

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  
CONTAINMENT COOLING SYSTEM

TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES

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

<u>Technical Specification</u>	<u>Page</u>
4.6.2.3	3/4 6-11a

Bases

3/4.6.2.3	B 3/4 6-3
-----------	-----------

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

<u>Technical Specification</u>	<u>Page</u>
4.6.2.3	3/4 6-13

Bases

3/4.6.2.3	B 3/4 6-3
-----------	-----------

CONTAINMENT SYSTEMSCONTAINMENT COOLING SYSTEMLIMITING CONDITION FOR OPERATION  
=====

3.6.2.3 Five containment cooling fans shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one or two of the above required containment cooling fans inoperable, restore the inoperable cooling fan(s) to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With three or more of the above required containment cooling fans inoperable and both containment spray systems OPERABLE, restore at least three cooling fans to OPERABLE status within 72 hours or be in at least HOT STANDBY WITHIN the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the remaining inoperable cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS  
=====

4.6.2.3 Each containment cooling fan shall be demonstrated OPERABLE:

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

a. At least once per 31 days by:

1. Starting (unless already operating) each fan from the control room *in low speed.*
2. Verifying that each fan operates for at least 15 minutes *in low speed.*
3. Verifying a cooling water flow rate of greater than or equal to *2550* 700 gpm to each cooler.

b. At least once per 18 months by verifying that on a safety injection test signal:

1. Each fan starts automatically *in* on low speed.
2. The automatic valves and dampers actuate to their correct positions and that the cooling water flow rate to each cooler is greater than or equal to *2550* 2500 gpm.

## CONTAINMENT SYSTEMS

### BASES

#### 3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

##### 3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the containment spray system ensures that containment depressurization and cooling capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the accident analyses.

##### 3/4.6.2.2 SPRAY ADDITIVE SYSTEM

The OPERABILITY of the spray additive system ensures that sufficient NaOH is added to the containment spray in the event of a LOCA. The limits on NaOH minimum volume and concentration, ensure that 1) the iodine removal efficiency of the spray water is maintained because of the increase in pH value, and 2) corrosion effects on components within containment are minimized. The contained water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics. These assumptions are consistent with the iodine removal efficiency assumed in the accident analyses.

##### 3/4.6.2.3 CONTAINMENT COOLING SYSTEM

The OPERABILITY of the containment cooling system ensures that ~~the containment air temperature will be maintained within limits during normal operation, and 2) adequate heat removal capacity is available~~ when operated in conjunction with the containment spray systems during post-LOCA conditions.

##### 3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

CONTAINMENT SYSTEMS

CONTAINMENT COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

=====

3.6.2.3 Five containment cooling fans shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one or two of the above required containment cooling fans inoperable, restore the inoperable cooling fan(s) to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With three or more of the above required containment cooling fans inoperable, and both containment spray systems OPERABLE, restore at least three cooling fans to OPERABLE status within 72 hours or be in at least HOT STANDBY WITHIN the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the remaining inoperable cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

=====

4.6.2.3 Each containment cooling fan shall be demonstrated OPERABLE:

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

a. At least once per 31 days by:

1. Starting (unless already operating) each fan from the control room *in low speed.*
2. Verifying that each fan operates for at least 15 minutes *in low speed.*
3. Verifying a cooling water flow rate of greater than or equal to *2550* ~~700~~ gpm to each cooler.

b. At least once per 18 months by verifying that on a safety injection test signal:

1. Each fan starts automatically *in* low speed.
2. The automatic valves and dampers actuate to their correct positions and that the cooling water flow rate to each cooler is greater than or equal to *2550* gpm.

## CONTAINMENT SYSTEMS

### BASES

#### 3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

##### 3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the containment spray system ensures that containment depressurization and cooling capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the accident analyses.

The containment spray system and the containment cooling system are redundant to each other in providing post accident cooling of the containment atmosphere. However, the containment spray system also provides a mechanism for removing iodine from the containment atmosphere and therefore the time requirements for restoring an inoperable spray system to OPERABLE status have been maintained consistent with that assigned other inoperable ESF equipment.

##### 3/4.6.2.2 SPRAY ADDITIVE SYSTEM

The OPERABILITY of the spray additive system ensures that sufficient NaOH is added to the containment spray in the event of a LOCA. The limits on NaOH volume and concentration, ensure that 1) the iodine removal efficiency of the spray water is maintained because of the increase in pH value, and 2) corrosion effects on components within containment are minimized. The contained water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics. These assumptions are consistent with the iodine removal efficiency assumed in the accident analyses.

##### 3/4.6.2.3 CONTAINMENT COOLING SYSTEM

The OPERABILITY of the containment cooling system ensures that ~~1) the containment air temperature will be maintained within limits during normal operation, and 2) adequate heat removal capacity is available when operated in conjunction with the containment spray systems during post-LOCA conditions.~~ <sup>1) the</sup> <sup>2)</sup>

The containment cooling system and the containment spray system are redundant to each other in providing post accident cooling of the containment atmosphere. As a result of this redundancy in cooling capability, the allowable out of service time requirements for the containment cooling system have been appropriately adjusted. However, the allowable out of service time requirements for the containment spray system have been maintained consistent with that assigned other inoperable ESF equipment since the containment spray system also provides a mechanism for removing iodine from the containment atmosphere.