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

March 31, 1982

Mr. Darrell G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Units 2 & 3
Quad Cities Station Units 1 & 2
Zion Station Units 1 and 2
Responses to NUREG-0737 Items
Requiring an April 1, 1982,
Submittal
NRC Docket Nos. 50-237/249,
50-254/265 and 50-295/304

References (a): J. Abel letter to D. Eisenhut
dated December 15, 1980.

(b): E. Swartz letter to D. Eisenhut
dated December 15, 1981.

(c): E. Swartz letter to D. Eisenhut
dated January 8, 1982.

(d): E. Swartz letter to D. Eisenhut
dated March 1, 1982.

Dear Mr. Eisenhut:

This letter, along with the attachment, is provided to respond to those NUREG-0737 items that require an April 1, 1982, submittal for our Dresden, Quad Cities and Zion Stations.

Additionally, where prior Commonwealth Edison responses identified an April 1, 1982, commitment date that can no longer be supported, the attachment provides the current status for such items. In some cases, however, we are deferring such discussions until April 16, 1982, at which time we will provide our response to Generic Letter No. 82-05 along with firm commitments for completion of such items.

To the best of my knowledge and belief the statements contained in the attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please address any questions that you or your staff may have regarding this matter to this office.

One (1) signed original and seventy-nine (79) copies of this transmittal are provided for your use.

Very truly yours,

E. Douglas Swartz
Nuclear Licensing Administrator

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cc: J. G. Keppler - Regional Adm. - RIII
Region III Inspector - Dresden
Region III Inspector - Quad Cites
Region III Inspector - Zion

Attachment

3769N

ATTACHMENT

COMMONWEALTH EDISON COMPANY

Responses to NUREG-0737 Items Requiring an April 1, 1982, Submittal.

Dresden Station Units 2 and 3

Quad Cities Station Units 1 and 2

Zion Station Units 1 and 2

3769N

II.B.2 Plant Shielding Modifications

Zion Response:

Reference (b) requested an implementation date extension to April 1, 1982. We are currently experiencing difficulties in meeting this commitment. A firm commitment for completion of this item will be provided by April 16, 1982, in our response to Generic Letter 82-05.

II.B.3 Postaccident Sampling Capability

Dresden, Quad Cities and Zion Response:

References (b) and (d) requested an implementation dated extension to April 1, 1982. We are currently experiencing difficulties in meeting these commitments. A firm commitment for completion of this item will be provided by April 16, 1982, in our response to Generic Letter 82-05.

II.D.1 Performance Testing of PWR Safety/Relief Valves

Zion Response:

Ref. 1: Letter from D. P. Hoffman (Consumers Power) to H. R. Denton (NRC) dated April 1, 1982, transmitting the following EPRI Safety and Relief Valve Test Program Reports:

a) Safety & Relief Valve Test Report

b) Valve Selection/Justification Report

c) Test Condition Justification Report

d) Plant Conditions Justification Report
   1) Westinghouse Plants
   2) Combustion Engineering Plants
   3) Babcock & Wilcox Plants

e) Evaluation of RELAP 5 MOD 1 for Calculation of Safety & Relief Valve Discharge Piping Hydrodynamic Loads

Commonwealth Edison is a participant in the generic EPRI/PWR Safety & Relief Valve Test Program. The reports referenced above document the Test Program results. Commonwealth Edison has performed a preliminary review of the results. We have concluded that the valves tested represent the safety & relief valve designs in use at Zion. We have also concluded that the conditions tested envelop and conservatively exceed the range of expected operating and accident conditions that we anticipate for Zion.

Safety Valves

The Zion pressurizer safety valves are the Crosby Model HP-BP-86 6M6 type, with loop seal internals. This valve model was tested in the EPRI Program and the referenced report sections that specifically apply to it relative to its use at Zion are as follows:

1. Safety & Relief Valve Test Report - Section 3.5

2. Valve Selection/Justification Report - Section III-A1

3. Test Condition Justification Report - Section 2.3 & 4.7

4. Plant Conditions Justification Report - Westinghouse Plants - All sections related to 4 loop plants

Our preliminary evaluation of the Crosby 6M6 operational capability is based on a qualitative review of valve test performance in response to fluid inlet conditions that we would anticipate at Zion in transient and accident events. During such events, the safety valves are expected to be capable of the following functions which we consider to be important to plant safety; 1) opening, (2) closing, and (3) internal and external structural integrity (for subsequent actuations). On a qualitative basis, our preliminary conclusion is that the EPRI tests of the Crosby 6M6 valves that we consider applicable to Zion do in fact demonstrate the Zion safety valves capability to perform these functions. Furthermore, we conclude that if any such event were to occur presently, the Zion safety valves are capable of depressurizing the reactor coolant system in a manner which will not produce unacceptable adverse effects on plant safety.

Specific technical justification of the expected transient and accident safety valve fluid inlet conditions which we consider to be applicable to Zion will be included in, and will form the basis of, our July 1, 1982, final operability evaluation. Where applicable, the final evaluation will also quantify specific performance criteria for the Zion safety valves relative to the operability functions identified. The EPRI test results will then be reassembled in terms of these criteria. In the event that test results fall outside of these criteria, their potential impacts on Zion safety margins will be determined. Our action plan to resolve any unacceptably adverse impacts, with an associated completion schedule for any warranted plant equipment or procedural modifications, will be included as an addendum to the final evaluation.

Power Operated Relief Valves

The Zion pressurizer power operated relief valves are Copes-Vulcan 2 inch Model D-100-160 type, with 17-4PH cage and 316SS stellite clad plug. Please note that this represents a change from previous generic and plant unique submittals. The change is made in order to reflect recent modifications to both Zion units, where the original 17-4PH plugs were replaced with 316SS stellite clad plugs. This was done to improve the PORV seat leakage performance for the purpose of operating the Zion units with the PORV isolation (block) valves open. We were successful in this effort.

We have concluded that the EPRI tests of the 3 inch Copes-Vulcan 17-4PH/316SS stellite clad version of this valve are applicable to the Zion 2 inch PORVs. The referenced EPRI report sections that apply to Zion are as follows:

1. Safety & Relief Valve Test Report - Section 4.6

2. Valve Selection/Justification Report - Section III-B2

3. Test Condition Justification Report - Sections 2.2 & 3.8

4. Plant Conditions Justification Report - Westinghouse Plants - All sections related to 4 loop plants

Our preliminary evaluation of the Copes-Vulcan PORV operational capability was done qualitatively, in similar fashion to the Crosby 6M6 safety valves. As in the case of the Crosby 6M6, during transient and accident conditions we would anticipate at Zion, that the Copes-Vulcan PORVs should be capable of; 1) opening, (2) closing, and (3) internal and external structural integrity (for subsequent actuations). Our preliminary conclusion is that the EPRI tests of the Copes Vulcan PORV that we consider applicable to Zion, do in fact demonstrate the Zion PORVs capability to perform these functions. Furthermore, we conclude that if any such event were to occur presently, the Zion PORVs are capable of precluding unwarranted challenges to the pressurizer safety valves.

Our July 1, 1982, final operability evaluation for PORVs will be performed in accordance with the same approach identified for safety valves. Our action plan and schedule for any warranted equipment or procedural modifications will be included as an addendum.

II.D.3 Direct Indication of Relief and Safety Valve Position

Dresden and Quad Cities Response:

Reference (b) indicated that our schedule for completion of the qualification testing program was February, 1982, with the test report to be made available in April, 1982. Due to extensive delays in this program, the equipment qualification and testing is now scheduled for completion in September 1982. As a result, qualified equipment must then be delivered and installed. If the qualification/testing program and equipment delivery proceed as currently scheduled, the qualified equipment will be installed on each unit during each refueling outage commencing after January 1, 1983.

II.F.1.3 Containment High-Range Rad Monitor

Zion Response:

Reference (c) requested an implementation date extension to April 1, 1982. This modification is now installed and operable and will be addressed in our April 16, 1982, response to Generic Letter 82-05.

II.F.1.5 Containment Water Level

Dresden and Quad Cities Response:

Reference (d) indicated that we would provide an updated status of the resolution of our calibrational problems by April 1, 1982. These problems have been determined to be as a result of a misapplication of the instruments previously not identified by the vendor. The stations are relocating these instruments to resolve the problem as previously explained in Reference (d). We anticipate these modifications to be completed by July 1, 1982, with the system to be tested and placed in-service by August 1, 1982. However, we will provide a firm commitment for completion of this item in our response to Generic Letter 82-05.

II.K.3.18 Modification of Automatic Depressurization System Logic

Dresden and Quad Cities Response:

References (1): D. B. Waters letter to D. G. Eisenhut dated March 31, 1981.

(2): T. J. Dente letter to D. G. Eisenhut dated February 5, 1982.

Reference (a) provided our response for Dresden 2 and 3 and Quad Cities 1 and 2 concerning this item and indicated that proposed Automatic Depressurization System (ADS) logic changes would be submitted by April 1, 1982. These changes were to be based on the feasibility study prepared by the BWR Owners Group which was submitted in Reference (1) above.

Recently, conflicts have arisen concerning the preferred ADS logic changes identified in Reference (1) and the reactivity (power) control Emergency Procedure Guidelines (EPG's) being developed. The conflicts and concerns were identified to the NRC Staff in Reference (2) above.

Based on the concerns identified in Reference (2), Commonwealth Edison Company does not believe it is appropriate at this time to propose ADS logic modifications. Following completion of the supplement to the original Owners Group report (Reference (1)) currently scheduled for September 30, 1982, Commonwealth Edison will submit proposed ADS logic modifications, as required. We estimate that at least three (3) months will be required for review of the supplemental report before proposed modifications can be identified.

Based on the above, we request a delay of the required April 1, 1982, submittal date for proposed ADS modifications until at least three (3) months after completion of the supplemental report identified in Reference (2).

II.K.3.30 Revised Small Break LOCA Methods to Show Compliance with 10 CFR 50, Appendix K

Zion Response:

Reference (c) indicated that the revised Westinghouse small-break LOCA analysis model was scheduled for submittal to the NRC by April 1, 1982. The Westinghouse Letter NA-EPR-2581 dated March 26, 1982, transmitted to the NRC, the draft copy of WCAP-10,054 "Small-Break LOCA Analysis Model".