

August 17, 2012

APPLICANT: DOMINION VIRGINIA POWER

APPLICATION: NORTH ANNA NUCLEAR POWER PLANT, UNIT 3, COMBINED LICENSE APPLICATION

SUBJECT: SUMMARY OF THE JUNE 7, 2012, PUBLIC MEETING WITH DOMINION VIRGINIA POWER REGARDING THE NORTH ANNA NUCLEAR POWER PLANT, UNIT 3 SEISMIC CLOSURE PLAN

On June 7, 2012, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and the combined license (COL) applicant, Dominion Virginia Power (Dominion). A public meeting notice was issued on May 24, 2012, and was documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML12139A316. The purpose of the public meeting was to discuss the North Anna Nuclear Power Plant, Unit 3, seismic closure plan, submitted on May 29, 2012, which is available in ADAMS under accession number ML12151A302. A list of attendees is provided as an enclosure.

During the meeting, Dominion's presentations covered the following topics:

- Overview of the seismic closure plan strategy.
- Details of significant changes to its application, design, and analyses.
- Plans for COL application submissions.

Several observations, listed below, were discussed by the NRC staff and Dominion at the meeting.

- The use of a common basemat for the Reactor Building (R/B) Complex reopens the issue of one dimensional versus two dimensional analysis of the subsurface layering because of the bigger footprint of the structure. The closed requests for additional information regarding this topic need to be evaluated for possible changes. The NRC staff indicated that further justification should be provided in the final safety analysis report (FSAR) regarding the methodology used and why it appropriately models subsurface conditions.
- The report documenting the field effort related to the Mineral, Virginia earthquake needs to be a reference in the FSAR.
- The information from the Central and Eastern United States (CEUS) Seismic Source Characterization (SSC) report (NUREG-2115, "Central and Eastern United States Seismic Source Characterization for Nuclear Facilities") related to the seismic hazard analysis at North Anna Nuclear Power Plant, Unit 3, needs to be described in the FSAR. There needs to be enough information stated in the FSAR for public review without opening other reference documents.

- There needs to be a comparison of the Mineral, Virginia earthquake strong motion record obtained at North Anna Nuclear Power Plant, Unit 1, to the North Anna Nuclear Power Plant, Unit 3 ground motion response spectra. The NRC staff also noted that although there will be a generic study conducted by the Electric Power Research Institute that will be useful for many plants, this report may not be available in time to support the current North Anna Nuclear Power Plant, Unit 3, schedule. The North Anna Nuclear Power Plant, Unit 3 FSAR needs to address the North Anna Nuclear Power Plant, Unit 1 record in some way because the earthquake occurred so close to the site.
- The FSAR needs to provide a description of what was trimmed or compressed in the probabilistic seismic hazard assessment (PSHA) logic tree. [The rationale for logic tree trimming will have to make sense in the broader view of the CEUS SSC model, as well as specific modeling parameters pertinent to the North Anna site.]
- The FSAR should address where concrete fill is used for each of the structures.
- The FSAR should show the locations of P-S log borings relative to the footprint of each structure. The NRC staff suggested that the last time around the eastern side of the plant was not well represented by the Vs data. The NRC staff also requested justification for the use of concrete fill wherever it's used in the analyses.
- The analysis of liquefaction should use the same performance level as that for design of structures.
- Justify using a conservative time history seed by showing it meets the criteria in the standard review plan.
- Update general arrangement figures need to be provided along with the relevant FSAR sections to facilitate the review.
- When the PSHA results are submitted, the values should be provided as digital files, e.g., spreadsheets.
- The NRC staff asked how the SASSI model would address an essential service water pipe tunnel bottom elevation that differs from that of the R/B complex. The applicant stated that the design for this area is not yet final, and that several options are being considered. The applicant indicated that the soil-structure interaction analysis for the R/B foundation will be modeled to reflect the final design.

- The applicant indicated that it will provide adequate justification to confirm the adequacy of the seismic demands calculated using the Modified Subtraction Method in the 'frequency range of interest.'

Please direct any inquiries to me at 301-415-6256, or via e-mail to Dennis.Galvin@nrc.gov.

/RA/

Dennis Galvin, Project Manager
Licensing Branch 2
Division of New Reactor Licensing
Office of New Reactors

Docket No.: 52-017

Enclosure:
List of Attendees

cc w/enclosure: See next page

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ADAMS Accession No.: ML12177A331

NRC-001

OFFICE	DNRL/LB2: PM	DNRL/LB2: LA	DNRL/LB2: PM	DNRL/LB2: PM (signed)
NAME	DGalvin	CMurphy	CPatel	DGalvin
DATE	08/15/2012	08/15/2012	08/17/2012	08/17/2012

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List of Attendees

Meeting with Dominion Virginia Power Regarding the North Anna, Unit 3 Seismic Closure Plan
Held On June 7, 2012

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Joe Hegner	Dominion
John Waddill	Dominion
Regina Borsch	Dominion
Mark Giles	Dominion
Bill Gallagher *	Dominion
Doug Kemp	Dominion / Bechtel
Alidad Hashemi	Dominion / Bechtel
Geoff Quinn	Dominion / Bechtel
John Davie	Dominion / Bechtel
David Fenster	Dominion / Bechtel
Joe Litehiser	Dominion / Bechtel
Jim Marrone *	Dominion / Bechtel
Robin McGuire *	Lettis Consultants International, Inc.
Scott Lindvall *	Lettis Consultants International, Inc.
Robert Crandall	Black and Veatch
Masanori Onozuka	MNES
Hikaru Ogasawara	MNES
Takanori Ogata	MNES
Ron Reynolds	MNES
William McConaghy	MNES
Mike Tschiltz	MNES
Luben Todorovski	URS
Mahmoud Khoncarly	URS
Mohammed Shams	Nuclear Regulatory Commission
Bhagwat Jain	Nuclear Regulatory Commission
John Ma	Nuclear Regulatory Commission
Vladimir Grazier	Nuclear Regulatory Commission
Tarun Roy	Nuclear Regulatory Commission
Weijun Wang	Nuclear Regulatory Commission
Dennis Galvin	Nuclear Regulatory Commission

* Participated via phone

Enclosure

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Kim Hawkins	Nuclear Regulatory Commission
Laurel Bauer	Nuclear Regulatory Commission
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(Revised 05/21/2012)

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