

March 23, 1994

Docket Nos. STN 50-454, STN 50-455  
and STN 50-456, STN 50-457

Mr. D. L. Farrar, Manager  
Nuclear Regulatory Services  
Commonwealth Edison Company  
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Dear Mr. Farrar:

**SUBJECT: BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1 AND 2,  
MAIN STEAM SAFETY VALVE LIFT SETTING TOLERANCE (TAC NOS. M88968,  
M88969, M88970, M88971)**

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

This notice relates to your March 21, 1994 application to add a one-time revision to the Technical Specifications. This revision would permit continued activities at all four units with main steam Code safety valve tolerances of  $\pm 3\%$  until the lift setpoints can be reset to within  $\pm 1\%$ .

Sincerely,

Original signed by

George F. Dick, Jr., 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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cc:

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UNITED STATES NUCLEAR REGULATORY COMMISSIONCOMMONWEALTH EDISON COMPANYDOCKET NOS. STN 50-454, STN 50-455, STN 50-456, AND STN 50-457NOTICE 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 amendments to Facility Operating License Nos. NPF-37, NPF-66, NPF-72, and NPF-77, issued to Commonwealth Edison Company (the licensee), for operation of the Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2 located in Ogle County, Illinois and Will County, Illinois respectively.

The proposed amendments would add a one-time revision to Technical Specification (TS) 4.7.1.2 and Table 3.7-2 to permit continued activities at all four units with main steam Code safety valve tolerances of  $\pm 3$  percent until the setpoints can be reset to within  $\pm 1$  percent. Specifically, the licensee proposed making two changes to the TSs. One change would be the addition of a statement to TS 4.7.1.1 for Braidwood stating that the provisions of TS 4.0.4 are not applicable for Braidwood, Unit 1 Cycle 5 until initial entry into MODE 2. Braidwood, Unit 1, is currently in refueling. The second change would be a statement to Table 3.7-2 allowing main steam line Code safety valve lift settings to have a  $\pm 3$  percent tolerance until May 9, 1994, by which time the lift settings will be reset to  $\pm 1$  percent.

The exigent circumstances could not be avoided because the licensee only recently became aware of the possible out-of-tolerance setpoints through a

letter from the vendor dated March 10, 1994. Upon discovery, the licensee requested a Notice of Enforcement Discretion by telephone followed by a formal request on March 11, 1994. Upon review, the NRC concluded that exercising enforcement discretion involved minimal or no safety impact and exercised discretion not to enforce compliance with the TS for the period from March 10, 1994, until the approval of the TS amendment request which was to be submitted for NRC review by March 21, 1994.

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 amendments 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:

- a. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

In the analysis performed for a  $\pm 3\%$  as-found MSSV [main steam safety valve] setpoint, all of the applicable Loss of Coolant Accident (LOCA) and non-LOCA design basis acceptance criteria remain valid both for the

transients evaluated and the single event analyzed, Loss of External Load/Turbine Trip.

The MSSVs are actuated after accident initiation to protect the secondary systems from overpressurization. Increasing the as-found setpoint tolerance will not result in any hardware modification to the MSSVs. Therefore, there is not an increase in the likelihood of spurious opening of a MSSV. Sufficient margin exists between the normal steam system operating pressure and the valve setpoint with the increased tolerance to preclude an increase in the probability of actuating the valves.

The peak primary and secondary pressures remain below 110% of design at all times. The Departure from Nucleate Boiling Ratio (DNBR) and Peak Clad Temperature (PCT) values remain within the specified limits of the licensing basis. Although increasing the valve setpoint tolerance may increase the steam release from the ruptured steam generator above the UFSAR [Updated Final Safety Analysis Report] value by approximately 2%, the Steam Generator Tube Rupture (SGTR) analysis indicates that the calculated break flow is still less than the value reported in the UFSAR. Therefore, the radiological analysis indicates that the slight increase in the steam release is offset by the decrease in the break flow such that the offsite radiation doses are less than those reported in the UFSAR. The evaluation also concluded that the existing mass releases used in the offsite dose calculation for the remaining transients (i.e., steamline break, rod ejection) are still applicable. Therefore, based on the above, there is no increase in the dose releases.

The effects of increased tolerances for MSSV setpoints on the LOCA safety analyses has been previously performed for VANTAGE 5 fuel. Calculations performed to determine the response to a hypothetical large break LOCA do not model the MSSVs, since a large break LOCA is characterized by a rapid depressurization of the reactor coolant system below the pressure of the steam generators. Thus, the calculated consequences of a large break LOCA are not dependent upon assumptions of MSSV performance. Therefore, the large break LOCA analysis results are not adversely affected by revising setpoint tolerances.

The small break LOCA analyses presented in Appendix C of the Byron/Braidwood Stations Units 1 and 2 VANTAGE 5 Reload Transition Safety Report were performed using a 3% higher safety valve setpoint pressure. The standard 3% accumulation between valve actuation and full flow was also accounted for in the analyses. These analyses calculated peak cladding temperatures well below the allowed 2200° F limit as specified in 10 CFR 50.46 demonstrating that the change to the MSSV setpoint tolerance can be accommodated for small break LOCAs.

Neither the mass and energy release to the containment following a postulated LOCA, nor the containment response following the LOCA

analysis, credit the MSSV in mitigating the consequences of an accident. Therefore, changing the MSSV lift setpoint tolerances would have no impact on the containment integrity analysis. In addition, based on the conclusion of the transient analysis, the change to the MSSV tolerance will not affect the calculated steamline break mass and energy releases inside containment.

The loss of load/turbine trip event was analyzed in order to quantify the impact of the setpoint tolerance relaxation. As was demonstrated in the evaluation, all applicable acceptance criteria for this event have been satisfied and the conclusions presented in the UFSAR remain valid. The conclusions presented in the Overpressure Protection Report remain valid. Therefore, the probability or consequences of an accident previously evaluated in the UFSAR would not be increased as a result of increasing the MSSV lift setpoint as found tolerance to 3% above or below the current Technical Specification lift setpoint value.

The probability of an accident occurring will not be affected by granting this amendment request. Therefore, the requested amendment does not significantly increase the probability or consequences of an accident previously evaluated.

- b. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

No new system configurations are introduced, and no equipment is being operated in a new or different manner than has been previously analyzed. Accordingly, no new or different failure modes are being created. Increasing the as-left setpoint tolerance on the MSSV does not create the possibility of an accident which is different than any already evaluated in the UFSAR. Increasing the as-left lift setpoint tolerance on the MSSVs does not introduce a new accident initiator mechanism. No new failure modes have been defined for any system or component important to safety nor has any new limiting single failure been identified. No accident will be created that will increase the challenge to the MSSVs and result in increased actuation of the valves. Therefore, the possibility of an accident different than any already evaluated is not created.

- c. The proposed amendment does not involve a significant reduction in a margin of safety.

Although the proposed amendment is requested for equipment utilized to prevent overpressurization on the secondary side and to provide an additional heat removal path, increasing the as-left lift setpoint tolerance on the MSSVs will not adversely affect the operation of the reactor protection system, any of the protection setpoints or any other device required for accident mitigation.

The proposed increase in the as-left MSSV lift setpoint tolerance will not invalidate the LOCA and non-LOCA conclusions presented in the UFSAR accident analyses. The new loss of load/turbine trip analysis concluded that all applicable acceptance criteria are still satisfied. For all the UFSAR non-LOCA transients, the DNB [departure from nucleate boiling] design basis, primary and secondary pressure limits and dose release limits continue to be met. Peak cladding temperatures remain well below the limits specified in 10 CFR 50.46. Thus, there is no reduction in the margin of safety.

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 April 29, 1994, 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 rooms, which for Byron is located at the Byron Public Library, 109 N. Franklin, P. O. 434, Byron, Illinois 61010; and for Braidwood is located at the Wilmington Public Library, 201 S. Kankakee Street, Wilmington, Illinois 60481. 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 Mr. James E. 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; Sidney 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 March 11, 1994, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document rooms, which for Byron is located at the Byron Public Library, 109 N. Franklin, P. O. Box 434, Byron, Illinois 61010; and for Braidwood is located at the Wilmington Public Library, 201 S. Kankakee Street, Wilmington, Illinois 60481.

Dated at Rockville, Maryland, this 23rd day of March 1994.

FOR THE NUCLEAR REGULATORY COMMISSION

*George F. Dick, Jr.*  
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