

ATTACHMENT B-1

Unit No. 1 Technical Specification Pages

ATTACHMENT TO LICENSE AMENDMENT NO.

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following pages of Appendix A, Technical Specifications, with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 3-18
3/4 5-8
B 3/4 5-3
B 3/4 5-5

Insert

3/4 3-18
3/4 5-8
B 3/4 5-3
B 3/4 5-5

TABLE 3.3-3 (Continued)

DPR-66

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
4. STEAM LINE ISOLATION					
a. Manual	2/steam line	1/steam line	2/operating steam line	1, 2, 3	18
b. Automatic Actuation Logic	2	1	2	1, 2, 3	13
c. Containment Pressure Intermediate-High-High	3	2	2	1, 2, 3	14
d. Low Steamline Pressure	3/loop	2/loop any loop	2/loop any loop	1, 2, 3 ⁽¹⁾	14
e. High Steam Pressure Rate	3/loop	2/loop any loop	2/operating loop	3 ⁽²⁾	14

EMERGENCY CORE COOLING SYSTEMS

3/4.5.5 SEAL INJECTION FLOW

LIMITING CONDITION FOR OPERATION

3.5.5 Reactor coolant pump seal injection flow shall be less than or equal to 28 gpm with the charging pump discharge pressure greater than or equal to 2397 psig and the seal injection flow control valve full open.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With the seal injection flow not within the limit, adjust manual seal injection throttle valves to give a flow within the limit with the charging pump discharge pressure greater than or equal to 2397 psig and the seal injection flow control valve full open within 4 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.5 Verify at least once per 31 days that the valves are adjusted to give a flow within the limit with the charging pump discharge at greater than or equal to 2397 psig and the seal injection flow control valve full open.⁽¹⁾

(1) Not required to be performed until 4 hours after the Reactor Coolant System pressure stabilizes at greater than or equal to 2210 psig and less than or equal to 2250 psig.

BASES

3/4.5.5 SEAL INJECTION FLOW

BACKGROUND

The function of the seal injection throttle valves during an accident is similar to the function of the Emergency Core Cooling Systems (ECCS) throttle valves in that each restricts flow from the charging pump header to the Reactor Coolant System (RCS).

The restriction on reactor coolant pump (RCP) seal injection flow limits the amount of ECCS flow that would be diverted from the injection path following an accident. This limit is based on safety analysis assumptions that are required because RCP seal injection flow is not isolated during SI.

APPLICABLE SAFETY ANALYSES

All ECCS subsystems are taken credit for in the large break loss of coolant accident (LOCA) at full power. The LOCA analysis establishes the minimum flow for the ECCS pumps. The charging pumps are also credited in the small break LOCA analysis. This analysis establishes the flow and discharge head at the design point for the charging pumps. The steam generator tube rupture and main steam line break event analyses also credit the charging pumps, but are not limiting in their design. Reference to these analyses is made in assessing changes to the Seal Injection System for evaluation of their effects in relation to the acceptance limits in these analyses.

This LCO ensures that seal injection flow of less than or equal to 28 gpm, with charging pump discharge pressure greater than or equal to 2397 psig and seal injection flow control valve full open, will be sufficient for RCP seal integrity but limited so that the ECCS trains will be capable of delivering sufficient water to match boiloff rates soon enough to minimize uncovering of the core following a large LOCA. It also ensures that the charging pumps will deliver sufficient water for a small LOCA and sufficient boron to maintain the core subcritical. For smaller LOCAs, the charging pumps alone deliver sufficient fluid to overcome the loss and maintain RCS inventory.

BASES3/4.5.5 SEAL INJECTION FLOW (Continued)ACTIONS

- a. With seal injection flow exceeding its limit, the amount of charging flow available to the RCS may be reduced. Under this condition, action must be taken to restore the flow to below its limit. The operator has 4 hours from the time the flow is known to be above the limit to correctly position the manual valves and thus be in compliance with the accident analysis. The completion time minimizes the potential exposure of the plant to a LOCA with insufficient injection flow and ensures that seal injection flow is restored to or below its limit. This time is conservative with respect to the completion times of other ECCS LCOs; it is based on operating experience and is sufficient for taking corrective actions by operations personnel.

When the required actions cannot be completed within the required completion time, a controlled shutdown must be initiated. The plant must be brought to at least MODE 3 within 6 hours and to MODE 4 within the following 12 hours. The allowed completion times are reasonable, based on operating experience and normal cooldown rates, and do not challenge plant safety systems or operators.

SURVEILLANCE REQUIREMENTS (SR)SR 3.5.5.1

Verification every 31 days that the manual seal injection throttle valves are adjusted to give a flow within the limit ensures that proper manual seal injection throttle valve position, and hence, proper seal injection flow, is maintained. The Frequency of 31 days is based on engineering judgment and is consistent with other ECCS valve Surveillance Frequencies. The Frequency has proven to be acceptable through operating experience.

As noted, the Surveillance is not required to be performed until 4 hours after the RCS pressure has stabilized within a ± 20 psig range of normal operating pressure. The RCS pressure requirement is specified since this configuration will produce the required pressure conditions necessary to assure that the manual valves are set correctly. The exception is limited to 4 hours to ensure that the Surveillance is timely.

ATTACHMENT B-2

Unit No. 2 Technical Specification Page

BASES

3/4.5.4 SEAL INJECTION FLOW (Continued)

ACTIONS

- a. With seal injection flow exceeding its limit, the amount of charging flow available to the RCS may be reduced. Under this condition, action must be taken to restore the flow to below its limit. The operator has 4 hours from the time the flow is known to be above the limit to correctly position the manual valves and thus be in compliance with the accident analysis. The completion time minimizes the potential exposure of the plant to a LOCA with insufficient injection flow and ensures that seal injection flow is restored to or below its limit. This time is conservative with respect to the completion times of other ECCS LCOs; it is based on operating experience and is sufficient for taking corrective actions by operations personnel.

When the required actions cannot be completed within the required completion time, a controlled shutdown must be initiated. The plant must be brought to at least MODE 3 within 6 hours and to MODE 4 within the following 12 hours. The allowed completion times are reasonable, based on operating experience and normal cooldown rates, and do not challenge plant safety systems or operators.

SURVEILLANCE REQUIREMENTS (SR)

SR 3.5.4.1

Verification every 31 days that the manual seal injection throttle valves are adjusted to give a flow within the limit ensures that proper manual seal injection throttle valve position, and hence, proper seal injection flow, is maintained. The Frequency of 31 days is based on engineering judgment and is consistent with other ECCS valve Surveillance Frequencies. The Frequency has proven to be acceptable through operating experience.

As noted, the Surveillance is not required to be performed until 4 hours after the RCS pressure has stabilized within a ± 20 psig range of normal operating pressure. The RCS pressure requirement is specified since this configuration will produce the required pressure conditions necessary to assure that the manual valves are set correctly. The exception is limited to 4 hours to ensure that the Surveillance is timely.