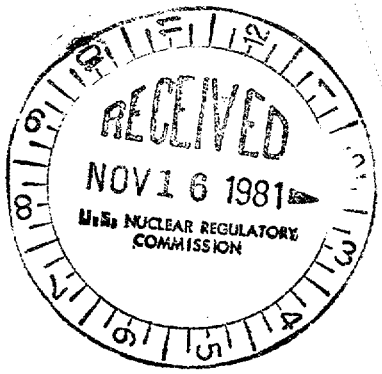
November 10, 1981

Docket No. 50-271



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

Dear Mr. Smith:

The Commission has issued the enclosed Amendment No. 67 to Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station. This amendment consists of changes to the Technical Specifications in response to your application dated June 30, 1981 as supplemented August 26, 1981 and subsequent discussions between the NRC staff and your staff.

These changes to the Technical Specifications incorporate limiting conditions for operation and surveillance requirements related to fire protection modifications which have been implemented at your facility.

On January 13, 1978 we issued our Fire Protection Safety Evaluation Report for the Vermont Yankee Nuclear Power Station which supported Amendment No. 43 to Operating License No. DPR-28. Amendment No. 54 issued September 12, 1979 modified Operating License No. DPR-28 to require a 5-man fire brigade. This amendment adds limiting conditions of operation and surveillance requirements pertaining to fire protection equipment which has been added to the facility.

We have reviewed your submittals and determined that the proposed addition of Limiting Conditions for Operation and Surveillance Requirements for (1) Fire Hose Stations, (2) High Pressure CO_2 System, (3) Sprinkler Systems, (4) Foam Systems, and (5) Fire Detection Sensors includes all necessary items contained in our fire protection evaluation and is acceptable. These proposed changes to the Technical Specifications conform where applicable to the most recent Standard Technical Specifications for GE BWRs (NUREG-0123 Rev. 3). Therefore, we find these changes acceptable as an administrative change implementing a previously reviewed and approved action of the Commission.

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment. We have determined that the amendment does not authorize a change in effluent types or total amounts

OFFICE ▶							
SURNAME ▶							
DATE ▶							

nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR Section 51.5(d)(4) that an environmental impact statement, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

Since the amendment is an administrative action, it does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin, and therefore does not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of a related Notice of Issuance is also enclosed.

Sincerely,

ORIGINAL SIGNED BY

Vernon L. Rooney, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:
1. Amendment No. 67 to DPR-28
2. Notice

cc: w/ enclosures
See next page

Distribution:
Docket File
NRC PDR
Local PDR
ORB#2 Reading
D. Eisenhut
J. Olshinski
S. Norris
V. Rooney
OELD
IE (3)
G. Deegan (4)
ACRS (10)
OPA (Clare Miles)
NSIC
TERA
B. Scharf (10)
D. Brinkman
ASLAB
Gray file

Amendment + FR Notice

OFFICE	ORB#2	ORB#2	ORB#2	AD:OR	OELD		
SURNAME	SNorris	VRooney:pbe	TIppolito	TNovak	R. Bachmann		
DATE	11/2/81	11/3/81	11/3/81	11/3/81	11/4/81		

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

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

VERMONT YANKEE NUCLEAR POWER CORPORATION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 67
License No. DPR-28

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Vermont Yankee Nuclear Power Corporation (the licensee) dated June 30, 1981 as supplemented August 26, 1981 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-28 is hereby amended to read as follows:

   2. Technical Specifications

      The Technical Specifications contained in Appendix A, as revised through Amendment No. 67 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 10, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 67

FACILITY OPERATING LICENSE NO. DPR-28

DOCKET NO. 50-271

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove	Insert
ii	ii
iii	iii
iv	iv
187f	187f
187g	187g
187h	187h
187i	187i
-	187j
-	187k
-	187l
-	187m

Amendment No. 67

TABLE OF CONTENTS (Con't)

TABLE OF CONTENTS (Con't)

3.13 Limiting Conditions for Operation

C. Fire Hose Stations

1. Except as specified in 3.12.C.2 below, all hose stations inside the Reactor Building, Turbine Building, and those inside the Administration Building which provided coverage of the Control Room Building shall be operable whenever equipment in the areas protected by the fire hose stations is required to be operable.

2. With one or more of the fire hose stations specified in 3.13.C.1 above inoperable, route an additional equivalent capacity fire hose to the unprotected area(s) from an operable hose station within one hour.

D. High Pressure CO_2 System

1. Except as specified in Specification 3.13.D.2, the CO_2 systems located in the cable vault, switchgear room, and diesel fire pump day tank room shall be operable, whenever equipment in the area protected by the system is required to be operable.

4.13 Surveillance Requirements

C. Fire Hose Stations

1. Each fire hose station shall be verified to be operable:

   a. At least monthly by visual inspection of the station to assure all equipment is available.

   b. At least once each 18 months by removing the hose for inspection and replacing degraded coupling gaskets and reracking.

   c. At least once each year by hydro-statically testing each outside hose at 250 lbs.

   d. At least once per 3 years by hydro-statically testing inside hose at 150 lbs.

   e. At least once per 3 years, partially open hose station valves to verify valve operability and no blockage.

D. High Pressure CO_2 System

1. The CO_2 system located in the cable vault, switchgear room, and diesel fire pump day tank room shall be demonstrated operable.

   a. At least once per six months by verifying each CO_2 cylinder does not contain less than 90% of its initial charge.

3.13 Limiting Conditions for Operation

2. From and after the date that the CO_2 system in the cable vault or the switchgear room is inoperable, establish a continuous fire watch within one hour with backup fire suppression equipment. Restore the system to operable status within 14 days or submit a report within the next 30 days to the Commission as specified in 6.7.C.2 outlining the cause of inoperability and the plans for restoring the system to operable status.

3. From and after the date that the CO_2 system in the diesel fire pump day tank room is inoperable, within one hour a fire watch shall be established to inspect the location at least once every hour. Restore the system to operable status within 14 days or submit a report within the next 30 days to the Commission as specified in 6.7.C.2 outlining the cause of inoperability and the plans for restoring the system to operable status.

E. Vital Fire Barrier Penetration Fire Seals

1. Except as specified in Specification 3.13.E.2 below, vital fire barrier penetration seals protecting the Reactor Building, Control Room Building and Diesel Generator Rooms shall be intact.

2. From and after the date a vital fire barrier penetration fire seal is not intact, a continuous fire watch shall be established on at least one side of the affected penetration within 1 hour.

3.13.F Sprinkler Systems

1. Except as specified in Specification 3.13.F.2 below, those sprinkler systems listed in Table 3.13.F.1 shall be operable whenever equipment in the area protected by those sprinklers is required to be operable.

4.13 Surveillance Requirements

b. At least once per 18 months by verifying that the system, including associated ventilation dampers, will actuate automatically to a simulated actuation signal.

c. At least once per operating cycle a flow path test shall be performed to verify flow through each nozzle.

E. Vital Fire Barrier Penetration Fire Seals

1. Vital fire barrier penetration fire seals shall be verified to be functional by visual inspection at least once per operating cycle and following any repair.

4.13.F Sprinkler Systems

1. Each of the sprinkler systems specified in Table 3.13.F.1 shall be demonstrated operable:

a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.

b. At least once each month by verifying each valve in the flow path is in its correct position. (For electrically supervised valves, adequate verification is a visual check of electrical indication.)

3.13 Limiting Conditions for Operation

4.13 Surveillance Requirements

Amendment No. 67

2. From and after the date that one of the sprinkler systems specified in Table 3.13.F.1 is inoperable, a fire watch shall be established within one hour to inspect the location with the inoperable sprinkler system at least once every hour. Restore the sprinkler system to operable status within 14 days or submit a report within the next 30 days to the Commission as specified in 6.7.C.2 outlining the cause of the malfunction and the plans for restoring the system to operable status.

c. At least once per 18 months by;

1. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.

2. A visual inspection of the sprinkler headers to verify their intergrity, and

3. A visual inspection of each nozzle's spray area to verify that the spray pattern is not obstructed.

4. Verifying that automatic valves actuate to their correct position from a test signal.

d. At least once per 3 years by performing a flow test through each open head sprinkler header and verifying each open head sprinkler nozzle is unobstructed.

3.13.G Foam Systems

1. Except as specified in Specification 3.13.G.2 below, the Recirculation M.G. Set Foam System shall be operable with its foam concentrate tank full (100 gallons) whenever the Recirculation M.G. Sets are operating.

2. From and after the date that the Recirculation M.G. Set Foam System is inoperable, a fire watch shall be established to inspect the location at least once every hour; and a foam nozzle shall be brought to the Reactor Building elevation containing the Recirculation M.G. Sets. A 100 gallon foam concentrate supply shall be available

4.13.G Foam Systems

1. The foam system specified in 3.13.G shall be demonstrated operable.

a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.

b. At least once per 18 months by:

3.13 Limiting Conditions for Operation

3. Except as specified in Specification 3.13.G.4 below, the Turbine Building Foam System shall be operable with its foam concentrate tank full (150 gallons).

4. From and after the date that the Turbine Building Foam System is operable a portable foam nozzle shall be brought to the Turbine Building Foam System location. A 150 gallon foam concentrate supply shall be available on site.

4.13 Surveillance Requirements

1. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.

2. A visual inspection of the foam system and equipment to verify intergrity, and

3. A visual inspection of the Recirculation MG Set Foam System foam nozzle area to verify that the spray pattern is not obstructed.

4. Foam concentrate samples shall be taken and analyzed for acceptability.

d. At least once per 3 years by performing an air flow test through the Recirculation MG Set foam header and verifying each foam nozzle is unobstructed.

Table 3.13.A.1

Fire Detection Sensors

	Sensor Location	Minimum No. Sensors Required to be Operable		
		Heat	Flame	Smoke
1.	Cable Spreading Room & Station Battery Room	-	-	23
2.	Switchgear Room	-	-	20
3.	Diesel Generator Room (A)	-	-	2
4.	Diesel Generator Room (B)	-	-	2
5.	Intake Structure (Service Water)	1	1	1
6.	Recirc Motor Generator Set Area	3	-	8
7.a	Control Room Zone 1 (Control Room Ceiling)	-	-	14
7.b	Control Room Zone 2 (Control Room Panels)	-	-	18
7.c	Control Room Zone 3 (Control Room Panels)	-	-	25
7.d	Control Room Zone 4 (Control Room Panels)	-	-	10
7.e	Control Room zone 5 (Exhaust & Supply Ducts)	-	-	2
8.a	Rx Bldg. Corner Rm NW 232	-	-	1
8.b	Rx Bldg. Corner Rm NW 213 (RCIC)	-	-	1
8.c	Rx Bldg. Corner Rm NE 232	-	-	1
8.d	Rx Bldg. Corner Rm NE 213	-	-	1
8.e	Rx Bldg. Corner Rm SE 232	-	-	1
8.f	Rx Bldg. Corner Rm SE 213	-	-	1
8.g	Rx Bldg. Corner Rm SW 232	-	-	1
9.	HPCI Room	-	-	8

Table 3.13.A.1, cont.

Sensor Location	Minimum No. Sensors Required to be Operable		
	Heat	Flame	Smoke
10. Torus area	12	-	16
11. Rx Bldg. Cable Penetration Area	-	-	7
12. Refuel Floor	-	-	13
13. Diesel Oil Day Tank Room (A)	-	1*	1*
14. Diesel Oil Day Tank Room (B)	-	1*	1*
15. Turbine Loading Bay (vehicles)	-	3	-

*NOTE: The Diesel Day Tank Rooms require only one detector operable (1 flame or 1 smoke).

Table 3.13.F.1
Sprinkler Systems

1. Reactor Building Penetration Area Preaction System
2. Diesel Generator Room A System
3. Diesel Generator Room B System
4. Turbine Loading Bay System
5. Diesel-driven Fire Pump System

Bases:

3.13/4.13 Fire Protection Systems

On May 11, 1976, Vermont Yankee received a letter from the NRC requesting that an in-depth evaluation of the existing fire protection systems be performed using Branch Technical Position (BTP) APCSB 9.5-1 as a guide. Concurrent with this evaluation a fire hazards analysis of the entire plant complex was required. In an effort to clarify the BTP an Appendix A was subsequently issued to specifically address operating plants. Enclosed with this Appendix the NRC requested that proposed Technical Specifications on fire protection also be submitted. The subject section 3.13/4.13 and the following specific bases are those specifications evolving from these efforts.

A. The smoke, heat and flame detectors provide the early warning fire detection capability necessary to detect problems in vital areas of the plant. Surveillance requirements assure these sensors and their associated instruments to be operable. When the equipment protected by the detectors is not required to be operable, specifications covering the sensors and instruments do not apply.

B,C,D, F and G. The Vital Fire Suppression Water System, CO_2 systems, sprinkler systems and foam systems specifications are provided to meet pre-established levels of system operability in the event of a fire. These systems provide the necessary protection to assure safe reactor shutdown. Periodic surveillance testing provides assurance that vital fire suppression systems are operable.

E. Vital fire barrier penetration fire seals are provided to assure that the fire resistance rating of barriers is not reduced by a penetration. Surveillance inspections shall be performed to insure that the integrity of these seals is maintained.

The diesel fire pump has a design consumption rate of 18 gallons of fuel per hour; therefore, 150 gallons provides for greater than 8 hours of operation. Additional fuel can be delivered in about one hour and additional fuel is on site. When the equipment protected by the fire protection systems is not required to be operable, the specifications governing the fire protection system do not apply.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 67 to Facility Operating License No. DPR-28 issued to Vermont Yankee Nuclear Power Corporation which revises the Technical Specifications for operation of the Vermont Yankee Nuclear Power Station located in Windham County, Vermont. The amendment is effective as of the date of its issuance.

The amendment revises the Technical Specifications to incorporate limiting conditions for operation and surveillance requirements related to fire protection modifications.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated June 30, 1981 as supplemented August 26, 1981, (2) Amendment No. 67 to License No. DPR-28, and (3) the Commission's letter to the licensee dated November 10, 1981 . All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Brooks Memorial Library, 224 Main Street, Brattleboro, Vermont 05301. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 10th day of November 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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