



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 update Technical Specification (TS) Table 3.7-1. The proposed amendment will change the values for the Reduced Power Range Neutron Flux High Setpoint Trip that are specified when one or more code Main Steam Safety Valves (MSSVs) are inoperable. The new setpoints were calculated in response to a Westinghouse Nuclear Safety Advisory Letter (NSAL-94-001, "Operation at Reduced Power Levels with Inoperable MSSVs," January 25, 1994").

ComEd's original response to the Westinghouse NSAL was to utilize administrative controls to implement the new setpoints. The purpose of this amendment is to incorporate the new setpoints into the Zion Technical Specifications.

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.

9611130184 961107
PDR ADOCK 05000295
P PDR

AD0011

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.

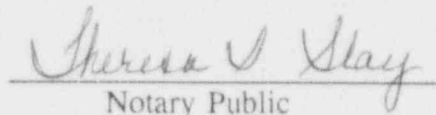
Please direct any questions you may have concerning this submittal to this office.

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 17th 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 LINE SAFETY VALVES AND REDUCED POWER RANGE NEUTRON
FLUX SETPOINT TRIP**

DESCRIPTION OF PROPOSED CHANGE

Commonwealth Edison proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses DPR-39 and DPR-48, to change the values for the Reduced Power Range Neutron Flux High Setpoint Trip that are specified when one or more code Main Steam Safety Valves (MSSVs) are inoperable. This issue was identified by a Westinghouse Nuclear Safety Advisory Letter (Reference 1). As a result, Nuclear Fuel Services issued a letter (Reference 2) that provided the reduced setpoint values to the station. Specification 3.7.1.C references Table 3.7-1 for the applicable setpoints, depending on which valve or valves are inoperable. ComEd has been using administrative controls to implement the reduced setpoints. This LAR is to make a permanent change to Table 3.7-1 to implement the reduced setpoints by license amendment.

DESCRIPTION OF CURRENT REQUIREMENT

Zion Technical Specifications 3.7.1.C states that with four reactor coolant loops and associated steam generators in operation and with one or more main steam line code safety valves inoperable, operation may continue provided, that within 4 hours, either the inoperable valves are restored to operable status or the Power Range Neutron Flux High Setpoint Trip is reset for the most restrictive loop in accordance with Table 3.7-1. Valve orifice sizes are specified in Table 4.7-1.

BASES FOR THE CURRENT REQUIREMENT

Technical Specification 3.7.1 requires that 20 MSSVs (all) shall be operable whenever the reactor is heated above 350° F unless the Power Range Neutron Flux High Trip setpoint is reset for the most restrictive loop, in accordance with Technical Specification Table 3.7-1. Table 3.7-1 provides the maximum allowable setpoint values to be used, depending on the number of MSSVs that are inoperable and the orifice size of the inoperable MSSV(s). The setpoints are based on the need to prevent Main Steam System overpressurization during the most limiting event included in the UFSAR accident analyses. The most limiting event for secondary side overpressurization is the Loss of Load/Turbine Trip (LOL/TT) event.

NEED FOR AMENDING THE REQUIREMENT

On January 25, 1995 Westinghouse issued a Nuclear Safety Advisory Letter (Reference 1) providing a description of a potential issue regarding the adequacy of the current Power Range Neutron Flux High Trip setpoints given in Technical Specification Table 3.7-1. Westinghouse found that the LOL/TT event may not be bounding for the allowable operating configurations of Table 3.7-1 since the high neutron flux trip setpoint may not be low enough to preclude a secondary side overpressurization condition. As a result of the Westinghouse potential issue, Nuclear Fuel Services issued a letter (Reference 2) which provides new Power Range Neutron Flux High Trip setpoints that are based on new calculations using the algorithm given in the Westinghouse letter.

The original Zion Station response to the Westinghouse Nuclear Safety Advisory Letter was to implement the new Reduced Power Range Neutron Flux High Trip setpoints using administrative controls. The purpose of this LAR is to incorporate the changes to Table 3.7-1 by a permanent technical specification change.

DESCRIPTION OF THE PROPOSED REQUIREMENT

The proposed change to Technical Specifications are new Reduced Power Range Neutron Flux High Trip setpoints for Table 3.7-1 to be used when one or more MSSVs are determined to be inoperable.

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

All 20 code MSSVs are required whenever the reactor is heated above 350° F in order to prevent Main Steam System overpressurization during the most limiting event included in the UFSAR accident analyses. The most limiting event for secondary side overpressurization is the LOL/TT event. If any MSSV is inoperable, the Power Range Neutron Flux High Trip setpoint is reset for the most restrictive loop, in accordance with Technical Specification 3.7.1.C. The reduced trip setpoint values were determined by review of the LOL/TT event in order to prevent secondary side overpressurization. The new reduced setpoint values provided by Reference 2 are based upon new calculations using the algorithms provided by Reference 1.

The Reduced Power Range Neutron Flux High Trip setpoints provided by Reference 2 have been incorporated in the Improved Technical Specifications.

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 amendment is not required to support any refueling outage, but is required within a reasonable period of time to address NRC staff concerns.