

June 4, 2008

Mr. Eugene S. Grecheck  
Vice President - Nuclear Development  
Dominion  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 005 (SRP  
SECTIONS 17.04, 17.06, AND 19) RELATED TO THE NORTH ANNA UNIT 3  
COMBINED LICENSE APPLICATION

Dear Mr. Grecheck:

By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted a combined license application for North Anna Unit 3 pursuant to 10 CFR Part 52. The U. S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application.

The staff has identified that additional information is needed to continue portions of the review and the request for additional information (RAI) is contained in the enclosure to this letter. To support the review schedule, Dominion is requested to respond within 45 days of the date of this letter. If the RAI response involves changes to application documentation, Dominion is requested to include the associated revised documentation with the response.

Should you have questions, please contact me at (301) 415-0224 or [Thomas.Kevern@nrc.gov](mailto:Thomas.Kevern@nrc.gov).

Sincerely,

**/RA/**

Thomas A. Kevern, Senior Project Manager  
ESBWR/ABWR Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket No.: 52-017

Enclosure:  
Request for Additional Information

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|                      |                  |               |
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| <u>Distribution:</u> | HHamzehee, NRO   | RFoster, NRO  |
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| RidsNroDnrlNge2      | TKevern, NRO     |               |

E-RAI Tracking No. 40, 63, 183, and 184

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|               |            |              |                     |                           |              |
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| <b>OFFICE</b> | TR:SPLB    | BC:SPLB      | PM:DNRL:NGE1        | OGC                       | PM:DNRL:NGE1 |
| <b>NAME</b>   | JLai *     | HHamzwhhee * | RFoster/<br>MEudy * | TKevern for<br>RWeisman * | TKevern      |
| <b>DATE</b>   | 04/16/2008 | 04/17/2008   | 05/09/2008          | 06/03/2008                | 06/04/2008   |

\*Approval captured electronically in the electronic RAI system.

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**Request for Additional Information  
North Anna, Unit 3  
Dominion  
Docket Number 52-017  
SRP Sections: 17.04, 17.06, and 19  
Application Section: FSAR 17.4, 17.6, 19.1.4.1.1, and 19.5**

**QUESTIONS**

**17.04-1 SRP Section: 17.04 - Reliability Assurance Program (RAP)**

SRP 17.4 and Regulatory Guide 1.206 (C.III.1, Page 182) identify the need to address 1) qualification requirements of the expert panel, if such panel is used, and 2) a description of the corrective action process for design and operational errors that degrade non-safety-related SSCs within the scope of the RAP. FSAR Section 17.4 does not address either the expert panel qualifications or the corrective action process. Please provide in FSAR Section 17.4 the following: 1) expert panel qualification requirements, if a panel is to be used, and 2) description of the corrective action process.

**17.06-1 SRP Section: 17.06 - Maintenance Rule**

In FSAR Section 17.6.3, Maintenance Rule Program Relationship with Reliability Assurance Activities, the STD SUP 17.6-2 includes, in the last sentence, reference to the "preventive maintenance program." Since the preventive maintenance program is not referenced in staff guidance in SRP 17.4 or 17.6, please describe how the preventive maintenance program is intended to support the Reliability Assurance Activities.

**19-1 SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation**

SRP 19.0 identifies the need for the plant-specific PRA to address internal flooding analysis. Neither FSAR Chapter 19 nor ESBWR topical report NEDE/NEDO 33386 identifies the North Anna plant-specific flooding zones of the yard and service water building. Please provide 1) description, preferably with drawings, of the yard and service water building flooding zones and 2) description of the impact of these plant-specific flooding zones on the PRA results.

**19-2 SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation**

FSAR Section 19.5, in support of meeting the requirement of 10 CFR 52.79(a)(46) pertaining to the plant-specific PRA, states the following: "The review of site-specific information and plant-specific design information determined that: 1) the DCD PRA bounds site-specific and plant-specific design parameters and design features, and 2) these parameters and features have no significant impact on the DCD PRA results and insights." Please justify the FSAR statements by providing the following: 1) describe the criteria used to determine whether or not site-specific and plant-specific design parameters and design features are bounded by the DCD PRA and explain how the criteria were applied in the evaluation, 2) describe the quantitative criteria used to determine whether or not a site-specific or plant-specific design parameter or design feature has a significant impact on the DCD PRA results and insights,

and 3) describe each of the site-specific and plant-specific design parameters and design features that were considered in the evaluation and a brief explanation of the technical basis for concluding there is no significant impact on the DCD PRA results and insights.