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Docket No.: 50-271

APR. 29 1976

Yankee Atomic Electric Company  
 ATTN: Mr. Robert H. Groce  
 Licensing Engineer  
 20 Turnpike Road  
 Westborough, Massachusetts 01581

Gentlemen:

The Commission has issued the enclosed Amendment No. 23 to Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station. The amendment consists of changes to the Technical Specifications in response to your application dated April 7, 1976. We have made changes to your proposed Technical Specification and have discussed these changes with you.

This amendment changes the surveillance frequency definition in Technical Specification Section 1.0.

Copies of the Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

Original Signed by

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

Enclosures:

1. Amendment No. 23
2. Safety Evaluation
3. Federal Register Notice

*Concur with changes as per conversation with Benedetto*

OFFICE →	ORB#4: <i>ORB</i>	C-ORB#4: DOR	OELD (3)	ORB#4: DOR (1)	
SURNAME →	PDiBenedetto	RReid	<i>Tourtelotte</i>	RIngram	
DATE →	4/27/76	4/28/76	4/28/76	4/27/76	

Yankee Atomic Electric Company

cc: w/enclosure

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New England Coalition on  
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Mr. Raymond H. Puffer  
Chairman  
Board of Selectman  
Vernon, Vermont 05354

cc w/enclosures and copy of  
VY's filing dtd. 4/7/76

Mr. Martin K. Miller, Chairman  
State of Vermont  
Public Service Board  
120 State Street  
Montpelier, Vermont 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. 23  
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 April 7, 1976, 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the  
Technical Specifications

Date of Issuance: APR. 29 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 23

FACILITY OPERATING LICENSE NO. DPR-28

DOCKET NO. 50-271

Remove page 4 from Appendix A Technical Specifications and insert the attached replacement page. The changed area on the revised page is shown by a marginal line.

- W. Shutdown - The reactor is in a shutdown condition when the reactor mode switch is in the shutdown mode position and no core alterations are being performed. When the mode switch is placed in the shutdown position a reactor scram is initiated, power to the control rod drives is removed, and the reactor protection system trip systems are de-energized.
1. Hot Shutdown means conditions as above with reactor coolant temperature greater than 212°F.
  2. Cold Shutdown means condition as above with reactor coolant temperature equal to or less than 212°F.
  3. Shutdown means conditions as above such that the effective multiplication factor ( $k_{eff}$ ) of the core shall be less than 0.99.
- X. Simulated Automatic Actuation - Simulated automatic actuation means applying a simulated signal to the sensor to actuate circuit in question.
- Y. Transition Boiling - Transition boiling means the boiling regime between nucleate and film boiling. Transition boiling is the regime in which both nucleate and film boiling occur intermittently with neither type being completely stable.
- Z. Surveillance Frequency - Unless otherwise stated in these specifications, periodic surveillance tests, checks, calibrations, and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus 25%. The total maximum combined interval time for any three consecutive tests shall not exceed 3.25 times the specified interval. The operating cycle interval is considered to be 18 months and the tolerances stated above are applicable.
- AA. Surveillance Interval - The surveillance interval is the calendar time between surveillance tests, checks, calibrations, and examinations to be performed upon an instrument or component when it is required to be operable. These tests unless otherwise stated in these specifications may be waived when the instrument, component, or system is not required to be operable, but these tests shall be performed on the instrument, component, or system prior to being required to be operable.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 23 TO LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

Introduction

By letter dated April 7, 1976, Vermont Yankee Nuclear Power Corporation (VYNPC) requested a temporary change to the Surveillance Frequency definition in Section 1.0 of the Vermont Yankee Nuclear Power Station (VYNPS) Technical Specifications appended to Facility Operating License No. DPR-28.

Discussion

VYNPS completed a refueling outage in December of 1974. During the outage all surveillance tests required for the operating cycle interval were completed. Some of the required testing can only be performed while the facility is shut-down; specifically, those required by Technical Specifications 4.7.D.1.a(2), 4.10.A.1.c, and 4.10.A.2.c. These tests, which are identified as the Instrument Line Flow Check Valve Operation Test, Diesel Generator Automatic Start and Load Test, and 125 Volt Battery Discharge Test, are the only tests that have not been repeated, thus far, to satisfy the operating cycle surveillance for this interval.

Definition Z, "Surveillance Frequency," Section 1.0 of the VYNPS Technical Specifications authorizes a maximum interval of 18 months to complete instrument and electrical surveillance. However, VYNPC anticipates operating until June 18, 1976, at which time they will shutdown VYNPS to commence refueling. The extended operation of VYNPS will result in exceeding the 18 month interval. Therefore, to obviate the need for a premature shutdown VYNPC has requested that the surveillance interval for this cycle be extended to 22 months. The proposed extension would be for this cycle only and would allow VYNPS to perform the required testing as part of the planned outage.

## Evaluation

We have reviewed the proposed change as requested by VYNPC on April 7, 1976. A time interval was incorporated in the surveillance frequency definition to specifically define the duration of the operating cycle. This was necessary to establish an interval for technical specifications which require surveillance testing to be performed "at least once per operating cycle." VYNPS was authorized (Amendment No. 19, dated February 25, 1976) to increase the operating cycle interval from 15 months to 18 months. This request was based on extended operating cycles due to improved fuel performance. The authorization was based on the interval being consistent with current practice, and that the change in probability of an accident resulting from the slight increase in surveillance interval was not significant.

The purpose of surveillance testing is to periodically insure that the reliability established in the design of the systems has not been degraded and that the probabilities assigned to specific postulated design basis accidents do not significantly change (increase) as a result of system performance. The 18 month operating interval has been evaluated and determined to be acceptable and, as stated above is consistent with current practice (Standard Technical Specifications) based on reviews of previous submittals by utilities having established 18 months (the longest accepted interval) as an operating cycle. Furthermore, realizing that prolonged maintenance outages and superior fuel performance may contribute to an extended operating cycle, we have authorized a plus 25% tolerance to be applied to the operating interval. The application of the 25% tolerance to the surveillance intervals has been reviewed and approved for implementation of current standard technical specifications on similar operating reactors. However, this tolerance may only be applied once within three cycles (i.e., the total maximum combined interval time for any three consecutive tests shall not exceed 3.25 times the specified interval). This allowance would permit the operating interval, as averaged over three cycles, to be extended approximately 8.3%. This extension will not significantly increase the probability of any accidents previously evaluated.

Therefore, based on the above and in lieu of the requested change, we conclude that it is acceptable to revise the definition of Surveillance Frequency in the following manner to reflect the position as stated above.

The last sentence of definition Z, Surveillance Frequency, is changed to read: "The operating cycle interval is considered to be 18 months and the tolerances stated above are applicable."

We have discussed this change with the licensee and VYNPC has agreed that the change is acceptable for VYNPS.

We have determined that the amendment does not authorize a change in effluent types or total amounts 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 §51.4(d)(4), that an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above that: (1) because the change does not involve a significant decrease in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: APR 29 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-271

VERMONT YANKEE NUCLEAR POWER CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 23 to Facility Operating License No. DPR-28 issued to Vermont Yankee Nuclear Power Corporation which revised Technical Specifications for operation of the Vermont Yankee Nuclear Power Station, located near Vernon, Vermont. The amendment is effective as of its date of issuance.

The amendment changes the surveillance frequency definition in Technical Specification Section 1.0.Z to apply a 25% tolerance, to be used only once within three cycles. This change is consistent with standard technical specifications applied to similar operating reactors.

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.

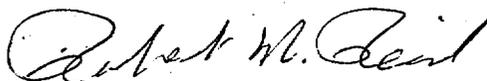
The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of this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

For further details with respect to this action, see (1) the application for amendment dated April 7, 1976, (2) Amendment No. 23 to License No. DPR-28, and (3) the Commission's related Safety Evaluation. 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.

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 Operating Reactors.

Dated at Bethesda, Maryland, this 29th day of April 1976.

FOR THE NUCLEAR REGULATORY COMMISSION



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