

PMNorthAnna3COLPEmails Resource

From: Patel, Chandu
Sent: Thursday, July 21, 2011 4:28 PM
To: 'na3raidommailbox@dom.com'
Cc: PMNorthAnna3COLPEmails Resource; Monarque, Stephen; Otto, Ngola; Roy, Tarun; Takacs, Michael
Subject: Draft RAI 5893, Draft RAI 5906, and Draft RAI 5907 for North Anna 3 COLA
Attachments: Draft RAI 5893.doc; Draft RAI 5906.doc; Draft RAI 5907.doc

Hi,

Please see attached Draft RAI 5893 (Section 11.5), Draft RAI 5906 (Section 13.04), Draft RAI 5907 (Section 16) for North Anna 3 COLA. If you need any clarification on any of these RAIs, please let Steve Monarque or appropriate Chapter know by July 27, 2011. Otherwise it will be issued as final after July 28, 2011.

Sincerely,
Chandu Patel

Hearing Identifier: NorthAnna3_Public_EX
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Draft RAI 5893.doc	31738	
Draft RAI 5906.doc	34298	
Draft RAI 5907.doc	41466	

Options

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Request for Additional Information No. 5893 (Draft)

North Anna, Unit 3
[Dominion Virginia Power]
Docket No. 52-017

SRP Section: 11.05 - Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems

Application Section: 11.5

QUESTIONS for Health Physics Branch (CHPB)

11.05-***

Staff review of FSAR (Rev. 3), Sections 10.4 and 11.5 in the SCOLA and response to RAI 3402, Question 11.05-2 (CP RAI #50, ML093370170) in the RCOLA found that the design description on the site-specific steam generator blowdown system (SGBDS) radiation monitor (RMS-RE-037) used in the blowdown system was not fully described in FSAR Section 11.5 of the SCOLA to address, in part, STD COL 10.4(2) and STD COL 11.5(1) for meeting compliance with 10 CFR 50.34a and 10 CFR 52.47(b)(1). FSAR Section 10.4.8.2.1 of the SCOLA states,

"A radiation monitor located downstream of the startup SG blowdown heat exchanger measures radioactive level in the blowdown water. When an abnormally high radiation level is detected, the blowdown lines are isolated and the blowdown water included in the SGBDS is transferred to waste holdup tank in the LWMS. The location and other technical details of the monitor will be developed during the detail design phase."

COL 10.4(2) in the DCD (Rev. 2) instructs the COL applicant to address the discharge to Waste Water System including site-specific requirements for the SGBDS.

Although FSAR Section 11.5 in the SCOLA includes Table 11.5-201 on SGBDS radiation monitor (RMS-RE-037) design information and Figure 11.5-201 on a typical SGBDS radiation monitor schematic, Section 11.5.2.5.3 and other parts of the SCOLA did not fully include all information related to the SGBDS radiation monitor on the design description (such as references to FSAR Section 10.4.8.1 and SGBDS radiation monitor schematic), ITAAC information in Tables A.5-1 and A.5-2 to Part 10 - Appendix A.5, revision to supplemental information deleting a statement regarding the "detailed design phase" in FSAR Section 10.4.8.1, and explanation of the bypass around the SGBDS radiation monitor in FSAR Figure 10.4.8-201 as similarly proposed in the RAI response (ML093370170) to the RCOLA. Please revise the SCOLA to include this information and provide a markup in your response.

Request for Additional Information No. 5906 (Draft)

North Anna, Unit 3
Dominion
Docket No. 52-017
SRP Section: 13.04 - Operational Programs
Application Section: 13.4

QUESTIONS for Health Physics Branch (CHPB)

13.04-***

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.

13.04-***

DCD FSAR Tier 2 Section 5.4.2.2 notes the requirement for a Primary-to-Secondary Leakage program in accordance with the criterion of NEI 97-06 "Steam Generator Program Guidelines". 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 10CFR 50.55a.b(2)(iii) "Steam Generator Tubing". The implementation milestones listed for these two items do not appear to be consistent with the monitoring criteria noted in Technical Specifications 3.4.13.2.

Please revise and update COL FSAR Section 13.4 Table 13.4-201 to reflect the FSAR and 10 CFR 55a sections that drives the Primary-to-Secondary Leakage monitoring program requirements, or provide an alternate approach and the associated justification.

13.04-***

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.

Request for Additional Information No. 5907 (Draft)

7/13/2011

North Anna, Unit 3
Dominion
Docket No. 52-017
SRP Section: 16 - Technical Specifications
Application Section: 16

QUESTIONS for Technical Specification Branch (CTSB)

16-***

Provide the following editorial corrections in various sections of the Technical Specifications:

1. On page 3.1.6-1, the second portion of the APPLICABILITY statement reads "MODE 2 with $K_{eff} \leq 1.0$ ". The statement should read "MODE 2 with $K_{eff} \geq 1.0$."
2. On page 3.1.9-1, the "a." statement in LCO 3.1.9 reads "a. RCS lowest loop temperature is $\leq 541^\circ$ F,". The statement should read "a. RCS lowest loop temperature is $\geq 541^\circ$ F,".
3. On page 3.2.1-2, there is an error made four times. Every " F_Q^C " should be " F_Q^W ". The four occurrences are on page 3.2.1-2, in CONDITION B and REQUIRED ACTIONS B.1, B.2, and B.3.
4. There are several Notes not formatted in accordance with the Writer's Guide for Plant-Specific Improved Technical Specifications, Section 2.1.4 Note Format. The four Notes are referenced as Notes in the corresponding Bases sections. The following Notes should be formatted as NOTES IAW the Writer's Guide:
 - a. Page 3.2.2-2 – REQUIRED ACTION A.3 – the statement beginning with "THERMAL POWER" should be formatted as a NOTE. This Note is referenced on page B3.2.2-6 of the Bases.
 - b. Page 3.2.3-2 – CONDITION C – The statement beginning with "Required Action" should be formatted as a NOTE. This Note is referenced on page B3.2.3-6 of the Bases.
 - c. Page 3.2.4-2 – REQUIRED ACTION A.6 – The statement beginning with "Perform Required" should be formatted as a NOTE. This Note is referenced on page B3.2.4-5 of the Bases.
 - d. Page 3.2.4-3 – SR 3.2.4.2 – The statement beginning with "Not required" should be formatted as a NOTE. This Note is referenced on page B3.2.4-6 of the Bases.
5. On page 1.1-2, second paragraph of CHANNEL CALIBRATION, in the second line, there needs to be a space between "with" and "Specification".
6. On page 1.1-2, fourth paragraph of CHANNEL CALIBRATION, the last sentence should read "The confirmed settings are..." vice "The confirmed setting are..."
7. On page 1.3-9, there needs to be a blank line between the paragraph that ends with "...for that valve." and "Since the Note..."
8. On page 1.4-4, there needs to be a blank line between the paragraph that ends with "...within 12 hours." and "The use of..."
9. On page 3.4.5-1, the COMPLETION TIME for REQUIRED ACTION B.1 should read "12 hours" vice "12 hour".
10. On page 3.5.5-1, the COMPLETION TIMES for REQUIRED ACTIONS B.1 and B.2 should be "6 hours" and "36 hours" respectively, vice "6 hour" and "36 hour".

11. On pages 5.7-3 and 5.7-4, there is continuation text at the top of the page before the section header and the word “Continued”. The section header and “Continued” should be at the top of the page before any text. The correct format is described in the Writer’s Guide for Standard Technical Specifications, section 2.6.2.e, with section 2.6.2 being the section that describes formatting for Technical Specifications section 5.0 (Administrative Controls).

16-***

Provide the following editorial corrections in various sections of the Bases:

1. ### On page B3.1.3-1 – third paragraph. In the fourth line, there needs to be a space inserted in “MODE1” between the “E” and the “1”. In the fifth line, there needs to be a space inserted in “MODE2” between the “E” and the “2”.
2. On page B3.1.6-4, there is no single line between the “LCO” section and the “APPLICABILITY” section. This is required in accordance with Writer’s Guide for Plant-Specific Improved Technical Specifications, Section 2.7.1.e.
3. ### On page B3.1.8-7, SR 3.1.8.4, line e. has Xenon incorrectly spelled “Xeon”.
4. On page B3.2.1-5, “ $F_Q^C(Z)$ ” is omitted from the last sentence of Action A.2 paragraph. The term belongs between the words “in” and “would”.
5. On page B3.4.3-2, the first sentence has “RTNDT”. The “NDT” should be subscript, as shown in the previous paragraph on page B3.4.3-1.
6. On page B3.4.3-5, paragraphs are labeled “B.1, B.2, and B.3”. It should read “B.1 and B.2” as shown on page 3.4.3-1 of the TS.
7. On page 3.4.6-5, the first sentence of SR 3.4.6.2 ends with “...water level is \leq 13%...” It should read “...water level is \geq 13%...”
8. On page B3.4.14-5, the 3rd line of the 3rd paragraph, there needs to be a space between “24” and “month”.
9. Following the References Section (page B3.7.10-11), there is a blank page labeled as page B3.7.10-12 which should be omitted. Following that page is a page marked “Intentionally Left Blank”. Following that page is another blank page marked as page B3.7.10-14 which should also be omitted.

16-***

Provide a response to the following question:

On page 3.1.7-3, the COMPLETION TIME of REQUIRED ACTION D.2 reads “Once per 8 hours”. The COMPLETION TIME should read “8 hours”.

16-***

Provide a response to the following question:

On page B3.2.3-8, the references for Bases Section B3.2.3 are omitted entirely. There should be 2 references:

- a. WCAP-8403 (nonproprietary), “Power Distribution Control and Load Following Procedures, “Westinghouse Electric Corporation, September 1974.
- b. Subsection 15.0.0.2.3.

16-***

Provide a response to the following question:

Page 3.4.11-1. CONDITION B, which states “Required Action and associated Completion Time of Condition A not met”, is incorrect. The requirements associated with Condition A not being met is covered in Condition D, which states “Required Action and associated Completion Time of Condition A, B, or C not met.” Condition B of the PTS should read “One SDV inoperable and not capable of being manually cycled.” The Required Action for this Condition should be:

- B.1 Close associated block valve 1 hour
- AND
- B.2 Remove power from associated 1 hour
block valve
- AND
- B.3 Restore SDV to OPERABLE status 72 hours

This is how the TS section of 3.4.11 is described in the PTS Bases. The TS and Bases in section 3.4.11 needs correcting.

16-***

Provide a response to the following question:

On page 3.7.10-4, the FREQUENCY for SR 3.7.10.5 should be “24 months on a STAGGERED TEST BASIS” vice “24 months.” This frequency regarding Main Control Room ventilation is discussed on page 5.5-15, and includes the staggered test basis portion of the frequency.

16-***

Provide a response to the following question:

On page 5.7-4, the last sentence of paragraph 4 should read “...device that continuously displays radiation dose rates...” vice “...device that continuously displaces radiation dose rates...”

16-***

Provide a response to the following question:

The NAPS COL item 16.1 list at the beginning of NAPS TS Rev 2 states that a Note was added to both 5.6.1 Annual Radiological Environmental Operating Report and 5.6.2 Radioactive Effluent Release Report. Neither of these 2 Notes appear in sections 5.6.1 and 5.6.2 respectively in NAPS TS Rev 2.