

UNITED STATES NUCLEAR REGULATORY COMMISSIONTENNESSEE VALLEY AUTHORITYDOCKET NO. 50-327NOTICE 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-77 issued to Tennessee Valley Authority (TVA or the Licensee), for the operation of the Sequoyah Nuclear Plants, Unit 1, located in Hamilton County, Tennessee.

The Licensee proposes to modify certain requirements on the upper head injection (UHI) accumulators for the Sequoyah Unit 1 (SQN) Technical Specification (TS). This is TS change 88-20 in the Licensee's application dated August 15, 1988. The proposed change would revise the SQN UHI level switch setpoint and tolerances of TS surveillance requirement (SR) 4.5.1.2.c.1. This change reflects the relationship between instrument-sensed differential pressure for the UHI water accumulator level and the delivered UHI water volume into the reactor vessel during an accident. A high differential pressure is sensed at the switch when the accumulator level is low, which correlates to the maximum injected water volume. Likewise, a low differential pressure is sensed for a high accumulator level and a minimum injected water volume.

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In its application, the Licensee stated that a Condition Adverse to Quality Report (CAQR) documented that the UHI level switches and setpoints currently used for Unit 1 could allow more than the analytical limit of 1130.5 cubic feet of UHI water to be injected during a postulated accident. It explained that two changes in the design and configuration of the UHI system were pursued to correct this potential problem. First, the minimum delivered UHI water volume is reduced from 900 cubic feet to 850 cubic feet. This is supported by Westinghouse Electric Corporation evaluations which are described in the application. Second, a new model of level switch is being installed in the UHI system, which are essentially the same as those switches presently used except for their span. The Licensee stated that because of the span differences the switches also have different accuracy characteristics. The Licensee has determined a new setpoint and tolerances based on the new instrument characteristics. These new values are being incorporated into SR 4.5.1.2.c.1 to ensure that the delivered UHI water volumes are bounded by the volumes assumed in the large-break, loss-of-coolant accident (LOCA) analyses. This, the Licensee explained, will ensure that the offsite doses from a postulated LOCA are bounded by the analyses in Section 15.5 of the SQN Final Safety Analysis Report (FSAR).

The Licensee requested in its application that, because of the potential for this amendment request to impact the heatup and restart of Unit 1, its application be given the highest priority and processed as expeditiously as possible. The Licensee explained that entry into Mode 3, Hot Standby, above 1900 psi is contingent upon the approval of this amendment request. The Licensee further explained that, if it appears that entry into Mode 3 above

1900 psi would be delayed strictly because the proposed TS change had not yet been approved it would request a temporary waiver of compliance for SR 4.5.1.2.c.1 until the amendment had been approved.

Before issuance of the proposed amendment, the Commission will have made findings required by the Atomic Energy Act of 1954 (the Act), as amended, 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; (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. The basis for this proposed determination is provided by the Licensee in its submittal and is given below.

TVA has evaluated the proposed technical specification change and has determined that it does not represent a significant hazards consideration based on criteria established in 10 CFR 50.92(c). Operation of SQN in accordance with the proposed amendment will not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated. The UHI system is designed to supply additional inventory to the reactor core during the blowdown phase of a LOCA. UHI flow to the core is terminated by automatic hydraulic isolation valves. These valves are actuated by level switches on the UHI water accumulator. The proposed change reflects a new actuation setpoint and the associated instrument tolerances for the level switches. As such, the change does not increase the probability of a previously evaluated accident. The new setpoint and tolerances were calculated based on a new level switch accuracy characteristic and a broadened UHI-delivered water volume band. Broadening the delivered water volume band did result in increased PCTs [peak clad temperatures] for the limiting cases. In all cases, however, the PCT remained below the 10 CFR 50.46 limit of

2,200°F. This in turn ensures that offsite doses remain bounded by the analyses of [SQN] FSAR Section 15.5. Because the proposed setpoint ensures that the delivered water volume remains bounded by the new analytical limits, the proposed change does not increase the consequences of by previously evaluated accident.

- (2) Create the possibility of a new or different kind of accident from any previously analyzed. The proposed change to the actuation setpoint and tolerances represents no modification to the UHI design or operation, which could create a new accident. The change only affects the performance of UHI for accident scenarios in which it is already assumed to function.
- (3) Involve a significant reduction in a margin of safety. The proposed change to SR 4.5.1.2.c.1 represents a new setpoint and accuracies for the combination of new level switches and a broadened delivered water volume band. The setpoint ensures that the delivered water volume remains between 850 and 1,130.5 cubic feet. Westinghouse analyses have indicated that delivered water volumes between these limits ensure that PCT remains below 2,200°F. Therefore, the margin of safety is not reduced by this proposed change.

In its review of the Licensee's application, the NRC staff concluded that, although the PCT remains below the limit of 2200°F in 10 CFR Part 50.46, the PCT does rise because of the proposed changes and there is a reduction in a margin of safety. However, the rise in PCT is not significant and the PCT remains below the limit of 2200°F. Therefore, the NRC staff concludes that the proposed changes do not involve a significant reduction in a margin of safety.

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 Rules and Procedures Branch, Division of Rules and Records, Office of Administration, U. S. Nuclear Regulatory

Commission, Washington, D. C. 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice.

By September 28, 1988, 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 the 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 must 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 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 must 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 proceedings; (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 the petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or 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, the 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 should 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 request for amendment 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 request for amendment involves a significant hazards consideration, any hearing held would take place before the issuance of the 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 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, Attention: 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 toll-free telephone call to Western Union at 1-800-325-6000 (in Missouri 1-800-342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to Suzanne C. Black: 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, D. C. 20555, and to Newman & Holtzinger, P.C., 1615 L Street, N.W., Washington, D. C. 20036, attorneys for the Licensee.

Nontimely filings of the petition 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 designated to rule on the petition and/or requests, that the 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 which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., 20555, and at the Local Public Document Room located at the Chattanooga-Hamilton County Library, 1001 Broad Street, Chattanooga, Tennessee 37402.

Dated at Rockville, Maryland, this 22 day of August 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Suzanne C. Black, Assistant Director
for Projects

TVA Projects Division
Office of Special Projects

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