Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

March 28, 1980

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

Subject: Zion Station Units 1 and 2
Implementation of Immediate Action
Items of Confirmatory Order
NRC Docket Nos. 50-295 and 50-304

Reference (a): February 29, 1980 letter from H. R. Denton to D. L. Peoples

Dear Mr. Denton:

Reference (a) contained a Confirmatory Order dated February 29, 1980 for Zion Station Units 1 and 2. That Order required Commonwealth Edison Company to perfrom certain actions immediately. Attachment A to this letter provides Commonwealth Edison's response to those actions.

Please address any questions that you might have concerning this matter to this office.

One (1) signed original and thirty-nine (39) copies of this transmittal are provided for your use.

Very truly yours,

William F. Naughton

William F. Naughton
Nuclear Licensing
Administrator
Pressurized Water Reactors

Attachment

2636A

8004080 214

NRC Docket Nos. 50-295
50-304

ATTACHMENT A

Commonwealth Edison Company's responses to the NRC Staff's Immediate Action items of Section A of Appendix A in Reference (a) follow.

A.1. Maintain reactor power level as necessary such that calculated fuel peak clad temperature does not exceed 2050°F under large break LOCA conditions per the 10 CFR 50 Appendix K analysis submitted on October 22, 1979.

The referenced analysis would permit the Zion units to operate with an F_Q peaking factor limit of 2.20 at a calculated fuel peak clad temperature less than 2050°F. Currently, the Zion units are operating with an F_Q peaking factor limit of 1.93, approximately 12% below the 2.20 limit. Thus, per the referenced analysis, the 2050°F calculated fuel peak clad temperature is being met at Zion Station.

A.2. Revise plant operating procedures as necessary to require a base load mode of operation only, without load following except for power reductions required to maintain system load for grid stability, required for maintenance (e.g., containment entry, main feed pump repairs, etc.) or as required by Technical Specifications.

Power level changes required for following system load are controlled by Commonwealth Edison Company's System Power Supply Office. Upon issuance of the Confirmatory Order, System Power Supply was notified that the Zion units were not to be load followed for system requirements except to maintain system load for grid stability.

A.3. Conduct a low pressure gross leak test of containment prior to any start up from cold shutdown conditions as indicated in Annex 1. If other means can be found to verify containment integrity, the licensee may propose such procedures to the Commission for its review and approval.

Both Zion units were in operation upon issuance of the Confirmatory Order. Therefore, no immediate actions were required. Procedure changes associated with this requirement will insure that containment leakage is within Technical Specification limits prior to startup from cold shutdown. This requirement will be implemented prior to the next startup fom cold shutdown.

A.4. Maintain at least two senior reactor operators (SRO's), one of whom may be the shift supervisor, in the control room at all times during power operations or hot shutdown, except that the shift supervisor shall be allowed to leave the immediate vicinity of the control room as duties may require, provided he is available to respond to an emergency by returning to the control room within ten minutes. The shift or watch supervisor's office is considered part of the control room.

The Zion procedures have been modified to meet this requirement.

A.5. Conduct testing to assure that the LPI/RHR check valves are in fact installed correctly and functioning as pressure isolation barriers when the plant is at pressure and producing power. Verification of valve operability shall be performed prior to plant restart if shutdown at the time of issuance of the Order and thereafter whenever RCS pressure has decreased to within 100 psig of RHR system design pressure.

Both Zion units were in operation upon issuance of the Confirmatory Order. Therefore, no immediate actions were required. However, changes to Zion operating procedures and various periodic tests (PTs) are being prepared which will require a LPI/RHR check valve test whenever RCS pressure has decrease to within 100 psig of RHR system design pressure. These changes will be implemented prior to plant startup following such an RCS pressure decrease.

A.6. Submit not later than March 1, 1980 the results of a review of a possible permanent plant modifications and pressure to further reduce the potential of a severe reactor accident and resultant radiation releases.

This action was completed via a letter from D. L. Peoples, et. al. to H. R. Denton dated February 25, 1980.

A.7. Require that all reactor operators and senior reactor operators conduct simulator training and in-plant walk-through of the following emergency procedures. Due to the licensee's large operating staff the in-plant walk-throughs shall be completed prior to the next reactor startup following issuance of the Order, or within sixty days of the date of issuance, whichever occurs first. Those reactor operators and senior reactor operators who have not received simulator training within the past four months on these items shall be given such simulator

training within 90 days of the date of the Order:

a. Plant or reactor startups to include a range wherein reactivity feedback from nuclear heat addition is noticeable and heat up rate is established.

b. Manual control of steam generator level and/or feedwater during startup and shutdown.

c. Any significant (10%) power change using manual rod control.

d. Loss of Coolant.

(i) including significant PWR steam generator leaks

(ii) inside and outside containment

(iii) large and small, including leak rate determination

(iv) saturated reactor coolant response (PWR)

e. Loss of core coolant flow/natural circulation

f. Loss of all feedwater (normal and emergency)

g. Station blackout

h. Anticipated Transients Without Scram (ATWS)

i. Stuck open relief valve on secondary side

j. Intersystem LOCA

Both Zion units were in operation upon issuance of the Confirmatory Order. Therefore, no immediate actions were required. However, the in-plant walk-throughs will be completed prior to the next reactor startup. The simulator training is in progress.