



**Commonwealth Edison**

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June 12, 1984

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

Subject: Quad Cities Station, Units 1 and 2  
NUREG-0737, Item II.K.3.16  
Reduction of Challenges and Failures  
of Relief Valves  
NRC Docket Nos. 50-254/265

References (a): D.B. Vassallo letter to D.L. Farrar  
dated April 3, 1984

(b): J.S. Abel letter to D.G. Eisenhut  
dated May 1, 1981.

Dear Mr. Denton:

Commonwealth Edison Company (CECo) has reviewed Reference (a) and the following is our response to the three questions presented, which were:

- (1) Which, if any, of the staff recommended modifications have been implemented,
- (2) Which, if any, of the staff recommended modifications you proposed to implement,
- (3) Whether you have implemented or propose to implement any of the other modifications or actions discussed in NUREG-0737, Item II.K.3.16 or in the BWR Owners Group report.

Question (1) Response:

The staff recommended modifications are:

- (1) Low-Low Set Relief Logic System or Equivalent Manual Actions;
- (2) Lower the reactor pressure vessel water level isolation setpoint for main steam isolation valve closure from Level 2 to Level 1;
- (3) Increase safety/relief valve simmer margin; and
- (4) Preventative Maintenance Program.

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Commonwealth Edison Company has not implemented modification 1, Low-Low Set, however, as part of NUREG-0737, Item I.C.1, CECO will implement the Emergency Procedure Guidelines developed by the BWR Owners Group. These procedures address the equivalent manual action identified as an option to Low-Low Relief set. These procedures will be in place by October, 1985.

As identified in the SER attached to Reference 1, Modification 2 is not applicable to Quad Cities.

Simmer margin, Modification 3 applies to the Target Rock type safety/relief valve. G.E. Service Information Letter, 196, Rev. 3 recommends a 120 psi differential pressure between the valve setpoint and normal operating pressure. Quad Cities normal operating pressure is 1000 psig and the Target Rock setpoint is 1135 psig, therefore, meeting the G.E. recommendation.

Likewise, CECO has in place a preventative maintenance program for the relief valves. Per the plant Technical Specifications, the relief valve setting is checked every refueling outage to assure the set pressure is as specified in the Technical Specification. In addition, the Target Rock relief valve is overhauled or replaced with an overhauled valve every other refueling outage. The Electromatic type relief valves are replaced every other refueling outage with rebuilt valves (i.e. - 50% of the valves are replaced every refueling outage). The "E" Electromatic is replaced every outage. The pilot solenoid is replaced with a rebuilt unit every refueling outage.

Question (2) Response:

In reference 2 of this letter CECO. stated that modifications were not necessary for Quad Cities because design currently meets the Owners Group criteria of 90% below that of the referenced plants probability for a stuck open relief valve. Therefore, CECO does not plan to implement recommended modifications 1 and 2.

Question (3) Response:

As part of CECO's modification program for 10CFR50, Appendix R and I.E. Bulletin 79-10B, Environmental Qualification of Electrical equipment, a redundant RCIC system will be added and an analog transmitter/trip system will replace the reactor vessel level scram monitoring system. The redundant RCIC system will reduce the probability of a stuck open relief valve by increasing the availability of the RCIC system, which can be used to reduce reactor pressure and potentially eliminate SRV opening. The BWR Owners Group position on NUREG-0737, Item II.K.3-16, identified numerous candidate modifications which would reduce the probability of a stuck open relief valve. The new analog transmitter, trip system being installed addresses item 3.1.4.1 of the BWR Owners Group report again decreasing the probability of a stuck open relief valve.

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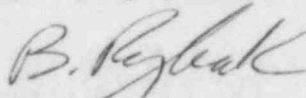
In addition, NUREG-0737, item II.K.3.16, recommended modification number 7 states, "offset valve setpoints to open fewer valves per challenge." Currently, Quad Cities has two relief valves set approximately 20 psig lower than the other three reliefs, therefore, meeting this recommendation.

In light of reference 2 and the above additional information, Quad Cities Station Units 1 and 2 meet the Owners Group criteria for reducing challenges to the relief valves. Therefore, no further modifications are needed or planned at this time.

If you have any questions concerning this matter please direct them to this office.

One (1) signed original and forty (40) copies of this transmittal are provided for your use.

Very truly yours,



B. Rybak

Nuclear Licensing Administrator

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cc: RIII Inspector - Quad Cities  
R. Bevan - NRR

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