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Dominion®

October 27, 2011

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

Serial No. NA3-11-044RA
Docket No. 52-017
COL/DEA

DOMINION VIRGINIA POWER
NORTH ANNA UNIT 3 COMBINED LICENSE APPLICATION
SRP 8.2: RESPONSE TO RAI LETTER 78

On July 14, 2011, the NRC requested additional information to support the review of certain portions of the North Anna Unit 3 Combined License Application (COLA), which consisted of six questions. Complete responses to five of the six Request for Additional Information (RAI) questions were provided by Dominion letter NA3-11-044R dated September 16, 2011. The response to the remaining question is provided in Enclosure 1:

- RAI 5832, Question 08.02-60 Overcurrent relay protection for transformers 1 and 2

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

Very truly yours,

Eugene S. Grecheck

Enclosure:

1. Response to NRC RAI Letter No. 78, RAI 5832 Question 08.02-60

Commitments made by this letter:

None

D089
NRD

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, 2011
My registration number is 7173057 and my
Commission expires: August 31, 2012

Wanda K. Marshall
Notary Public

WANDA K. MARSHALL
Notary Public
Commonwealth of Virginia
7173057
My Commission Expires Aug 31, 2012

cc: U. S. Nuclear Regulatory Commission, Region II
C. P. Patel, NRC
T. S. Dozier, NRC
G. J. Kolcum, NRC

ENCLOSURE 1

Response to NRC RAI Letter 78

RAI 5832 Question 08.02-60

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

North Anna Unit 3

Dominion

Docket No. 52-017

RAI NO.: 5832 (RAI Letter 78)

SRP SECTION: 08.02 – OFFSITE POWER SYSTEM

QUESTIONS for Electrical Engineering Branch (EEB)

DATE OF RAI ISSUE: 07/14/2011

QUESTION NO.: 08.02-60

In response to RAI 5181, Question 08.02-43, Dominion deleted over current relay protection for transformers 1 and 2. Explain why over current relays are not required for transformer 1 and 2.

Dominion Response

Transformers 1 and 2 are each protected against internal faults by differential relaying. These transformers have solid grounds on the wye connected, 500 kV windings. The 34.5 kV delta connected winding has a zig-zag transformer connected at the bus to create a ground source. This ground source is monitored by relaying for ground fault protection. The combination of differential and ground fault relaying provide adequate protection for transformers 1 and 2. In this application, overcurrent relays would only be used as backup for the differential relaying. Since the combination of differential and ground fault relaying provides adequate protection for transformers 1 and 2, overcurrent relays are not required.

Proposed COLA Revision

None