

NorthAnnaRAIsPEm Resource

From: Patel, Chandu
Sent: Thursday, April 14, 2011 4:35 PM
To: 'na3raidommailbox@dom.com'
Cc: Weisman, Robert; NorthAnnaRAIsPEm Resource; Pal, Amar; Otto, Ngola
Subject: RAI Leter No. 66, Rai 5645, Section 8.2, North Anna 3 COLA
Attachments: RAI Letter No 66 RAI 5645.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 45 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_eRAI
Email Number: 13

Mail Envelope Properties (8C658E9029C91D4D90C6960EF59FC0D61C800CD12C)

Subject: RAI Leter No. 66, Rai 5645, Section 8.2, North Anna 3 COLA
Sent Date: 4/14/2011 4:34:56 PM
Received Date: 4/14/2011 4:34:57 PM
From: Patel, Chandu

Created By: Chandu.Patel@nrc.gov

Recipients:

"Weisman, Robert" <Robert.Weisman@nrc.gov>
Tracking Status: None
"NorthAnnaRAIsPEm Resource" <NorthAnnaRAIsPEm.Resource@nrc.gov>
Tracking Status: None
"Pal, Amar" <Amar.Pal@nrc.gov>
Tracking Status: None
"Otto, Ngola" <Ngola.Otto@nrc.gov>
Tracking Status: None
"na3raidommailbox@dom.com" <na3raidommailbox@dom.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	818	4/14/2011 4:34:57 PM
RAI Letter No 66 RAI 5645.doc	30942	

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

RAI Letter No. 66
4/14/2011
North Anna, Unit 3
Dominion
Docket No. 52-017
SRP Section: 08.02 - Offsite Power System
Application Section: 8.2

QUESTIONS for Electrical Engineering Branch (EEB)

Request for Additional Information No. 5645

08.02-59

In response to RAI Question 08.02-10 (Letter 9, eRAI 178) regarding grid stability analysis for multiple contingencies (tripping of all three units), the applicant stated that NERC Category D is considered an extreme event analysis and exceeds N-2 evaluation. This includes a case for loss of all generating units at a single station. However, the applicant did not address the effect of grid stability during the loss of both existing units (Units 1 and 2). After review of commercial nuclear power plant event reports, the staff finds three dual units trip occurred since 2009: Sequoyah 1 and 2 (LER 327 and 328/2009003), Calvert Cliffs Units 1 and 2 (LER 3172010001 and 3182010001), Braidwood Units 1 and 2 (LER 4562010001 and 4572010003). In light of recent events, the possibility of dual unit trip exists at North Anna since reserve auxiliary transformers are shared between North Anna 1 and 2. Based on the operating experience identified in above LERs, address the effect of grid stability (maximum and minimum switchyard voltage) during the loss of both existing units.