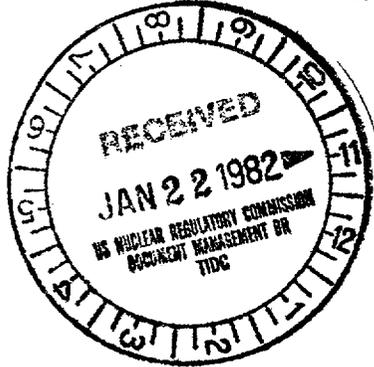


JAN 14 1982

Docket No. 50-271

Mr. Robert L. Smith
Licensing Engineer
Vermont Yankee Nuclear Power
Corporation
1671 Worcester Road
Framingham, Massachusetts 01701



Dear Mr. Smith:

The Commission has issued the enclosed Order modifying the January 13, 1981 Order, as modified by the Order dated November 25, 1981, for the Vermont Yankee Nuclear Power Plant. This Order grants an extension of the exemption and extends the completion date for installation of plant modifications needed to comply with the staff's Acceptance Criteria contained in Appendix A to NUREG-0661 to no later than prior to the start of Cycle 10.

The completion schedule reflected in this Order is that contained in the Mark I Owners Group submittal dated June 29, 1981 or as subsequently agreed upon by you and the staff as confirmed in your December 10, 1981 letter and approved by the Commission.

The granting of this extension is based on information provided to the staff by you and the Mark I Owners Group. Unforeseen difficulties and delays were identified primarily related to one or more of the following: (1) torus and torus attached piping analyses; (2) equipment delivery; (3) the use of interpretations and/or alternate approaches to the NUREG-0661 Acceptance Criteria; (4) plant-unique design and modification problems; and (5) slippages in refueling outages.

We have reviewed your scheduled revisions and believe an acceptable balance has been achieved between the modifications completed which provide a significant improvement in the safety margin and the granting of additional time for completion of the remaining modifications which will fully restore the originally intended safety margin. The plant-unique analyses for your facility should be submitted for confirmatory review in accordance with the schedule provided in the June 29, 1981 Mark I Owners Group Status Summary Report or as subsequently agreed upon by you and the staff.

OFFICE							
SURNAME	B202100020 B20114						
DATE	PDR ADOCK 05000271						
	P PDR						

JAN 14 1982

Mr. Robert L. Smith

- 2 -

The issuance of this modifying Order provides an extension of the exemption from General Design Criterion 50 of Appendix A to 10 CFR Part 50 previously granted to the affected licensee on January 13, 1981. This exemption concerns the minimum margins of safety in the containment design. As part of the Mark I Containment Short-Term Program (STP), the staff determined that a margin of safety of at least two in the containment design was sufficient to assure the containment function in the event of a design basis loss-of-coolant accident (LOCA) and, therefore, provided an adequate basis for continued plant operation until the completion of the Long-Term Program (LTP). The objective of the LTP, which will be completed when the provisions of the enclosed Orders are satisfied, is to restore the originally intended margins of safety in the containment design (approximately three to four).

A copy of the enclosed Order is being filed with the Office of the Federal Register for publication.

Sincerely,

Domenic Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosure:
Order

cc: w/enclosure
See next page

Distribution:	Docket File	NRC PDR	Local PDR	ORB#2 Rdg	D. Eisenhut
S. Norris	B. Siegel	OELD	I&E(4)	T. Barnhardt-4	L. Schneider
D. Brinkman	ACRS-10	Gray	V. Rooney	R. Diggs	NSIC
TERA	OPA-C. Miles	Extra(5)	SECY	ASLAB	

OFFICE	ORB#2	ORB#2	ORB#2	ORB#2	DL:AD:OR	DL:DEPDIR	DL:DIR	OELD
SURNAME	SNorris	BSiegel	VRooney	TTippen	TNovak	RPurple	DEisenhut	KEyn
DATE	1/1/82	1/6/82	1/8/82	1/6/82	1/11/82	1/1/82	1/15/82	1/8/82

Mr. Robert L. Smith

cc:

Mr. W. F. Conway
President & Chief Operating Officer
Vermont Yankee Nuclear Power Corp.
411 Western Avenue
Drawer 2
West Brattleboro, Vermont 05301

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

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

New England Coalition on Nuclear
Pollution
Hill and Dale Farm
R.D. 2, Box 223
Putney, Vermont 05346

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

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

Brooks Memorial Library
224 Main Street
Brattleboro, Vermont 05301

Raymond N. McCandless
Vermont Division of Occupational
& Radiological Health
Administration Building
10 Baldwin Street
Montpelier, Vermont 05602

Honorable John J. Easton
Attorney General
State of Vermont
109 State Street
Montpelier, Vermont 05602

Mr. E. W. Jackson
Manager of Operations
Vermont Yankee Nuclear Power Corp.
411 Western Avenue
Drawer 2
West Brattleboro, Vermont 05301

U.S. Environmental Protection Agency
Region I Office
Regional Radiation Representative
JFK Federal Building
Boston, Massachusetts 02203

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

Vermont Yankee Decommissioning
Alliance
53 Frost 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

Vermont Public Interest Research
Group, Inc.
43 State Street
Montpelier, VT 05602

Ronald C. Haynes
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION

In the Matter of)	
Vermont Yankee Nuclear Power Corporation)	Docket No. 50-271
Vermont Yankee Nuclear Power Plant)	

MODIFICATION OF JANUARY 13, 1981
 AND NOVEMBER 25, 1981 ORDERS

I.

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

II.

On January 13, 1981 the Commission issued an Order modifying the license requiring: (1) the licensee to promptly assess the suppression pool hydrodynamic loads in accordance with NEDO-21888 and NEDO-24583-1 and the Acceptance Criteria contained in Appendix A to NUREG-0661 and (2) design and install any plant modifications needed to assure that the facility conforms to the Acceptance Criteria contained in Appendix A to NUREG-0661. The Order, published in the Federal Register on January 28, 1981 (46 FR-9323), required installation of any plant modifications needed to provide compliance with the Acceptance Criteria in Appendix A to NUREG-0661 be completed not later than November 30, 1981, or, if the plant is shutdown on that date, before the resumption of power operation thereafter.

On November 25, 1981 a 45-day extension of this January 13, 1981 Order, published in the Federal Register on December 3, 1981 (46 FR-58760), was granted by the Director of the Division of Licensing pending Commission approval of a staff generic proposal to extend the completion dates for the Mark I long-term program containment modification for all affected licenses.

III.

On October 31, 1979 the staff issued an initial version of its acceptance criteria to the affected licensees. These criteria were subsequently revised in February 1980 to reflect acceptable alternative assessment techniques which would enhance the implementation of this program. Throughout the development of these acceptance criteria, the staff has worked closely with the Mark I Owners Group in order to encourage partial plant-unique assessments and modifications to be undertaken.

Since the development of these acceptance criteria, significant progress has been made by the licensee in meeting the Order requirements. However, by letter dated February 23, 1981 the licensee stated that unforeseen difficulties and delays have been encountered primarily related to one or more of the following: (1) torus and torus attached piping analyses; (2) equipment delivery; (3) the use of interpretations and/or alternate approaches to the NUREG-0661 Acceptance Criteria; (4) plant-unique design and modification problems; and (5) slippages in refueling outages that have necessitated revision of the Order date.

The major modifications, which are those associated with the torus, vent system, internal structures and safety relief valve piping, which comprise approximately 75% of the total program effort, have been completed. The remaining items to be completed are primarily associated with the torus attached piping modifications.

The Commission believes that substantial improvements have already been made in the margins of safety of the containment systems and expects improvements will continue to be made during the period until all the modifications required for compliance with this Order are completed. The Commission further believes an acceptable balance has been achieved between completion of the major modifications, which provide significant improvement in the safety margin, and the granting of additional time for completion of the remaining modifications which fully restore the originally intended safety margin. In consideration of the range of completion dates submitted by all of the affected licensees and an assessment of the nature of the remaining effort involved in the analysis, design and installation of the needed plant modifications, the Commission has concluded that the licensee's proposed completion schedule is both responsive and practicable.

The Commission has, therefore, determined to modify the January 13, 1981 Order, as modified by the Order of November 25, 1981, to extend the previously imposed completion date for needed plant modifications. This Order continues in effect the exemption to General Design Criterion 50 of Appendix A to 10 CFR Part 50 granted on January 13, 1981.

IV.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, including Sections 103 and 161i, and the Commission's rules and regulations in 10 CFR Parts 2 and 50, IT IS ORDERED that the completion date specified in Section V of the January 13, 1981, "Order for Modification of License," as modified by the Order of November 25, 1981, is hereby changed to read as follows: "prior to the start of Cycle 10." The Order of January 13, 1981, except as modified herein, remains in effect in accordance with its terms.

V.

The licensee may request a hearing on this Order within 30 days of the date of publication of this Order in the Federal Register. A request for hearing shall be submitted to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Copies of the request shall also be sent to the Secretary of the Commission and the Executive Legal Director at the same address.

If a hearing is requested by the licensee the Commission will issue an order designating the time and place of any such hearing. If a hearing is held, the issue to be considered at such a hearing shall be whether the completion date specified in Section V of the January 13, 1981, "Order for Modification of License," should be changed to prior to start of Cycle 10.

This Order shall become effective upon expiration of the period within which a hearing may be requested or, if a hearing is requested, on the date specified in an order issued following further proceedings on this Order.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Dated at Bethesda, Maryland,
this 14th day of January 1982