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10 CFR 50.59(d)(2)

BVY 15-018

March 2, 2015

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

SUBJECT: 10 CFR 50.59 Report
Vermont Yankee Nuclear Power Station
Docket No. 50-271
License No. DPR-28

REFERENCE: Letter USNRC to VYNPC, "TMI Action Plan Item II.K.3.3, Reporting of Relief Valve Failures and Challenges," NVY 82-44, dated March 30, 1982

Dear Sir or Madam:

In accordance with 10 CFR 50.59(d)(2), Attachment 1 of this letter provides a summary of the change made at Vermont Yankee Nuclear Power Station (VY) that required a 50.59 Evaluation to be performed covering the period between April 6, 2013 and March 2, 2015.

Additionally, in accordance with the referenced letter, VY reports that there were no in-service Main Steam Relief Valve or Safety Valve failures or challenges during the period between April 6, 2013 and January 12, 2015, which was the date that VY was certified to have permanently ceased operations and had the fuel permanently removed from the reactor vessel. VY will cease reporting Main Steam Relief Valve or Safety Valve failures or challenges as these components serve no purpose in the permanently defueled condition.

There are no new regulatory commitments contained in this submittal.

If you have any questions or require additional information, please contact me at (802) 451-3374.

Sincerely,

[CCC/plc]

IE47
NRR

Attachment: 1. Biennial 10 CFR 50.59 Report

cc: Mr. Daniel H. Dorman
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Mr. Christopher Recchia, Commissioner
VT Department of Public Service
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Attachment 1

Vermont Yankee Nuclear Power Station

Biennial 10 CFR 50.59 Report

Vermont Yankee Nuclear Power Station
Biennial 10 CFR 50.59 Report
April 6, 2013 and March 2, 2015
Evaluation Summary

Title: Installation of Station Blackout Diesel Generator (Engineering Change 37986)

Year Implemented: 2013

Brief Description:

This activity was to install a new alternate AC (AAC) source, in the form of a Station Blackout Diesel Generator (SBO DG), that would be credited for compliance with the NRC's Station Blackout Rule, 10 CFR 50.63. The previously credited AAC source, the Vernon Hydroelectric Station (VHS), was no longer going to be maintained as a black-start facility by the owner-operator. The changes to the Vermont Yankee Nuclear Power Station (VY) licensing basis for 10 CFR 50.63 compliance was reviewed and approved by the NRC pursuant to 10 CFR 50.90. The installation of the SBO DG and connection to the existing VY switchgear prior to NRC approval of the license amendment request was evaluated under 10 CFR 50.59.

Summary of Evaluation:

The modification installed a new 3,000KW/3,750 kVA Diesel Generator and associated 4160V switchgear that can be switched into the Vernon Tie cable in place of the VHS.

The new switchgear is interlocked so that the SBO DG and Vernon Tie cannot be connected in parallel. Breaker operations at existing safety related 4160V Buses 3 and 4 (i.e. breakers 3V4, 3V and 4V) during all modes of operation remain unaffected by this modification; existing breaker interlocks remain and no new interlocks are added. The method of operating these breakers does not change. When considering all of the equipment involved in the transmission of power from the VHS, including the power generation components, to breaker 3V4, the introduction of the switchgear does not, by itself, result in more than a minimum increase in the likelihood of a malfunction of, or interruption of power from, the VHS feed to breaker 3V4.

The change does not more than minimally increase the frequency of occurrence of an accident because this change does not affect the operation of breakers at the existing safety related buses. The change does not affect analyzed accident mitigation or result in increasing the radiological consequences of any accidents.

The change does not more than minimally increase the consequences of a malfunction because there is no difference in the consequences of a malfunction between the existing VHS as the SBO AAC source and the new SBO DG as the SBO AAC source.

The change does not create the possibility of an accident of a different type because the change does not introduce any new sources of energy that could result in an accident of a different type. Also, the failure modes of new equipment introduced into the switchgear were evaluated and do not impact any safety related functions or introduce any new accident types.

The change does not create the possibility of a malfunction of a structure, system or component important to safety with a different result than previously evaluated because the SBO DG does not create a new failure mechanism than that previously evaluated with the VHS.

This change does not result in a fission product barrier being altered or exceeded because the change does not affect reactor coolant system design or primary containment design.

This change does not result in a departure from a method of evaluation as described in the Updated Final Safety Analysis Report. A coping duration for the SBO AAC source was previously performed in accordance with 10 CFR 50.63 and determined to be 8 hours. The methodology for determining the coping duration is given in Regulatory Guide 1.155 and NUMARC 87-00, Revision 1. This methodology is not changed or affected by the change.