

September 8, 1972

Docket No. 50-271

Vermont Yankee Nuclear Power Corp.
ATTN: Mr. Albert A. Cree, President
77 Grove Street
Rutland, Vermont 05701

Gentlemen:

Pursuant to the Initial Decision of the presiding Atomic Safety and Licensing Board, issued August 24, 1972 and a Memorandum of the Atomic Safety and Licensing Appeal Board, issued September 5, 1972, the Atomic Energy Commission has issued Amendment No. 2 to the Facility Operating License No. DPR-28 to the Vermont Yankee Nuclear Power Corporation. Amendment No. 2, a copy of which is enclosed, is a temporary operating license which authorizes operation of the Vermont Yankee Nuclear Power Station at thermal power levels not to exceed 318.6 megawatts (20% of rated power), in accordance with the Technical Specifications (Appendices "A" and "B") appendend thereto, with operation restricted to the closed-cycle cooling mode.

Your attention is directed to the restriction contained in the temporary operating license whereby Vermont Yankee and its sponsoring utilities are prohibited from retiring, dismantling, or performing any maintenance on any of their existing generating capacity that could reasonably be delayed, on the ground of the availability of the capacity of the Vermont Yankee Nuclear Power Station. The temporary operating license is effective as of the date of issuance, and shall expire (a) on February 28, 1973, or on such later date to which it may be extended, or (b) upon earlier issuance of a full-term operating license. The Commission will vacate this temporary operating license if it finds that Vermont Yankee is not prosecuting its application for a full-term operating license with due diligence. Upon

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expiration of the temporary operating license, without the issuance of a full-term operating license, the facility license in effect for Vermont Yankee Nuclear Power Station shall be the facility license as it read prior to Amendment No. 2.

A related notice which has been forwarded to the Office of the Federal Register for filing and publication is enclosed for your information.

Sincerely,

Original Signed by
Roger S. Boyd

Roger S. Boyd, Assistant Director
for Boiling Water Reactors
Directorate of Licensing

Enclosures:

1. Amendment No. 2 to DPR-28
2. Federal Register Notice

cc: John A. Ritscher, Esquire
Ropes & Gray
225 Franklin Street
Boston, Massachusetts 02110

D. E. Vandeburgh, Vice President
Vermont Yankee Nuclear Power Corp.
Turnpike Road
Westboro, Massachusetts 01581

Lawrence E. Minnick, Vice President
Vermont Yankee Nuclear Power Corp.
Turnpike Road
Westboro, Massachusetts 01581

bcc: HJMcAlduff, ORO
HMueller, GMR/H
JAHarris PI
JRBuchanan, ORNL
TWLaughlin, DTIE

NHGoodrich, ASLBP
AAWells ASLABP
SRobinson, SECY
JSaltzman SLR
St. George T. Arnold

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UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER CORPORATION

(VERMONT YANKEE NUCLEAR POWER STATION)

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE (TEMPORARY OPERATING LICENSE)

Notice is hereby given that the Atomic Energy Commission (the Commission) has issued Amendment No. 2 to Facility Operating License No. DPR-28 to Vermont Yankee Nuclear Power Corporation (Vermont Yankee). Amendment No. 2 is a temporary operating license which authorizes operation of the Vermont Yankee Nuclear Power Station (the facility) at thermal power levels not to exceed 318.6 megawatts (20% of the facility's rated power), in accordance with the Technical Specifications (Appendices "A" and "B") appended thereto. Operation of the facility is restricted to the authorized power level and to the closed-cycle cooling mode and, in accordance with Section 50.57 (d) of 10 CFR Part 50, Vermont Yankee and its sponsoring utilities are prohibited from retiring, dismantling, or performing any maintenance on any of their existing generating capacity that could reasonably be delayed, on the ground of the availability of the capacity of the Vermont Yankee Nuclear Power Station. The facility is a boiling water nuclear power reactor located at the licensee's site in Windham County, Vermont.

On March 21, 1972, the Commission issued Facility Operating License No. DPR-28 to Vermont Yankee which permitted fuel loading and low-power testing, at power levels not to exceed 15.9 megawatts thermal (1% of the facility's rated power), in accordance with the Technical Specifications (Appendix "A") appended thereto. Amendment No. 1 to DPR-28, issued on

April 21, 1972, modified the license to authorize the receipt, possession and use of certain special nuclear material and byproduct material.

On August 24, 1972, the presiding Atomic Safety and Licensing Board (Board), after a hearing held August 15, 1972, on a motion by Vermont Yankee, issued an initial decision authorizing the issuance of a temporary operating license, pursuant to Section 192 of the Atomic Energy Act of 1954, as amended, (Act) subject to the resolution of two questions certified to the Commission. On September 5, 1972, the Atomic Safety and Licensing Appeal Board (Appeal Board) to which the Commission delegated the authority and review functions which the Commission would otherwise exercise and perform in this proceeding (36 F. R. 3837, February 27, 1971) issued a memorandum with respect to the certified questions. The Appeal Board's responses to the certified questions are such as authorize the immediate issuance of the temporary operating license which has been issued.

Concurrently with the issuance of the temporary operating license, the Commission issued Change No. 3 to the Technical Specifications which, in part, deleted the Environmental Technical Specifications (Section 7.0) previously contained in Appendix "A" to DPR-28, issued on March 21, 1972, and reissued the Environmental Technical Specifications as Appendix "B" to the temporary operating license. The Environmental Technical Specifications contained in Appendix "B" provide for protection of the environment during the period of the temporary operating license. Changes Nos. 1 and 2 to the Technical Specifications, dated July 24, 1972, and August 1, 1972, respectively, clarified and modified the Technical Specifications, but did not present any significant safety considerations not previously described or implicit

in the Safety Analysis Report. Similarly, Change No. 3, in addition to transferring the Environmental Technical Specifications to Appendix "B", further clarifies and modifies the Technical Specifications by adding several operating conditions without presenting any significant safety considerations not previously described or implicit in the Safety Analysis Report.

The Commission's regulatory staff has inspected the facility and has determined that, for operation as authorized by the temporary operating license, the facility has been constructed in accordance with the application, as amended, the provisions of Provisional Construction Permit No. CPPR-36, the Act, and the Commission's regulations. The licensee has submitted proof of financial protection in satisfaction of the requirements of 10 CFR Part 140.

The Board has concluded that the facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission and will not be inimical to the common defense and security or to the health and safety of the public and that Vermont Yankee is technically and financially qualified to engage in the activities authorized by the temporary operating license. The Board has further concluded that operation of the facility during the period of the temporary operating license in accordance with its terms and conditions will provide adequate protection of the environment during the period of the temporary operating license, and that operation of the facility in accordance with the terms and conditions of the temporary operating license is essential toward insuring that the power generating capacity of the utility system or power pool here involved is at, or is restored to, the levels required to assure the adequacy and reliability of the power supply.

The temporary operating license is effective as of the date of issuance and shall expire on February 28, 1973, or on such later date to which it may be extended or upon earlier issuance of a full-term operating license. The Commission will vacate the temporary operating license if it is found that Vermont Yankee is not prosecuting its application for a full-term operating license with due diligence. Upon expiration of the temporary operating license, without the issuance of a full-term operating license, the facility license in effect for this facility shall be the facility license as it read prior to Amendment No. 2.

For further details, see (1) the Board's Orders, dated August 4 and 24, 1972, (2) the Appeal Board's Memoranda and Orders dated August 29, 1972 and September 5, 1972, (3) Amendment No. 2, to Facility Operating License No DPR-28, (4) Change No. 3 to Technical Specifications dated September 7, 1972, (5) Vermont Yankee's Motion dated July 11, 1972 and supporting affidavits, and (6) the Regulatory Staff's Answer dated August 3, 1972 and supporting affidavits, all of which are available for public inspection in 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. Copies of items (3) and (4) may be obtained upon request addressed to the U. S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Director of Licensing.

Dated at Bethesda, Maryland, this *7th* day of September, 1972.

FOR THE ATOMIC ENERGY COMMISSION



Roger S. Boyd, Assistant Director
for Boiling Water Reactors
Directorate of Licensing



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

Vermont Yankee Nuclear Power Corporation

(Vermont Yankee Nuclear Power Station)

Docket No. 50-271

Facility Operating License

License No. DPR-28
Amendment No. 2
[TEMPORARY OPERATING LICENSE]

The Atomic Energy Commission (the Commission) having found that:

- a. Construction of the Vermont Yankee Nuclear Power Station (the facility) has been substantially completed in conformity with the application, as amended, the Provisional Construction Permit No. CPPR-36, the provisions of the Atomic Energy Act of 1954, as amended (the Act), and the rules and regulations of the Commission as set forth in Title 10, Chapter 1, CFR; and
- b. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission; and
- c. There is reasonable assurance (i) that the activities authorized by this temporary operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission; and
- d. The Vermont Yankee Nuclear Power Corporation (Vermont Yankee) is technically and financially qualified to engage in the activities authorized by this temporary operating license, in accordance with the rules and regulations of the Commission; and
- e. Vermont Yankee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations; and
- f. The issuance of this temporary operating license will not be inimical to the common defense and security or to the health and safety of the public; and

- g. Operation of the facility during the period of this temporary operating license in accordance with its terms and conditions will provide adequate protection of the environment during the period of this temporary operating license; and
- h. Operation of the facility in accordance with the terms and conditions of this temporary operating license is essential toward insuring that the power generating capacity of the utility system or power pool here involved is at, or is restored to, the levels required to assure the adequacy and reliability of the power supply; and
- i. The issuance of this temporary operating license is authorized by Section 192 of the Act and all the provisions of that section, of Section 185 of the Act, and of the Commission's implementing regulations contained in 10 CFR Part 2, "Rules of Practice", and 10 CFR Part 50, "Licensing of Production and Utilization Facilities" have been met.

Accordingly, Facility Operating License No. DPR-28, as amended, issued to Vermont Yankee Nuclear Power Corporation (Vermont Yankee), is hereby amended in its entirety for the duration of this temporary operating license, to read:

- 1. This temporary operating license applies to the Vermont Yankee Nuclear Power Station (the facility), a single cycle, boiling water, light water moderated and cooled reactor, and associated electric generating equipment. The facility is located on Vermont Yankee's site, in the Town of Vernon, Windham County, Vermont, and is described in the application as amended.
- 2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the applicant:
 - A. Pursuant to Sections 104b and 192 of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use, and operate the facility as a utilization facility at the designated location on the Vermont Yankee site.
 - B. Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material", to receive, possess, and use at any one time up to 1800 kilograms of U-235 contained in reactor fuel assemblies, and in up to ten individual fuel rods; 16 grams of plutonium encapsulated as Pu-Be-Neutron source assemblies; and 140 grams of U-235 contained in aluminum-clad elements and 1 gram of U-235 as fission detectors for use in the reactor instrumentation system, all in connection with operation of the facility.

- C. Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Licensing of Byproduct Material", to receive, possess, and use in connection with operation of the facility any byproduct material with Atomic numbers between 3 and 83, inclusive, in any form with no nuclide to exceed 2 millicuries; 50 curies of cesium 137, 25 millicuries of cobalt 60 both as sealed sources; 100 microcuries of strontium 90 as sealed instrument check sources, each source not to exceed 5 microcuries; 6 curies of americium 241 as sealed sources; eight sources of 1200 curies each of antimony 124 as sealed sources; and 1 curie of krypton 85 as gas.
 - D. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility.
3. This temporary license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54, 50.57 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

A. Maximum Power Level

Vermont Yankee is authorized to operate the facility at steady state power levels not to exceed 318.6 megawatts thermal (20% of rated power) in accordance with the Technical Specifications (Appendices A and B) appended hereto.

B. Technical Specifications

The Technical Specifications contained in Appendices A and B attached hereto are hereby incorporated in this license. Vermont Yankee shall operate the facility at power levels not to exceed 318.6 megawatts thermal (20% of rated power) in accordance with the Technical Specifications, and may make changes in the Technical Specifications only when authorized by the Commission, in accordance with the provisions of Section 50.59 of 10 CFR Part 50.

C. Reports

Vermont Yankee shall make reports in accordance with the requirements of the Technical Specifications.

D. Records

Vermont Yankee shall keep facility operating records in accordance with the requirements of the Technical Specifications.

E. Restrictions

Anything hereinabove or in the Technical Specifications to the contrary notwithstanding, the facility shall be operated only in the closed-cycle cooling mode.

Vermont Yankee and the sponsoring utilities comprising Vermont Yankee are prohibited from retiring, dismantling, or performing any maintenance on any of their existing generating capacity that could reasonably be delayed, on the ground of the availability of the capacity of the facility.

F. Miscellaneous Conditions

Pursuant to the Initial Decision of the presiding Atomic Safety and Licensing Board issued August 24, 1972, the following conditions are incorporated herein:

1. Vermont Yankee will grant authorized representatives of the Massachusetts Department of Public Health (MDPH) and Metropolitan District Commission (MDC) access to records and charts related to discharge of radioactive materials to the Connecticut River.
2. Prior to discharge of each batch of liquid radioactive effluent, a sample will be collected and held for independent analysis by the State of Massachusetts.
3. Vermont Yankee will furnish advance notification of each scheduled calibration of liquid effluent monitors to MDPH and MDC and, upon request, will permit authorized representatives of the State of Massachusetts to be present during such calibrations.
4. Vermont Yankee will permit authorized representatives of the MDPH and MDC to examine the methodology and all results of chemical and radioactive effluent analyses performed for or by Vermont Yankee.
5. Immediate notification shall be made to MDPH or to an agency designated by MDPH in the event concentrations of radioactive materials in liquid effluents, measured at the point of release from Vermont Yankee, exceed 100 times the limit set forth in the facility Technical Specifications. In the event concentrations of radioactive materials in liquid effluents are between 10 times and 100 times the limit set forth in the facility Technical Specifications, notification shall be made in writing within 30 days following such release.
6. A report shall be submitted to both MDPH and MDC within sixty days of January 1st and July 1st of each year of plant

operation. Such reports shall specify the total quantities of radioactive materials released to the Connecticut River during the six months ended on the December 31 or June 30 immediately preceding the report. The report shall contain the following information:

- (a) Total curie activity discharged other than tritium and dissolved gases.
 - (b) Total curie alpha activity discharged.
 - (c) Total curies of tritium discharged.
 - (d) Total curies of dissolved radio-gases discharged.
 - (e) Total volume (in gallons) of liquid waste discharged.
 - (f) Total volume (in gallons) of dilution water.
 - (g) Average concentration at outfall of discharge canal.
 - (h) Time, date and duration of maximum concentration released (average over the period of release).
 - (i) Total radioactivity (in curies) released by nuclide including dissolved radio-gases.
 - (j) Percent of technical specification limit for total activity released.
7. Upon notification in writing by MDPH or MDC that water from the Connecticut River is being diverted via the Upper Northfield Reservoir to recharge Quabbin Reservoir, Vermont Yankee shall submit to both MDPH and MDC, until receipt of notification that such diversion has been terminated, monthly reports of liquid radioactive releases.
4. This temporary operating license is issued without prejudice to subsequent licensing action which may be taken by the Commission with regard to the application for a full-term license.
5. The Commission will vacate this temporary operating license if it finds that Vermont Yankee is not prosecuting its application for a full-term operating license with due diligence.
6. This temporary operating license is effective as of the date of issuance, and shall expire (a) February 28, 1973, or on such later date to which it may be extended, or (b) upon earlier issuance of a full-term license.

7. Upon expiration of this temporary operating license, without the issuance of a full-term operating license, the facility license in effect for this facility shall be the facility license as it read prior to this Amendment No. 2.

FOR THE ATOMIC ENERGY COMMISSION

A. Giambusso

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Enclosure:

Appendix A - Technical Specifications
Appendix B

Date of Issuance:

SEP 7 1972

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER CORPORATION

(VERMONT YANKEE NUCLEAR POWER STATION)

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For further details, see (1) the Board's Orders, dated August 4 and 24, 1972, (2) the Appeal Board's Memoranda and Orders dated August 29, 1972 and September 5, 1972, (3) Amendment No. 2, to Facility Operating License No DPR-28, (4) Change No. 3 to Technical Specifications dated September 7, 1972, (5) Vermont Yankee's Motion dated July 11, 1972 and supporting affidavits, and (6) the Regulatory Staff's Answer dated August 3, 1972 and supporting affidavits, all of which are available for public inspection in 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. Copies of items (3) and (4) may be obtained upon request addressed to the U. S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Director of Licensing.

Dated at Bethesda, Maryland, this *7th* day of September, 1972.

FOR THE ATOMIC ENERGY COMMISSION



Roger S. Boyd, Assistant Director
for Boiling Water Reactors
Directorate of Licensing