

UNITED STATES NUCLEAR REGULATORY COMMISSIONBOSTON EDISON COMPANYDOCKET NO. 50-293NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-35, issued to Boston Edison Company (the licensee), for operation of the Pilgrim Nuclear Power Station (the facility), located in Plymouth County, Massachusetts.

In accordance with the licensee's application dated February 1, 1985, as modified February 15, 1985, the proposed amendment would modify the Technical Specifications (TS) to permit changes in the normal full power background trip level setting for the main steam line high radiation scram and isolation setpoints to accommodate a short-term test of operation with hydrogen injection into the reactor coolant. The purpose of the test is to enable Boston Edison Company to evaluate the feasibility and efficacy of hydrogen water chemistry as a mitigator of intergranular stress corrosion cracking (IGSCC) of BWR stainless steel piping at Pilgrim Station. Hydrogen injection will increase nitrogen (N-16) carryover in the main steam, which will increase background radiation in areas where main steam is found. The TS changes will permit an increase in the above setpoints prior to hydrogen injection at 20 percent or higher power levels and will require restoration of the pre-injection setpoints following the conclusion of injection, or when power is decreased to below 20 percent of rated power.

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

The Commission has made a proposed determination 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; (3) involve a significant reduction in a margin of safety. The determination was based upon the following considerations.

The only postulated event which takes credit for the main steam line high radiation (MSLRM) trip is the design basis control rod drop accident (CDRA). As stated in the Pilgrim Final Safety Analysis Report (FSAR), a CRDA is only of concern below 10% of rated power. Since the main steam line radiation monitor setpoint will be increased only for hydrogen injection at power levels of 20% or higher, the FSAR analysis and the design function of the MSLRM trip will remain valid. Therefore, this proposed Technical Specification change will not reduce plant safety margins.

If, due to a recirculation pump trip or other unanticipated power reduction event, the reactor drops below 20% rated power without setpoint readjustment, control rod withdrawal is prohibited until the necessary setpoint readjustment is made. This ensures that fuel failures of the type concerning the MSLRM are unlikely. In addition, the capability to monitor

for fuel failures, which is the mission of the MSLR trip setpoint, will be maintained by: (1) the continued operability of the main steam radiation monitors, which provide signals to the reactor protection and primary containment isolation systems; (2) routine radiation surveys; (3) the performance of primary coolant water analyses; and (4) the continued operability of the Steam Jet-Air Ejector Off-Gas Radiation Monitor.

Although the potential for error exists whenever instrument setpoints are adjusted, the resulting increase in the probability or consequences of accidents previously evaluated is considered insignificant because of Boston Edison's existing quality assurance program and operating procedures as applied to instrument adjustments.

At the maximum planned hydrogen injection rate, approximately 18 SCFM, experience at Dresden Unit 2 and General Electric facilities indicates an expected increase of approximately three to eight times the normal main steam line background radiation level. Radiation protection practices will be performed during initial hydrogen injection based upon a pre-injection radiation (ALARA) review. During initial injection, special radiation level surveys will be performed and protective actions will be taken, as appropriate, to control all onsite personnel exposure. As data is gathered and assessed, steps will be taken to make changes to plant design and procedures deemed appropriate to minimize personnel exposure during the injection of hydrogen. Changes in gaseous effluent release rates for hydrogen injection are expected to be negligible due to the short decay times for N-16.

Based on the diverse means for maintaining the ability to detect fuel failures, on the efficacy of existing programs and procedures to assure accurate instrument setpoint adjustment, on both routine and exceptional ALARA actions to be taken prior to and during injection, on the ability of existing Technical Specifications to ensure that inimical control rod movement cannot occur below 20% power, and on the insignificant effect of increased M-16 activity on gaseous effluent release rates, the Commission's staff concludes that the proposed amendment will not significantly increase the probability or consequences of accidents previously considered, will not create the possibility of a new or different accident from any previously evaluated, and will not significantly reduce a safety margin. Therefore, the staff proposes to determine that the proposed amendment does not involve significant hazards considerations.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Comments should be addressed to the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attn: Docketing and Service Branch.

By March 27, 1985, 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 petition for leave to intervene. Request for a hearing and petitions 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. 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 fifteen (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 fifteen (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, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. 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 a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. 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 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 involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-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 30-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 a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

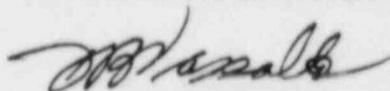
A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attn: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., by the above date. Where petitions are filed during the last ten (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 (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to Domenic B. Vassallo: 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 Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, and to W. S. Stowe, Esq., Boston Edison Company, 800 Boylston Street, 36th Floor, Boston, Massachusetts 02199, 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 Atomic Safety and Licensing Board designated to rule on the petition and/or request, that the petitioner has made a substantial showing of good cause for the granting of a late petition and/or request. That determination will be 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 February 1, 1985, as supplemented February 15, 1985, which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Plymouth Public Library, 11 North Street, Plymouth, Massachusetts 02362.

Dated at Bethesda, Maryland, this 20th day of February, 1985.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing