

## REACTOR COOLANT SYSTEM

### OVERPRESSURE PROTECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

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3.4.9.3 At least one of the following overpressure protection system shall be OPERABLE:

- a. Two Pressurizer Overpressure Protection System relief valves (POPs) with a lift setting of less than or equal to 375 psig, or
- b. A reactor coolant system vent of greater than or equal to 3.14 square inches.

APPLICABILITY: When the temperature of one or more of the RCS cold legs is less than or equal to 312°F, except when the reactor vessel head is removed.

#### ACTION:

- a. With one POPs inoperable, either restore the inoperable POPs to OPERABLE status within 7 days or depressurize and vent the RCS through a 3.14 square inch vent(s) within the next 24 hours; maintain the RCS in a vented condition until both POPs have been restored to OPERABLE status.
- b. With both POPs inoperable, depressurize and vent the RCS through a 3.14 square inch vent(s) within 24 hours; maintain the RCS in a vented condition until both POPs have been restored to OPERABLE status.
- c. In the event either the POPs or the RCS vent(s) are used to mitigate a RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the POPs or vent(s) on the transient and any corrective action necessary to prevent recurrence.
- d. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.4.9.3.1 Each POPs shall be demonstrated OPERABLE by:

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- a. With one POPs inoperable, either restore the inoperable POPs to OPERABLE status within 7 days or depressurize and vent the RCS through a 3.14 square inch vent(s) within the next 24 hours; maintain the RCS in a vented condition until both POPs have been restored to OPERABLE status.
- b. With both POPs inoperable, depressurize and vent the RCS through a 3.14 square inch vent(s) within 24 hours; maintain the RCS in a vented condition until both POPs have been restored to OPERABLE status.
- c. In the event either the POPs or the RCS vent(s) are used to mitigate a RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the POPs or vent(s) on the transient and any corrective action necessary to prevent recurrence.
- d. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.4.10.3.1 Each POPs shall be demonstrated OPERABLE by:

PROPOSED LICENSE CHANGE  
SALEM GENERATING STATION  
NO. 1 AND 2 UNITS  
DOCKET NO. 50-272 AND 50-311

Reactor Coolant System

Relief Valves

Limiting Condition for Operation

Description of Change

Change the action statements in paragraph (a) and (b) of the limiting condition for operation, Section 3.4.3 of Salem Unit 1 and Section 3.4.5 of Salem Unit 2 Technical Specification to read:

- a. With one or more PORV(s) inoperable, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and render associated block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one or more block valve(s) inoperable, within 1 hour either restore the block valve(s) to OPERABLE status or close the block valve(s) and render the block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Reason For Change

The pressurizer power operated relief valves (PORVs) prevent actuation of the reactor high pressure trip for all design transients up to and including design step load decreases with steam dump. The PORVs also limit challenges to the spring loaded safety valves. The opening of any power operated relief valve is annunciated in the control room.

The current Limiting Condition for Operation (LCO) requires closing the block valve(s) and the power removed when an inoperable PORV(s) or block valve(s) can not be restored to OPERABLE status within one hour. This requirement aggravates plant conditions during a possible overpressure transient by isolating the normal pressure relief path, forcing a higher Reactor Coolant System (RCS) pressure and reliance on the

pressurizer safety valves. This decreases the margin of safety and reduces system reliability by potentially increasing the number of challenges to the pressurizer safety valves.

The proposed amendment would revise the method of ensuring closed block valve(s) for an inoperable PORV(s) or block valve(s) by administrative control. This revised LCO will adequately maintain the reactor coolant pressure boundary and at the same time provide operational flexibility, increased operational safety margins and higher system reliability.

### Safety Evaluation

- a. Probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report will not be increased.

The proposed method of ensuring closed PORV block valve(s) is equally effective as the current method and will ensure that the reactor coolant pressure boundary is maintained.

The adverse effect of a failed open PORV(s) with an open block valve(s) is bounded by the LOCA analysis provided in the Final Safety Analysis Report.

- b. The possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report will not be created.

The proposed method for ensuring closed block valve(s) in the event of inoperable PORV(s) or block valve(s) does not result in any plant modification, and will not impact safe operation of any system, component or structure required for safety.

- c. The margin of safety as defined in the basis for any Technical Specification is not reduced.

The proposed change will maintain positive shutoff of an inoperable PORV or block valve while providing immediate and controlled relief capability from the control console in the event RCS pressure relief becomes necessary.

Our evaluation of the conditions described herein enable us to determine that this change does not involve any Significant Hazards Consideration.

## REACTOR COOLANT SYSTEM

### 3/4.4.3 RELIEF VALVES

#### LIMITING CONDITION FOR OPERATION

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3.4.3 Two power relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3

#### ACTION:

- a. With one or more PORV(s) inoperable, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and render associated block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one or more block valve(s) inoperable, within 1 hour either restore the block valve(s) to OPERABLE status or close the block valve(s) and render associated block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.4.3.1 In addition to the requirements of Specification 4.0.5, each PORV shall be demonstrated OPERABLE at least once per 18 months by performance of a CHANNEL CALIBRATION and operating the valve through one complete cycle of full travel.

4.4.3.2 Each block valve shall be demonstrated OPERABLE at least once per 92 days by operating the valve through one complete cycle of full travel.

## REACTOR COOLANT SYSTEM

### 3/4.4.5 RELIEF VALVES

#### LIMITING CONDITION FOR OPERATION

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3.4.5 Two power relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3

#### ACTION:

- a. With one or more PORV(s) inoperable, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and render associated block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one or more block valve(s) inoperable, within 1 hour either restore the block valve(s) to OPERABLE status or close the block valve(s) and render associated block valve inoperable by administrative control; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.4.5.1 In addition to the requirements of Specification 4.0.5, each PORV shall be demonstrated OPERABLE at least once per 18 months by performance of a CHANNEL CALIBRATION and operating the valve through one complete cycle of full travel.

4.4.5.2 Each block valve shall be demonstrated OPERABLE at least once per 92 days by operating the valve through one complete cycle of full travel.