

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 30, 2013

10 CFR 2.202
EA-12-049

Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Serial No.: 12-163C
NL&OS/MAE: R0
Docket Nos.: 50-280/281
License Nos.: DPR-32/37

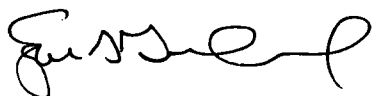
VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
SUPPLEMENT TO OVERALL INTEGRATED PLAN IN RESPONSE TO MARCH 12, 2012
COMMISSION ORDER MODIFYING LICENSES WITH REGARD TO REQUIREMENTS FOR
MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS
(ORDER NUMBER EA-12-049)

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (the Order) to Virginia Electric and Power Company (Dominion). Dominion responded to the Order by letters dated March 26, 2012, October 25, 2012, and February 28, 2013 (Serial Nos. 12-163, 12-163A and 12-163B, respectively).

The purpose of this letter is to supplement the Overall Integrated Plan that was provided in Dominion's February 28, 2013 letter. The additional information is provided in the attachment to this letter.

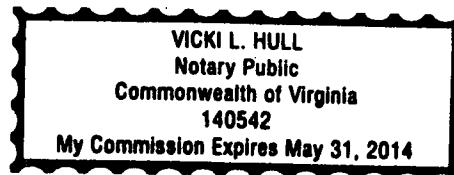
If you have any questions, please contact Ms. Margaret Earle at (804) 273-2768.

Sincerely,



Eugene S. Grecheck
Vice President Nuclear Engineering and Development
Virginia Electric and Power Company

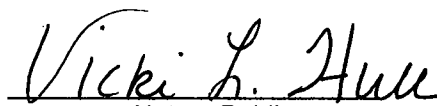
COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)



The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Eugene S. Grecheck who is Vice President Nuclear Engineering and Development of Virginia Electric and Power Company. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of the Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 30TH day of April, 2013.

My Commission Expires: 5-31-14


Notary Public

(SEAL)

A151
LRR

Attachment

Commitments made by this letter: No New Regulatory Commitments

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NRC Senior Resident Inspector
Surry Power Station

Attachment

**Supplement To Overall Integrated Plan
Requirements for Mitigation Strategies For Beyond-Design-Basis External Events**

**Surry Power Station Units 1 and 2
Virginia Electric and Power Company (Dominion)**

Supplement To Overall Integrated Plan
Requirements for Mitigation Strategies For Beyond-Design-Basis External Events

By letter dated February 28, 2013, Serial No. 12-163B, Dominion provided an Overall Integrated Plan (OIP) to address Beyond-Design-Basis (BDB) events at Surry Units 1 and 2 as required by Order Number EA-12-049, dated March 12, 2012. It was stated that the OIP was based on conceptual design information and that final design information and revisions would be provided via updates. Various open items were inserted into the OIP to identify information that would be provided or confirmed at a later date. This attachment provides the basis for closure of Open Item Nos. 2 and 3.

Open Item No. 2 - *Preliminary analyses have been performed to determine the Class 1E battery life based on implementation of load stripping actions. The final battery life duration will be provided when the analyses are completed.*

The completed analyses of the Class 1E station emergency battery life determined an increase in extended battery life from the original 14 hours to 20 hours for both Surry Units 1 and 2. This provides additional time to setup and engage Phase 2 BDB equipment as part of the long-term coping strategy.

This response closes Open Item No. 2 for Surry.

Open Item No. 3 - *Preliminary analyses have been performed to determine the time to steam generator overfill without operator action to reduce AFW flow, time to steam generator dryout without AFW flow, and time to depletion of the useable volume of the ECST. The final durations will be provided when the analyses are completed.*

The analysis for secondary side inventories and heat removal has been finalized. Slight changes were observed from the preliminary values reported in the OIP. These changes, applicable to both Surry Units 1 and 2, are as follows:

- 1) The time to steam generator (SG) overfill without operator action decreased from 2.3 hours to 1.5 hours. As indicated in the February 28, 2013 OIP submittal, the loss of all AC power directs operations personnel to locally throttle AFW flow from the turbine driven auxiliary feedwater (TDAFW) pump to all three SGs to prevent overfilling of the SGs. Operators could access the area in less than 20 minutes and begin to control AFW flow within the following 10 minutes in order to maintain SG levels. Therefore, the throttling of AFW flow to prevent SG overfill can be accomplished within the decreased time constraint of 1.5 hours.

- 2) The time for SG dryout increased from 50 minutes to 1 hour. This provides additional time, if needed, to perform a manual start of the TDAFW pump as part of the Phase 1 core cooling strategy.
- 3) The time to depletion of the water supply from the emergency condensate storage tank (ECST) increased from 4.4 hours to 5.0 hours. This increase provides additional time to realign the suction supply from the emergency condensate makeup tank (ECMT) to the TDAFW pump as part of the long-term core cooling strategy. The cumulative time for depletion of both the ECST and the ECMT also changed from 13.1 hours to 14.2 hours. This increase provides additional time to setup and engage Phase 2 BDB equipment as part of the long-term core cooling strategy.

This response closes Open Item No. 3 for Surry.