VERMONT YANKEE
NUCLEAR POWER CORPORATION

P.O. Box 157, Governor Hunt Road
Vernon, Vermont 05354-0157
(802) 257-7711

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VYV-RE-96-008
BVY 96-40

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

References: (a) License No. DPR-28 (Docket No. 50-271)

Subject: CRD SSPVs With Viton Internals, Vermont Yankee Response to BWROG Recommendations

On February 16, 1996 the BWROG provided guidance related to testing of dual type ASCO SSPVs with Viton internals and testing of the Alternate Rod Insertion (ARI) system.

Vermont Yankee intends to meet or exceed the guidance related to the testing of both the SSPVs and ARI. Specifically, we will perform single rod scrams of 15 control rods during each upcoming rod pattern exchange. Rod pattern exchanges are currently scheduled for April 23, 1996, an interval of 56 days, and June 11, 1996, a 49 day interval. From June 11, 1996 until the projected end of cycle, August 23, 1996 is a 73 day interval. The BWROG recognized that each licensee would be responsible for implementing these recommendations in a fashion consistent with other plant events, such as rod pattern exchanges. Vermont Yankee's specific response to the individual RRG recommendations is attached.

We trust that this letter satisfies the request for information by the NRC as discussed with the RRG during the February 21, 1996 meeting. If any additional information is required please do not hesitate to contact us.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

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Donald A. Reid
Vice President, Operations

Attachment

c: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS
Ashok C. Thadani, Mail Stop 12-G18

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ATTACHMENT

Specific Response to RRG
Recommendations

The RRG interim recommendations and Vermont Yankee's response are as follows;

1) Every 60 days of power operation, perform control rod scram time testing on a **REFERENCE SAMPLE [5%] OF "VITON SSPV CONTROL RODS".**

   a) If the 5% insertion scram time for any rod in the **REFERENCE SAMPLE OF "VITON SSPV CONTROL RODS"** is greater than 0.49 second, then declare the respective rod(s) "inoperable/slow".
   b) Use the scram time data to determine the degradation rate to predict the point at which preventative maintenance should be performed.

RESPONSE:

Vermont Yankee intends to continue to perform single rod scram testing of 15 rods (16.85%) each rod pattern exchange. Five rods (5.6%) will be a fixed sample per the RRG definition of "Reference Sample" . Any rod with a first notch drop out time of ≥ .490 seconds will be fully inserted into the core and declared inoperable. All Technical Specification requirements for inoperable control rods will be followed. The performance of these five rods will be trended individually. and collectively, to determine if preventative maintenance is needed prior to the next scheduled scram time test. This response fully meets the RRG recommendation for 60 day testing with the exception of the 73 day interval between the last sequence exchange and the end-of-cycle. The BWROG recognized the 60 days as strictly a suggested interval and the specific interval would be driven by plant events. If VY has high confidence, following the June 11, 1996 test, that no predictive maintenance would be needed, we believe going 73 days without testing is acceptable.

2) Every 120 days of power operation, perform control rod scram time testing on a **REPRESENTATIVE SAMPLE OF "VITON SSPV CONTROL RODS" [10%]** and a **REPRESENTATIVE SAMPLE OF "BUNA-N SSPV CONTROL RODS".** [This item is in addition to performing the testing in item 1 above.]

   a) If the 5% insertion scram time for any rod is greater than 0.49 second, then declare the respective rod(s) "inoperable/slow". [Plants with ITS, must meet all the single rod scram times specified in their Tech Specs.]

ATTACHMENT (continued)

b) [This item only is for plants which are required to calculate a core average scram time.]
Use this information to calculate a **WEIGHTED CORE AVERAGE SCRAM TIME** for 5% insertion scram time. If this weighted average is greater than the current Tech Spec limit for 5% insertion scram time, then take the action required by the current Tech Specs.

RESPONSE:

Vermont Yankee intends to continue to perform single rod scram testing of 15 rods (16.85%) each pattern exchange. Five rods (5.6%) will be a fixed sample per the RRG definition of "Reference Sample" . In addition, 10 other rods (11.24%) will be selected for testing. These 10 rods meet the definition of "Representative Sample of Viton SSPV Control Rods". No Buna-N SSPVs are installed at VY so no requirement for testing a "Representative Sample of BUNA-N SSPVs" exists. Any rod with a first notch drop out time of ≥ .490 seconds will be fully inserted into the core and declared inoperable. All TS requirements for inoperable control rods will be followed. The performance of the 10 rods in the reference sample will be ana' d to establish TS compliance. Per part b. of the RRG recommendation if the sample average of these 10 rods is greater than the TS limit of 0.358 seconds the actions required by TS will be initiated. Only simple averaging is required since VY does not have any BUNA-N SSPVs. This exceeds the RRG recommendation for 120 day testing.

3) Perform a functional test of the Alternate Rod Insertion (ARI) logic and valves once per cycle.

RESPONSE:

Vermont Yankees tests the entire ARI logic and valves once per cycle per the following procedures;

OP 4369 tests the performance of the ARI solenoid v s during each Refueling Outage (RFO)

OP 43109 and OP 43111 are used to test the functionality of both the level and the pressure signals to the ARI logic. These procedures consist of two parts; the transmitters are tested during each RFO and a functional test of the 4 pressure and level channels is performed each month.

This fully meets the RRG recommendation.