE - TABLES 3.3-6 and 4.3-3

T/S Table Item No.	Instrument Description	Acceptable RMs Channels
1a	Fuel Storage Area	2R5 or 2R9
1b	Containment Area	2R44A and B
2a1a	Containment Gaseous Activity Purge & Pressure/Vacuum Relief Isolation	2R12A or 2R41A, B and D(1) (2)
2a1b	Containment Gaseous Activity RCS Leakage Detection	2R12A
2a2a	Containment Air Particulate Activity Purge & Pressure/Vacuum Relief Isolation	2R11A
2a2b	Containment Air Particulate Activity RCS Leakage Detection	2R11A
2b1	Noble Gas Effluent Medium Range Auxiliary Building Exhaust System (Plant Vent)	2R45B(3)
2b2	Noble Gas Effluent High Range Auxiliary Building Exhaust System (Plant Vent)	2R45C(3)
2b3	Noble Gas Effluent Main Steamline Discharge - Safety Valves and Atmospheric Steam Dumps	2R46
2b4	Noble Gas Effluent Condenser Exhaust System	2R15

(1) The channels listed are required to be operable to meet a single operable channel for the Technical Specification's "Minimum Channels Operable" requirement.

(2) For Mode 6, the setpoint applies to 2R41D using 2 x Background from 2R41A. For Modes 1, 2, 3, 4 & 5, the setpoint applies to 2R41D per Specification 3.3.3.9. The measurement range applies to 2R41A and B which display in uCi/cc using the appropriate channel conversion factor from cpm to uCi/cc.

(3) If 2R45 is out of service 2R41 may be used to meet the technical specification action requirement.

3/4.3.3.2 MOVABLE INCORE DETECTORS

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.

For the purpose of measuring $F_Q(Z)$ or $F^N_{\Delta H}$, a full incore flux map 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."

3/4.3.3.8 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated and adjusted in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. 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.

CROSS REFERENCE - TABLES 3.3-12 and 4.3-12

T/S Table Item No.	Instrument Description	Acceptable RMS Channels
1a	Liquid Radwaste Effluent Line Gross Activity	2R18
1b	Steam Generator Blowdown Line Gross Activity	2R19A,B,C, and D(1)
2a	Containment Fan Coolers - Service Water Line Discharge Gross Activity	2R13A, B and C(1)
2b	Chemical Waste Basin Line Gross Activity	R37

(1) The channels listed are required to be operable to meet a single operable channel for the Technical Specification's "Minimum Channels Operable" requirement.

3/4.3.3.9 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The alarm/trip setpoints for these instruments shall be calculated and adjusted in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. This instrumentation also includes provisions for monitoring (and controlling) 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, 63, and 64 of Appendix A to 10 CFR Part 50.

CROSS REFERENCE - TABLES 3.3-13 and 4.3-13

T/S Table Item No.	Instrument Description	Acceptable RMS Channels
1a	Waste Gas Holdup System Noble Gas Activity	2R41A, B and D(1)(2)
2a	Containment Purge and Pressure - Vacuum Relief Noble Gas Activity	2R12A or 2R41A, B and D(1)(2)
3a	Plant Vent Header System Noble Gas Activity	2R16 or 2R41A, B and D(1)(2)

(1) The channels listed are required to be operable to meet a single operable channel for the Technical Specification's "Minimum Channels Operable" requirement.

(2) 2R41D is the setpoint channel. 2R41A and 2R41B are the measurement channels.

3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment or structures.

The overspeed protection instrumentation consists of five solenoid valves and one trip mechanism which can be grouped into three independent systems. These are:

1. Mechanical Overspeed Trip

   The mechanical overspeed trip valve will dump the autostop oil. The dump of the autostop oil will open the oil operated interface valve to dump the emergency electro-hydraulic trip fluid.

2. Electrical Overspeed Trip

   The electrically sensed overspeed will trip two solenoid valves either of which will dump the autostop oil. The dump of the autostop oil will open the oil operated interface valve to dump the emergency electro-hydraulic trip fluid. The solenoid valves associated with the electrical overspeed are also energized by the various generator protections trips.

   The dump of the autostop oil will actuate a solenoid to dump the emergency electro-hydraulic trip fluid. This solenoid serves as a backup for both the mechanical and electrical overspeed trips. The backup solenoid is also energized by the various generator protections trips.

3. Overspeed Protection Controller

   Either of the two overspeed protection control solenoid dump valves will dump the control electro-hydraulic trip fluid from the governor and intercept valves. When turbine speed decreases, and the overspeed condition clears, the signal is removed and the governor and intercept valves reopen.

Salem Unit 2 turbine is operated at full time, full arc admission. To prevent excessive steam flow induced cyclic stresses of the control stage blading, perform turbine valve testing in accordance with manufacturer's recommendations.

During normal power operation, turbine valve testing is performed at a frequency consistent with the methodology presented in WCAP-11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency." This report evaluates the contribution of failure or unavailability of the turbine

valve safety function to the probability that the turbine will overspeed and eject a missile. It concludes that extended intervals between turbine valve functional tests can be achieved without exceeding the NRC acceptance criteria for the probability of a turbine missile ejection incident. Factors which affect the selected valve test interval include low pressure turbine rotor type and inspection interval; turbine valve type, arrangement and overspeed control; and secondary side water chemistry.