



May 12, 2005

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

Serial No. 05-305
ESP/JDH
Docket No. 52-008

DOMINION NUCLEAR NORTH ANNA, LLC
NORTH ANNA EARLY SITE PERMIT APPLICATION
REVISION 4

Enclosed is Revision 4 to the North Anna Early Site Permit (ESP) application. Revision 4 updates the application to incorporate Dominion's responses to NRC's requests for additional information, our responses to the open items in the December 2004 draft Safety Evaluation Report, and other information discussed with the NRC staff.

A summary of the Revision 4 changes is provided in Enclosure 1. A CD containing the North Anna ESP application, Revision 4, is provided in Enclosure 2.

If you have any questions or require additional information, please contact Mr. Joseph D. Hegner at 804-273-2770.

Very truly yours,

Eugene S. Grecheck
Vice President-Nuclear Support Services

Enclosures:

1. Description of Changes in Revision 4.
2. One CD-ROM labeled "North Anna Early Site Permit Application, Docket No. 52-008, September 2003; Revision 4, May 2005, NRC ADAMS Edition," containing the following files:

DC73

1. North Anna ESP Application R4 (1 of 8).pdf; 4664 KB; publicly available
2. North Anna ESP Application R4 (2 of 8).pdf; 28,064,970 bytes, publicly available
3. North Anna ESP Application R4 (3 of 8).pdf; 49,772,368 bytes, publicly available
4. North Anna ESP Application R4 (4 of 8).pdf; 47,298,189 bytes, publicly available
5. North Anna ESP Application R4 (5 of 8).pdf; 43,676,749 bytes, publicly available
6. North Anna ESP Application R4 (6 of 8).pdf; 34,149,855 bytes, publicly available
7. North Anna ESP Application R4 (7 of 8).pdf; 51,103,672 bytes, publicly available
8. North Anna ESP Application R4 (8 of 8).pdf; 31,311,890 bytes, publicly available

Commitments made in this letter: None

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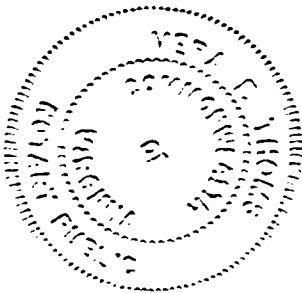
COUNTY OF HENRICO

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 Support Services, of Dominion Nuclear North Anna, LLC. He has affirmed before me that he is duly authorized to execute and file the foregoing document on behalf of Dominion Nuclear North Anna, LLC, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 12th day of May, 2005.

My Commission expires: ~~My Commission Expires July 31, 2007~~

Vera F. Thoms
Notary Public



(SEAL)

Serial No. 05-305
Docket No. 52-008
Revision 4 to North Anna ESP Application

Enclosure 1

**Description of Changes in Revision 4
North Anna Early Site Permit Application**

North Anna Early Site Permit Application Description of Changes in Revision 4	
Affected Section, Table, or Figure	Reason for Change
Part 2 Chapter 1	
▪ Section 1.8.1	Editorial change to clarify conformance with requirements of 10 CFR 100.21(c)(1).
▪ Section 1.8.2	Revision 3 format error. Added electronic link to RG 1.76 and DG 1105.
▪ Table 1.9-1	Response to DSER Open Items 2.3-1, 2.3-2, 2.3-3, 2.4-5, 2.4-8, 2.4-10, 2.4-11; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
Part 2 Chapter 2	
▪ Section 2.1.2.1	Response to DSER Open Item 2.1-1; Reference Dominion's May 2, 2005 Letter, Serial No. 05-194A.
▪ Section 2.3.1.3.1 ▪ Table 2.3-4 (deleted)	Response to DSER Open Item 2.3-1; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Section 2.3.1.3.8	Response to DSER Open Item 2.3-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Section 2.3.2.3	Response to DSER Open Item 2.3-4; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Section 2.3.5.1	Editorial change to clarify conformance with requirements of 10 CFR 100.21(c)(1).
▪ Section 2.4.7.5 ▪ Section 2.4 References ▪ Table 2.4-13 (deleted)	Response to DSER Open Item 2.3-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Sections 2.4.11.1, 2.4.11.4 ▪ Section 2.4 References	Response to DSER Open Item 2.4-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Section 2.4.13 ▪ Section 2.4 References ▪ Table 2.4-20 (new)	Response to DSER Open Item 2.4-11; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Sections 2.4.12.1.2, 2.4.12.3, 2.4.12.4 ▪ Table 2.4-15 ▪ Figure 2.4-15	Response to DSER Open Item 2.4-7; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
▪ Sections 2.5.2.5, 2.5.2.6.7, 2.5.2.6.7.c, 2.5.2.6.7.d, 2.5.2.7, 2.5.4.7.1, 2.5.4.7.3, 2.5.4.7.4, 2.5.4.8.2, 2.5.4.8.4.a, 2.5.4.8.4.b, 2.5.4.8.4.c, 2.5.4.8.5, 2.5.5.2.3.a, 2.5.5.2.3.b ▪ Section 2.5 References ▪ Tables 2.5-27A (new), 2.5-45, 2.5-46	Response to DSER Open Item 2.5-2; Reference Dominion's March 30, 2005 Letter, Serial No. 05-194.

North Anna Early Site Permit Application Description of Changes in Revision 4	
Affected Section, Table, or Figure	Reason for Change
<ul style="list-style-type: none"> Figures 2.5-48, 2.5-48A (new) 2.5-51, 2.5-53, 2.5-54A, 2.5-54B, 2.5-54B(1) (new), 2.5-54B(2) (new), 2.5-54B(3) (new), 2.5-55A (new) 	
Part 2 Chapter 13	
<ul style="list-style-type: none"> Section 13.3.2.2.2.h 	Response to DSER Open Item 13.3-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
Part 2 Chapter 15	
<ul style="list-style-type: none"> Table 15.4-26 	Revision 3 typographical errors. Corrected isotope designations.
Part 3 Chapter 2	
<ul style="list-style-type: none"> Table 3.1-1 Table 3.1-9 	Response to Supplemental RAIs 1.a and 1.c; Reference Dominion's April 13, 2005 Letter, Serial No. 05-209A.
<ul style="list-style-type: none"> Table 3.1-9 Table 3.3-1 Figure 3.3-1 	Response to Supplemental RAI 1.b; Reference Dominion's April 13, 2005 Letter, Serial No. 05-209A.
Part 3 Chapter 3	
<ul style="list-style-type: none"> Section 3.4.1.3.3 	Response to DSER Open Item 2.4-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
<ul style="list-style-type: none"> Section 3.8 	Revision 3 typographical error. CFR citation should be 10 CFR 51.52.
<ul style="list-style-type: none"> Section 4.2 References 	Revision 3 format error. Reference 13 text should be black versus blue.
Part 3 Chapter 5	
<ul style="list-style-type: none"> Sections 5.2.2.1.3, 5.2.2.2 Section 5.2 References 	Response to DSER Open Item 2.4-3; Reference Dominion's March 3, 2005 Letter, Serial No. 05-785B.
<ul style="list-style-type: none"> Section 5.7.1 	Response to October 29, 2004 RAI on Uranium Fuel Cycle Impacts; Reference Dominion's November 18, 2004 Letter, Serial No. 04-705.
Part 3 Chapter 7	
<ul style="list-style-type: none"> Section 7.1.2 Table 7.1-27 	Revision 3 typographical errors. Corrected EAB and LPZ γ/Q values (Section 7.1.2) and isotope designations (Table 7.1-27).