



November 7, 1996

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Subject: Zion Station Units 1 and 2  
Application for Amendment to Facility  
Operating Licenses DPR-39 and DPR-48  
NRC Docket Nos. 50-295 and 50-304

This letter transmits, pursuant to 10 CFR 50.90, an application for an amendment to Appendix A of the Zion Unit 1 and 2 Facility Operating License, DPR-39 and DPR-48, to change Mode 4 Technical Specification (TS) Surveillance Requirement (SR) 4.3.1.A.4.b. The proposed amendment will change SR 4.3.1.A.4.b. from verifying greater than or equal to 17% steam generator secondary side wide range water level to greater than or equal to 17% narrow range water level.

This application for amendment is comprised of the following attachments to this letter:

Attachment A provides a description and safety analysis of the proposed changes to the Technical Specifications.

Attachment B provides an annotated copy and a clean copy of the affected pages of the Current Technical Specifications (CTS), including the changes.

Attachment C provides an evaluation of Significant Hazards Considerations for the proposed changes to the Technical Specifications in accordance with 10 CFR 50.92.

Attachment D provides an evaluation of the need for an Environment Assessment of the proposed changes to the Technical Specifications in accordance with 10 CFR 51.21 and 10 CFR 51.22.

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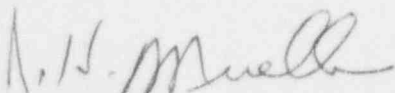
This proposed amendment has been reviewed and approved by Zion Station Onsite and Offsite Review personnel in accordance with ComEd procedures.

To the best of my knowledge and belief, the statements contained in this amendment application are true and correct. In some respects these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contract employees, and consultants. Such information has been reviewed in accordance with company practices, and I believe it to be reliable.

Commonwealth Edison is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated state official.

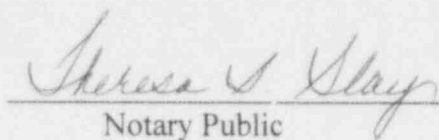
Please direct any questions you may have concerning this submittal to this office.

Respectfully,



J. H. Mueller  
Site Vice President  
Zion Station

Subscribed and Sworn to before me, a Notary Public in and for  
the State of Illinois and County of Lake  
this 7th day of November, 1996.

  
Notary Public

Attachments

cc: NRC Regional Administrator - RIII  
Zion Station Project Manager - NRR  
Senior Resident Inspector - Zion Station  
Office of Nuclear Facility Safety - IDNS  
IDNS Resident Inspector  
Master Files  
Reg. Assurance File  
DCD Licensing

**ATTACHMENT A**

**ZION NUCLEAR GENERATING STATION**

**DESCRIPTION AND SAFETY ANALYSIS**  
**FOR PROPOSED CHANGES TO**  
**FACILITY OPERATING LICENSES**  
**DPR-39 AND DPR-48**

**APPENDIX A TECHNICAL SPECIFICATIONS**

**STEAM GENERATOR WATER LEVEL REQUIREMENTS**

## **DESCRIPTION OF PROPOSED CHANGE**

Commonwealth Edison proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses DPR-39 and DPR-48, to require steam generator operability for MODE 4 heat removal be verified by ensuring steam generator secondary side water level is greater than or equal to 17% by narrow range water level indication at least once per shift.

## **DESCRIPTION OF CURRENT REQUIREMENT**

Surveillance Requirement (SR) 4.3.1.A.4.b. ensures the required steam generator(s) are OPERABLE for the heat removal function by verifying steam generator secondary side water level to be greater than or equal to 17% by wide range water level indication at least once per shift.

## **BASES FOR THE CURRENT REQUIREMENT**

Limiting Condition for Operation (LCO) 3.3.1.A.4 requires that in MODE 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. The required steam generator(s) are determined OPERABLE by verifying adequate water level to support heat removal at least once per shift. One steam generator capable of performing its heat transfer function will provide sufficient heat removal capability to remove core decay heat when in MODE 4.

## **NEED FOR AMENDING THE REQUIREMENT**

Based on the requirements of ES-0.2 Natural Circulation Cooldown, 17% by the wide range secondary side steam generator water level indication is insufficient to provide adequate heat removal function. The correct indication in the surveillance requirement should be 17% by narrow range steam generator water level indication. A 17% water level by narrow range indication is sufficiently high in the steam generator to provide the adequate natural circulation driving head to ensure heat removal capability is maintained. This level is also consistent with and conservative relative to Emergency Operating Procedure, ES-0.2. ES-0.2, Natural Circulation Cooldown, requires at least 8% level by narrow range. Normal practice is to maintain steam generator water level between 30% and 40% by narrow range indication in accordance with General Operating Procedure, GOP-4. This operating range is also consistent with ES-0.2. Therefore, to ensure the Technical Specifications are correct, the appropriate level indication to be used should be updated in the surveillance requirement.

## **DESCRIPTION OF THE PROPOSED REQUIREMENT**

SR 4.3.1.A.4.b will be revised to read that 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. The proposed changes are based on the Amendments up to and including Amendment 172 for Unit 1 and Amendment 159 for Unit 2. The pages of Technical Specifications indicating proposed changes are provided in Attachment B.

## **BASES FOR THE PROPOSED REQUIREMENT**

17% by narrow range steam generator secondary side water level indication provides an adequate water level in the steam generator to ensure sufficient natural circulation driving head. Natural circulation is essential to the heat removal capability of the steam generators in MODE 4.

Attachment C contains an Evaluation of Significant Hazards Considerations which concludes that the proposed changes will not 1) Significantly increase the probability of occurrence or consequences of any accident previously evaluated, 2) Create the possibility of a new or different kind of accident from those previously analyzed, or 3) Significantly reduce a margin of safety.

Attachment D contains an Environmental Assessment Statement which concludes that since the proposed changes do not involve a significant hazards consideration, a significant change in the types or amounts of effluents that may be released off-site, or a significant increase in individual or occupational radiation exposure, no environmental impact statement need be prepared in conjunction with issuance of a license amendment incorporating these proposed changes.

## **SCHEDULE REQUIREMENTS**

This change is required to ensure existing practice is consistent with Technical Specification requirements. Since the change is more conservative in nature, the change should be approved and implemented in a reasonable period of time.