



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 clarify the OPERABILITY requirements for the RHR loops during core alteration operations. The proposed amendment will change the Limiting Condition for Operation (LCO) 3.13.1.A.4, the requirement to have one RHR pump and heat exchanger in operation during core alterations, and SR 4.13.1.A.4 in Technical Specification 3.13.1, CORE ALTERATIONS, Core Reactivity. The requirement for one RHR loop in operation during core alterations is addressed in LCO 3.13.9.B, Residual Heat Removal System Operation.

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

Attachment A provides a description and safety analysis of the proposed supplemental 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 supplemental 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.

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

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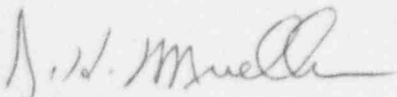
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To the best of my knowledge and belief, the statements contained in this amendment application are true and correct. In some respects these statements are not based on my personal knowledge, but obtained information furnished by other ComEd employees,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

ComEd 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.

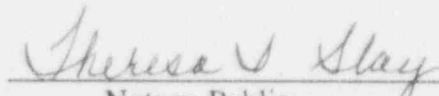
Please direct any questions you may have concerning this submittal to this office.

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**

RHR REQUIREMENTS DURING CORE ALTERATION OPERATIONS

DESCRIPTION OF PROPOSED CHANGE

Commonwealth Edison proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses DPR-39 and DPR-48, to change LCO 3.13.1.A.4 (the requirement to have one Residual Heat Removal (RHR) pump and heat exchanger in operation to maintain core reactivity within control limits during core alteration operations) and SR 4.13.1.A4 to make them consistent with LOC 3.13.9.B.b (which allows the residual heat removal loop to be removed from operation for up to one hour per an eight hour period during the performance of CORE ALTERATIONS). In addition LCO 3.13.9.B, Action a., will be modified to make it consistent with LCO 3.13.9.B.b. The requirement for one RHR loop in operation during core alterations is addressed by LCO 3.13.9.B.

DESCRIPTION OF CURRENT REQUIREMENT

LCO 3.13.1.A states that core reactivity shall be maintained within control limits during CORE ALTERATIONS by implementing specific restrictions. 3.13.1.A.4 requires at least one RHR pump and heat exchanger in operation during core alteration operations. LCO 3.13.9.B requires at least one RHR loop OPERATING in MODE 6 when water level above the top of the reactor vessel flange is greater than 22 feet. LCO 3.13.9.B, Action b., allows for the RHR loop to be removed from operation for up to one hour per eight-hour period during performance of CORE ALTERATIONS.

BASES FOR CURRENT REQUIREMENT

The requirement that at least one RHR loop be in operation to maintain core reactivity within limits during CORE ALTERATIONS ensures that (a) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140 °F as required during REFUELING, and (b) sufficient coolant circulation is maintained through the reactor core to minimize the effect of a boron dilution incident and prevent boron stratification. The RHR loop being in operation is required for both decay heat removal to maintain water in the reactor pressure vessel below 140 °F, and for sufficient coolant circulation to minimize the effect of boron dilution and prevent boron stratification. Securing an RHR loop for one hour every eight-hour period is acceptable in that it does not significantly impact core water temperature or stratification.

REASON FOR REQUESTING AN AMENDMENT

The requirement for an RHR pump and heat exchanger being in service is addressed by both LCO 3.13.1.A.4 and LCO 3.13.9.B. In addition, under LCO 3.13.9.B it is acceptable to take the RHR pump out of service for one hour every eight hours in Mode 6 when water level above the top of the reactor pressure vessel flange is greater than 22 feet. LCO 3.13.1.A.4 does not have a Mode of Applicability and Required Actions, and does not contain an allowance to take the RHR pump out of service for one hour every eight hours when water level is greater than 22 feet above the top of the reactor pressure vessel flange. The purpose of this LAR is to clarify that this is acceptable during CORE ALTERATIONS, and remove potential conflicts between two Specifications that have slightly different requirements.

DESCRIPTION OF THE PROPOSED REQUIREMENT

The proposed LAR will change LCO 3.13.1.A.4 and SR 4.13.1.A.4. In addition LCO 3.13.9.B, Action a. will be modified to include a requirement to suspend CORE ALTERATIONS if RHR is removed from service, except as provided in Specification 3.13.9.B.b, which allows an RHR loop to be secured for up to one hour every eight-hour period.

The proposed changes are based on the requirements of Technical Specifications and all 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

The requirement that at least one RHR loop be in operation during MODE 6 ensures that (a) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140 °F as required during Refueling, and (b) sufficient coolant circulation is maintained through the reactor core to minimize the effect of a boron dilution incident and prevent boron stratification during CORE ALTERATIONS. The requirement for an RHR pump and heat exchanger being in service is addressed by LCO 3.13.9.B. In addition, under LCO 3.13.9.B it is acceptable to take the RHR pump out of service for one hour every eight hours when water level above the top of the reactor pressure vessel flange is greater than 22 feet during the performance of CORE ALTERATIONS.

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 LAR is not a requirement for a refueling outage, but should be addressed in a reasonable amount of time to support reducing the number of technical specification interpretations.