

PMNorthAnna3COLPEmails Resource

From: Patel, Chandu
Sent: Thursday, October 28, 2010 8:32 AM
To: Pal, Amar
Cc: NorthAnna3COL Resource
Subject: FW: North Anna Unit 3 Combined License Application - Results of FSAR Chapter 8 RAI Review
Attachments: 102710 NA3-10-018 D. ltr. NA3 Combined License Application-Results of FSAR Chapter 8 RAI Review.pdf
Importance: High

Amar,

Please see attached and let me know if it is helpful or not.

Thanks,
Chandu

From: Wanda K Marshall [<mailto:wanda.k.marshall@dom.com>]
Sent: Wednesday, October 27, 2010 3:58 PM
Cc: Patel, Chandu; Jessie, Janelle; Dozier, Tamsen; James T Reece
Subject: North Anna Unit 3 Combined License Application - Results of FSAR Chapter 8 RAI Review
Importance: High

Cc list:

Please see attached.

Wanda K. Marshall
North Anna 3 Project Team
Administrative Assistant/Notary Public
DOMINION RESOURCES SERVICES
5000 Dominion Blvd., Glen Allen, VA 23060

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and/or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

Hearing Identifier: NorthAnna3_Public_EX
Email Number: 884

Mail Envelope Properties (8C658E9029C91D4D90C6960EF59FC0D6191B7D9EEE)

Subject: FW: North Anna Unit 3 Combined License Application - Results of FSAR Chapter 8 RAI Review
Sent Date: 10/28/2010 8:32:27 AM
Received Date: 10/28/2010 8:32:28 AM
From: Patel, Chandu
Created By: Chandu.Patel@nrc.gov

Recipients:
"NorthAnna3COL Resource" <NorthAnna3COL.Resource@nrc.gov>
Tracking Status: None
"Pal, Amar" <Amar.Pal@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	1435	10/28/2010 8:32:28 AM
102710 NA3-10-018 D. ltr. NA3 Combined License Application-Results of FSAR Chapter 8 RAI Review.pdf	311907	

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

Eugene S. Grecheck
Vice President
Nuclear Development

Dominion Energy, Inc. • Dominion Generation
Innsbrook Technical Center
5000 Dominion Boulevard, Glen Allen, VA 23060
Phone: 804-273-2442, Fax: 804-273-3903
E-mail: Eugene.Grecheck@dom.com



October 27, 2010

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. NA3-10-018
Docket No. 52-017
COL/MWH

DOMINION VIRGINIA POWER
NORTH ANNA UNIT 3
COMBINED LICENSE APPLICATION – RESULTS OF FSAR CHAPTER 8 RAI REVIEW

In a letter dated November 26, 2007 (Letter Serial No. NA3-07-001), Dominion Virginia Power (Dominion) submitted the North Anna Unit 3 Combined License Application (COLA) that incorporated the ESBWR DCD by reference. North Anna Unit 3 was designated by the ESBWR DCWG as the R-COLA. In a letter dated June 28, 2010 (Letter Serial No. NA3-10-011), Dominion revised the North Anna COLA to incorporate the US-APWR DCD by reference instead. That action resulted in the North Anna Unit 3 COLA being designated as an S-COLA for the US-APWR technology. Dominion is currently reviewing the NRC requests for additional information (RAI) and Dominion responses issued to date to determine whether the change in technology impacted the applicability of the RAIs to the June 28 COLA revision.

This letter provides the results of the review of RAIs associated with Final Safety Analysis Report (FSAR) Chapter 8, which was identified as priority information by the NRC project manager. The enclosed table identifies the Chapter 8 RAIs and classifies each in one of three categories: 1) RAI or RAI Response Not Applicable, 2) RAI Response Valid for the S-COLA, or 3) RAI Response Requires Revision. As a result of the evaluation, the response to RAI No. 08.02-37 requires revision. Dominion will provide a revised response by separate transmittal no later than sixty days from the date of this letter.

Additional reviews are in progress for the remaining RAIs and the results of those reviews will be reported separately.

Please contact Regina Borsh at (804) 273-2247 (regina.borsh@dom.com) if you have questions.

Very truly yours,

Eugene S. Grecheck

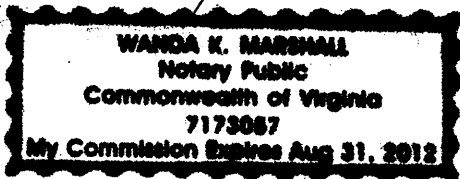
COMMONWEALTH OF VIRGINIA

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 27th day of October, 2010
My registration number is 7173057 and my
Commission expires: August 31, 2012

Wanda K. Marshall
Notary Public



Enclosure: FSAR Chapter 8 RAI Review Results

Commitments made by this letter:

A revised response to RAI 08.02-37 will be provided within sixty days of the date of this letter.

cc: U. S. Nuclear Regulatory Commission, Region II
C. P. Patel, NRC
J. B. Jessie, NRC
T. S. Dozier, NRC
J. T. Reece, NRC

Attachment

FSAR Chapter 8 RAI Review Results

Evaluation of the Applicability of ESBWR R-COLA FSAR Chapter 8 RAI Responses to US-APWR North Anna 3 S-COLA								
RAI #	NRC RAI Ltr #	RAI Topic	NA3 RAI Response Ltr #	Date Response Submitted	RAI or RAI Response Not Applicable	RAI Response Valid for S-COLA (Note 1)	RAI Response Requires Revision (Note 1)	Comments
08.02-1	9	Switchyard figure discrepancy	NA3-08-056R	7/28/2008	X	-	-	
08.02-2	9	Cable routing in the intermediate switchyard	NA3-08-056R	7/28/2008	X	-	-	
08.02-3	9	Intermediate transformer rating	NA3-08-056R	7/28/2008	X	-	-	
		In-situ monitoring programs to prevent degradation of cable insulation due to moisture						
08.02-4	9	500kV transmission & bus ratings	NA3-08-056R	7/28/2008	X	-	-	
08.02-5	9	Discuss provisions for transformer protection	NA3-08-056R	7/28/2008	-	X	-	
08.02-6	9	Protective relay acceptance	NA3-08-056R	7/28/2008	-	X	-	
08.02-7	9							
		Industry standards for switchyard protection						Conformance with the NERC standards is addressed in the S-COLA. Conformance with IEEE C37.013 standard is addressed in the DCD.
08.02-8	9	Transformer testing	NA3-08-056R	7/28/2008	X	-	-	
08.02-9	9	Inclusion	NA3-08-056R	7/28/2008	-	X	-	
08.02-10	9	Grid stability and stability analysis	NA3-08-056R	7/28/2008	-	X	-	
		Grid stability and the modeling of the 34.5 kV line						
08.02-11	9		NA3-08-056R	7/28/2008	-	X	-	
08.02-12	9	Twenty year grid outage history	NA3-08-056R	7/28/2008	-	X	-	

Evaluation of the Applicability of ESBWR R-COLA FSAR Chapter 8 RAI Responses to US-APWR North Anna 3 S-COLA								
RAI #	NRC RAI Ltr #	RAI Topic	NA3 RAI Response Ltr #	Date Response Submitted	RAI or RAI Response Not Applicable	RAI Response Valid for S- COLA (Note 1)	RAI Response Requires Revision (Note 1)	Comments
08.02-13	9	Offsite power system unit technical specifications	NA3-08-056R	7/28/2008	X	-	-	
08.02-14	9	System Impact Study (SIS) loadflow analysis	NA3-08-056R	7/28/2008	-	X		
08.02-15	9	Maximum and minimum grid frequency	NA3-08-056R	7/28/2008	X	-	-	
08.02-16	9	GDC-5 applicability	NA3-08-056R	7/28/2008	X	-	-	
08.02-17	9	GDC-4 applicability	NA3-08-056R	7/28/2008	X	-	-	
08.02-18	9	GDC-2 applicability	NA3-08-056R	7/28/2008	X	-	-	
		Clarify compliance with the requirements of 10 CFR 50.65						
08.02-19	9	"Maintenance Rule"	NA3-08-056R	7/28/2008	-	X	-	Refer to S-COLA FSAR Table 1.9-202
08.02-20	9	BTP 8-3 applicability	NA3-08-56R	7/28/2008	X	-	-	
08.02-21	9	BTP 8-5 applicability	NA3-08-56R	7/28/2008	X	-	-	
08.02-22	9	BTP 8-6 applicability	NA3-08-056R	7/28/2008	X	-	-	
		Transmission reliability consistent with analysis in Chapter 19						
08.02-23	9	Station ground grid description	NA3-08-056R	7/28/2008	X	-	-	
08.02-24	9	Adequacy of surge / lightning protection of offsite power system	NA3-08-056R	7/28/2008	X	-	-	
08.02-25	9	Impact on Unit 1 & 2 grid stability with addition of Unit 3	NA3-08-056R	7/28/2008	-	X	-	
08.02-26	9	Reliability and stability analysis	NA3-08-056R	7/28/2008	-	X	-	
08.02-27	16	Offsite electric power system for SSCs important to safety	NA3-08-085RA	8/21/2008	X	-	-	
08.02-28	16		NA3-08-085RA	8/21/2008	X	-	-	

Evaluation of the Applicability of ESBWR R-COLA FSAR Chapter 8 RAI Responses to US-APWR North Anna 3 S-COLA								
RAI #	NRC RAI Ltr #	RAI Topic	NA3 RAI Response Ltr #	Date Response Submitted	RAI or RAI Response Not Applicable	RAI Response Valid for S-COLA (Note 1)	RAI Response Requires Revision (Note 1)	Comments
08.02-29	29	Provide justification for testing methods for detecting cable degradation and frequency of testing	NA3-08-121R	12/1/2008	-	X	-	
08.02-30	29	Identify transformers 1, 2,3,5 and 6 in Figure 8.2-201	NA3-08-121R	12/1/2008	-	X	-	
08.02-31	29	Stability analysis in comparison to Palo Verde incident	NA3-08-121R	12/1/2008	-	X	-	
08.02-32	29	Explain why distribution loads have limited ability to affect grid stability	NA3-08-121R	12/1/2008	-	X	-	
08.02-33	29	Provide discussion on how the requirements of GDC 5 are met (Closed by NRC Letter No 035)	NA3-08-121R	12/1/2008	X	-	-	
08.02-34	29	Provide discussion on how the requirements of GDC 4 are met	NA3-08-121R	12/1/2008	X	-	-	
08.02-35	29	Provide discussion on how the requirements of GDC 2 are met	NA3-08-121R	12/1/2008	X	-	-	
08.02-36	29	Applicability of the "Maintenance Rule" to switchyard equipment	NA3-08-121R	12/1/2008	-	X	-	
08.02-37	29	Describe existing and proposed grounding system at North Anna Station	NA3-08-121R	12/1/2008	-	-	X	A revised response to this RAI will be submitted.
08.02-38	32	Discuss the effect of the largest unit trip on the switchyard voltage and frequency	NA3-09-007R	3/18/2009	X	-	-	

Evaluation of the Applicability of ESBWR R-COLA FSAR Chapter 8 RAI Responses to US-APWR North Anna 3 S-COLA								
RAI #	NRC RAI Ltr #	RAI Topic	NA3 RAI Response Ltr #	Date Response Submitted	RAI or RAI Response Not Applicable	RAI Response Valid for S-COLA (Note 1)	RAI Response Requires Revision (Note 1)	Comments
08.02-39	32	Periodic testing of underground 230kV cables (Closed by NRC Letter #35)	None		X	-	-	
08.02-40	33	Switchyard cables (Closed by NRC Letter #35)	None		X	-	-	
08.03.02-1	11	Station blackout response procedures RG 1.41, 1.128, 1.129	NA3-08-063R	8/4/2008	X	-	-	
08.03.02-2	11	conformance clarification	NA3-08-063R	8/4/2008	X	-	-	

Note 1: References within the RAI and/or RAI response to COLA Section numbers and DCD Section numbers may be different for the S-COLA.