

Enclosures:

1. Response to NRC RAI Letter No. 84, RAI 5906 Question 13.04-1
2. Response to NRC RAI Letter No. 84, RAI 5906 Question 13.04-2

Commitments made by this letter:

1. Incorporate proposed changes in a future COLA submission.

COMMONWEALTH OF VIRGINIA

COUNTY OF HENRICO

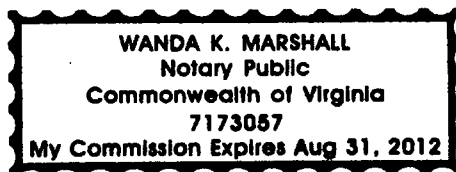
The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Eugene S. Grecheck, who is Vice President-Nuclear Development of Virginia Electric and Power Company (Dominion Virginia Power). He has affirmed before me that he is duly authorized to execute 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.

Acknowledged before me this 12th day of October, 2011

My registration number is 7173057 and my

Commission expires: August 31, 2012

Wanda K. Marshall
Notary Public



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

ENCLOSURE 1

Response to NRC RAI Letter 84

RAI 5906, Question 13.04-1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

**North Anna Unit 3
Dominion
Docket No. 52-017**

RAI NO.: 5906 (RAI Letter 84)

**SRP SECTION: 13.04 – OPERATIONAL PROGRAMS
QUESTIONS for Health Physics Branch (CHPB)**

DATE OF RAI ISSUE: 08/18/2011

QUESTION NO.: 13.04-1

10 CFR 20.1406 requires licensees to minimize contamination of the facility and the environment. Regulatory Guide 4.21 notes that a conceptual site model and ground water monitoring programs are part of a leakage detection and minimization program. NEI Template 08-08A "Generic FSAR Template Guidance for Life Cycle Minimization of Contamination", a proposed acceptable method of demonstrating compliance with 10 CFR 20.1406, notes that applicants should develop the appropriate site procedures and implement these procedures and programs consistent with applicant's FSAR section 13.4 (prior to Radiation Protection Milestone 3 initial fuel load). However, COL FSAR Section 13.4 does not contain any milestones for the development of a ground water monitoring program.

Please revise and update COL FSAR Section 13.4 to describe the ground water monitoring implementation milestone, or provide an alternate approach and the associated justification.

Dominion Response

In FSAR Section 12.5, Dominion has fully adopted the generic program description for life-cycle minimization of contamination that is provided in NEI 08-08A, *Generic FSAR Template Guidance for Life Cycle Minimization of Contamination*. NEI 08-08A provides an acceptable method of demonstrating compliance with 10 CFR 20.1406 and directs the COL applicant to develop the appropriate site procedures and programs to meet the industry's Groundwater Protection Initiative (GPI) and a requirement to implement them prior to initial fuel load.

Development of the above mentioned GPI site procedures and programs, which would include various leak detection systems in addition to a groundwater monitoring program, will be implemented consistent with FSAR Section 13.4 and the third milestone in FSAR Table 13.4-201, Item 10 for the Radiation Protection (RP) Program, (i.e., prior to initial fuel load as an element of the RP Program that is necessary to support fuel load and plant operation). Because the implementation milestone is already identified in NEI 08-08A, is fully adopted by Dominion, and is already reflected in Table 13.4-201 of FSAR Section 13.4, there is no need to further revise or update COL FSAR Section 13.4 to describe the ground water monitoring implementation milestone.

Proposed COLA Revision

None.

ENCLOSURE 2

Response to NRC RAI Letter 84

RAI 5906, Question 13.04-2

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

North Anna Unit 3

Dominion

Docket No. 52-017

RAI NO.: 5906 (RAI Letter 84)

SRP SECTION: 13.04 – OPERATIONAL PROGRAMS

QUESTIONS for Health Physics Branch (CHPB)

DATE OF RAI ISSUE: 08/18/2011

QUESTION NO.: 13.04-2

10 CFR 50.34.f(2)(xxvi) [NUREG 0737 III.D.1.1] requires leakage control and detection for systems outside containment that might contain highly radioactive fluids, and requires applicants to submit a leakage control program, including an initial test program and a schedule for retesting systems. DCD FSAR Tier 2 Chapter 16 (Technical Specifications), subsection 5.5.2, notes the requirement for a leakage minimization program for systems outside containment that might contain highly radioactive fluids.

1. COL FSAR Section 13.4, Table 13.4-201 "Operational Programs Required by NRC and Program Implementation", Items 1 "Inservice Inspection Program", and 2 "Inservice Testing Program" do not reference this section of the FSAR, nor do they reference 10 CFR 50.34.f(2)(xxvi).
2. Table 13.4-201 also includes Item 6, "Preservice Testing Program", which does not appear to list either the FSAR section or the "Program Source", consistent with the initial test requirements stated in 10 CFR 50.34.f(2)(xxvi) and NUREG 0737 III.D.1.1.

Please revise and update COL FSAR Section 13.4, Table 13.4-201 to reference 10 CFR 50.34.f(2)(xxvi) and FSAR sections that describe the Highly Radioactive Fluid Systems Outside Containment monitoring program requirements, or provide an alternate approach and the associated justification.

Dominion Response

Because a leakage control and detection program for systems outside containment is site-specific, COL Item 13.4(2) was added in DCD Revision 3 for a COL applicant to address the requirements of NUREG-0737, III.D.1.1. The new COL Item is as follows:

COL 13.4(2) The COL Applicant is to develop a leakage monitoring and prevention program for the systems specified in TS 5.5.2. The leakage monitoring and prevention program will include the appropriate methods and acceptance criteria as defined in NUREG-0737 Item III.D.1.1.

Dominion will address the requirements of this new DCD COL Item in the next submittal of the S-COLA. In order to address COL 13.4(2), the following statement will be added to FSAR Section 13.4:

“A leakage monitoring and prevention program, as described in Technical Specifications Section 5.5.2, that includes appropriate methods and acceptance criteria defined in NUREG-0737 Item III.D.1.1 will be developed prior to initial fuel load.”

FSAR Table 13.4-201 is not revised because the leakage monitoring and prevention program for systems outside containment is not an operational program identified for inclusion in the FSAR per the guidance provided in SECY-05-0197 and SRM-SECY-05-0197. Regulatory Guide (RG) 1.206, Section C.IV.4.1, describes that although numerous programs support the operation of a nuclear power plant, SECY-05-0197 focused on a specific set of programs that are collectively referred to as “operational programs” and are listed in Table 13.4-1 of RG 1.206. The program described above is not listed in SECY-05-0197 as an “operational program.” Additionally, because the Inservice Inspection, Inservice Testing, and, Preservice Testing programs identified in Table 13.4-201 are ASME Code based programs and are not associated with the requirements of 10 CFR 50.34 f(2)(xxvi) or NUREG-0737, Item III.D.1.1, it would be inappropriate to cite Section 5.2.2 of the Technical Specifications as a cross-reference for any of these programs in Table 13.4-201.

Dominion notes that the NRC has issued a final Safety Evaluation Report (SER) for Vogtle Units 3 and 4. Chapter 13 of that SER [ML 110300015, dated 8/5/11] concludes that FSAR Section 13.4 and Table 13.4-201 are acceptable based on the regulatory guidance in SECY-05-0197 and RG 1.206. The Vogtle Table 13.4-201 does not contain references to the program listed in 10 CFR 50.34 f(2)(xxvi) and NUREG 0737, Item III.D.1.1.

Proposed COLA Revision

FSAR Section 13.4 will be revised to include the text provided above in response to new DCD COL Item 13.4(2) as indicated on the attached markup.

Markup of North Anna COLA

The attached markup represents Dominion's good faith effort to show how the COLA will be revised in a future COLA submittal in response to the subject RAI. However, the same COLA content may be impacted by revisions to the DCD, responses to other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be somewhat different than as presented herein.

13.4 Operational Program Implementation

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

STD COL 13.4(1)

Replace the sentence in the DCD Section 13.4 with the following.

Table 13.4-201 identifies the required Operational Programs including the associated FSAR Sections and committed Milestones for implementation. Each operational program is "fully described" in the associated FSAR Sections.

NAPS COL 13.4(2)

A leakage monitoring and prevention program, as described in Technical Specification Section 5.5.2, and which includes appropriate methods and acceptance criteria defined in NUREG-0734 Item III.D.1.1, will be developed prior to initial fuel load.

13.4.1 Combined License Information

Replace the content of DCD Subsection 13.4.1 with the following.

STD COL 13.4(1)
NAPS COL 13.4(1)

**13.4(1) Operational Programs as defined in SECY-05-0197
(Ref. 13.4-1)**

This COL item is addressed in Section 13.4, including Table 13.4-201.

NAPS COL 13.4(2)

**13.4(2) Leakage monitoring and prevention program as defined in
NUREG-0737 Item III.D.1.1.**

This COL item is addressed in Section 13.4.