



REGULATORY DOCKET FILE 001  
UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 24, 1980

Dockets Nos. 50-269, 50-270  
and 50-287

Mr. William O. Parker, Jr.  
Vice President - Steam Production  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Dear Mr. Parker:

SUBJECT: ORDER FOR MODIFICATION OF LICENSES CONCERNING ENVIRONMENTAL  
QUALIFICATION OF SAFETY-RELATED ELECTRICAL EQUIPMENT

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 Licenses which changes the Technical Specifications for Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. 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,

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Enclosure:  
Order for Modification  
of Licenses

cc w/enclosure: See next page

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Duke Power Company

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October 24, 1980

cc w/enclosure(s):

Mr. William L. Porter  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Office of Intergovernmental Relations  
116 West Jones Street  
Raleigh, North Carolina 27603

Oconee Public Library  
201 South Spring Street  
Walhalla, South Carolina 29691

Honorable James M. Phinney  
County Supervisor of Oconee County  
Walhalla, South Carolina 29621

Director, Criteria and Standards  
Division  
Office of Radiation Programs (ANR-460)  
U. S. Environmental Protection Agency  
Washington, D. C. 20460

U. S. Environmental Protection Agency  
Region IV Office  
ATTN: EIS COORDINATOR  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Mr. Francis Jape  
U.S. Nuclear Regulatory Commission  
P. O. Box 7  
Seneca, South Carolina 29678

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
DUKE POWER COMPANY  
(Oconee Nuclear Station, Units  
Nos. 1, 2 and 3)

Dockets Nos. 50-269, 50-270,  
and 50-287

ORDER FOR MODIFICATION OF LICENSES

I.

The Duke Power Company (licensee) is the holder of Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, which authorize the operation of the Oconee Nuclear Station, Units Nos. 1, 2 and 3, at steady state reactor power levels not in excess of 2568 megawatts thermal (rated power) for each unit. The facilities consist of pressurized water reactors located at the licensee's site in Oconee County, South Carolina.

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 79-01B<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 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."

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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.

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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 Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 are 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 facilities 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 Licenses DPR-38, DPR-47 and DPR-55 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.

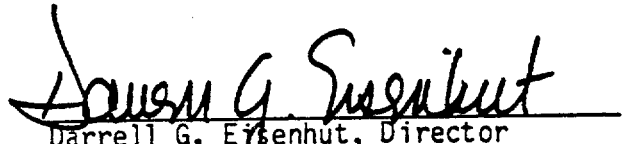
The licensee or any person whose interest may be affected by this Order may request a hearing within 20 days of the date of publication of this Order in the Federal Register. Any request for a hearing will not stay the effective date of this Order. Any request for a hearing shall be addressed to the 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 William S. Porter, Duke Power Company, P. O. Box 2178, 422 South Church Street, Charlotte, North Carolina 28242, attorney for the licensee.

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 IE Electrical Equipment in Operating Reactors
3. NUREG-0588, Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment.



Specification

6.5.1 The following records shall be prepared and permanently retained in a manner convenient for review:

- a. Records of modifications to the station as described in the FSAR.
- b. Special nuclear material physical inventory records.
- c. Special nuclear material isotopic inventory records.
- d. Radiation monitoring records, including records of radiation and contamination surveys.
- e. Records of off-site environmental surveys.
- f. Personnel radiation exposure records as required by 10CFR20.
- g. Records of radioactive releases and waste disposal.
- h. Records of reactor coolant system in-service inspections.
- i. Preoperational testing records.
- j. Records of special reactor tests or experiments.
- k. Records of changes to safety-related operating procedures.
- l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.7.

6.5.2 The following records shall be prepared and retained for a minimum of six (6) years in a manner convenient for review:

- a. Switchboard Record.
- b. Reactor Operations Logbook.
- c. Shift Supervisor Logbook.
- d. Maintenance histories for station safety-related structures, systems and components.
- e. Records of safety-related inspections, other than reactor coolant system in-service inspections.
- f. Records of reportable occurrences.
- g. Periodic testing records and records of other periodic checks, calibrations, etc. performed in accordance with surveillance requirements for safety-related parameters, structures, systems and components.

## 6.7 ENVIRONMENTAL QUALIFICATION

6.7.1 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 Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of Licenses DPR-38, DPR-47 and DPR-55 dated October 24, 1980.

6.7.2 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.