

U. S. NUCLEAR REGULATORY COMMISSION
TOLEDO EDISON COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DOCKET NO. 50-346
ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-3 issued to Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees), for operation of the Davis-Besse Nuclear Power Station, Unit No. 1 located in Ottawa County, Ohio.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action

The proposed amendment would revise the provisions in the Davis-Besse Nuclear Power Station, Unit No. 1, Technical Specifications (TS's), Section 4.4.5.2 relating to steam generator tube sample selection and inspection in accordance with Toledo Edison Company's application dated January 11, 1988.

Specifically, the proposed amendment would add a third, special interest group comprised of tubes near the centers of both steam generators. This new special interest group shall be effective only through the fifth refueling outage.

The Need for the Proposed Action

The proposed changes are needed to support inspection of 100 percent of the specified region of tubes in the central regions of the steam generators in addition to the random sampling of the remaining tubes.

Environmental Impacts of the Proposed Action

The Davis-Besse steam generators provide primary to secondary pressure boundary and provide heat removal from the reactor vessel. The tube inspection ensures this boundary is maintained by verifying tube material integrity.

The Technical Specifications for the Davis-Besse Nuclear Power Station require periodic inspection of a minimum of 3% of the total tubes in both steam generators. The tubes for inspection are to be selected randomly, except that certain tubes known to have detectable wall penetrations are to be included in the inspection and at least 50% of the tubes to be inspected are to be in areas where experience has indicated potential problems. Experience has shown that many tubes with defects are clustered in certain regions of the steam generators. This phenomenon is a result of the non-homogeneous arrangement of tubes in the steam generator which allows various degradation mechanisms to be more important in certain regions. The Technical Specifications, therefore, permit excluding tubes in certain regions from the random sample provided that all tubes in that region are inspected. The Davis-Besse Technical Specifications provide for two of these special-interest groups, and the proposed amendment would add a third. The designation of special-interest groups is important for several reasons, one of which is that since inspection frequency and subsequent sample size for inspection is dependent upon the results of the random sampling, exclusion of the special-interest groups from the random sample can result in substantially reduced numbers of tubes to be inspected. Thus, the inspection can be accomplished more economically with little or no reduction in safety.

The Commission has evaluated the environmental impact of the proposed amendment and has determined that post-accident radiological releases would not be greater than previously determined, and the proposed amendment does not otherwise affect radiological plant effluents during normal operation. In addition, occupational radiation exposure is not changed significantly. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed amendment.

With regard to potential nonradiological impacts, the proposed amendment involves a change in steam generator inspection performance and tube selection. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the Federal Register on March 25, 1988 (53 FR 9835). No request for hearing or petition for leave to intervene was filed following this notice.

Alternatives to the Proposed Action

Since the Commission has concluded that the environmental effects of the proposed action are not significant, any alternative with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce the environmental impacts attributable to this facility. Denial would result in fewer tube inspections and, therefore, decreased awareness of actual steam generator tube conditions.

Alternate Use of Resources

This action does not involve the use of resources not previously considered in the Final Environmental Statement related to operation of the Davis-Besse facility.

Agencies and Persons Consulted

The Commission's staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated January 11, 1988 which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington D.C., and at the University of Toledo Library, Documents Department, 2801 Bancroft Avenue, Toledo, Ohio 43606.

Dated at Rockville, Maryland, this 14th day of July, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

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