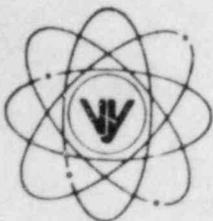


VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

FVY 84-87

REPLY TO:
ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

July 9, 1984

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Office of Nuclear Reactor Regulation
Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing

References: a) License No. DPR-28 (Docket No. 50-271)
b) Letter, USNRC to VYNPC, dated 5/3/84
c) Letter, VYNPC to USNRC, dated 2/7/84

Dear Sir:

Subject: Snubber Technical Specifications

In response to your request [Reference b)], the following information regarding snubber Technical Specifications is provided:

Item 1 The STS Table footnote contains the provision, "Snubbers may be added to safety related systems without prior License Amendment to Table ___ provided that a revision to Table ___ is included with the next license Amendment request." Your proposed TS 3.6.I.4 contains the provision for adding or deleting snubbers and the word "subsequent" is used instead of "next".

Recently approved Technical Specifications for Near Term Operating Licensees (NTOL's) included the following condition for such deletion: "In lieu of any other report required by Specification 6.9.1, at least 15 days prior to the deletion of any listed snubber, a Special Report shall be prepared and submitted to the Commission in accordance with Specification 6.9.2 evaluating the safety significance of the proposed snubber removal." If your proposed Technical Specification contains the deletion provision, include the recently approved NTOL Technical Specification condition.

Delete "subsequent" and insert "next" or if the word "subsequent" is used instead of "next", your proposed Technical Specification should specify a time frame (e.g., within 90 days).

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RESPONSE

Vermont Yankee intends to delete the Snubber Table from our Technical Specification in accordance with the USNRC Letter to All Power Reactor Licensees, dated May 3, 1984. This item, therefore, is no longer applicable.

Item 2 The STS visual acceptance criteria 4.7.9b contains the provisions, "Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specifications 4.7.9d or 4.7.9e, as applicable." Your proposed TS 4.6.I.1.b contains the term "and/or" preceding the (2) and this provides an additional option. The "/or" should be deleted from your proposed TS.

Your proposed TS 4.6.I.1.b paragraph on page 110c can be deleted here since it is more appropriate under TS 4.6.I.1.c and it is repeated there. The paragraph contains the provision, "The scope of this engineering evaluation shall be consistent with the licensee's engineering judgement and may be limited to a documented visual inspection of the supported component(s)." If you elect to leave the paragraph here delete this provision or revise the phrase "engineering judgement" to "documented engineering evaluation", or "documented engineering judgement".

RESPONSE

Vermont Yankee will delete the "/or" and delete the paragraph discussing evaluation by engineering judgement.

Item 3 The STS 4.7.9b contains the visual acceptance criteria condition, "However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval." Your proposed TS 4.6.I.1.b contains the provision to determine OPERABLE via functional test.

Recently approved TS for NTOL's include the following condition for determining OPERABLE, "When a fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be declared inoperable and

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shall not be determined OPERABLE via functional test unless the test is started with the piston in the as-found setting, extending the piston rod in the tension mode direction." If your proposed TS is to contain the functional test provision for determining OPERABLE, include this recently approved NTOL condition.

RESPONSE

Vermont Yankee will revise our application for license amendment to incorporate the suggested specification.

Item 4 The STS 4.7.9 functional test does not exempt snubbers of greater than 50,000 lb, whereas your proposed TS 4.6.I.1.c contains the provision, "Snubbers of rated capacity greater than 50,000 lbs. need not be functionally tested." One of the objectives of the STS was to eliminate this 50,000 lb. arbitrary limit on testing, therefore, your proposed TS should be revised to remove the exemption. If a reasonable time delay interim exemption is needed, it should be requested and you should provide reasons for its need (e.g., to obtain larger capacity test equipment, etc.). Your proposed TS should define the end date of the exemption so it will be self-cancelling.

RESPONSE

Vermont Yankee currently has in place a program for testing snubbers which exceed the capacity of our testing machine. Accomplishment of this testing involves: 1) checking and/or setting proper lockup and bleed velocity of the snubber valve; 2) checking for free stroke of the cylinder; and 3) checking the pressure retaining capability of the cylinder.

This program is based on a vendor supplied procedure which requires mounting the valve assembly from the snubber which is too large for the testing machine on to a 4" bore snubber. The procedure provides a calculation of equivalent velocities and forces between the 4" snubber and the large snubber. A correlation is then made to determine the appropriate acceptance criteria. Additional testing is done to verify the free stroke and pressure capabilities of the snubber.

It is important to note that Vermont Yankee has only one snubber in this category. Considering the minimum number of snubbers involved and the fact that we have a program in place that meets the intent of the specification we cannot justify the purchase of a larger capacity testing machine. We will clarify the exemption in our proposed TS to reflect the testing performed.

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Item 5 The STS 4.7.9c contains the functional test condition, "For Each snubber that does not meet the functional test acceptance criteria of Specification 4.7.9d or 4.7.9e, an additional 10% of that type of snubber shall be functionally tested." Your proposed TS 4.6.I.1.c contains the provision for only testing an additional "5%". The 5% should be revised to 10%.

RESPONSE

Vermont Yankee will revise the percentage from "5" to "10".

Item 6 The STS 4.7.9c contains the functional test condition, "At least 25% of the snubbers in the representative sample shall include snubbers from the following three categories:

1. The first snubber away from each reactor vessel nozzle;
2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.); and
3. Snubbers within 10 feet of the discharge from a safety relief valve".

If the 25% sample is deleted, as is the case in your proposed TS, your TS or TS Bases should describe the STS 4.7.9c representative sample, as follows: "The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers."

RESPONSE

The requirements contained in Standard Technical Specifications assume that plants have hundreds, or thousands, of snubbers installed. At Vermont Yankee, we have 57 snubbers. Considering that 10%, or 6 snubbers, are required to be functionally tested each refueling cycle, it is impossible to meet the standard Technical Specification requirements because the small number of snubbers in the sample would not be sufficient to encompass all the "various configurations, operating environments and the range of size and capacity of snubbers."

The proposed change, as submitted requires that a "representative sample" be tested during each cycle; we feel this is sufficient.

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Item 7 Your proposed TS 4.6.I.1.c regarding functional tests contains the provision, "If any snubber selected for functional testing either fails to lock up within the capability of the testing machine," etc. The phrase "within the capability of the testing machine" should be deleted from your proposed TS. If a reasonable time delay interim exemption is needed, it should be requested and you should provide reasons for its need (e.g., to obtain larger capacity testing equipment etc.). Your proposed TS should define the end date of the exemption so it will be self-cancelling.

RESPONSE

Vermont Yankee will delete the words "within the capability of the testing machine" from our proposed change.

See Response to Item #4 for additional information.

Item 8 Your proposed TS 4.6.I.2.c, functional test, last paragraph contains the provision, "The scope of this engineering evaluation shall be consistent with the licensee's engineering judgement and may be limited to a documented visual inspection of the supported component(s)." Delete this sentence, or the phrase "engineering judgement" should be revised to "documented engineering evaluation" or "documented engineering judgement."

RESPONSE

Vermont Yankee will revise the sentence to require a "documented" judgement or evaluation.

Item 9 Your proposed TS does not include snubber service life monitoring. Your reference (4) reasons for not including this provision were that the TS intent was satisfied through the plant's preventive maintenance requirements of determining failure trends and that other more important TS do not require this type program. During the reference (3) inspection, there was lack of documented evidence of a preventive maintenance program for failure trending. Neither was there criteria for determining service life in your maintenance procedure and records, and additionally, there was difficulty in determining which were the high capacity snubbers. Concerning your reference (4) comment that other TS areas do not require this type program, it is pointed out that other equipment undergoes more frequent inservice testing and other methods to verify operability.

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In view of the above, the staff concludes that service life monitoring coverage should be in your TS.

RESPONSE

We have reviewed our existing administrative program and cannot agree with the conclusions drawn by the NRC Inspectors. The results of testing, inspections and/or repairs are documented and evaluated. The acceptability of this approach is clearly demonstrated by our past experience. In instances where failures were anticipated or occurred (e.g., seal degradation problems), preventive maintenance was performed as necessary on suspect snubbers prior to failure. It should also be noted that VY has not experienced a functional test failure on the 10% required sample since 1978. Additionally, it has been our practice to rebuild 10% or more of our snubbers during each refuel outage as part of our preventive maintenance program.

The NRC statement indicating that, because snubbers do not receive frequent in-service inspection or other methods to verify operability does not justify having a specific service life monitoring problem in Technical Specifications. That concern is addressed by the variable inspection frequency already contained in the specifications. Vermont Yankee already has in Specification 6.5 a requirement to have detailed procedures in areas including surveillance, testing and preventive maintenance. We continue to feel that this is sufficient.

Item 10 Your proposed TS Bases last paragraph phrase of "tested once each refueling cycle" is not per the STS. The phrase should be revised to the STS phrase of "tested during plant shutdowns at 18 month intervals" or use your existing TS defined term "tested during each operating Cycle."

Your proposed TS Bases should include service life monitoring (see Item 9).

RESPONSE

Vermont Yankee will substitute the Technical Specification defined term of "operating cycle".

See our response to Item #9 for our position on service life monitoring.

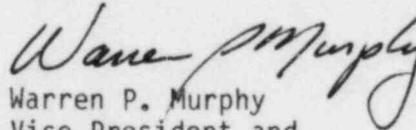
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It is presently our plan to submit a revision to Reference c), which incorporates the changes discussed in our response to Items 1 through 10 above by October 1984.

Should you have any additional questions or comments regarding this information, do not hesitate to contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

A handwritten signature in cursive script that reads "Warren P. Murphy".

Warren P. Murphy
Vice President and
Manager of Operations