

**SALEM GENERATING STATION UNIT NOS. 1 AND 2  
FACILITY OPERATING LICENSES DPR-70 AND DPR-75  
DOCKET NOS. 50-272 AND 50-311  
CHANGE TO TECHNICAL SPECIFICATIONS  
CONTROL ROOM EMERGENCY AIR CONDITIONING SYSTEM**

TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES

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

<u>Technical Specification</u>	<u>Page</u>
3/4.7.6.	3/4 7-20
B 3/4.7.6	B 3/4 7-5 B 3/4 7-5b

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

<u>Technical Specification</u>	<u>Page</u>
3/4.7.6	3/4 7-17
B 3/4.7.6	B 3/4 7-5 B 3/4 7-5b

9903050230 990222  
PDR ADOCK 05000272  
P PDR

Insert 1:

... 1) maintain the control room at a positive pressure  $\geq$  1/8-inch W.G. relative to the outside atmosphere, Work Control Center and Control Room Equipment Rooms and 2) maintain the control room at a positive pressure  $\geq$  1/20-inch W.G. relative to the Relay Rooms and the Auxiliary Building ...”

Insert 2:

... 1) maintaining the control room at a positive pressure  $\geq$  1/8-inch W.G. relative to the outside atmosphere, Work Control Center and Control Room Equipment Rooms and 2) maintaining the control room at a positive pressure  $\geq$  1/20-inch W.G. relative to the Relay Rooms and the Auxiliary Building ...”

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.6.1 Each control room emergency air conditioning system filtration train shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train(s) and verifying that the train(s) operates with each fan operating for at least 15 minutes.
- b. At least once per 18 months or prior to return to service (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:
  1. Verifying that the charcoal adsorbers remove  $\geq 99\%$  of a halogenated hydrocarbon refrigerant test gas when they are tested in-place while operating the ventilation system at a flow rate of 8000 cfm  $\pm 10\%$ .
  2. Verifying that the HEPA filter banks remove  $\geq 99\%$  of the DOP when they are tested in-place while operating the ventilation system at a flow rate of 8000 cfm  $\pm 10\%$ .
  3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from one of the charcoal adsorbers demonstrates a removal efficiency of  $\geq 99\%$  for radioactive methyl iodide when the sample is tested at 30°C, 95% relative humidity.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a carbon sample obtained from a test canister demonstrates a removal efficiency of  $\geq 99\%$  for radioactive methyl iodide when the sample is tested at 30°C, 95% relative humidity.
- d. At least once per 18 months by:
  1. Verifying that the pressure drop across the combined HEPA filter and charcoal adsorber bank is  $\leq 3.5$  inches water gauge while operating the ventilation system at a flow rate of 8000 cfm  $\pm 10\%$ .
  2. Verifying that on a safety injection test signal or control room intake high radiation test signal, the system automatically actuates in the pressurization mode by opening the outside air supply and diverting air flow through the HEPA filter and charcoal adsorber bank.
  3. Verifying that the system can INSERT 1 ~~maintain the control room at a positive pressure  $\geq 1/8$ " water gauge relative to the adjacent areas~~ during system operation with makeup air being supplied through the HEPA filters and charcoal adsorbers at the design makeup flow rate of  $\leq 2200$  cfm.

PLANT SYSTEMS

BASES

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3/4.7.5 FLOOD PROTECTION

The limitation on flood protection ensures that facility protective actions will be taken and operation will be terminated in the event of flood conditions. The limit of elevation 10.5' Mean Sea Level is based on the elevation above which facility flood control measures are required to provide protection to safety related equipment.

3/4.7.6 CONTROL ROOM EMERGENCY AIR CONDITIONING SYSTEM

The OPERABILITY of the control room emergency air conditioning system (CREACS) ensures that 1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and 2) the control room will remain habitable for operations personnel during and following all credible accident conditions.

INSERT 1

The CREACS is a shared system between Unit 1 and 2 supplying a common Control Room Envelope (CRE). During emergency operation following receipt of a Safety Injection or High Radiation actuation signal, for areas inside the CRE, one 100% capacity fan in each Unit's CREACS will operate in a pressurization mode with a constant amount of outside air supplied for continued CRE pressurization to ~~1/8" water gauge~~. One fan from each train will automatically start upon receipt of an initiation signal, with one fan in each train in standby. A failure of one fan will result in the standby fan automatically starting.

Each CREACS train has two 100% capacity fans, such that any one of the four fans is sized to provide the required flow for CRE pressurization to 1/8" water gauge positive pressure within the common CRE during an emergency.

A failure of one CREACS filtration train requires manual actions to properly reposition dampers in support of single filtration train operation.

To minimize control room radiological doses, the CREACS outside air is supplied from the non-accident unit's emergency air intake through the cross-connected supply duct (as determined by which unit received an accident signal). Outside air is mixed with recirculated air, passed through each CREACS filter bank (pre-filter, HEPA filter, and charcoal filter) and cooling coil, and distributed to the common CRE.

CREACS will be manually initiated in the recirculation mode only in the event of a fire outside the CRE, a toxic chemical release, delivery of Ammonium Hydroxide or testing.

PLANT SYSTEMS

BASES

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CAACS and CREACS interface isolation dampers: 1(2)CAA14 and 1(2)CAA20

These two dampers are normally open and do not have associated redundant dampers. These dampers serve a boundary function by isolating the CREACS from the CAACS during emergency operation of the CREACS.

Note: Dampers 1(2)CAA5, CAACS recirculation damper will receive an accident alignment signal to ensure proper accident configuration of CAACS. This damper, however, is not required for the OPERABILITY of CREACS as defined in the LCO.

The control room envelope is considered intact and able to support operation of the CREACS when the emergency air conditioning system is capable of ~~maintaining a 1/8" water gauge positive pressure~~ with the control room boundary door(s) closed.

↑  
**INSERT 2**

Filter testing will be in accordance with the applicable sections of ANSI N510 (1975) with the exception that laboratory testing of activated carbon will be in accordance with ASTM D3803 (1989).

TS Surveillance Requirement verifies that each fan is capable of operating for at least 15 minutes by initiating flow through the HEPA filter and charcoal adsorbers train(s) to ensure that the system is available in a standby mode.

Each CAACS normal air intake ductwork will have an additional radiation detector channel installed for a total of two detectors per intake. The two detector channels from Unit 1 and Unit 2 CAACS air intake provide input to common radiation monitor processors. Each radiation monitor processor (one for 1R1B-1/1R1B-2 and one for 2R1B-1/2R1B-2) provides a signal to initiate CREACS in the pressurization mode should high radiation be detected. A minimum of one out of two detectors in either intake will initiate the pressurization mode. With two detector channels inoperable on a Unit, operation may continue as long as CREACS is placed inservice in the pressurization or recirculation mode. Pressurization mode will be initiated after 7 days with one inoperable detector. Radiological releases during a fuel handling accident while operating in the recirculation mode could result in unacceptable radiation levels in the CRE since the automatic initiation capability has been defeated for high radiation due to isolation of the detectors. Therefore, movement of irradiated fuel assemblies or Core Alterations at either Unit will not be permitted when in the recirculation mode.

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.

PLANT SYSTEMS

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4.7.6.1 The control room emergency air conditioning system shall be demonstrated OPERABLE:

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