

July 28, 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. 021 (SRP
SECTIONS: 05.02.01.01, 05.02.01.02, 13.01.01, 13.01.02-13.01.03, 13.02.01,
13.02.02, 13.05.02.01, and 14.02) 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.

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

July 28, 2008

Mr. Eugene S. Grecheck
Vice President - Nuclear Development
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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.

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Docket No. 52-017

Enclosure: Request for Additional Information

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DATE	07/09/08	07/16/08	07/16/08	07/28/08

*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: 05.02.01.01 - Compliance With the Codes and Standards Rule, 10 CFR 50.55a; 05.02.01.02 - Applicable Code Cases; 13.01.01 - Management and Technical Support Organization; 13.01.02-13.01.03 - Operating Organization; 13.02.01 - Reactor Operator Requalification Program; Reactor Operator Training; 13.02.02 - Non-Licensed Plant Staff Training; 13.05.02.01 - Operating and Emergency Operating Procedures; 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
Application: FSAR Sections 5.2.1.1, 5.2.1.2, 13.1.1, 13.1.2, 13.2, 13.2.2, 13.5, and Appendix 14AA**

QUESTIONS

05.02.01.01-1

The FSAR incorporates by reference Subsection 5.2.1.1, "Compliance with 10 CFR 50.55a," in ESBWR DCD Tier 2 Revision 4 without supplemental information or departures. ESBWR DCD Subsection 5.2.1.1 refers to Table 3.2-1, "Classification Summary," and Table 3.2-3, "Quality Group Designations – Codes and Industry Standards," for the ASME Code applied to components in the ESBWR design. As those tables focus on Section III of the ASME *Boiler & Pressure Vessel Code* (BPV Code), the COL applicant is requested to address the application of other sections of the ASME BPV Code and the ASME *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code) in its implementation of the ESBWR reactor design.

05.02.01.02-1

The FSAR incorporates by reference Subsection 5.2.1.2, "Applicable Code Cases," of the ESBWR DCD Tier 2 without supplemental information or departures. The ESBWR DCD indicates that the various ASME Code Cases that may be applied to components in the ESBWR design are listed in Table 5.2-1, "Reactor Coolant Pressure Boundary Components (Applicable Code Cases)." The ESBWR DCD also notes that NRC Regulatory Guide (RG) 1.84, "Design, Fabrication, and Materials Code Case Acceptability, ASME Section III," and RG 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," provide a list of ASME Code design and fabrication code cases that have been generically approved by the NRC staff. The ESBWR DCD does not reference RG 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code." The COL applicant is requested to discuss use of Code Cases not listed in ESBWR DCD Tier 2 Table 5.2-1 related to the ASME BPV or OM Codes.

05.02.01.02-2

ESBWR DCD Tier 2 Revision 4, Subsection 5.2.1.2, states that annulled cases are considered active for equipment that has been contractually committed to fabrication prior to the annulment. The COL applicant is requested to discuss compliance with the requirements regarding the use of annulled Code Cases specified in 10 CFR 50.55a(b)(4), (5), and (6).

13.01.01-1

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," Section I.1.1.B discusses preoperational responsibilities of the applicant. The statement is made in Section 13.1.1.2.1, Engineering, of the application, that design work may be contracted to and performed by outside companies in accordance with Section 17.5. Where is this guidance related to outside company work found in the application?

13.01.01-2

FSAR Section 13.1.1.1, Design, Construction, and Operating Responsibilities, states that Section 17.5 provides a discussion of key executive and corporate management positions, functions, and responsibilities. Staff review indicates such discussion is not contained in Section 17.5. Please identify the location of this discussion.

13.01.01-3

Section 13.1.1, Management and Technical Support Organization, includes the statement that Section 17.5 provides high-level illustrations of the corporate organization. Staff review indicates such illustrations are not contained in Section 17.5. Please identify the location of these illustrations in the application.

13.01.01-4

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," Section I.1.B.iii requests the applicant describe the development of the plant maintenance programs. Please describe the development of the plant maintenance programs.

13.01.01-5

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," Section I.1.B.viii requests the applicant provide information on the interface with the NSSS and AE organizations. Please describe how NAPS management interfaces with the NSSS and AE organizations.

13.01.01-6

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.2.B and RG 1.206, section C.I.13.1.1.2, "Organizational Arrangement", request the applicant to provide the relationship of the nuclear-oriented part of the organization to the rest of the corporate organization. Describe where can this relationship be found in the NAPS application?

13.01.02-13.01.03-2

Standard Review Plan Section 13.1.2 - 13.1.3, "Operating Support Organization," sections I.A.1 and I.a.2 and Regulatory Guide 1.206, section C.I 13.1.2, "Operating Organization" ask for the applicant's commitment to Regulatory Guide 1.33. In Section 13.1.2.1, Plant Organization, of the application, it is stated that the nuclear plant employees are responsible for reporting problems with plant equipment and facilities. These employees are required to identify and document equipment problems in accordance with the QA program. The QA program requirements as they apply to the operating organization are described in Section 17.5. Where are QA program requirements related to identification and documentation of equipment problems found in the application?

13.01.02-13.01.03-3

Standard Review Plan Section 13.1.2 - 13.1.3, "Operating Support Organization," Sections I.A.1 and I.a.2 and Regulatory Guide 1.206, section C.I 13.1.2, "Operating Organization" ask for the applicant's commitment to Regulatory Guide 1.33. The statement is made in Section 13.1.2.1, "Plant Organization" that the plant management, technical support, and plant operating organizations are incorporated into Section 17.5 and that additional personnel are required to augment normal staff during outages. Where is this information found in the application?

13.01.02-13.01.03-4

Standard Review Plan Section 13.1.2 - 13.1.3, "Operating Organization," section I.A.1 and I.A.2 and RG 1.206, section C.I.13.1.2, "Operating Organization" ask the applicant to describe their commitment to meet the guidelines of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)" for its operating organization, for onsite review, and rules of practice. Where can this commitment to Regulatory Guide 1.33 be found in the application?

13.02.01-1

FSAR, Section 13.2, Training, Appendix 13BB, Training Program, incorporates by reference NEI 06-13-A, Rev 0, "Technical Report on a Template for an Industry Training Program Description." The staff notes that NEI 06-13-A, Revision 1, which addresses a cold license training program, is now available. There are portions of NEI 06-13-A, Revision 1 that are either partially included in, or not addressed in FSAR Appendix 13BB, including eligibility requirements, licensed operator training and experience requirements, and crew experience requirements. Explain your intent regarding incorporation of NEI-06-13-A, Revision 1, into the FSAR.

13.02.02-1

NUREG-0800, Standard Review Plan Section 13.2.2.I.D.i and ii requires periodic drills during construction and provisions for indoctrination of construction personnel. FSAR Section 13.2.2 refers to section 13.1. Under 13.1 it states the site construction executive is responsible during construction for site fire protection but does not specifically address the above requirements of the SRP. Please revise the FSAR to describe how the

requirements for periodic drills and indoctrination of construction personnel are going to occur as identified in the SRP.

13.05.02.01-2

SRP Section 13.5.2.1, states that the group within the operating organization responsible for maintaining the procedures should be identified. The FSAR, Section 13.5, did not identify such group. Identify the group within the operating organization responsible for maintaining the procedures identified in the FSAR, Section 13.5.2.

13.05.02.01-3

NUREG-0800, Section 13.5.2.1, states that the procedures generation package (PGP) should include a description of the process used to develop plant-specific technical guidelines (P-STGs) from the generic technical guidelines (GTGs). The FSAR, Section 13.5.2.1.4, "Emergency Operating procedures," states that the PGP would include the identification of additional equipment beyond that identified in the GTGs, but did not include a description of the process used to develop P-STGs. Provide a description of the process used to develop P-STGs from the GTGs.

13.05.02.01-4

NUREG-0800, Section 13.5.2.1, states that the PGP should include a plant-specific writer's guide (P-SWG) that details the specific methods to be used by the applicant in preparing EOPs based on P-STGs. The FSAR, Section 13.5.2.1.4, states that the PGP would include a generic writer's guide. Provide a P-SWG that details the specific methods to be used by the applicant in preparing EOPs based on P-STGs.

14.02-7

In the FSAR Appendix 14.AA, Description of Initial Test Program Administration, Subsection 14AA.3.4, "Test Procedure Changes," the COL applicant provides guidance on changes to test procedures. Staff review indicates Subsection 14AA.3.4 should include a description of the 50.59-like change control process for evaluating major test procedure changes for test abstracts in the Initial Test Program. The staff notes that in accordance with 10 CFR 50.59(c)(1), "a licensee may make changes to test procedures as described in the FSAR (as updated) without obtaining a license amendment, only if: (i) a change to the technical specifications (TS) incorporated in the license is not required, and (ii) the change, test or experiment does not meet any of the criteria in 50.59(c)(2)." Please include in Subsection 14AA.3.4 the need to evaluate and obtain a license amendment if it is revealed that a major test procedure change could result in a TS amendment in accordance with 10 CFR 50.59(c)(1) and meets any one of eight criteria in 10 CFR 50.59(c)(2)(i) through (viii).