

ATTACHMENT B

ZION NUCLEAR GENERATING STATION

**MARKED UP ANNOTATED COPY AND CLEAN COPY OF TECHNICAL
SPECIFICATIONS**

FACILITY OPERATING LICENSES

DPR-39 AND DPR-48

APPENDIX A TECHNICAL SPECIFICATIONS

STEAM GENERATOR WATER LEVEL REQUIREMENTS

LIMITING CONDITION FOR OPERATION

3.3.1.A. 4. At least two of the six heat removal loops (four reactor coolant loops* and two residual heat removal loops) shall be OPERABLE. At least one of these loops shall be OPERATING.#

APPLICABILITY: Mode 4

ACTION:

- a. With less than the above required loops OPERABLE, immediately initiate corrective action to return two loops to OPERABLE status as soon as possible; be in COLD SHUTDOWN within 24 hours.
- b. With no heat removal loop in operation:
 - 1) Suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and;
 - 2) Immediately initiate corrective action to return the required heat removal loop to operation.

SURVEILLANCE REQUIREMENT

- 4.3.1.A. 4.
- a. The required reactor coolant pump(s), if not OPERATING, shall be determined to be OPERABLE once per week by verifying correct breaker alignments and indicated power availability.
 - b. The required steam generator(s) shall be determined OPERABLE by verifying secondary side ~~wide~~ range water level to be greater than or equal to 17% at least once per shift. *narrow*
 - c. At least one heat removal loop shall be verified to be in operation and circulating reactor coolant at least once per shift.
 - d. With no heat removal loop in operation the core exit temperature shall be monitored utilizing data from 2 or more core exit thermocouples. The frequency of temperature readings shall be adequate to insure that the temperature will not increase above the 10°F subcooling limit between temperature readings.

- * See section 3.3.2.6 for low temperature overpressure protection considerations before starting a reactor coolant pump.
- # All reactor coolant pumps and residual heat removal loops may be de-energized for up to one hour provided:
- 1) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and
 - 2) core outlet temperature is maintained at least 10°F below saturation temperature.

Amendment Nos. 102 & 92

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p>3.3.1.A. 4. At least two of the six heat removal loops (four reactor coolant loops* and two residual heat removal loops) shall be OPERABLE. At least one of these loops shall be OPERATING.#</p> <p><u>APPLICABILITY:</u> Mode 4</p> <p><u>ACTION:</u></p> <ul style="list-style-type: none"> a. With less than the above required loops OPERABLE, immediately initiate corrective action to return two loops to OPERABLE status as soon as possible; be in COLD SHUTDOWN within 24 hours. b. With no heat removal loop in operation: <ul style="list-style-type: none"> 1) Suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and; 2) Immediately initiate corrective action to return the required heat removal loop to operation. 	<p>4.3.1.A. 4. a. The required reactor coolant pump(s), if not OPERATING, shall be determined to be OPERABLE once per week by verifying correct breaker alignments and indicated power availability.</p> <ul style="list-style-type: none"> b. The required steam generator(s) shall be determined OPERABLE by verifying secondary side narrow range water level to be greater than or equal to 17% at least once per shift. c. At least one heat removal loop shall be verified to be in operation and circulating reactor coolant at least once per shift. d. With no heat removal loop in operation the core exit temperature shall be monitored utilizing data from 2 or more core exit thermocouples. The frequency of temperature readings shall be adequate to insure that the temperature will not increase above the 10°F subcooling limit between temperature readings.

* See section 3.3.2.G for low temperature overpressure protection considerations before starting a reactor coolant pump.

All reactor coolant pumps and residual heat removal loops may be de-energized for up to one hour provided:

- 1) no operations are permitted that would cause dilution of the reactor coolant system boron concentration,
- and 2) core outlet temperature is maintained at least 10°F below saturation temperature.

ATTACHMENT C

ZION NUCLEAR GENERATING STATION

**EVALUATION OF SIGNIFICANT HAZARD CONSIDERATIONS
FOR PROPOSED CHANGES TO
FACILITY OPERATING LICENSES
DPR-39 AND DPR-48
APPENDIX A TECHNICAL SPECIFICATIONS**

STEAM GENERATOR WATER LEVEL REQUIREMENTS

Commonwealth Edison has evaluated this proposed license amendment and determined that it involves no significant hazard considerations. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazard considerations if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated;
2. Create the possibility of a new or different kind of accident from any previously analyzed; or,
3. Involve a significant reduction in the margin of safety.

This determination has been performed as indicated below:

1. **The proposed changes do not involve a significant increase in the probability or consequences of occurrence of any accident previously evaluated.**

Maintaining secondary side steam generator water level greater than or equal to 17% by wide range level indication is the current requirement by the technical specifications. By revising the requirement to require using the narrow range water level, no change in operating practices or plant configuration is made. The minimum requirement of 17% by narrow range level indication is more restrictive and conservative than 17% by wide range indication. The requirement to maintain secondary side steam generator water level greater than or equal to 17% by narrow range indication is currently required by operations procedure PT-0, Appendix F-1 and will be maintained. This change ensures that the requirements for natural circulation cooldown are maintained in Mode 4. Therefore, changing this surveillance requirement does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. **The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The proposed changes do not require a physical alteration of the plant (no new or different equipment will be installed). The Technical Specifications will continue to require OPERABLE steam generator(s) for heat removal functions. The Technical Specifications will continue to require the performance of SR 4.3.1.A.4.b. Changing the SR to use narrow level indication correctly states the steam generator water level required to support heat removal function. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **The proposed changes do not involve a significant reduction in a margin of safety.**

The proposed changes do not result in a significant reduction in a margin of safety because it has no impact on any safety analysis assumptions. The requirement to have OPERABLE steam generator(s) in MODE 4 for heat removal function is maintained. The requirement to perform SR 4.3.1.A.4.b is not changed. Changing the SR to use narrow level indication correctly states the steam generator water level required to support heat removal function. Therefore, this change does not involve a significant reduction in a margin of safety.

ATTACHMENT D

ZION NUCLEAR GENERATING STATION

**ENVIRONMENTAL ASSESSMENT STATEMENT
FOR PROPOSED CHANGES TO
FACILITY OPERATING LICENSES
DPR-39 AND DPR-48**

APPENDIX A TECHNICAL SPECIFICATIONS

STEAM GENERATOR WATER LEVEL REQUIREMENTS

The proposed changes of this license amendment request have been evaluated against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for categorical exclusion as provided for under 10 CFR 51.22(c)(9). The following is a discussion of how the proposed changes meet the criteria for categorical exclusion.

10 CFR 51.22(c)(9): Although the proposed change involves a change to a requirement with respect to the installation or use of facility components or to an inspection or Surveillance Requirements:

- (i) The proposed change involves no significant hazards considerations (refer to Attachment C of this license amendment request);
- (ii) There is no significant change in the types or a significant increase in the amounts of any effluent that may be released offsite, since the proposed changes do not affect the generation of any radioactive effluent nor do they affect any of the permitted release paths; and
- (iii) There is no significant increase in individual or cumulative occupational radiation exposure. The actions proposed in this request for an amendment do not significantly affect plant radiation levels, and therefore do not significantly affect dose rates and occupational exposure.

Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Based on the aforementioned and pursuant to 10 CFR 51.22(b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of a license amendment incorporating the proposed change.