

AUG 01 1975

Docket No. 50-271

Yankee Atomic Electric Company
ATTN: Mr. G. Carl Andognini
Assistant to the Vice President
20 Turnpike Road
Westboro, Massachusetts 01581

Gentlemen:

By letter of July 31, 1975, you requested a modification of the "Order for Modification of License" issued on July 23, 1975, to allow for continued operation for an additional three days until August 6, 1975.

We have reviewed this request and conclude that the health and safety of the public will not be endangered by modifying the date for compliance with the July 23, 1975 Order from August 3 to August 6, 1975.

Enclosed are the "Order for Modification of License" issued by the Commission on August 1, 1975 and the supporting safety evaluation.

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

Sincerely,

*Original signed by
Robert W. Reid*

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

*c/p
3*

Enclosures:

- 1. Order
- 2. Safety Evaluation

cc w/enclosures:

See next page

	RL:ORB#4 <i>PDB</i>	<i>[Signature]</i>	<i>KRG</i>	<i>KRG/for</i>	<i>[Signature]</i>	<i>[Signature]</i>
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	8/1/75					
SURNAME >	RWReid <i>[Signature]</i>		KRGoller	AGiambusso	EGCase	BCRusche
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cc w/enclosures:

Mr. James E. Griffin, President
Vermont Yankee Nuclear Power Corporation
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Mr. Donald E. Vandenburg, Vice President
Vermont Yankee Nuclear Power Corporation
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New England Coalition on Nuclear
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Hill and Dale Farm
West Hill - Faraway Road
Putney, Vermont 05346

Brooks Memorial Library
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Brattleboro, Vermont 05301

Mr. Raymond H. Puffer
Chairman
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Vernon, Vermont 05354

cc w/enclosures and cy of VY's
filing dtd. 7/31/75:
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State of Vermont
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Montpelier, Vermont 05602

Mr. Wallace Stickney
Environmental Protection Agency
JFK Federal Building
Boston, Massachusetts 02203

additional cc: see next page

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Yankee Atomic Electric Company - 3 -

cc w/enclosures and cy of Vy's
filing dtd. 7/31/75:
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SUPPLEMENT TO
EVALUATION OF VERMONT YANKEE CHANNEL BOX WEAR
FOR THE PURPOSE OF LIMITED OPERATION AT PARTIAL POWER
BY THE
OFFICE OF NUCLEAR REACTOR REGULATION
U. S. NUCLEAR REGULATORY COMMISSION

August 1, 1975

Supplement to Evaluation of Vermont Yankee
Channel Box Wear For the Purpose of Limited
Operation at Partial Power

In our "Evaluation of Vermont Yankee Channel Box Wear For the Purpose of Limited Operation at Partial Power" dated July 23, 1975 justification was presented for continued operation for a limited period. The justification was based on the conditions that the level of wear was such that channel box failure is not likely, and surveillance for excessive wear was provided. Our safety evaluation concluded that operation for a limited period was acceptable. •

TIP traces were obtained at the Vermont Yankee plant on July 31, 1975 at approximately 100% core flow and on July 25 and August 1, 1975 at 70% core flow. These TIP traces were reviewed for the noisiest core location, i.e., location 20-45. A comparison of these data with data previously taken prior to July 31, 1975 indicates that the TIP noise has not increased. The data for 100% core flow indicates less than 5% unnormalized noise bandwidth to signal ratio. The data for the 70% core flow indicates that the unnormalized noise bandwidth to signal ratio is about 3%.

We conclude that these recently obtained TIP traces do not show any accelerated channel box wear. We further conclude that operation of Vermont Yankee for an additional three days beyond the period contemplated by our previous safety evaluation is acceptable since no appreciable additional wear will be incurred.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

VERMONT YANKEE NUCLEAR POWER CORPORATION

(Vermont Yankee Nuclear Power Station)

Docket No. 50-271

ORDER FOR MODIFICATION OF LICENSE

1. Vermont Yankee Nuclear Power Corporation (the Licensee) is the holder of Facility Operating License No. DPR-28 which authorizes operation of the Vermont Yankee Nuclear Power Station (the Facility), a boiling water reactor located near Vernon, Vermont.
2. On July 23, 1975, the Commission issued an "Order for Modification of License" (40 Fed. Reg. 32180, July 31, 1975) (the Order) which confirmed a plan for limited additional operation of the Facility. As detailed in the Order, the Facility's channel box wear, as indicated by the noise-to-signal ratio recorded by the traversing incore probe (TIP), had exceeded the remedial action threshold. The remedial plan confirmed by the Order contemplated operation of the Facility for a limited period of time (until the August 3, 1975) at not more than 80% of rated core power and 70% of rated core flow, provided the TIP noise-to-signal ratio at those levels did not exceed 0.05. In addition, the Order permitted operation up to full flow and power for a brief period of time as necessary to obtain baseline TIP data.

2.

3. By letter dated July 31, 1975,^{1/} the Licensee requested a modification of the Order to allow continued operation for an additional three days until August 6, 1975. The Licensee's letter states that the request is made at the behest of the New England Power Exchange based upon a serious power shortage resulting from the unscheduled outage of several units and forecasted weather conditions.
4. As discussed in the Commission's July 23, 1975 Order, and in the NRC Staff "Evaluation of Vermont Yankee Channel Box Wear for the Purpose of Limited Operation at Partial Power," dated July 23, 1975, the allowable channel box wear at 80% of rated core power/70% of rated flow will not be exceeded as long as the Vermont Yankee TIP noise level ratio does not exceed 0.05. However, the NRC Staff's evaluation recognized that wear continues even at the Licensee's proposed reduced flow rate, though slower than at full flow, and therefore agreed with the Licensee's proposal to shut down by August 3, 1975 as part of the plan to proceed with further remedial action.
5. As evaluated in the NRC Staff's "Supplement to Evaluation of Vermont Yankee Channel Box Wear for the Purpose of Limited Operation at

^{1/} Copies of all documents referred to in this Order are available or are being made available for public inspection in the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and the Commission's Local Public Document Room, Brooks Memorial Library, 224 Main Street, Brattleboro, Vermont.

3.

Partial Power," dated August 1, 1975, the TIP noise level ratios recorded since the Commission's July 23, 1975 Order, at both the limited flow rate and the brief full flow rate period allowed to obtain baseline data, indicate that the Facility's channel box wear is still well within that allowable at the 80% of rated core power/70% of rated core flow limitations. The NRC Staff's evaluation concludes that no appreciable additional wear will occur during the requested three-day extension to August 6, 1975. In addition, the surveillance for excessive wear previously provided will continue.

6. The Facility can be operated until August 6, 1975 under the Licensee's proposed plan previously confirmed by the Commission's July 23, 1975 Order, without endangering the health and safety of the public. The NRC Staff believes the Licensee's modification to its plan is appropriate under the circumstances and should be confirmed by NRC Order.2/
7. 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,

2/ The brief period of operation at full flow and power to obtain baseline data has been achieved and is therefore deleted as no longer necessary.

4.

IT IS ORDERED THAT Facility Operating License No. DPR-28 is hereby amended by substituting the provisions set out in Appendix A hereto for the provisions set out in Appendix A to the Commission's Order for Modification of License, dated July 23, 1975.

FOR THE NUCLEAR REGULATORY COMMISSION



Ben C. Rusche, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 1st day of August 1975.

APPENDIX A

1. The Licensee shall place the Facility in a shutdown condition not later than August 6, 1975 and shall not, without prior written approval of the Director, Office of Nuclear Reactor Operation, return the facility to operation following the shutdown.
2. Prior to the shutdown, the Licensee shall not operate the Facility at core power levels exceeding 80 percent of rated power or core flow rates exceeding 70 percent of design flow rate, and further shall place the facility in a shutdown condition if the traversing incore probe (TIP) noise band width-to-signal amplitude ratio exceeds 0.05.
3. The Licensee shall, during power operation with flow rates equal to 70 percent of rated flow, obtain unfiltered TIP traces as specified in Section VIII of the Evaluation of Channel Box Wear dated July 22, 1975, such that all operable TIP positions are traversed every seven days.