

March 25, 2004

Mr. David A. Christian
Senior Vice President and Chief Nuclear Officer
Dominion Resources Services, Inc.
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 2 -
DOMINION NUCLEAR NORTH ANNA, LLC EARLY SITE PERMIT
APPLICATION FOR THE NORTH ANNA ESP SITE (TAC NO. MC1127)

Dear Mr. Christian:

By letter dated September 25, 2003, Dominion Nuclear North Anna, LLC (Dominion) submitted its application for an early site permit (ESP) for the North Anna ESP site.

The Nuclear Regulatory Commission (NRC) staff is performing a detailed review of the Site Safety Analysis Report in your ESP application. The NRC staff is requesting additional information with respect to the application. The topics covered in the requests for additional information (RAIs) contained in Enclosure 1 are seismology and emergency preparedness. These RAIs were sent to you via electronic mail on February 2, 2004, and were discussed with your staff by phone on February 12. Changes were made to them as a result of the audit of seismological aspects of your application held on March 2-4, 2004. The revised RAIs were sent to you via electronic mail on March 18, 2004 and were discussed with your staff by phone on March 24, 2004.

Receipt of requested information within 75 days of the date of this letter will support the NRC's efficient and timely review of Dominion's ESP application. We recognize that receipt of signed arrangements from all agencies involved in emergency planning, as discussed in RAI 13.3-1, may require some additional time. Please note that failure to provide a response in a timely fashion may result in a delay of completion of the staff's safety evaluation report.

D. Christian

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If you have any questions or comments concerning this matter, you may contact me at (301) 415-1421 or mls3@nrc.gov.

Sincerely,

/RA/

Michael L. Scott, Dominion ESP Project Manager
New Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 52-008

Enclosure: As stated

cc: See next page

D. Christian

-2-

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Michael L. Scott, Dominion ESP Project Manager
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Docket No. 52-008

Enclosure: As stated

cc: See next page

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ACCESSION NO. ML040480124 *See previous concurrence

OFFICE	RNRP/PM	EPPO/SC*	EMEB/SC	OGC/NLO	RNRP/SC
NAME	MScott	EWeiss	KManoly	RWeisman	LDudes
DATE	3/24/04	3/24/04	3/24/04	3/24/04	3/25/04

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**North Anna Early Site Permit Application
Site Safety Analysis Report (SSAR)
Requests for Additional Information (RAI)
RAI LETTER NO. 2**

RAI 2.5.2-1

SSAR Section 2.5.2, Vibratory Ground Motion

SSAR Section 2.5.2 describes the results of Dominion's determination of ground motion at the ESP site from possible earthquakes. Regulatory Guide 1.165 (RG 1.165) provides a method acceptable to the NRC staff with respect to the probabilistic evaluations that can be conducted to address the uncertainties associated with the Safe Shutdown Earthquake (SSE) determination. RG 1.165 specifies a target or reference probability (median 10^{-5} per year) that is used to determine the controlling earthquakes, subsequent site ground motion, and the SSE.

Please provide the following information related to the approach used to obtain the SSE in SSAR Section 2.5.2:

- a) The approach described in SSAR Section 2.5.2 incorporates component capacity or performance parameters into a scale factor used to compute the SSE. Please justify the incorporation of equipment performance into determination of the SSE.
- b) Please explain how the SSE derived in SSAR Section 2.5.2 is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface.
- c) Please describe how the performance-based approach incorporates the site-specific geology of the ESP site into the determination of the SSE.
- d) Please provide site-specific response spectra from the controlling earthquakes at the reference probability level (median 10^{-5} per year) and demonstrate that the SSE envelopes the response spectra from the controlling earthquakes at the reference probability level, or justify why this information is not needed in determining the SSE. Please also justify any reference probability level used other than median 10^{-5} per year. Appendix B to RG 1.165 discusses situations in which an alternative reference probability level may be appropriate.

RAI 13.3-3

SSAR Section 13.3, Emergency Planning

SSAR Section 13.3.2 states, in part, "[t]he Major Features Emergency Plan takes advantage of the emergency planning resources, capabilities, and organization that Virginia Power has already established and currently maintains at the NAPS [North Anna Power Station] site."

Please confirm whether you wish to incorporate applicable sections of the existing North Anna Emergency Plan (NAEP) into the ESP application, to the extent that it supports the emergency planning description in the ESP application. Dominion may either take credit for this information by providing the confirmation stated, or it may provide the information separately in response to individual RAIs.

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