

OCT 24 1980

Distribution:

✓ Docket	J. Roe
NRC PDR	S. Norris
Local PDR	M. Williams
ORB Reading	OELD
NRR Reading	OI&E (3)
H. R. Denton	B. Jones (4)
E. G. Case	ACRS (16)
R. Hartfield, MPA	OPA (Clare Miles)
G. Bennington, MPA	NSIC
D. Eisenhut	TERA
R. Purple	Secretariat (SECY)
T. Novak	R. Diggs
R. Tedesco	J. Heltemes, AEOD
G. Lainas	V. Rooney
	J. Murray, OELD

Docket No. 50-271

Mr. Robert L. Smith
Licensing Engineer
Vermont Yankee Nuclear Power
Corporation
25 Research Drive
Westboro, Massachusetts 01581

Dear Mr. Smith:

SUBJECT: ORDER FOR MODIFICATION OF LICENSE 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 License which changes the Technical Specifications for Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Plant. 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
T. A. Ippolito

Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

8011070569

G

Enclosure:
Order

cc w/enclosure: See Next Page

OFFICE	ORB #2	ORB #2	ORB #2	ORB #2	ORB #2
SURNAME	S. Norris	V. Rooney: kf	T. Ippolito	M. Williams	D. Eisenhut
DATE	10/24/80	10/24/80	10/24/80	10/24/80	10/24/80

Mr. Robert L. Smith

- 2 -

October 24, 1980

cc:

Mr. W. F. Conway
Vice President and Manager of
Operations
Vermont Yankee Nuclear Power
Corporation
P. O. Box 157
Vernon, Vermont 05602

Mr. Louis Heider, V.P.
Vermont Yankee Nuclear Power
Corporation
25 Research Drive
Westboro, Massachusetts 05181

John A. Ritscher, Esquire
Rope & Gray
225 Franklin Street
Boston, Massachusetts 02110

Laurie Burt
Assistant Attorney General
Environmental Protection Division
Attorney General's Office
One Ashburton Place, 19th Floor
Boston, Massachusetts 02108

New England Coalition on Nuclear
Pollution
Hill and Dale Farm
West Hill - Faraway Road
Putney, Vermont 05346

Mr. Raymond H. Puffer
Chairman
Board of Selectman
Vernon, Vermont 05354

W. P. Murphy, Plant Superintendent
Vermont Yankee Nuclear Power
Corporation
P. O. Box 157
Vernon, Vermont 05354

Brooks Memorial Library
224 Main Street
Brattleboro, Vermont 05301

John R. Stanton, Director
Radiation Control Agency
Haven Drive
Concord, New Hampshire 03301

John W. Stevens
Conservation Society of Southern
Vermont
P. O. Box 256
Townshend, Vermont 05353

Dr. Mars Longley, Director
Occupational & Radiological Health
10 Baldwin Street
Montpelier, Vermont 05602

Ronald J. Wilson
810 18th Street, N. W.
Suite 802
Washington, D. C. 20006

Honorable M. Jerome Diamond
Attorney General
John A. Calhoun
Assistant Attorney General
State of Vermont
109 State Street
Pavilion Office Building
Montpelier, Vermont 05602

Mr. J. E. Griffin, President
Vermont Yankee Nuclear Power
Corporation
77 Grove Street
Rutland, Vermont 05701

U. S. Environmental Protection
Agency
Region I Office
ATTN: EIS COORDINATOR
JFK Federal Building
Boston, Massachusetts 02203

Mr. Robert L. Smith

- 3 -

October 24, 1980

cc:

David White
Co-Director
Vermont Public Interest
Research Group, Inc.
26 State Street
Montpelier, Vermont 05602

Public Service Board
State of Vermont
120 State Street
Montpelier, Vermont 05602

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
US EPA
Crystal Mall #2
Arlington, Virginia 20460

Vermont Yankee Decommissioning
Alliance
127 Main Street
Brattleboro, Vermont 05301

Vermont Yankee Decommissioning
Alliance
5 State Street
Box 1117
Montpelier, Vermont 05602

Resident Inspector
c/o U. S. NRC
P. O. Box 176
Vernon, Vermont 05453

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of
VERMONT YANKEE NUCLEAR POWER
CORPORATION
(Vermont Yankee Nuclear Power Plant))

Docket No. 50-271

ORDER FOR MODIFICATION OF LICENSE

I.

The Vermont Yankee Nuclear Power Corporation (licensee) is the holder of Facility Operating License No. DPR-28 which authorizes the operation of the Vermont Yankee Nuclear Power Plant at steady state reactor power levels not in excess of 1593 megawatts thermal (rated power). The facility consists of a boiling water reactor located at the licensee's site in Windham County, Vermont.

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 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.

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

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 License No. DPR-28 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

Qualification of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-28 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

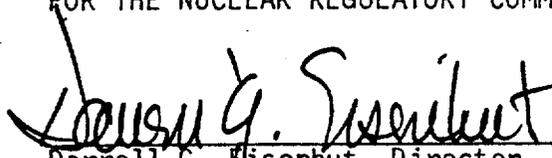
The licensee or any person whose interest may be affected by this Order may request a hearing within 20 days of the date of publication of this Order in the Federal Register. Any request for a hearing will not stay the effective date of this Order. Any request for a hearing shall be addressed to the 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 John A. Ritsher, Esquire, Ropes and Gray, 225 Franklin Street, Boston, Massachusetts 01581, 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. Wisenhut, 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.

7. Records of transient or operational cycling for those plant components that have been designed to operate safely for a limited number of transients or operational cycles.
8. Records of inservice inspections of the reactor coolant system.
9. Minutes of meetings of the Plant Operation Review Committee and the Nuclear Safety Audit and Review Board.
10. Records for Environmental Qualification which are covered under the provisions of paragraph 6.9.

6.9 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 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 License DPR-28 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.