

PMNorthAnna3COLPEmails Resource

From: Patel, Chandu
Sent: Thursday, June 16, 2011 3:44 PM
To: 'na3raidommailbox@dom.com'
Cc: Weisman, Robert; NorthAnna3COL Resource; Pal, Amar; Clement, Richard; Otto, Ngola
Subject: RAI Letter No. 76, RAI 5461, Section 11.4, North Anna 3 COLA
Attachments: RAI Letter 76 RAI 5461.doc

By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted a Combined License Application for North Anna, Unit 3, pursuant to Title 10 of the *Code of Regulations*, Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this COLA.

The NRC staff has identified that additional information is needed to continue portions of the review and a Request for Additional Information (RAI), is enclosed. To support the review schedule, Dominion is requested to respond within 30 days of the date of this request. If the RAI response involves changes to the application documentation, Dominion is requested to include the associated revised documentation with the response.

Sincerely,
Chandu Patel
Lead Project Manager for NA3 COLA

Hearing Identifier: NorthAnna3_Public_EX
Email Number: 975

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Options

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RAI Letter No. 76
6/16/2011
North Anna, Unit 3
Dominion
Docket No. 52-017
SRP Section: 11.04 - Solid Waste Management System
Application Section: 11AA.4.5

QUESTIONS for Electrical Engineering Branch (EEB)

Request for Additional Information No. 5461

Appendix A to 10 CFR part 50, states that under 10 CFR § 52.79, COL applications must include the principal design criteria which establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components (SSCs) important to safety that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public. Please provide additional information regarding the electrical subsystem for the proposed onsite stand-alone Interim Radwaste Storage Facility (IRSF) described in Appendix 11AA, "Interim Radwaste Storage Facility" to FSAR Section 11.4 that meet the dose limits in 10 CFR Part 20, numerical dose objectives in Appendix I to 10 CFR Part 50, and the General Design Criteria in Appendix A to 10 CFR Part 50 in the event that electrical power supplied to other IRSF subsystems designed for radiation and environmental protection is lost.

11.04-6

FSAR states that the 120/208 VAC distribution panel is designed to provide power to 120 or 208 VAC rated loads (such as adequate lighting throughout the facility) in the IRSF. Discuss type of lighting that will be available during loss of 480 VAC power.

11.04-7

FSAR Subsection 11AA.4.5 states that the electrical distribution system is designed to permit periodic in-service testing and inspection of components to assure system integrity and capability to perform its intended function. Provide frequency of in-service testing and inspection of electrical distribution system components.

11.04-8

FSAR Subsection 11AA.1.2 states that as hydrogen and other combustible gases are generated from the radiolysis and hydrolysis reactions, the IRSF has a ventilation design to prevent the buildup of these gases to the lower flammability limit. Additionally, FSAR Subsection 11AA.4.1 states that heat tracing of the fire water standpipe is provided to prevent freezing. Since IRSF is powered from Unit 3 Non-Class 1E 480 VAC, 3 phase, 60 Hz distribution system, discuss the following during a loss of power:

- a. How the ventilation will prevent the buildup of these gases to the lower flammability limit.
- b. The effect of loss of heat tracing on the standpipe for the fire suppression system.