

PMNorthAnna3COLPEmails Resource

From: Patel, Chandu
Sent: Wednesday, June 18, 2014 3:42 PM
To: 'na3raidommailbox@dom.com' (na3raidommailbox@dom.com)
Cc: PMNorthAnna3COLPEmails Resource; Weisman, Robert; Carpentier, Marcia; Nolan, Ryan; Buckberg, Perry
Subject: RAI Letter 126, RAI 7533, FSAR Section 3.5.1.4, North Anna COLA (52-017)
Attachments: RAI Letter 126 RAI_7533.docx

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.

Chandu Patel, Senior Project Manager
U.S. NRC, Office of New Reactors
NRC/NRO/DNRL/LB3,
Washington, DC 20555-0001
301.415.3025
MS T6D38

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Created By: Chandu.Patel@nrc.gov

Recipients:

"PMNorthAnna3COLPEmails Resource" <PMNorthAnna3COLPEmails.Resource@nrc.gov>
Tracking Status: None
"Weisman, Robert" <Robert.Weisman@nrc.gov>
Tracking Status: None
"Carpentier, Marcia" <Marcia.Carpentier@nrc.gov>
Tracking Status: None
"Nolan, Ryan" <Ryan.Nolan@nrc.gov>
Tracking Status: None
"Buckberg, Perry" <Perry.Buckberg@nrc.gov>
Tracking Status: None
"na3raidommailbox@dom.com" (na3raidommailbox@dom.com) <na3raidommailbox@dom.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

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Request for Additional Information 126

Issue Date: 06/18/2014

Application Title: North Anna, Unit 3 - Docket Number 52-017

Operating Company: Dominion

Docket No. 52-017

Review Section: 03.05.01.04 - Missiles Generated by Tornadoes and Extreme Winds

Application Section: 3.5.1.4; 19A

QUESTIONS

03.05.01.04-2

In response to RAI 7471, Question 03.05.01.04-01, the applicant provided a table showing the ESBWR standard-plant tornado and hurricane missile spectra and associated velocities compared to North Anna 3 site-specific values. This table indicates that site-specific wind-borne missiles are indeed bounded by the referenced DCD for Seismic Category I structures. However, the RAI response does not discuss other ESBWR standard-plant structures, such as the structures housing RTNSS equipment, which, as non-Seismic Category I structures, are designed for hurricane missiles but not tornado missiles.

At the time the reference ESBWR DCD was reviewed, hurricane missile velocities were calculated by using tornado missile methodologies described in SRP 3.5.1.4 Revision 2. Indeed, the table provided in the applicant's response to RAI 7471, Question 03.05.01.04-01, shows that, for the ESBWR standard plant, an automobile subject to hurricane winds can become a missile with a velocity of 68 mph. However, in October 2011, RG 1.221 was issued with a completely new methodology for calculating hurricane missiles. Using RG 1.221, the North Anna 3 site-specific automobile missile generated from a hurricane can have a velocity of 74 mph, which is not bounded by the DCD value of 68 mph.

It is unclear to the staff whether North Anna 3 is taking a departure from the DCD since the site-specific automobile missile, generated by hurricane winds, is not bounded by the DCD. The staff requests the applicant to provide additional detail in the FSAR to demonstrate that RTNSS structures are designed to withstand site-specific design-basis hurricane missile impacts.