

November 3, 1993

Docket No. 50-254

Mr. D. L. Farrar  
Manager, Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III, Suite 500  
1400 OPUS Place  
Downers Grove, Illinois 60515

Dear Mr. Farrar:

SUBJECT: RESOLUTION OF UNREVIEWED SAFETY QUESTIONS RELATED TO PROPOSED PLANT  
MODIFICATIONS ASSOCIATED WITH REACTOR VESSEL WATER LEVEL  
INSTRUMENTATION (TAC NO. M86909)

The Commission has forwarded the enclosed "Notice of Consideration of Issuance  
of Amendment to Facility Operating License, Proposed No Significant Hazards  
Consideration Determination and Opportunity for a Hearing" to the Office of  
the Federal Register for publication.

This notice relates to your October 29, 1993, submittal to resolve unreviewed  
safety questions related to proposed modifications associated with the Reactor  
Vessel Water Level Instrumentation.

Sincerely,

Original Signed By:

Chandu P. Patel, Project Manager  
Project Directorate III-2  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosure:  
Notice

cc w/enclosure:  
See next page

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NAME	SMOORE	CPATEL <sup>CP</sup>	JSTANG <sup>CP</sup> for	JDYER <sup>DM</sup>
DATE	11/3/93	11/3/93	11/3/93	11/3/93
COPY	YES/NO	YES/NO	YES/NO	YES/NO

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DATE	11/3/93	11/3/93	11/3/93	11/3/93
COPY	YES/NO	YES/NO	YES/NO	YES/NO

Mr. D. L. Farrar  
Commonwealth Edison Company

Quad Cities Nuclear Power Station  
Unit Nos. 1 and 2

cc:

Mr. Stephen E. Shelton  
Vice President  
Iowa-Illinois Gas and  
Electric Company  
P. O. Box 4350  
Davenport, Iowa 52808

Michael I. Miller, Esquire  
Sidley and Austin  
One First National Plaza  
Chicago, Illinois 60690

Mr. Richard Bax  
Station Manager  
Quad Cities Nuclear Power Station  
22710 206th Avenue North  
Cordova, Illinois 61242

Resident Inspector  
U. S. Nuclear Regulatory Commission  
22712 206th Avenue North  
Cordova, Illinois 61242

Chairman  
Rock Island County Board  
of Supervisors  
1504 3rd Avenue  
Rock Island County Office Bldg.  
Rock Island, Illinois 61201

Illinois Department of Nuclear Safety  
Office of Nuclear Facility Safety  
1035 Outer Park Drive  
Springfield, Illinois 62704

Regional Administrator, Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road, Bldg. #4  
Glen Ellyn, Illinois 60137

Robert Neumann  
Office of Public Counsel  
State of Illinois Center  
100 W. Randolph  
Suite 11-300  
Chicago, Illinois 60601

UNITED STATES NUCLEAR REGULATORY COMMISSIONCOMMONWEALTH EDISON COMPANYDOCKET NO. 50-254NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DRP-29, issued to the Commonwealth Edison Company (the licensee), for operation of the Quad Cities Nuclear Power Station, Unit 1, located in Rock Island County, Illinois.

The proposed amendment resolves unreviewed safety questions (USQ) related to proposed plant modifications associated with Reactor Vessel Water Level Instrumentation. These modifications have been initiated to mitigate the circumstances outlined in NRC Bulletin 93-03, "Resolution of Issues Related to Reactor Water Level Instrumentation in BWRs" dated May 28, 1993 (Bulletin).

Exigent circumstances exist because the design of the backfill instrumentation to meet the requirements of the Bulletin was not completed on a schedule to ensure that the resolution of the USQ would allow time for the normal 30-day public comment period and still allow startup from the planned maintenance outage for Quad Cities, Unit 1, scheduled for completion before November 22, 1993.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6), for an amendment to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated because:

The addition of the backfill instrumentation piping does not significantly increase the probability of an accident previously evaluated due to the low probability of the inadvertent closure of the root valves(s). CECO has evaluated the estimated frequency of the inadvertent closure of the root valve(s) at approximately  $1E-08$  per reactor year given the implementation of administrative controls. The resulting condition (valve mismanipulation) cycles the Reactor Pressure Vessel in a similar manner as a plant LOCA (i.e., simulates LOCA conditions). The current (pre-modification) LOCA initiation frequency is predicted to be approximately  $1E-04$  per reactor year. Therefore, the proposed modifications do not significantly increase the probability of any previously evaluated accident.

The consequences of any previously evaluated accident are not increased by the proposed modifications. For example, the consequences of closing the root valve for the reference leg from condensing chamber 12A, without first isolating the backfill injection, is the inadvertent pressurization of the reference leg resulting in the opening of the SRV and all Electromatic reliefs. This is equivalent to an inadvertent actuation of the automatic depressurization system (ADS) - an event that is not analyzed in the safety analysis as an initiating event. Regardless, the event is bounded by the recirculation line break analysis in terms of the RPV

response. Because this event would release inventory to the suppression pool, it has less significant consequence than other events previously analyzed for Dresden and Quad Cities Stations.

- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated because:

For Dresden and Quad Cities Station, a spectrum of Loss-of-Coolant Accidents have previously been evaluated. The accident in question associated with the proposed modifications can be categorized as a LOCA due to the resultant plant response following the initiating conditions. The previously analyzed LOCA analyses bound the conditions introduced by the proposed modifications. As such, the proposed amendment request for Dresden and Quad Cities Stations do not introduce any new or different kinds of accidents.

The proposed modification connects the non-safety-related CRD system to each division of RPV instrumentation. The failure of the CRD piping may result in instrument line leakage. However, this event is mitigated by the isolation action of the reference leg backfill instrument check valves. Although the proposed modifications may introduce the potential for a malfunction of equipment of a different type than previously evaluated in the safety analysis report, the proposed amendment request for Dresden and Quad Cities Stations does not introduce any new or different kinds of accidents.

- 3) Involve a significant reduction in the margin of safety because:

The previously analyzed LOCA consequences bound the consequences introduced by the inadvertent closure of the root valve(s) and subsequent LOCA conditions. As such, the previously approved safety margin remains unchanged. Therefore, the proposed modifications do not significantly reduce the margin of safety for both Dresden and Quad Cities Stations.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By December 9, 1993 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this

proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room located at the Dixon Public Library, 221 Hennepin Avenue, Dixon, Illinois 61021. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific

aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to J. Dyer: petitioner's

name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to Michael I. Miller, Esquire; Sidley and Austin, One First National Plaza, Chicago, Illinois 60690, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated October 29, 1993, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. 20555, and at the local public document room, located at the Dixon Public Library, 221 Hennepin Avenue, Dixon, Illinois 61021.

Dated at Rockville, Maryland, this 3rd day of November 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

*Chandu P. Patel*

Chandu P. Patel, Project Manager  
Project Directorate III-2  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation