

VERMONT YANKEE NUCLEAR POWER CORPORATION

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November 20, 2001
BVY 01-87

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

References: (a) Letter, USNRC to VYNPC, "Safety Evaluation of the Inservice Testing Program for Pumps and Valves, Third Interval Plan, Revision 19, Vermont Yankee Nuclear Power Station (TAC NO. MA4503)," NVCY 99-29, dated March 12, 1999.

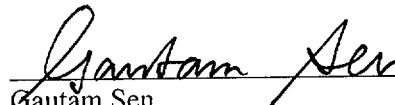
**Subject: Vermont Yankee Nuclear Power Station
License No. DPR-28 (Docket No. 50-271)
Request for Alternative Testing of Manual Valves Per
10CFR50.55a(a)(3)(ii) Inservice Testing (IST) Program**

Pursuant to 10CFR50.55a(a)(3)(ii), Vermont Yankee Nuclear Power Corporation (VY) hereby requests approval to perform alternative testing to that specified by the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, and ASME/ANSI OM, "Operation and Maintenance of Nuclear Power Plants." Attachment 1 provides the scope and justification for the alternative testing of manual valves. Approval for the use of the alternative testing is requested by May 1, 2002. Upon approval, the alternative method will be incorporated into our IST Program Plan that was approved per Reference (a).

If you have any questions on this transmittal, please contact Mr. Jim DeVincentis (802) 258-4236.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION


Gautam Sen
Licensing Manager

Attachment

cc: USNRC Region 1 Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS
Vermont Department of Public Service

A047

Attachment 1

Vermont Yankee Nuclear Power Corporation

Proposed Alternate Test Method - Exercising Test Frequency for Manual Valves

RELIEF REQUEST**Number: RR-V20, Revision 0** (Sheet 1 of 3)**SYSTEM(s):**

Service Water, Alternate Cooling Water, Fuel Pool Cooling, Reactor Building Closed Cooling Water, Instrument Air

COMPONENTS:

Manual valves defined in Tables 1 and 2.

Table 1

| Dwg/ Coord | Component | Size | SC | Test | OM-10 Freq | ISTC Freq | OM-10 ROJ/CSJ | Notes |
|---------------|-------------|------|-----|------|---------------|--------------|------------------|-------|
| G-191159 Sh 1 | | | | | | | | |
| C-12 | V70-32B | 2.5 | 3 | SO | Q | OC | n/a | * 22 |
| C-13 | V70-36A | 3 | 3 | SO | Q | OC | n/a | * 22 |
| C-13 | V70-36B | 3 | 3 | SO | Q | OC | n/a | * 22 |
| K-13 | V70-42A | 8 | 3 | SO | Q | OC | n/a | * 8 |
| B-13 | V70-42B | 8 | 3 | SO | Q | OC | n/a | * 8 |
| F-03 | V70-6 | 8 | 3 | SC | Q | OC | n/a | * 8 |
| J-13 | PCV-104-69A | 8 | 3 | SO | Q | OC | n/a | * 8 |
| B-13 | PCV-104-69B | 8 | 3 | SO | Q | OC | n/a | * 8 |
| C-05 | V70-130A | 3 | 3 | SC | Q | OC | n/a | * 8 |
| I-05 | V70-130B | 3 | 3 | SC | Q | OC | n/a | * 8 |
| C-12 | V70-24B | 2.5 | 3 | SO | Q | OC | n/a | * 22 |
| D-02 | V70-27 | 1.5 | 3 | SC | Q | OC | n/a | * 8 |
| D-13 | V70-29 | 3 | 3 | SO | Q | OC | n/a | * 22 |
| D-13 | V70-29A | 3 | 3 | SO | Q | OC | n/a | * 22 |
| G-191159 Sh 2 | | | | | | | | |
| D-08 | V70-414 | .75 | NNS | SC | Q | OC | n/a | * 8 |
| B-03 | V70-203 | 1.25 | 3 | SC | Q | OC | n/a | * 8 |
| G-191159 Sh 3 | | | | | | | | |
| P-02 | V70-106 | 2 | 3 | SC | Q | OC | n/a | * 8 |
| P-05 | V70-107 | 2 | 3 | SC | Q | OC | n/a | * 8 |
| N-02 | V70-24A | 2.5 | 3 | SC | Q | OC | n/a | * 8 |
| O-10 | V70-28A | 3 | 3 | SC | Q | OC | n/a | * 8 |
| P-02 | V70-32A | 2.5 | 3 | SC | Q | OC | n/a | * 8 |
| L-4 | V70-30A | 1 | 3 | SC | Q | OC | n/a | |
| M-4 | V70-31A | 1 | 3 | SC | Q | OC | n/a | |
| M-4 | V70-30B | 1 | 3 | SC | Q | OC | n/a | |
| N-4 | V70-31B | 1 | 3 | SC | Q | OC | n/a | |
| G-191173 Sh 1 | | | | | | | | |
| F-05 | V19-37 | 4 | 3 | SC | Q | OC | n/a | * 23 |
| H-05 | V19-53 | 6 | 3 | SC | Q | OC | n/a | * 23 |
| | V19-22A | 6 | 3 | SC | Q | OC | n/a | * 23 |
| | V19-22B | 6 | 3 | SC | Q | OC | n/a | * 23 |
| G-191237 Sh 2 | | | | | | | | |
| D-04 | SCW-65A | .75 | 3 | SC | Q | OC | n/a | |

RELIEF REQUEST

Number: RR-V20, Revision 0 (Sheet 2 of 3)

Table 2

| Dwg/ Coord | Component | Size | SC | Test | OM-10 Freq | ISTC Freq | OM-10 ROJ/CSJ | Notes |
|---------------|-----------|------|-----|-------|---------------|--------------|------------------|-------|
| G-191159 Sh 2 | | | | | | | | |
| D-09 | SB-70-1 | 24 | NNS | SO/SC | CS | RO | CSJ-V16 | * 8 |
| D-07 | V70-11 | 14 | 3 | SO/SC | CS | RO | CSJ-V16 | * 8 |
| D-06 | V70-17 | 20 | 3 | SO | CS | RO | CSJ-V16 | * 8 |
| E-07 | V70-18 | 20 | 3 | SC | CS | RO | CSJ-V16 | * 8 |
| G-191160 Sh 3 | | | | | | | | |
| L-15 | V72-28A | 1 | NNS | SC | CS | RO | CSJ-V17 | |
| L-16 | V72-28B | 1 | NNS | SC | CS | RO | CSJ-V17 | |
| K-16 | V72-28D | 1 | NNS | SO | CS | RO | CSJ-V17 | |
| K-16 | V72-28E | 1 | NNS | SO | CS | RO | CSJ-V17 | |
| G-191172 | | | | | | | | |
| G-08 | V10-17A1 | .5 | 2 | SC | CS | RO | CSJ-V18 | |

NOTES:

- *8. These valves form the Alternate Cooling System boundary alignment and are otherwise included in the IST Program based on a commitment to NRC. Reference: OP-2181; NRC Inspection Report 94-03, dated 3/4/94.
- *22. These manually operated valves are required to close for the Alternate Cooling Mode (ACS) of the Service Water System. Valves were added per commitment to BMO 97-61.
- *23. This normally closed valve is assigned as part of the Fuel Pool Cooling System. This portion of the system is normally not in service, but is required during refueling operations. Testing is required within 3 months prior to placing this portion of the system in an operable status and shall be exercised at a quarterly frequency while in service (ref. OM-10 para. 4.2.1.7).

EXAM OR TEST CATEGORY:

Category B

CODE REQUIREMENT:

OM Part 10, Para. 4.2.1.1 "Exercising Test Frequency"

"Active Category A and B valves shall be tested nominally every 3 months, except as provided by paras. 4.2.1.2, 4.2.1.5, 4.2.1.7."

REQUEST FOR RELIEF:

Relief is requested from the current Code of record requirements of ASME OM-10, 1988 Edition, 1989 Addenda, Para. 4.2.1.1, to use ASME OM-1998 Edition, through OMb-2000 Addenda, ISTC-3540 in its entirety for manual valves.

RELIEF REQUEST**Number: RR-V20, Revision 0 (Sheet 3 of 3)****ALTERNATE TEST METHOD:**

The majority of the manual valves in the IST Program are service water valves that would be considered to be subject to somewhat adverse conditions. Valve maintenance and operation history for these valves lends credibility to an extended test frequency however, a five-year frequency as allowed by OMB-2000, would not be prudent due to the service media. In order to facilitate tracking and scheduling, all manual valves currently in the IST Program will be full stroke exercised on a "once per cycle" frequency. The valves in Table 1 previously scheduled at a quarterly frequency will be moved to a once per cycle frequency. The valves in Table 2 previously scheduled at a cold shutdown frequency will be revised to a refueling frequency. In conjunction with these tests, any failures will be evaluated in accordance with the requirements of the VY IST Program. This evaluation will include analysis to determine corrective action(s), common mode failure, and performance reliability. Performance reliability may require an increased test frequency for the failed component(s).

ALTERNATE TEST BASIS:

OM-1998 Edition, through OMB-2000 Addenda, Subsection ISTC, Paragraph ISTC-3540 permits manual valves to be full stroke exercised at least once every 5 years, except where adverse conditions may require the valve to be tested more frequently to ensure operational readiness. Any increased testing shall be specified by the owner. The valve shall exhibit the required change of obturator position. VY proposes to use this imminent Code change at an earlier date to provide a significant reduction in valve cycling that otherwise provides no significant increase to the acceptable level of quality and safety.

The overall population (59 total) of manual valves has shown reliability over at-least an 18-month frequency. Currently, 29 of the 59 total valve population tests are deferred tests. Of these 29 valves, 20 are deferred to a refueling outage condition and 9 are deferred to a cold shutdown condition. More frequent cycling of these valves is not practicable. The remaining 30 valves are currently tested at a quarterly frequency. The environment of these valves is the same as those currently tested once per cycle at refueling or cold shutdown conditions. Of these 30 valves, a five-year maintenance history search revealed no mechanical failures. Therefore, a less frequent test schedule should have no more of an impact than those already tested at a once per cycle (RO) frequency. Any increase in risk due to the relaxed frequency of manual valve testing is insignificant. Therefore, the alternative testing at an overall decreased testing frequency, rather than testing quarterly, provides an acceptable level of quality and safety.

SUMMARY OF VERMONT YANKEE COMMITMENTS

BVY NO.: 01-87 Request for Alternate Testing of Manual Valves per 10CFR50.55a(a)(3)(ii)

The following table identifies commitments made in this document by Vermont Yankee. Any other actions discussed in the submittal represent intended or planned actions by Vermont Yankee. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Licensing Manager of any questions regarding this document or any associated commitments.

| COMMITMENT | COMMITTED DATE OR "OUTAGE" |
|------------|-------------------------------|
| None | N/A |
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