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U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D. C. 20555 Serial No. NA3-12-002 Docket No. 52-017 COL/RAB

## DOMINION VIRGINIA POWER NORTH ANNA 3 COMBINED LICENSE APPLICATION LIMITED SEISMIC CLOSURE PLAN

On October 4, 2011, the NRC requested that Dominion submit a schedule for providing revisions to certain seismic information in the North Anna 3 COLA. In response to that request, we are in the process of developing a comprehensive Seismic Closure Plan (SCP) that considers the seismic and structural work that Mitsubishi Heavy Industries, Ltd. (MHI) is currently performing for the US-APWR standard design. Our comprehensive SCP also considers the August 23, 2011 earthquake that occurred in central Virginia near the North Anna site.

As you know, the North Anna 3 comprehensive SCP is dependent upon MHI's seismic closure plan for the DCD. On January 5, 2012, MHI submitted a letter to NRC (ML12011A031) to update its completion plan for the US-APWR seismic and structural analyses. The letter stated that MHI will provide its final closure plan by the end of March 2012.

At present, the scope of changes to the standard design and their impact on the North Anna 3 S-COLA have not yet been fully determined. However, based on our involvement with MHI through its Seismic Task Force, we anticipate that improvements will be forthcoming in the seismic stability and structural integrity of the standard plant. Overall, we would expect those improvements to result in a simpler design that would facilitate NRC's DCD and S-COLA reviews. Based on MHI's commitment to submit its final closure plan in March 2012, Dominion intends to submit its comprehensive SCP in May 2012.

In parallel with MHI's development of its final closure plan and determining its impact on the S-COLA, Dominion is assessing the earthquake that occurred on August 23, 2011 in central Virginia to determine whether any changes should be made to the North Anna 3 S-COLA in light of the event.



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To perform the assessment, Dominion plans to evaluate incorporation of the event using the new Central and Eastern United States (CEUS) Seismic Source Characterization (SSC) model which addresses earthquakes through 2008. The CEUS-SSC catalog will be updated through 2011 to include the August 23, 2011 earthquake. This model will incorporate the EPRI (2004, 2006) earthquake ground motion model for CEUS locations to develop a new hard rock probabilistic seismic hazard analysis (PSHA) and design response spectra. The methodology to develop the ground motion response spectra (GMRS) from the hard rock PSHA will follow Regulatory Guide (RG) 1.208, *A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion*, March 2007.

Dominion is aware that NRC is currently re-evaluating its North Anna 3 S-COLA review schedule. We understand that NRC intends to issue a revised schedule in the near term to conform it with the recently revised review schedules for the DCD and R-COLA. To support that effort, we had previously advised NRC that Dominion would provide any available information to better inform NRC's development of a revised review schedule. At this time, because of the need for MHI to first complete the actions described above, Dominion is able to offer limited input. That input, designated the "Limited Seismic Closure Plan," is provided in the table below. Of course, our intent would be to submit the listed FSAR sections in a form agreeable to NRC project management.

Affected COLA Part/Section	Target Date
FSAR Section 2.5, Geology, Seismology and	July 2012
Geotechnical Engineering	
FSAR Section 2.5.1, Basic Geologic and Seismic	July 2012
Information	
FSAR Section 2.5.3, Surface Faulting	July 2012

North Anna 3 S-COLA Limited Seismic Closure Plan

Dominion will also perform a review of NRC Requests for Additional Information (RAIs) to determine which, if any, are impacted by the limited SCP. The results of that review, including a schedule for revising affected responses, will be provided to the NRC in a separate submittal.

From a broader perspective, NRC's previously published review schedule for the North Anna 3 COLA indicated that the combined license would be issued approximately one month after the US-APWR design was certified and in parallel with the R-COLA. As this important licensing action continues to progress, Dominion intends to work with the NRC to maintain the nexus between design certification and issuance of the North Anna 3 combined license.

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Please contact Joseph Hegner at (804) 273-2770 (joseph.hegner@dom.com) if you have any questions.

Very truly yours,

Eugene S. Grecheck

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 Development of Virginia Electric and Power Company (Dominion Virginia Power). He has affirmed before me that he is duly authorized to execute and file the foregoing document on behalf of the Company, and that the statements in the document are true to the best of his knowledge and belief.

2012 Acknowledged before me this  $/ \Im$ dav of My registration number is 7173057 and my Commission expires:  $\zeta$ 2012 Notarv

WANDA K. MARSHALL Notary Public Commonwealth of Virginia 7173057 My Commission Expires Aug 31, 201

- cc: U. S. Nuclear Regulatory Commission, Region II C. P. Patel, NRC T. S. Dozier, NRC
  - G. J. Kolcum, NRC

Commitments made by this letter:

- 1. Submitted information to NRC in accordance with the enclosed limited Seismic Closure Plan.
- 2. Determine additional COLA impacts due to the standard plant design and DCD revisions and submit a comprehensive SCP to the NRC by May 30, 2012.
- 3. Submit revised RAI responses based on information provided by limited Seismic Closure Plan.