



Commonwealth Edison

One First National Plaza, Chicago, Illinois

Address Reply to: Post Office Box 767

Chicago, Illinois 60690

July 12, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Zion Nuclear Power Station Units 1 and 2
Proposed Amendment to Facility Operating
License Nos DPR-39 and DPR-48
NRC Docket Nos. 50-295 and 50-304

Dear Mr. Denton:

Attachment 1 to this letter is a proposed amendment to Facility Operating License Nos. DPR-39 and DPR-48, Appendix A, Section 5.0 - Design Features. This change will raise the enrichment limits to approximately 3.7 w/o for the Spent Fuel Pool and 4.0 w/o for the New Fuel Vault. There are no changes being made to Spent Fuel Pool, New Fuel Vault, or their racks. The enrichment increases are required in order to implement 18 month operating cycles. This transition is scheduled to occur in early 1986.

A general description of the criticality analysis and its results is provided in Attachment 2. Attachment 3 to this letter is a demonstration that the amendment involves no significant hazards consideration. The proposed amendment has received On-Site and Off-Site review and approval.

Attachment 4 contains the criticality analysis performed by Westinghouse in support of this proposed amendment. These calculations predict effective multiplication factors of 0.9481 and 0.9086 for the Spent Fuel Pool and the New Fuel Vault, respectively. Both of these results are below the acceptance criteria of 0.95.

A \$150.00 fee remittance is enclosed in accordance with 10 CFR 170. As provided by 10 CFR 50.91, the State of Illinois is being notified of this amendment request by transmittal of a copy of this letter and the attachments.

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H. R. Denton

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If there are any further questions regarding this matter, please contact this office.

Three (3) signed originals and thirty-seven (37) copies of this transmittal and its attachments are hereby provided for your review.

Very truly yours,

Peter LeBlond

P. C. LeBlond
Nuclear Licensing Administrator

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Attachments

cc: NRC Resident Inspector - Zion
J. Norris - NRR
G. Wright - State of Ill.

SUBSCRIBED AND SWORN to
before me this 12th day
of July, 1985

John J. Mayo
Notary Public

0294K