

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
TENNESSEE VALLEY AUTHORITY  
(Browns Ferry Nuclear Plant,  
Units 1, 2 and 3)

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Docket Nos. 50-259  
50-260  
and 50-296

REVISED ORDER FOR MODIFICATION OF LICENSES

I.

The Tennessee Valley Authority (licensee) is the holder of Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 which authorize the operation of the Browns Ferry Nuclear Plant, Units 1, 2 and 3 at steady state reactor power levels each not in excess of 3293 megawatts thermal (rated power). The facilities consist of boiling water reactors located at the licensee's site in Limestone County, Alabama.

II.

On November 4, 1977, the Union of Concerned Scientists (UCS) filed with the Commission a "Petition for Emergency and Remedial Relief." The petition sought action in two areas: fire protection for electrical cables, and environmental qualification of electrical components. By Memorandum and Order dated April 13, 1978 (7 NRC 400), the Commission denied certain aspects of the petition and, with respect to other aspects, ordered the NRC staff to take several related actions. UCS filed a Petition for Reconsideration on May 2, 1978. By Memorandum and Order, dated May 23, 1980, the Commission reaffirmed its April 13, 1978 decision

regarding the possible shutdown of operating reactors. However, the Commission's May 23, 1980 decision directed licensees and the NRC staff to undertake certain actions.

With respect to environmental qualification of safety-related electrical equipment, the Commission determined that the provisions of the two staff documents - the Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines) and NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979 "form the requirements which licensees and applicants must meet in order to satisfy those aspects of 10 CFR Part 50, Appendix A General Design Criterion (GDC-4), which relate to environmental qualification of safety-related electrical equipment." The Commission directed, for replacement parts in operating plants, "unless there are sound reasons to the contrary, the 1974 standard in NUREG-0588 will apply." The Commission also directed the staff to complete its review of the information sought from licensees by Bulletin 79-01B<sup>1</sup> and to complete its review of environmental qualification of safety-related electrical equipment in all operating plants, including the publication of Safety Evaluation Reports, by February 1, 1981. The Commission

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<sup>1</sup> Bulletin 79-01B was not sent to licensees for plants under review as part of the staff's Systematic Evaluation Program. The information sought by Bulletin 79-01B was requested from these licensees by a series of letters and meetings during the months of February and March, 1980.

imposed a deadline that, "by no later than June 30, 1982 all safety-related electrical equipment in all operating plants shall be qualified to the DOR Guidelines or NUREG-0588." The Commission requested the staff to, "keep the Commission and the public apprised of any further findings of incomplete environmental qualification of safety-related electrical equipment, along with corrective actions taken or planned," and requested the staff to provide bi-monthly progress reports to the Commission.

The Commission further directed the staff to add certain documentation requirements to each license after the specific requirements were approved by the Commission. The Commission also pointed out that the various deadlines imposed in its Order, "do not excuse a licensee from the obligation to modify or replace inadequate equipment promptly."

### III.

The information developed during this proceeding emphasizes the importance of adequate documentation, the prompt completion of the review of environmental qualification of safety-related electrical equipment, and the prompt completion of any plant modification needed to assure conformance with the DOR Guidelines or NUREG-0588. A significant aspect of this review is the timely submittal of environmental qualification information by the operating plant licensees to enable the staff to complete its review in accordance with the Commission's Order. The staff has a program presently underway to reevaluate, using the DOR Guidelines and NUREG-0588, the qualifications of safety-related electrical equipment exposed

to environments that may exist following postulated accidents. These accidents are Loss of Coolant Accident and Main Steam Line Break inside containment, and High Energy Line Breaks inside and outside containment.

In this connection the licensee was requested by I&E Bulletin 79-01B of January 14, 1980 to provide a detailed review of the environmental qualification of Class 1E electrical equipment. This review was to include all equipment required to function under postulated accident conditions, both inside and outside the primary containment, and recognize all conditions specified in the bulletin. Evidence of qualification together with methods and justification, was requested.

Clarification was provided by supplemental information, briefings, and in some cases, meetings with the licensee. Timely completion of the staff's review of environmental qualification of electrical equipment and timely completion of needed modifications by the licensee is required to provide continuing reasonable assurance of public health and safety. Such completion is dependent on the prompt receipt of a complete response by the licensee to the staff's requests for information. However, the licensee's response, to date, is incomplete.

Therefore, I have concluded that the public health, safety, and interest require that a firm schedule for the timely submission of all the information previously requested by the staff should be established by Order effective immediately.

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT EFFECTIVE IMMEDIATELY Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 are hereby amended to add the following provisions:

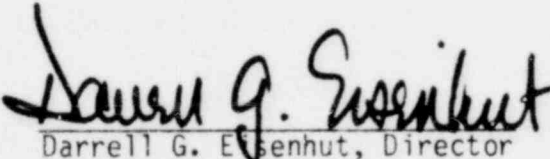
"Information which fully and completely responds to the staff's request as specified in I & E Bulletin 79-01B, shall be submitted to the Director, Region II, Office of Inspection and Enforcement, by the licensee not later than November 1, 1980."

An earlier response is encouraged to facilitate staff review and issuance of the safety evaluation report. The licensee or any person whose interest may be affected by this Order may request a hearing within 20 days of the date of publication of this Revised Order in the Federal Register. Any request for a hearing will not stay the effective date of this Order. Any request for a hearing shall be addressed to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D. C. 20555. A copy of the request should also be sent to the Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, and to H. S. Sanger, Jr., Esquire, General Counsel, Tennessee Valley Authority, 400 Commerce Avenue, E11B, 33C Knoxville, Tennessee 37902, attorney for the licensee.

If a hearing is held concerning this Order, the issue to be considered at the hearing shall be whether the license should be modified to require submission of information as set forth in Section IV. of the Order.

Operating of the facilities on terms consistent with this Order is not stayed by the pendency of any proceedings on the Order. This Order revises, in its entirety, the Order issued August 29, 1980, and published in the Federal Register September 12, 1980, (45 FR 60519).

FOR THE NUCLEAR REGULATORY COMMISSION

  
Darrell G. Eisenhower, Director  
Division of Licensing

Effective Date: September 19, 1980  
Bethesda, Maryland