VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

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United States Nuclear Regulatory Commission

Attention: Document Control Desk

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Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION) NORTH ANNA POWER STATION UNITS 1 AND 2 ANNUAL ENVIRONMENTAL OPERATING REPORT

Enclosed is the Annual Environmental Operating Report for North Anna Power Station Units 1 and 2 for 2016, pursuant to Section 5.4.1 of the Technical Specifications, Appendix B – Environmental Protection Plan.

If you have any questions or require additional information, please contact Mr. Donald R. Taylor at (540) 894-2100.

Very truly yours,

N. Larry Lane Site Vice President

Enclosure

cc: U. S. Nuclear Regulatory Commission

Region II

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NRC Senior Resident Inspector North Anna Power Station

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NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION UNITS 1 AND 2

APPENDIX B

ENVIRONMENTAL PROTECTION PLAN
2016 ANNUAL REPORT
DOCKET NOS. 50-338 AND 50-339

INTRODUCTION

This 2016 Environmental Operating Report for the North Anna Power Station is submitted by Virginia Electric and Power Company as required under Section 5.4.1 of Appendix B, Environmental Protection Plan (EPP).

The objective of the EPP is to verify that the North Anna Power Station is operated in an environmentally acceptable manner, with other federal, local consistent NRC and state and well informed of requirements as as to keep the NRC anv environmental effects of facility construction or operation.

During 2016, no significant adverse environmental impacts occurred as a result of the operation of North Anna Power Station, Units 1 and 2. Aquatic issues are addressed in the licensee's VPDES permit (number VA 0052451) issued by the Virginia State Water Control Board. The VPDES permitting program is administered by the Department of Environmental Quality (DEQ) and the NRC relies on this agency for regulation of matters involving water quality and aquatic biota.

Listed below are the summaries and analyses required by Subsection 4.2 of the EPP.

PLANT DESIGN AND OPERATION (SECTION 3.1)

A review of all changes in station design or operation, tests and experiments did not reveal any potentially, significant, unreviewed, environmental issues.

EROSION CONTROL INSPECTION - SITE (SECTION 4.2.2.1)

Performance of Periodic Test Procedures, 1-PT-9.3: Erosion Control Inspection-Station Site, and 0-PT-75.12: Visual Inspection of the Service Water Reservoir Dike Crest and Toe, were completed by the Civil/Design Engineering Department. Six (6) areas of concern were identified during the performance of 1-PT-9.3. Two (2) areas of concern were identified during the performance of 0-PT-75.12.

The areas identified in 1-PT-9.3 were minor erosion issues. Three (3) of the areas identified were due to animal burrows near the Independent Spent Fuel Storage Installation (ISFSI) area,

Warehouse 5, and the tie-in vault and fabric tank, which needed to be filled in. Two (2) of the areas identified were due to excess gravel, sedimentation, and vegetation build-up in concrete drainage ditches near the ice house and discharge canal, that needed to be cleaned out. There was one (1) issue identified where there was rutting and asphalt deterioration identified near the North Anna Nuclear Information Center (NANIC), which needed to be repaired. The two (2) areas identified during the performance of 0-PT-75.12 were animal burrows observed near the Service Water Reservoir, north of the horizontal drains gallery, which needed to be filled in.

All of the issues identified were entered into the station's corrective action system and work orders were assigned. All of the work that was assigned to correct the identified issues was completed by March 31, 2017. All of the issues identified were minor erosion issues that did not adversely impact site erosion control measures, or station operation.

EROSION AND SEDIMENT CONTROL PROGRAM - CORRIDOR RIGHTS-OF-WAY SECTION 4.2.2.2)

During 2016 all transmission line rights-of-way were patrolled to coordinate brush and tree work needed for maintenance of the lines. This work involved the following:

- North Anna-to-Gordonsville corridor: The patrol revealed that there were some minor vegetation issues. Herbicide applications commenced on August 31, 2016 and were completed on September 6, 2016. No significant erosion and sedimentation issues were observed.
- North Anna-to-Morrisville corridor: The patrol revealed that there were some minor vegetation issues. Herbicide applications commenced on August 4, 2016 and were completed on August 11, 2016. No significant erosion and sedimentation issues were observed.
- North Anna to Ladysmith corridor: The patrol did not reveal any vegetation issues that needed work. No significant erosion and sedimentation issues were observed.
- North Anna to Midlothian corridor: The patrol revealed that there were some minor vegetation issues. Herbicide applications commenced on May 31, 2016 and were completed on June 8, 2016. No significant erosion and sedimentation issues were observed.

During all of the above-noted patrols and follow-up observations, no abnormal erosion conditions were observed on any of the above corridors associated with transmission line construction, modification, maintenance activities or the use of herbicides during 2016.

NON-COMPLIANCE (SECTION 5.4.1)

There were no non-compliances with the Environmental Protection Plan during 2016.

NON-ROUTINE REPORTS (SECTION 5.4.2)

There was one (1) five day notification letter submitted to the VA DEQ, on December 20, 2016, and one (1) 20-day follow-up letter, submitted to the VA DEQ on January 8, 2017, for the following event:

An unsuccessful pressure test of the 2H redundant underground diesel fuel feed line occurred during the week of December 12, 2016. Prior to this test, all of the other underground diesel fuel feed lines had been pressure tested successfully earlier during the year. A subsequent gas leak test confirmed the presence of a line leak in the vicinity of where the line enters the 2H Emergency Diesel Generator (EDG) room inside the Unit 2 Service Building. A soil remediation vendor began excavation work on December 20, 2016. During the excavation and remediation work, no free diesel product was observed in the soil, ground water was not affected, and there were no discharges of diesel fuel to the lake or Waste Heat Treatment Facility (WHTF). Affected piping sections were replaced and successfully pressure tested, prior to being placed back into service. The soil excavation / remediation work was completed on January 3, 2017.