

Docket

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U.S. NRC
DIVISION OF LICENSING
WASHINGTON

Docket No. 50-237

Mr. J. S. Abel
Director of Nuclear Licensing
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Abel:

SUBJECT: ORDER FOR MODIFICATION OF LICENSE CONCERNING ENVIRONMENTAL
QUALIFICATION OF SAFETY-RELATED ELECTRICAL EQUIPMENT (SEP
TOPIC III-12) - DRESDEN NUCLEAR POWER STATION, UNIT NO. 2

Ref. (a) Commission Memorandum and Order of May 23, 1980 (80-CLI-21)
Ref. (b) Inspection and Enforcement Bulletin Supplement No. 2 to
IEB-79-01B, September 30, 1980.

This letter transmits an Order for Modification of License which changes the Technical Specifications for Dresden Nuclear Power Station, Unit No. 2. This change is a result of Ref. (a) which required the staff to codify the documentation requirements for the qualification of safety-related electrical equipment. A copy of the Order is being filed with the Office of the Federal Register for publication.

The deadline of November 1, 1980 for submittal of the qualification information is not changed by this Order. Some additional information regarding the file is contained in Ref. (b). Questions regarding this Order should be directed through your Project Manager.

Sincerely,

ORIGINAL SIGNED BY

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
Order (w/attachments)

cc w/enclosure: See Next Page

8011240 037

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 24, 1980

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Mr. J. S. Abel

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October 24, 1980

cc w/enclosure:

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Dresden Nuclear Power Station
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Natural Resources Defense Council
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Washington, D. C. 20005

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Resident Inspectors Office
Dresden Station
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Director, Technical Assessment
Division
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Agency
Federal Activities Branch
Region V Office
ATTN: EIS COORDINATOR
230 South Dearborn Street
Chicago, Illinois 60604

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of Commonwealth Edison)
 Company)
 Dresden Nuclear Power Station,)
 Unit No. 2)

Docket No. 50-237

ORDER FOR MODIFICATION OF LICENSE

I.

Commonwealth Edison Company (the licensee) is the holder of Provisional Operating License No. DPR-19, which authorizes the operation of the Dresden Nuclear Power Station, Unit No. 2 at steady state reactor power levels not in excess of 2527 megawatts thermal (rated power). The facility consists of a boiling water reactor located at the licensee's site in Grundy County, Illinois.

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.

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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 IE Electrical Equipment in Operating Reactors" (DOR Guidelines) and NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979 (copies attached) "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 qualifications 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 79-01B¹ 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 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."

¹ 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.

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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 that, "In order to leave no room for doubt on this issue, the staff is to prepare additional Technical Specifications for all operating plants which codify the documentation requirement paragraph of the Guidelines (paragraph 8.0)." The staff was directed to add these documentation requirements to each license after they 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 Commission has approved the Technical Specification provisions set forth in Section IV below which specify documentation requirements and which specifically impose on the licensee the requirement of the Commission's May 23, 1980 Memorandum and Order that by no later than June 30, 1982 all safety-related electrical equipment shall be qualified to the DOR Guidelines or NUREG-0588.

The information developed during the Commission review of the UCS Petition emphasizes the importance of prompt completion of the upgrading of

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environmental qualification of safety-related electrical equipment to conform to the DOR Guidelines or NUREG-0588 and of adequate documentation of equipment qualifications. The deadlines set forth in the Commission's Memorandum and Order dated May 23, 1980, assure that such upgrading will be accomplished promptly. In order to assure prompt completion of necessary qualification work or replacement of unqualified components, if necessary, in conformance with the requirements of the Commission's Memorandum and Order dated May 23, 1980, and to provide complete and adequate documentation as promptly as possible, such upgrading and documentation work must commence immediately. Therefore, I have concluded that the public health, safety and interest require this Order for Modification of License to be effective immediately.

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's Rules and Regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT EFFECTIVE IMMEDIATELY Provisional Operating License No. DPR-19 is hereby amended to add the following provisions to the Appendix A Technical Specifications.

- (a) "By no later than June 30, 1982, all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588, "Interim Staff Position on Environmental

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Qualification of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-19 dated October 24, 1980.

- (b) "By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified."

To effectuate the foregoing, appropriate pages for incorporation into the Technical Specifications are attached to this Order.

V

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 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 Isham, Lincoln & Beale, Counselors at Law, One First National Plaza, 42nd Floor, Chicago, Illinois, attorney for the licensee.

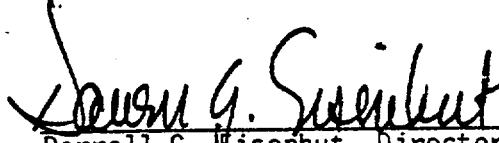
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If a hearing is held concerning this Order, the issues to be considered at the hearing shall be:

- a. whether the licensee should be required to have the environmental qualification records referred to in Section IV, above, available at a central location by no later than December 1, 1980; and
- b. whether all safety-related electrical equipment should be qualified as required in Section IV, above, by no later than June 30, 1982.

Operation of the facility on terms consistent with this Order is not stayed by the pendency of any proceedings on the Order.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhower, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Effective Date: October 24, 1980
Bethesda, Maryland

Attachments:

1. Technical Specification Pages
2. Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors
3. NUREG-0588, Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment.

2

B. Records and/or logs relative to the following items shall be recorded in a manner convenient for review and shall be retained for the life of the plant.

1. Substitution or replacement of principal items of equipment pertaining to nuclear safety.
2. Changes made to the plant as it is described in the Safety Analysis Report.
3. Records of new and spent fuel inventory and assembly histories.
4. (Deleted)
5. Updated, corrected, and as-built drawings of the plant.
6. Records of plant radiation and contamination surveys.
7. Records of off-site environmental monitoring surveys.
8. Records of radiation exposure for all plant personnel, including all contractors and visitors to the plant in accordance with 10 CFR 20.
9. Records of radioactivity in liquid and gaseous wastes released to the environment.

10. Records of transient or operational cycling for those components that have been designed to operate safely for a limited number of transient or operational cycles.
11. Records of individual staff members indicating qualifications, experience, training and retraining.
12. Inservice inspections of the reactor coolant system.
13. Minutes of meetings and results of reviews performed by the off-site and on-site review functions.
14. Records for Environmental Qualification which are covered under the provisions of paragraph 6.7.

6.6 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Director of the appropriate Regional Office of Inspection and Enforcement unless otherwise noted.

A. Routine Reports

1. Startup Report

A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

6.7 Environmental Qualification

- A. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0500 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-19 dated October 24, 1980.
- B. By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0500. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.