COMMONWEALTH of VIRGINIA

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May 16, 2011

Ms. Pamela F. Faggert
Vice-President and Chief Environmental Officer
Dominion Virginia Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

RE: Federal Consistency Certification for a Combined Construction and Operation License and U.S. Army Corps of Engineers Permit for the North Anna Power Station Unit 3, Dominion Virginia Power, DEQ-10-167F

Dear Ms. Faggert:

The Commonwealth of Virginia has completed its review of the Federal Consistency Certification (FCC) dated September 30, 2010 (received November 22, 2010) for the Combined Construction and Operation License and U.S. Army Corps of Engineers Permit for the North Anna Power Station Unit 3 submitted by Dominion Virginia Power. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also the federal consistency coordinating agency for the Commonwealth. The following agencies participated in this review:

Department of Environmental Quality
Department of Conservation and Recreation
Department of Game and Inland Fisheries
Marine Resources Commission
Department of Health
Department of Forestry
Department of Historic Resources
Department of Transportation

The Department of Mines, Minerals and Energy, Department of Agriculture and Consumer Services, Virginia Institute of Marine Science, Department of Emergency Management, Department of State Police, Louisa County, Town of Mineral, Orange

County, Spotsylvania County, Caroline County, Hanover County, King William County, Thomas Jefferson Planning District Commission, Rappahannock-Rapidan Regional Commission and the George Washington Regional Commission were also invited to comment on the proposal.

PROJECT DESCRIPTION

Dominion Virginia Power (Dominion) is proposing to construct and operate a third nuclear unit (Unit 3) at the existing North Anna Power Station (NAPS) site in Louisa County, Virginia. The proposed project requires issuance of a Combined Construction and Operation License (COL) from the Nuclear Regulatory Commission (NRC) pursuant to 10 CFR, Part 52, Subpart C. The COL will authorize construction of Unit 3, not including certain site preparation activities previously authorized by an Early Site Permit (ESP) in 2007 issued by the NRC. The proposed project also requires the issuance of federal permits from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Activities associated with the proposed Unit 3 project can be divided into five components:

1) construction of Unit 3 at the NAPS site, including site separation activities that will occur prior to the construction of Unit 3;
2) additions to the existing NAPS-to-Ladysmith transmission line;
3) modifications to the large component transport route (LCTR);
4) the placement of construction material on the Route 700 parcels near the entrance to the NAPS site; and
5) operation of Unit 3.

The NAPS site and Route 700 parcels are owned by Dominion and located in Louisa County. Lake Anna, which is adjacent to the NAPS site and supports operation of the existing plant, is bordered by Louisa, Spotsylvania, and Orange Counties. The transmission line corridor traverses Louisa, Spotsylvania, and Caroline Counties. The LCTR traverses King William, Caroline, Hanover and Louisa Counties.

BACKGROUND

Dominion previously submitted a consistency certification for the Commonwealth's review and response on March 21, 2005, for activities related to a NRC Early Site Permit for the proposed project. Dominion applied to the NRC for the ESP in 2003 to determine the suitability of its North Anna Power Station site for additional nuclear units. On November 21, 2006, DEQ concurred with the certification provided that the following two conditions are satisfied:

1) that prior to construction and operation of one or both of the proposed new units, including any site preparation and preliminary construction activities, Dominion shall obtain all required permits and approvals not yet secured for the activities to be performed that are applicable to the enforceable policies of the Virginia

2) Coastal Zone Management Program (VCP) and that Dominion also adheres to all the conditions contained therein; and,
3) that should the NRC later approve Dominion's application and ultimately issue an Early Site Permit for the referenced project, in accordance with 15 CFR Part 930 §930.4(a) (3), the NRC shall include in the application approval and in the ESP the additional permit condition submitted by Dominion on November 10, 2006, at the request of the Department of Game and Inland Fisheries, which pertains to the completion of an Instream Flow Incremental Methodology (IFIM) study.

Dominion has identified, and is currently in the process of obtaining, the necessary permits and authorizations as stipulated in Condition 1. With regard to Condition 2, an IFIM study was conducted by Dominion in consultation with DEQ, the Department of Game and Inland Fisheries, and the Department of Conservation and Recreation to address potential impacts of water consumption by proposed Unit 3 on aquatic resources downstream. The final October 2009 report titled *Instream Flow Incremental Methodology (IFIM) Studies on the North Anna and Pamunkey Rivers, Virginia* evaluated how the addition of a third unit would potentially affect habitat for fish and other aquatic organisms, as well as recreation on the North Anna and Pamunkey Rivers. Wetlands, boat docks, and ramps on Lake Anna were also studied to address a potential rise in lake level.

On November 27, 2007, the NRC issued an ESP for the North Anna site, which determined the site is suitable for construction of new units and authorized site preparation activities, including but not limited to:

- Site preparation for construction of the facility (including clearing, grading, construction of temporary access roads, and preparation of borrow areas);
- Installation of temporary construction support facilities (including warehouses, shops, concrete mixing plants, utilities, docking and unloading facilities, and construction support buildings);
- Excavation for facility structures;
- Construction of service facilities (including items such as roadways, paving, railroad spurs, fencing, exterior utility and lighting systems, switchyard interconnects, and sanitary sewage treatment facilities); and
- Construction of cooling towers, intake and discharge structures, and circulating water lines as well as fire protection equipment, switchyard and other interconnections, and microwave towers.

In July 2010, Dominion submitted a Joint Permit Application (JPA) to the Virginia Marine Resources Commission (VMRC) (with copies to USACE and DEQ) for wetland and stream impacts that will result from all aspects of the Unit 3 project: site separation, site preparation, and construction.

PUBLIC PARTICIPATION

In accordance with 15 CFR §930.2, public notice of this proposed action was published on the DEQ web site from January 30, 2011 through March 18, 2011. Furthermore, DEQ conducted a public hearing on March 3, 2011 at the Louisa County Middle School to receive oral and written comments from the public. Notice of the public hearing was published on DEQ's web site and in three newspapers as follows:

DEQ web site:	January 30 through March 18
Richmond Times-Dispatch:	January 30 and February 20
Central Virginian:	February 3 and February 17
Fredericksburg Free Lance-Star:	January 30 and February 20

The hearing was recorded by a court reporter, and the resulting transcript is part of DEQ's records. During the public review process, including the public hearing, we received comments from more than 65 individuals and organizations concerning this review. In summary, the majority of the public comments received state that the proposed project currently under review is inconsistent with one or more of the following enforceable policies of the VCP: Fisheries Management, Wetlands Management, and Point Source Pollution Control.

Due to the volume of information provided by the public, the need for a careful analysis thereof, and in order to facilitate a timely review by agencies, DEQ compiled the major comments which represented the views of numerous individuals and several organizations and asked agencies to analyze the issues raised by the public. DEQ included copies of detailed public comments and the transcript of the public hearing for reviewers' use in addressing the issues raised. A summary of the issues raised during the public comment period and any additional responses provided by agencies administering the applicable enforceable and advisory policies of the VCP are enclosed as **Appendix 1** and **Appendix 2**.

It is important to note that many of the topics and issues identified in the correspondence and testimony submitted during the public comment period were either not applicable to the enforceable policies of the VCP as they specifically relate to the review of the federal consistency certification for the referenced project, or they were unrelated to the provisions of the CZMA. For this reason, the comments were separated into two categories: **Appendix 1** addresses public comments relating to the enforceable policies; and **Appendix 2** addresses other issues raised during the public review.

After further review of the topics and issues raised during the comment period, none of the agencies that administer the enforceable policies of the VCP objected to Dominion's consistency certification for the project.

FEDERAL CONSISTENCY ANALYSIS

Pursuant to the Coastal Zone Management Act of 1972, as amended, activities requiring a federal permit, license, approval, or receiving federal funding assistance, must be consistent with the Virginia Coastal Zone Management Program. The VCP consists of a network of policies administered by several agencies. DEQ, as the lead agency for the VCP, coordinates the review of federal consistency certifications with agencies administering the enforceable and advisory policies of the VCP.

According to the consistency certification the proposed action would have no effect on the following enforceable policies: fisheries management; subaqueous lands management; wetlands management; dunes management; point source pollution control; and shoreline sanitation. The agencies of the commonwealth responsible for the administration of the enforceable policies of the VCP generally agree with the findings in FCC. Dominion must ensure that the construction and operation of the proposed Unit 3 is consistent with the aforementioned policies.

FEDERAL CONSISTENCY CONDITIONAL CONCURRENCE

Based on our review of Dominion's consistency certification and the comments submitted by the agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP provided the following conditions, discussed in more detail below, are satisfied.

- Dominion shall obtain and comply with all applicable permits and/or approvals associated with enforceable policies of the VCP;

- Dominion shall comply with all conditions of the Virginia Water Protection Permits (VWPPs) issued on April 15, 2011 for activities authorized under Part I (VWPP 10-1256) and Part II (VWPP 10-1496) of the project for:

    a. impacts to surface waters associated with construction related activities to support Unit 3 and the large component transport route (VWPP 10-1256); and
    b. minor surface water withdrawals for construction related activities (Permit No. 10-1496.

- Dominion shall comply with the conditions of any future VWPP issued for activities proposed under Part III (JPA No. 10-2001) of the project pertaining to major water withdrawals for the operation of Unit 3, and temporal changes to shoreline wetland associated with a proposed 3-inch increase in lake water levels. Any future permit for Part III will include permit conditions that meet the applicable requirements of *VWPP Regulation* 9 VAC 25-210-110.

- Dominion shall comply with all conditions of the NAPS Virginia Pollutant Discharge Elimination System (VPDES) permit (VA0052451) for industrial

process discharges, domestic wastewater discharges, and industrial stormwater discharges for Units 1 and 2.

- Should Dominion submit application for discharges associated with the proposed Unit 3, and receive authorization to discharge under the VPDES program, they shall comply with the conditions of any future VPDES permit. Any future permit for Unit 3 will include permit conditions that meet the applicable requirements of VPDES *Regulation* 9 VAC 25-31-10 *et seq.*, and would be protective of the Virginia Water Quality Standards.

- Dominion shall comply with all conditions of any future VPDES permit that may be issued for a wastewater treatment plant used to treat domestic discharges generated by the construction workforce for the construction of the proposed Unit 3. Any future permit for the construction workforce wastewater treatment will include permit conditions that meet the applicable requirements of VPDES *Regulation* 9 VAC 25-31-10 *et seq.*, and would be protective of the Virginia Water Quality Standards.

- Dominion shall comply with all conditions of any future general VPDES permit for the discharge of total nitrogen or total phosphorus to the Chesapeake Bay or its tributaries. This permit will be required for combined sewage treatment plant discharges of more than 40,000 gallons per day (gpd), or an equivalent load, directly into tidal or non-tidal waters. The general permit would be issued in accordance with the *General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia* (9 VAC 25-820-10 *et seq.*), and would be protective of the Virginia Water Quality Standards.

In accordance with the *Federal Consistency Regulations* at 15 CFR Part 930, section 930.4, this conditional concurrence is based on Dominion obtaining necessary authorizations prior to any ground disturbance. If the requirements of section 930.4, sub-paragraphs (a)(1) through (a)(3) are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, section 940.43. Should this conditional concurrence become an objection based on Dominion's failure to comply with the applicable enforceable policies, pursuant to 15 CFR Part 930, Subpart H, Dominion may request that the Secretary of Commerce override this objection (see 15 CFR Part 930, §930.63(e)).

Also, other state approvals which may apply to this project are not included in this concurrence. Therefore, Dominion must ensure that this project is constructed and operated in accordance with all applicable federal, state, and local laws and regulations. If, prior to construction, the project should change significantly and any of the enforceable policies of the VCP would be affected, pursuant to 15 CFR §930.66, Dominion must submit supplemental information to DEQ for review and approval.

SUPPLEMENTAL COORDINATION

In accordance with 15 CFR Part 930, §930.66, federally permitted activities previously determined to be consistent with the VCP, but which have not yet begun, require further coordination by the applicant if the proposed activity will affect any coastal use or resource in a substantially different way than originally described. Substantially different coastal effects are reasonably foreseeable if the applicant makes substantial changes in the proposed activity that are relevant to VCP enforceable policies, or if there are significant new circumstances or information relevant to the proposed activity and the effects of that activity on any coastal use or resource. In the event that the referenced project affects any coastal use or resource in a substantially different way than originally described, Dominion must notify DEQ through a supplemental consistency certification.

DISCUSSION OF APPLICABLE ENFORCEABLE POLICIES

The discussion which follows responds to Dominion's analysis of the enforceable policies of the VCP that apply to this project and review comments submitted by agencies that administer the enforceable policies. The discussions present state agencies' comments and conclusions with regard to each of the applicable enforceable policies of the VCP, along with conditions and stipulations stemming from the enforceable policies, with regard to the referenced project.

1. Fisheries Management. The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities.

1(a) Agency Jurisdiction. The fisheries management enforceable policy is administered by the Marine Resources Commission (VMRC); Virginia Code§ 28.2-200 to§ 28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code§ 29.1-100 to§ 29.1-570.

1(b) Agency Findings.

(i) Construction of Unit 3

DGIF notes that Dominion proposes to construct two construction water intakes and withdraw a daily maximum of 750,000 gallons per day (gpd) of water from Lake Anna to support construction activities related to the proposed addition of a third nuclear reactor. DGIF believes that 750,000 gpd is an excessive amount of water for the suppression of dust and fire, cleaning, and for moisture control during backfilling activities.

In response to DGIF concerns, Dominion proposed permit conditions that ensure that surface water withdrawals for construction water shall not exceed 500,000 gpd when the elevation of Lake Anna decreases below 248 feet above mean sea level (msl). Once the elevation of Lake Anna decreases 1 foot below 248 feet msl, the maximum daily surface water withdrawal activities shall decrease 50 percent to 250,000 gpd and

continue to decrease by 50 percent with each foot of lake level decrease. DGIF supports this water withdrawal plan.

Dominion proposes to fit the intakes with a 1.0 mm mesh screen and maintain an intake velocity at 0.25 feet per second (fps). DGIF supports these measures and has determined that they adequately protect aquatic life from impingement and entrainment.

According to DGIF, it does not appear that instream (lake) work is necessary to construct the construction water intakes. However, should instream work be necessary, DGIF has provided recommendations for instream construction (see **1(c) Recommendations**, below).

(ii) Large Component Transport Route Activities

According to DGIF, the Mattaponi River at the Walkerton Bridge roll-off site and the site of the temporary bridge over the North Anna River at Rout 30 have been designated Anadromous Fish Use Areas.

(iii)Operation of Unit 3

DGIF concurs with the dam release schedule proposed by Dominion in the FCC and supports Dominion's proposed mitigation measures related to the operation of Unit 3.

1(c) Recommendations.

(i) Construction of Unit 3

DGIF recommends that DEQ closely review Dominion's construction water needs and ensure that the maximum requirement is all that is withdrawn from the lake and that the water is used in the most conservative manner possible. In addition, DGIF recommends DEQ permit this withdrawal in a manner that includes triggers requiring a reduction in the volume of the water withdrawn when the lake level drops. For example, DGIF finds it appropriate to require a withdrawal volume reduction by as much as half if the lake elevation drops below 248 feet. The same type of trigger should be applied for every foot of lake elevation drop (e.g. at 247 feet, and so on).

Should construction of the construction water intakes require instream work, DGIF recommends the following:

- conduct any in-stream activities during low or no-flow conditions;
- use non-erodible cofferdams or turbidity curtains to isolate the construction area;
- block no more than 50% of the streamflow at any given time;
- stockpile excavated material in a manner that prevents reentry into the stream/lake;

- restore original streambed and streambank contours;
- revegetate barren areas with native vegetation; and
- implement strict erosion and sediment control measures.

(ii) Large Component Transport Route Activities

DGIF recommends that construction at the Walkerton Bridge roll-off site and the temporary bridge over the North Anna River at Route 30:

- adhere to a time-of-year restriction from February 15 through June 30 of any year for all in-stream work;
- conduct any in-stream activities during low or no-flow conditions;
- use non-erodible cofferdams or turbidity curtains to isolate the construction area;
- block no more than 50% of the streamflow at any given time;
- stockpile excavated material in a manner that prevents reentry into the stream;
- restore original streambed and streambank contours;
- revegetate barren areas with native vegetation; and
- implement strict erosion and sediment control measures.

(iii)Operation of Unit 3

DGIF recommends that the intakes/pumps be fitted with meters and that water withdrawal logs be available for review upon request.

1(c) Conclusion. DGIF concurs that the proposed project is consistent with the fisheries management enforceable policy of the VCP, assuming adherence to appropriate erosion and sediment controls during construction.

For additional information regarding these comments, contact DGIF, Amy Ewing at (804) 367-2211.

2. Subaqueous Lands Management. The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality, Water Division.

2(a) Agency Jurisdiction. The Virginia Marine Resources Commission (VMRC), pursuant to Section 28.2-1200 *et seq.* of the Code of Virginia, has jurisdiction over any encroachments in, on, or over any state-owned rivers, streams, or creeks in the Commonwealth.

The VMRC serves as the clearinghouse for the Joint Permit Application (JPA) used by the:

- DEQ for issuance of a Virginia Water Protection Permit;
- VMRC for encroachments on or over state-owned subaqueous beds as well as tidal wetlands; and
- U.S. Army Corps of Engineers for issuing permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act;
- local wetlands board for impacts to wetlands.

Application for a permit for subaqueous lands impacts is made by submitting a JPA (form MRC 30-300) to VMRC. VMRC will distribute the JPA to appropriate agencies who will review the JPA and respond to the applicant.

2(b) Agency Comments.

(i) Large Component Transport Route

According to VMRC, as proposed, the project will require a VMRC subaqueous permit for the Mattaponi River roll-off ramp and the North Anna River Route 30 temporary bridge crossing.

(ii) NAPS-to-Ladysmith Transmission Line

A VMRC subaqueous permit is required for the proposed NAPS-to-Ladysmith transmission line for its aerial encroachment over the drowned North Anna River main channel within Lake Anna.

VMRC received the Joint Permit Application (VMRC #10-1256) for the above-referenced activities on August 2, 2010. Representatives from VMRC, DEQ, USACE, King William Wetlands Board and Virginia Institute of Marine Science have met with Dominion to identify the additional information needs required to complete the regulatory review of the project. Public hearings may be scheduled by both the local wetlands board and VMRC in the next few months.

3. Wetlands Management and Point Source Pollution Control. The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation. The tidal wetlands program is administered by the Marine Resources Commission (Virginia Code 28.2-1301 through 28.2-1320). The Virginia Water Protection Permit program administered by DEQ includes protection of both tidal and non-tidal wetlands (Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the *Clean Water Act*).

The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code 62.1-44.15. Point source pollution control is accomplished

through the implementation of: (1) the National Pollutant Discharge Elimination System permit program established pursuant to Section 402 of the federal *Clean Water Act* and administered in Virginia as the Virginia Pollutant Discharge Elimination System permit program; and (2) the Virginia Water Protection Permit program administered by DEQ (Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the *Clean Water Act*).

3(a) Agency Jurisdiction.

(i) Virginia Marine Resources Commission

Pursuant to Virginia Code 28.2-1301 through 28.2-1320, the VMRC has jurisdiction over impacts to tidal wetlands in the Commonwealth. Accordingly, impacts upon tidal permit may require a permit from VMRC.

(ii) Department of Environmental Quality

The State Water Control Board (SWCB) promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System Permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection Permit.

The VWPP is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as §401 certification of the federal *Clean Water Act* §404 permits for dredge and fill activities in waters of the U.S. The VWPP Program is under the Office of Wetlands and Water Protection/Compliance, within the DEQ Division of Water Quality Programs. In addition to central office staff that review and issue VWP permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities.

DEQ issues individual VPDES permits to both municipal and industrial facilities. Permit requirements, special conditions, effluent limitations and monitoring requirements are determined for each facility on a site specific basis in order to meet applicable water quality standards. General permits are permits written for a general class of dischargers including Discharges of Storm Water Associated with Industrial Activity (9 VAC 25-151 (VAR 05)). The six DEQ regional offices perform permit application reviews and issue permits for the covered activities.

3(b) Agency Comments.

(i) Virginia Marine Resources Commission

According to VMRC, the project will require a tidal wetlands permit from the King William County Local Wetlands Board for the Mattaponi River roll-off ramp.

(ii) Department of Environmental Quality

1. Virginia Water Protection Permits

The DEQ Northern Regional Office (NRO) VWPP program received a Joint Permit Application (JPA) on July 16, 2010, and addendums to the JPA on September 28, 2010, November 5, 2010 and December 15, 2010. These documents were also submitted to the USACE and Virginia Marine Resources Commission for their review and permitting. This JPA corresponds to Part I of the project. Dominion has submitted three separate VWPP applications for three VWPPs corresponding to three different parts of the current VWP permitting effort for the project. The three parts of the project are summarized below:

- **Part I - Surface Water Construction Related Impacts** (VWPP No. 10-1256). Part I of the project proposes surface water impacts related to construction activities. The activities reviewed include construction-related activities to support Unit 3, Large Component Transport Route-related activities, and the NAPS to Ladysmith transmission line.
- **Part II - Minor Surface Water Withdrawal for Construction Activities** (VWPP No. 10-1496). Part II of the project proposes a minor surface water withdrawal for construction related activities. A JPA for a VWP permit for this activity was received on September 9, 2010.
- **Part III - Major Surface Water Withdrawal for Operational Activities and Temporal Change to Shoreline Wetlands** (JPA No. 10-2001). Part III of the project proposes a major surface water withdrawal associated with the operational activities of Unit 3 and shoreline wetland impacts associated with a 3-inch increase in water elevation. A JPA for a VWPP for this activity was received on December 20, 2010.

The Virginia State Water Control Board (SWCB) issued two VWPPs (VWPP No. 10-1256 and VWPP No. 10-1496) on April 15, 2011, authorizing impacts to surface waters from construction related activities (**Part I**) and impacts from surface water withdrawals during construction related activities (**Part II**). In issuing the two permits, the SWCB determined those impacts to surface waters and the withdrawal of water for Unit 3 construction-related activities do not contravene Virginia's water quality standards if the activities are in accordance with the permits.

DEQ is currently working on a third VWPP for a major surface water withdrawal for the operation of Unit 3 (**Part III**). Based upon VWPP program staff review of this proposed activity, the proposed 3-inch increase in water elevation in the normal target pool of Lake Anna and the water level in Waste Heat Treatment Facility (WHTF) have the potential to result in a temporal change in shoreline wetland function and/or acreage. Compensation for the temporal change to shoreline wetlands associated with a permanent increase of 3 inches in the normal target pool elevation of Lake Anna and the water level in the WHTF is proposed to be provided at a ratio of 1:1 (8.14 wetland

credits) through the purchase of wetland credits from an approved wetland mitigation bank.

2. Virginia Pollutant Discharge Elimination System Permits

Although applications have not been submitted for activities under the purview of the VPDES program for the proposal, the following permitting activities under the program are anticipated.

- **Existing VPDES Permit for Units 1 and 2.** Dominion's existing VPDES permit (VA0052451) for industrial process discharges, domestic wastewater discharges, and industrial stormwater discharges will expire on October 24, 2012. The reapplication package for this permit is not due for submittal until April 24, 2012. Upon reissuance, the VPDES permit will be prepared in accordance with state and federal regulations and applicable practices and guidance. According to DEQ-NRO, the VPDES program staff will ensure the reissued permit will be protective of the Virginia Water Quality Standards.

- **Work Force Construction Permit.** If issued, this permit would authorize the discharge from a sewage treatment plant intended for use during the construction of the proposed Unit 3. VPDES staff at DEQ-NRO has not received an application for this permit at this time. According to DEQ-NRO, the VPDES permit would be prepared in accordance with state and federal regulations, applicable practices and guidance, and would be protective of Virginia Water Quality Standards.

- **Nutrient General Permit.** This general permit, if issued, would authorize the discharge of total nitrogen or total phosphorus to the Chesapeake Bay or its tributaries. This permit will be required for combined sewage treatment plant discharges more than 40,000 gpd, or an equivalent load, directly into tidal or non-tidal waters. The VPDES permit would be prepared in accordance with *General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia* (9 VAC 25-820-10 *et seq.*), and will be protective of Virginia Water Quality Standards.

In addition, DEQ's position with regard to the legal appeal of the exiting VPDES permit, which addresses the operation of and the temperature within the WHTF, is that, in accordance with the August 2010 Court of Appeals ruling, VPDES permit VA0052451 was prepared correctly and issued correctly and no alterations are required.

4. Nonpoint Source Pollution Control. Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code 10.1-560 *et seq.*).

4(a) Agency Jurisdiction. The Department of Conservation and Recreation (DCR) Division of Soil and Water Conservation (DSWC) administers the *Virginia Erosion and Sediment Control Law and Regulations* (*VESCL&R*) and *Virginia Stormwater Management Law and Regulations* (*VSWML&R*).

4(b) Erosion and Sediment Control Plans. According to DCR-DSWC, the property owner is responsible for submitting a project specific erosion and sediment control (ESC) plan to the appropriate locality for review and approval pursuant to the local ESC requirements, if the project involves a land-disturbing activity of equal to or greater than 10,000 square feet (2,500 square feet in a Chesapeake Bay Preservation Area). Depending on local requirements the area of land-disturbance requiring an ESC plan may be less. The ESC plan must be approved by the locality prior to any land-disturbing activity at the project site. All regulated land-disturbing activities associated with the project, including on- and off-site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project must be covered by the project specific ESC plan. Local ESC program requirements must be requested through the appropriate local government. [Reference: *Virginia Erosion and Sediment Control Law* §10.1-563; *Virginia Erosion and Sediment Control Regulations* 4 VAC 50-30-30, 4 VAC 50-30-40]

4(c) Stormwater Management Plans. Depending on local requirements, a Stormwater Management (SWM) plan may be required. Local SWM program requirements must be requested through the appropriate locality. [Reference: *Virginia Stormwater Management Act* §10.1-603.3; *Virginia Stormwater Management* (*VSMP*) *Permit Regulations* 4 VAC 50-60-110]

4(d) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities. DCR is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program.

Therefore, the operator or owner of construction activities involving land-disturbing activities equal to or greater than one acre (2,500 square feet or more in a Chesapeake Bay Preservation Area) are required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific stormwater pollution prevention plan (SWPPP). Construction activities requiring registration also include the land disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will ultimately disturb equal to or greater than one acre. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the *Virginia Stormwater Management Program* (*VSMP*) *Permit Regulations.*

General information and registration forms for the General Permit are available on DCR's website at http://www.dcr.virginia.gov/soil_and_water/index.shtml. [Reference: *Virginia Stormwater Management Act* §10.1-603.1 *et seq.*; *VSMP Permit Regulations* 4 VAC-50 *et seq.*]

5. Air Pollution Control. The program implements the federal *Clean Air Act* to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code 10-1.1300 through §10.1-1320).

5(a) Agency Jurisdiction. DEQ's Air Quality Division, on behalf of the State Air Pollution Control Board develops regulations pursuant to Virginia's Air Pollution Control Law. DEQ is charged to carry out mandates of the state law and related regulations as well as Virginia's federal obligations under the *Clean Air Act* as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issue of necessary permits to construct and operate all stationary sources in the region as well as to monitor emissions from these sources for compliance. As a part of this mandate, the environmental documents of new projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

5(b) Agency Findings. According to the DEQ Air Division, Spotsylvania and Hanover Counties are located in an ozone (O_3) maintenance area and an emission control area for the contributors to ozone pollution. All other affected localities are in ozone (O_3) attainment areas.

5(c) Recommendation. Dominion should take all reasonable precautions to limit emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x), principally by controlling or limiting the burning of fossil fuels.

5(d) Requirements.

(i) Fugitive Dust

Fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations*. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

(ii) Open Burning

If project activities include the burning of construction material or the use of special incineration devices, this activity must meet the requirements for open burning under 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100 of the *Regulations* for open burning, and it may require a permit. In addition, the *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. Therefore, Dominion should contact the appropriate locality to determine what local requirements, if any, exist.

6. Coastal Lands Management. This is a state-local cooperative program administered by the DCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater, Virginia established pursuant to the *Chesapeake Bay Preservation Act*; Virginia Code §10.1-2100 –10.1-2114 and *Chesapeake Bay Preservation Area Designation and Management Regulations*; Virginia Administrative Code 9 VAC10-20 *et seq.*

6(a) Agency Jurisdiction. The DCR Department of Chesapeake Bay Local Assistance (DCBLA) administers the coastal lands management enforceable policy of the VCP, which is governed by the *Chesapeake Bay Preservation Act* (Virginia Code §10.1-2100-10.1-2114) and *Chesapeake Bay Preservation Area Designation and Management Regulations* (9 VAC 10-20 *et seq.*).

6(b) Agency Comments.

(i) Large Component Transport Route

The proposed temporary large component off-loading location, along the Mattaponi River, is within King William County. In King William County, the areas protected by the *Chesapeake Bay Preservation Act*, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include:

- tidal wetlands;
- certain non-tidal wetlands;
- shores; and
- a minimum 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow.

RMAs, which require less stringent performance criteria, include all areas of the county not included in the RPA.

The temporary off-loading area is located within the 100-foot RPA buffer. While the temporary off-loading activity is considered to be water-dependent and therefore permitted, any land disturbance and resulting removal of vegetation within the 100-foot RPA buffer must be mitigated once the temporary off-loading activity has concluded. This mitigation should be done in accordance with the Division's *Riparian Buffers Modification and Mitigation Guidance Manual.*

(ii) NAPS-to-Ladysmith Transmission Line

In accordance with 9 VAC 10-20-150 B 1 of the *Regulations*, electric transmission lines and their appurtenant structures are conditionally exempt from the *Regulations* provided that their construction, installation, operation, and maintenance are in accordance with:

- regulations promulgated pursuant to the *Erosion and Sediment Control Law* (§ 10.1-560 *et seq.* of the Code of Virginia) and the *Virginia Stormwater Management Act* (§ 10.1-603.1 *et seq.* of the Code of Virginia):
- erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or
- local water quality protection criteria at least as stringent as the above state requirements.

(iii)Unit 3 Construction/Operation

The proposed surface water and wetland impacts associated with the North Anna Power Station Unit 3 improvements are not subject to the *Regulations* and therefore the Division of Chesapeake Bay Local Assistance has no comments on these aspects of the project.

The proposed construction-related improvements associated with the North Anna Power Station Unit 3 improvements are not located within an area that is covered by the *Regulations* and therefore the Division of Chesapeake Bay Local Assistance has no comments on this aspect of the project.

6(c) Conclusion. DCR-DCBLA finds the proposed project consistent with the *Chesapeake Bay Preservation Area Designation and Management Regulations* provided construction activities adhere to the above requirements.

ADVISORY POLICIES OF THE VCP

The discussions which follow present state agency comments and recommendations with regard to each of the advisory policies of the VCP that are applicable to the referenced project, issues raised by the public pertaining to these advisory policies, and responses to these issues from agencies with jurisdiction on the appropriate policy. Although not required for the purposes of consistency, in accordance with 15 CFR § 930.39(c), Dominion and the NRC should consider the advisory policies

(recommendations) of the Virginia Coastal Resources Management Program as they pertain to the referenced project.

1. Coastal Natural Resource Areas. These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:

a) Wetlands
b) Aquatic Spawning, Nursery, and Feeding Grounds
c) Coastal Primary Sand Dunes
d) Barrier Islands
e) Significant Wildlife Habitat Areas
f) Public Recreation Areas
g) Sand and Gravel Resources
H) Underwater Historic Sites

1(a) Agency Jurisdiction. The mission of the Virginia Department of Conservation and Recreation is to conserve Virginia's natural and recreational resources. DCR supports a variety of environmental programs organized within seven divisions including the Division of Natural Heritage. The Natural Heritage Program's (DCR-DNH) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. The *Virginia Natural Area Preserves Act*, 10.1-209 through 217 of the *Code of Virginia*, was passed in 1989 and codified DCR's powers and duties related to statewide biological inventory: maintaining a statewide database for conservation planning and project review; land protection for the conservation of biodiversity; and the protection and ecological management of natural heritage resources (the habitats of rare, threatened, and endangered species, significant natural communities, geologic sites, and other natural features).

1(b) Agency Findings. The Department of Conservation and Recreation's Division of Natural Heritage has searched its Biotics Data System for occurrences of natural heritage resources from project sites. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

(i) North Anna 3 Project Site

According to the information currently on file, this site may support habitat appropriate for Small whorled pogonia (*Isotria medeoloides*, G2/S2/LT/LE) in forested areas within the proposed project areas. Small whorled pogonia grows in a variety of woodland habitats in Virginia, but tends to favor mid-aged woodland habitats on gently north or northeast facing slopes often within small draws. Direct destruction as well as habitat loss and alteration are principal reasons for the species' decline (Ware, 1991). Note

that Small whorled pogonia is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS).

DCR has reviewed the Survey for the Small Whorled Pogonia North Anna Power Station dated June 4, 2010 and concurs with the methodology and negative findings of the report.

(ii) NAPS-to-Ladysmith Transmission Line

The Blanton's Powerline Conservation Site is within the NAPS-to-Ladysmith transmission line corridor. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant.

The Blanton's Powerline Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources occurring within this conservation site are:

Stachys eplingii	Epling's Hedge-nettle	G5/S1/NL/NL
Carex buxbaumii	Brown Bog Sedge	G5/S2/NL/NL
Dichanthelium consanguineum	Blood Witchgrass	G5/S1?/NL/NL

DCR concurs with the findings of the July 2010 Detailed Survey for the Epling's Hedge-nettle, Blanton's Powerline Conservation Site. DCR supports avoidance of these rare plants within the power line right-of-way during project construction and maintenance activities through the use of the existing service road within the transmission line corridor as well as strict adherence to erosion and sediment control measures as stated in the survey report (page 3 of 4).

(iii)Large Component Transport Route

Swamp pink (*Helonias bullata*, G3/S2S3/LT/LE) may occur in specific areas along the large component transport corridor. Swamp pink inhabits groundwater-influenced, perennially saturated, nutrient-poor headwater wetlands and is sensitive to hydrologic alterations to its habitat. The major direct threat to this species is habitat loss. Indirect threats result from activities that affect the hydrologic regime including such upslope activities as timber harvesting, land clearing and development, and agriculture. Downstream threats to the hydrology of a swamp pink habitat arise from flooding caused by road crossings with culverts that become blocked and beaver activity

(VanAlstine, 1994). In Virginia, swamp-pink is currently known from 45 locations, 3 of which are historic.

This species is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS).

According to the information provided in the FCC, existing roads will be used for this project activity therefore DCR does not anticipate impact to Swamp pink. However, if the scope of the project changes including road widening, DCR requests re-coordination with DNH to determine potential impacts.

(iv)Walkerton Roll-off Site

The Walkerton-Horse Landing Conservation Site has been documented within the project site at the Walkerton Roll-off location. Walkerton-Horse Landing Conservation Site has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resources of concern at this site are:

Haliaeetus leucocephalus	Bald Eagle	G5/S2S3B,S3N/NL/NL
Bacopa innominata	Tropical Water-hyssop	G3G5/S2/NL/NL
Eriocaulon parkeri	Parker's Pipewort	G3/S2/NL/NL

The bald eagle breeds from Alaska eastward through Canada and the Great Lakes region, along coastal areas off the Pacific and Atlantic Oceans, and the Gulf of Mexico, and in pockets throughout the western United States (NatureServe, 2009). In Virginia, it primarily breeds along the large Atlantic slope rivers (James, Rappahannock, Potomac, etc) with a few records at inland sites near large reservoirs (Byrd, 1991). Bald eagle nest sites are often found in the midst of large wooded areas near marshes or other bodies of water (Byrd, 1991). Bald eagles feed on fish, waterfowl, seabirds (Campbell *et al.*, 1990), various mammals and carrion (Terres, 1980). This species is currently classified as threatened by the Virginia Department of Game and Inland Fisheries.

Threats to this species include human disturbance of nest sites (Byrd, 1991), habitat loss, biocide contamination, decreasing food supply and illegal shooting (Herkert, 1992).

Tropical water-hyssop, a state endangered species, has been documented in the meandering sections of tidal tributaries to the Chesapeake Bay on narrow shores or on the borders of freshwater marshes (Porter, 1991; Rawinski, 1987). Threats to tropical water-hyssop in Virginia include erosion and activities leading to wetland destruction such as shoreline development activities, impoundments, and marina development (Virginia Natural Heritage Program, 1988). Tropical water-hyssop is currently known from 13 locations in Virginia, of which 5 occurrences are historic.

Parker's pipewort is classified as very rare to uncommon in Virginia. This diminutive pipewort species displays a greyish-white button flower and often occurs with other rare

mudwort species in the intertidal zone of tidal regions from Maine to North Carolina. Potential threats include activities that alter natural river currents causing sedimentation, which could inhibit germination of seeds or smother seedlings, and/or erosion of the habitat. Other potential threats include activities that result in increased salinity levels, water pollution, and displacement by aggressive species (J. C. Ludwig, 1996). Parker's pipewort is known from 21 current occurrences in Virginia, and 9 historic occurrences.

In addition, Small waterwort (*Elatine minima*, G5/S1/NL/NL) has been historically documented in the project area. Small waterwort is often found in the same intertidal habitats as Parker's pipewort and tropical water-hyssop: narrow shores and marsh edges (J.C. Ludwig, pers. com.). Virginia is the southern limit of this species range, where it is limited to three counties. These tiny plants reach less than two inches in height. At the base of their leaves, pin-head sized, transparent pod contain the plant's seeds (Hotchkiss, 1972). Small waterwort is known from three locations in Virginia.

DCR reviewed the September 2010 Survey of Submerged Aquatic Vegetation (SAV) and Other Aquatic Habitats of the Mattaponi River associated with the proposed Large Component Transport Route and concurs with the findings.

1(c) Recommendations. Dominion is encouraged to implement the following recommendations:

- Coordinate this project with the USFWS to ensure compliance with protected species legislation due to the legal status of small whorled pogonia.
- Coordinate with DGIF to ensure compliance with protected species legislation due to the legal status of the Bald eagle.
- Implement and strictly adherence to applicable state and local erosion and sediment control and stormwater management laws and regulations to minimize adverse impacts to the aquatic ecosystem as a result of proposed activities.

2. Wildlife Resources and Protected Species.

2(a) Agency Jurisdiction. The Department of Game and Inland Fisheries (DGIF), as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects (*Virginia Code* Title 29.1). The DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 *et seq.*), and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts. Furthermore, DGIF and the Virginia Marine Resources Commission administer the fisheries management enforceable policy of the VCP.

2(b) Agency Findings. DGIF does not currently document any listed wildlife resources under its jurisdiction from any of the component areas of the project. Therefore, DGIF

does not anticipate any adverse impacts to wildlife resources or listed species. In particular, DGIF does not anticipate adverse impacts upon such resources to result from the proposed lake level increase.

2(c) Recommendations. DGIF offers the following recommendations addressing development activities to minimize overall impacts to wildlife and natural resources:

- avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable;
- maintain undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams;
- conduct any in-stream activities during low or no-flow conditions;
- use non-erodible cofferdams or turbidity curtains to isolate the construction area;
- block no more than 50% of the streamflow at any given time;
- stockpile excavated material in a manner that prevents reentry into the stream;
- restore original streambed and streambank contours;
- revegetate barren areas with native vegetation; and
- adhere to a time-of-year restriction protective of resident and migratory songbird nesting from March 15 through August 15 of any year for all tree removal and ground clearing;
- implement strict erosion and sediment control measures.

Stormwater controls for this project should be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to, utilizing bioretention areas, and minimizing the use of curb and gutter in favor of grassed swales. Bioretention areas (also called rain gardens) and grass swales are components of Low Impact Development (LID). They are designed to capture stormwater runoff as close to the source as possible and allow it to slowly infiltrate into the surrounding soil. They benefit natural resources by filtering pollutants and decreasing downstream runoff volumes.

For additional information, contact DGIF, Amy Ewing at (804) 367-2211.

3. Parks, Natural Areas, and Wildlife Management Areas. Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.

3(a) Agency Findings. The DCR Division of State Parks (DSP) has determined that Lake Anna State Park will be impacted by the proposed 3-inch normal pool rise in Lake Anna as a result of Unit 3. DCR-DSP is unable to determine the full impact to the park due to the proposed lake level increase.

3(b) Recommendation. DCR-DSP requests that Dominion contact agency staff to discuss potential impacts of the 3-inch rise to the Lake Anna State Park.

ADDITIONAL ENVIRONMENTAL CONSIDERATIONS

In addition to the enforceable policies of the VCP, comments were also provided with respect to applicable requirements and recommendations of the following programs:

1. Solid and Hazardous Waste Management.

1(a) Agency Jurisdiction. Solid and hazardous wastes in Virginia are regulated by the Virginia Department of Environmental Quality, the Virginia Waste Management Board (VWMB) and the U.S. Environmental Protection Agency. They administer programs created by the federal Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act, commonly called Superfund, and the Virginia Waste Management Act. DEQ administers regulations established by the VWMB and reviews permit applications for completeness and conformance with facility standards and financial assurance requirements. All Virginia localities are required, under the Solid Waste Management Planning Regulations, to identify the strategies they will follow on the management of their solid wastes to include items such as facility siting, long-term (20-year) use, and alternative programs such as materials recycling and composting.

1(b) Agency Findings.

(i) Construction of Unit 3 and Placement of Material at Route 700 Parcels

DEQ Division of Land Protection and Revitalization (DLPR) conducted a cursory review of its data files including a GIS database search in the vicinity of the North Anna Power Station, but did not identify any waste sites that would impact or be impacted by the proposed construction. The power station facility is a hazardous waste storage, treatment or disposal facility (TSDF) (VAD065376279, North Anna Power Station, TSDF).

The relocation of the existing paint shop/vehicle maintenance shop requires that Dominion ensure that any hazardous waste either currently managed or generated as a result of relocation activities are handled in accordance with the *Virginia Hazardous Waste Management Regulations* (*VHWMR*). According to information in RCRAInfo (EPA data base), the North Anna Power Station is a Small Quantity Generator of hazardous waste. If the facility manages waste in tanks, the regulations require the removal of all hazardous waste from the tanks, discharge control equipment, and discharge confinement structures as specified in 40 CFR 265.201(d)). Any hazardous waste that may be generated as a result of construction activities must be managed in accordance with the *VHWMR*.

(ii) NAPS-to-Ladysmith Transmission Line Activities and Large Component Transport Route Activities

These project components cross numerous zip codes. Therefore, Dominion should conduct an environmental investigation on and near the sites to identify any solid or hazardous waste sites or issues before work commences. This investigation should include a search of waste-related databases (see Waste Information page attached).

1(c) Requirements.

(i) Waste Management

Any soil that is suspected of contamination or wastes that are generated during construction must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations.

(ii) Asbestos-containing Materials and Lead-based Paint

All structures being demolished, renovated or removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9 VAC 20-80-640 for ACM and 9V AC 20-60-261 for LBP must be followed.

1(d) Recommendations. DEQ encourages all facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

2. Health Impacts.

2(a) Agency Jurisdiction.

(i) Virginia Department of Health-Division of Environmental Epidemiology

The Virginia Department of Health's (VDH) Division of Environmental Epidemiology (DEE) mission is to prevent and control human diseases and conditions due to exposure to chemical and biological agents in the environment and transmission from animals to humans. VDH-DEE accomplishes this through developing and maintaining surveillance programs for environmental factors that may indicate a potential human health hazard, diseases and conditions that may be due to exposure to certain environmental factors, and diseases that are transmitted from animals to humans; investigating reported outbreaks of human diseases and unusual findings from surveillance programs; and communicating findings from surveillance programs and investigations.

(ii) Virginia Department of Health-Division of Shellfish Sanitation

The VDH Division of Shellfish Sanitation (DSS) is responsible for protecting the health of the consumers of molluscan shellfish and crustacea by ensuring that shellfish growing waters are properly classified for harvesting, and that molluscan shellfish and crustacea processing facilities meet sanitation standards. The mission of this Division is to minimize the risk of disease from molluscan shellfish and crustacea products at the wholesale level by classifying shellfish waters for safe commercial and recreational harvest; by implementing a statewide regulatory inspection program for commercial processors and shippers; and by providing technical guidance and assistance to the shellfish and crustacea industries regarding technical and public health issues.

2(b) Agency Comments.

(i) Unit 3 Operation

VDH-DEE previously responded to Dominion's 2005 ESP consistency certification regarding potential health effects that may result from the operation of an additional reactor at NAPS. According to VDH-DEE, DEQ included VDH-DEE comments and recommendations regarding heat-related concerns in the Commonwealth's November 2006 response to the federal consistency certification, which were:

- swimming in waters greater than 113°F may result in burns, depending on contact time;
- swimming in waters greater than 104 °F should be avoided; and
- water temperatures greater than 95 °F may increase the risk of acquiring primary amebic meningoencephalitis (PAM) and people should avoid water exposure altogether or should avoid forceful entry of water up nasal passages.

(ii) Large Component Transport Route

The VDH Division of Shellfish Sanitation finds that activities at the Walkerton Bridge roll-off site have no potential to impact shellfish from a public health aspect.

2(c) Recommendations. In 2006, VDH-DEE recommended avoiding recreational swimming use in waters where temperatures are elevated. In addition, VDH-DEE now recommends that warning signs be posted in areas where waters have exceeded or have the potential to exceed 104°F. Supporting information on the areal extent of lake water that has exceeded or may exceed 104°F would further assist VDH in managing public health risks potentially related to Lake Anna.

2(d) Conclusion. VDH concludes that it is reasonable to assume that existing heat and microbial-related illness risks would not change if a third nuclear reactor was operating at NAPS based on Dominion's assertion that the water temperature would not increase in the lake.

Contact VDH-DEE, Dan Dietrich at (804) 864-8128, and/or VDH-DSS, Robert Croonenberghs at (804) 864-7480 for additional information.

3. Transportation Impacts.

3(a) Agency Jurisdiction. The Virginia Department of Transportation (VDOT) provides comments pertaining to potential impacts to existing and future transportation systems.

3(b) Agency Findings.

(i) Culpeper District Office

The VDOT Culpeper District Office notes that the affected area around the site will involve coordination with several district offices (i.e. Richmond, Fredericksburg, and Culpeper) to ensure that the impacted areas are identified and mitigated. In addition, some of the earlier documentation discussed the use of rail for material transport to the site. This should be thoroughly explored and documented.

(ii) Fredericksburg District Office

The VDOT Fredericksburg District Office finds that the FCC did not address the routing of general construction traffic and the transport of most construction materials. While NAPS is located in Louisa County, a great deal of construction traffic will access the site by way of roads leading in from Caroline and Spotsylvania Counties. It should be anticipated that significant volumes of vehicles will travel along Route 208 from the populated area in the vicinity of the City of Fredericksburg and from I-95 to the north (the commuting pattern of current NAPS employees may reflect this, to some degree). Additional trips bound for NAPS will depart I-95 at Exits 104, 110, 118 and 126. Most of these trips will travel several miles on the system of Secondary Roads. These patterns may or may not mimic current commuter patterns to and from NAPS. All of these potential routings should be analyzed in the suggested Traffic Impact Analysis (TIA) for both the construction phase and the post-construction phase of Unit 3 and associated improvements.

Significant hindrances along the Large Component Transport Route include the narrowness of Route 629, the significant traffic volume on Route 30 and the intersections of Primary Routes 360 and 301. The majority of the LCTR within the Fredericksburg District is not elaborated upon in the FCC. Mention is briefly made of a temporary river crossing structure at the North Anna River on Route 30. While no explanation is offered, it is assumed that the existing bridge has inadequate capacity. This temporary structure will require right-of-way or easement in two counties/districts.

The document states, "In locations where culverts and pipes require additional protection to support the loads, steel plating or crane mats will be used. Replacement or improvement of existing culverts and pipes is not expected to be necessary." VDOT will require additional details of this procedure and the proposed locations.

Furthermore, general details regarding truck width, length, weight, speed, etc. are needed.

The construction of a 500 kV transmission line between NAPS and the Ladysmith Substation (to be located entirely within the existing transmission corridor) will place large vehicles on several secondary roads in Caroline and Spotsylvania Counties. VDOT anticipates that equipment will exit I-95 at Ladysmith, although several other viable options exist. The traffic impact analysis should include all interchanges and the intersections of Route 1 with the various connecting roads.

It is likely that frequent interruptions in service will occur on the highways affected by various aspects of the construction of Unit 3. Dominion should coordinate with VDOT as soon as the details of these interruptions are available.

4. Historic and Archaeological Resources.

4(a) Agency Jurisdiction. The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State Historic Preservation Office, ensures that federal actions comply with *Section 106 of the National Historic Preservation Act* of 1962 (*NHPA*), as amended, and its implementing regulation at 36 CFR Part 800. The *NHPA* requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. *Section 106* also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

4(b) Agency Comments. DHR has been in direct consultation with the Nuclear Regulatory Commission and Virginia Dominion Power regarding the potential impacts of this project on historic resources.

4(c) Requirement. The NRC and the USACE must continue to consult with DHR pursuant to *Section 106 of the National Historic Preservation Act.*

5. Forest Resources.

5(a) Agency Jurisdiction. The mission of the Virginia Department of Forestry (VDOF) is to protect and develop healthy, sustainable forest resources for Virginians. VDOF was established in 1914 to prevent and suppress forest fires and reforest bare lands. Since the Department's inception, it has grown and evolved to encompass other protection and management duties including: protecting Virginia's forests from wildfire, protecting Virginia's waters, managing and conserving Virginia's forests, managing state-owned lands and nurseries, and managing regulated incentive programs for forest landowners.

5(b) Agency Finding. VDOF finds that the proposed project will have no significant impact to the forest resources of the Commonwealth.

Further information regarding VDOF's finding may be obtained by contacting VDOF, Todd Groh at (434) 220-9044.

REGULATORY AND COORDINATION NEEDS

1. Subaqueous Lands Management. Dominion must continue to coordinate with the Virginia Marine Resources Commission on potential project impacts to subaqueous lands at the Mattaponi River roll-off ramp and the NAPS to Ladysmith transmission line corridor, pursuant to Section 28.2-1200 *et seq.* of the *Code of Virginia*, to ensure project consistency with the subaqueous lands management enforceable policy of the VCP. For additional information and coordination, contact VMRC, Randy Owen at (757) 247-2251.

2. Point Source Pollution Control and Wetlands. Proposed point source discharges to surface waters are coordinated through the Virginia Pollutant Discharge Elimination System program at DEQ-NRO pursuant to Virginia Code §§ 62.1-44.15 through 44.30 and VPDES Permit Regulation 9 VAC 25-31 *et seq.* Pursuant to Virginia Code §62.1-44.15:5, Dominion must continue to coordinate with the DEQ Northern Regional Office to ensure compliance with the conditions of the Part I and Part II Virginia Water Protection Permits issued for surface water and wetland impacts. In addition, Dominion must continue to coordinate with DEQ-NRO on the Part III VWPP application which will set conditions for water withdrawals for the operation of Unit 3 and the impact of the proposed 3-inch rise in lake level on shoreline wetlands. Project impacts on tidal wetlands at the Mattaponi River roll-off site are coordinated through the VMRC and King William Wetlands Board. For additional information and coordination, contact the VMRC Tidal Wetlands program, Randy Owen at (757) 247-2251; DEQ-VWPP program, Trisha Beasley at (703) 583-3940; and DEQ-NRO VPDES program, Susan Mackert at (703) 583-3853.

3. Nonpoint Source Pollution Control.

3(a) Erosion and Sediment Control Plan and Stormwater Management. The proposed development must comply with *Virginia's Erosion and Sediment Control Law* (Virginia Code 10.1-567) and *Regulations* (4 VAC 50-30-30 *et seq.*) and *Stormwater Management Law* (Virginia Code 10.1-603.5) and *Regulations* (4 VAC 3-20-210 *et seq.*) as locally administered. Local erosion and sediment control, and stormwater management requirements should be coordinated with the appropriate local government.

3(b) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities. For projects involving land-disturbing activities of equal to or greater than one acre (2,500 square feet in a Chesapeake Bay Preservation Area), Dominion is required to apply for registration coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities (4 VAC-50 *et seq.*). Specific questions

regarding the Stormwater Management Program requirements should be directed to Holly Sepety, DCR, at (804) 225-2613.

4. Air Pollution Control. Guidance on minimizing the emission of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) during construction may be obtained from DEQ-NRO. Activities associated with construction of this project may be subject to air regulations administered by the Department of Environmental Quality. The following sections of Virginia Administrative Code are applicable:

- fugitive dust and emissions control (9 VAC 5-50-60 *et seq.*);and
- open burning restrictions (9 VAC 5-40-130 *et seq.*).

Also, contact the appropriate local government for any local requirements on open burning. For additional information and coordination, contact DEQ-NRO, Terry Darton at (703) 583-3845.

5. Coastal Lands Management. This project must be consistent with the coastal lands management enforceable policy of the VCP as locally administered through the *Chesapeake Bay Preservation Area Designation and Management Regulations* (9 VAC 10-20 *et seq.*). Mitigation within the RPA buffer at the roll-off site on the Mattaponi River should be conducted in accordance with DCR's *Riparian Buffers Modification and Mitigation Guidance Manual* and in coordination with King William County. Transmission line activities must be conducted in accordance with 9 VAC 10-20-150 B 1 of the *Regulations* in coordination with Spotsylvania and Hanover Counties. For additional information, contact DCR-DCBLA, Joan Salvati at (804) 225-3440 and the appropriate local government.

6. Natural Heritage Resources. Dominion should contact DCR-DNH at (804) 786-7951 to secure updated information on natural heritage resources if a significant amount of time passes before the project is implemented.

7. Parks, Natural Areas and Wildlife Management Areas. Discussion regarding the potential impacts of the 3-inch rise to the Lake Anna State Park may be accomplished by contacting DCR-DSP, Warren Wahl at (804) 786-5055.

8. Solid and Hazardous Wastes.

8(a) Solid and Hazardous Waste Management Regulations. All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. Some of the applicable state laws and regulations are:

- *Virginia Waste Management Act*, Code of Virginia Section 10.1-1400 *et seq.*;
- *Virginia Hazardous Waste Management Regulations* (*VHWMR*) (9 VAC 20-60);
- *Virginia Solid Waste Management Regulations* (*VSWMR*) (9 VAC 20-80);

- *Virginia Regulations for the Transportation of Hazardous Materials* (9 VAC 20-110).

Some of the applicable federal laws and regulations are:

- *Resource Conservation and Recovery Act* (*RCRA*) (42 U.S.C. Section 6901 *et seq.*), and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and
- U.S. Department of Transportation Rules for Transportation of Hazardous Materials (49 CFR Part 107).

For additional information and coordination regarding waste management issues, contact DEQ-NRO, Richard Doucette at (703) 583-3811.

8(b) Asbestos-containing Material. It is the responsibility of the owner or operator of rehabilitation activities, prior to the commencement of the activity, to thoroughly inspect the affected part of the project where the rehabilitation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material (ACM). Upon classification as friable or non-friable, all waste ACM shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 et seq.). Contact the DEQ Division of Land Protection and Revitalization at (804) 698-4021 for additional information and the Department of Labor and Industry, Ronald Graham at (804) 371-0444.

8(c) Lead-based Paint. If applicable, the proposed project must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements contact the Department of Professional and Occupational Regulation, David Dick at (804) 367-8588.

9. Storage Tanks. The use of portable fuel above ground storage tanks with a capacity of greater than 660 gallons must be registered with DEQ using *AST Registration Form 7540-AST*. Tank registration may be accomplished by contacting DEQ-NRO, Cynthia Sale at (703) 583-3830.

10. Traffic Impacts. The proposed Traffic Impact Analysis and impacts to the state transportation network may be coordinated by contacting the VDOT Culpeper District Office, Charles Proctor at (540) 829-7558, and the VDOT Fredericksburg District Office, Stephen Haynes at (540) 899-4709.

11. Historic Resources. In accordance with Section 106 of the *National Historic Preservation Act*, as amended, and its implementing regulation 36 CFR 800, the NRC and USAC must continue to coordinate with DHR with respect to potential project impacts to historic and archaeological resources. For additional information and coordination, contact DHR, Roger Kirchen at (804) 367-2323, ext. 153.

Thank you for the opportunity to comment on the FCC for the Combined Construction and Operation License and U.S. Army Corps of Engineers Permit for the proposed Unit 3 at the North Anna Power Station. Detailed comments of reviewing agencies are attached for your review. If you have questions, please call me at (804) 698-4484, Ellie Irons at (804) 698-4325 or John Fisher at (804) 698-4339.

Sincerely,

Richard Weeks, Chief Deputy
Department of Environmental Quality

Enclosures

Ec: Dave Davis, DEQ-OWWP
Scott Kudlas, DEQ-OSGSP
Tom Faha, DEQ-NRO
David Hartshorn, DEQ NRO
Richard Criqui, DEQ-DLPR
Kotur Narasimhan, DEQ-Air
Amy Ewing, DGIF
Tony Watkinson, VMRC
Robbie Rhur, DCR
Keith Tignor, VDACS
Barry Matthews, VDH
Chris Adkins, VDOT
David Spears, DMME
Roger Kirchen, DHR
Todd Groh, VDOF
Pam Mason, VIMS
Michael Cline, VDEM
Steve Flaherty, VDSP
Robert Dube, Louisa County
Julie Jordan, Orange County
C. Douglas Barnes, Spotsylvania County
Percy Ashcraft, Caroline County
Cecil R. "Rhu" Harris, Hanover County
Trenton Funkhouser, King William County
Willie Harper, Town of Mineral
Stephen Williams, Thomas Jefferson PDC
Jeffery Walker, Rappahannock-Rapidan Regional Commission
Robert Wilson, George Washington Regional Commission
Ken Roller, Dominion

Tamsen Dozier, NRC
David Kaiser, NOAA

Fisher, John (DEQ)

From: Ewing, Amy (DGIF)
Sent: Tuesday, February 15, 2011 9:01 AM
To: Fisher, John (DEQ)
Cc: Odenkirk, John (DGIF); Smith, Scott (DGIF); Fernald, Ray (DGIF)
Subject: RE: ESSLog# 31246_CZMA certification-Dominion Lake Anna 3rd reactor

John,
It was confirmed for us during the meeting with NRC that the change in reactor technology will not alter the dam release schedule or the required water withdrawal from Lake Anna, therefore, we find the project, as proposed in the consistency document, consistent with the Fishereis Management section of the CZMA.

Thanks, Amy

From: Fisher, John (DEQ)
Sent: Friday, February 11, 2011 3:24 PM
To: Ewing, Amy (DGIF)
Subject: RE: ESSLog# 31246_CZMA certification-Dominion Lake Anna 3rd reactor

Amy:

Please confirm whether DGIF continues to agree with the dam release schedule proposed by Dominion based on the proposed new reactor design (US Advanced Pressurized Water Reactor), assuming you have sufficient information from the NRC February 3 interagency meeting.

Thanks,
John

John E. Fisher
Virginia Department of Environmental Quality
Division of Environmental Enhancement
Office of Environmental Impact Review
629 East Main Street, #634
Richmond, Virginia 23219
(804) 698-4339
(804) 698-4319 fax
john.fisher@deq.virginia.gov
www.deq.virginia.gov

From: Ewing, Amy (DGIF)
Sent: Monday, January 10, 2011 11:10 AM
To: Fisher, John (DEQ)
Cc: Odenkirk, John (DGIF); Fernald, Ray (DGIF); Smith, Scott (DGIF)
Subject: ESSLog# 31246_CZMA certification-Dominion Lake Anna 3rd reactor

John.
We have reviewed the coastal consistency document developed for the proposed 3rd reactor at Dominion's North Anna Power Station (NAPS) adn offer the following comments and recommendations. The consistency determination addressed consistency with the CZMA for the following activities:

- construction of Unit 3
- additions to existing NAPS to Ladysmith transmission line
- modifications to the large component transportation route
- placement of construction materials on the Rt 700 parcels

- operation of unit 3

Construction of Unit 3:
Proposed construction intakes on Lake Anna:
We have reviewed the subject project that proposes to construct two intakes and withdraw a daily maximum of 750,000 gpd of water from Lake Anna to support construction activities related to the proposed addition of a third nuclear reactor.

We understand the need for water to suppress dust and fire, for cleaning, and for moisture control during backfilling activities. However, it seems to us that 750,000 gpd is an excessive amount of water for this use. We recommend that DEQ closely review Dominion's construction water needs and ensure that the maximum requirement is all that is withdrawn from the lake and that such water is used in the most conservative manner possible. In addition, we recommend DEQ permit this withdrawal in a manner that includes triggers requiring a reduction in the volume of the water withdrawn when the lake level drops. For example, we find it appropriate to require a withdrawal volume reduction by as much as half if the lake elevation drops below 248 feet. The same type of trigger should be instituted for every foot of lake elevation drop (at 247 ft, and so on).

It appears Dominion proposes to fit the intake with a 1mm mesh screen and that the intake velocity will be 0.25 fps. We are supportive of these measures and determine them to adequately protect aquatic life from impingement and entrainment.

It does not appear that instream (lake) work is necessary to place the intakes. In the case that it is, we recommend using non-erodible cofferdams or turbidity curtains to isolate the construction area, stockpiling excavated material in a manner that prevents reentry into the stream/lake, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

In response to our comments related to the construction intakes on Lake Anna (above), Dominion proposed the following permit condition to address our comments: *Surface water withdrawal activities shall not exceed 500,000 gpd when the elevation of Lake Anna decreases below 248 feet above mean sea level (msl). Once the elevation of Lake Anna decreases 1 foot below 248 feet msl, the maximum daily surface water withdrawal activities shall decrease 50 percent to 250,000 gpd and continue to decrease by 50 percent with each foot of lake level decrease.*

We are comfortable with Dominion's proposal, but request that the intakes/pumps be fitted with meters and that the logs be available for review, upon request.

Lake level increase (wetland impacts):
We do not currently document any listed wildlife resources under our jurisdiction from the project area. Therefore, we do not anticipate adverse impacts upon such resources to result from the proposed lake level increase.

Additions to NAPS to Ladysmith transmission lines:
We do not currently document any listed wildlife resources under our jurisdiction from the project area. Therefore, we do not anticipate this project to result in adverse impacts upon this project.

Modifications to the large component transportation line:
Walkerton Bridge off loading area:
The Mattaponi River in this area has been designated an Anadromous Fish Use Area. Therefore, we recommend that all instream work at this site adhere to a time of year restriction from February 15 through June 30 of any year. In addition, we recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

Temporary Bridge over North Anna at Rt. 30:
The North Anna River in this area has been designated an Anadromous Fish Use Area. Therefore, we recommend that all instream work at this site adhere to a time of year restriction from February 15 through June 30 of any year. In addition, we recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given

time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

Placement of construction materials on Rt 700 parcels:
We do not currently document any listed wildlife resources under our jurisdiction from the project area. Therefore, we do not anticipate adverse impacts upon such resources to result from the proposed lake level increase.

Operation of Unit 3:
Dam release schedule:
We are agreeable to the dam release schedule proposed by Dominion in the Nov 2010 Supplemental CZMA certification document and find it consistent with the Fisheries Management Section of the CZMA assuming the recent change in reactor technology does not significantly alter the environmental impacts of this project. We will not be able to determine if there are significant changes until our meeting with NRC on Feb 3, 2011. We request the opportunity to amend our comments after this meeting if significant changes in the environmental impacts are determined likely due to the recent change in proposed reactor technology.

Mitigation:
We are supportive of Dominion's mitigation measures.

Intake construction:
We recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

Project-Wide Recommendations:
To minimize overall impacts to wildlife and our natural resources, we offer the following comments about development activities: We recommend that the applicant avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable. We recommend maintaining undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams.

We recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

We recommend that the stormwater controls for this project be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to, utilizing bioretention areas, and minimizing the use of curb and gutter in favor of grassed swales. Bioretention areas (also called rain gardens) and grass swales are components of Low Impact Development (LID). They are designed to capture stormwater runoff as close to the source as possible and allow it to slowly infiltrate into the surrounding soil. They benefit natural resources by filtering pollutants and decreasing downstream runoff volumes.

We recommend that all tree removal and ground clearing adhere to a time of year restriction protective of resident and migratory songbird nesting from March 15 through August 15 of any year.

We recommend adherence to erosion and sediment controls during ground disturbance.

Coastal Consistency:
Assuming adherence to appropriate erosion and sediment controls during construction andconsidering the caveat regarding the change in technology detailed in the dam release schedule section above, we find this project consistent with the Fisheries Management Section of the CZMA.

Thanks, Amy

Amy M. Ewing
Environmental Services Biologist
Virginia Dept. of Game and Inland Fisheries
804-367-2211

Fisher, John (DEQ)
From: Owen, Randy (MRC)
Sent: Tuesday, December 14, 2010 6:11 PM
To: Fisher, John (DEQ)
Cc: Watkinson, Tony (MRC); Neikirk, Chip (MRC); Ryan Fletcher
Subject: Environmental Review Request Form - North Anna Power Station Unit 3

John,

Please accept the following comments in response to your November 22, 2010 Environmental Review Request Form for the Combined License & U. S. Army Corps of Engineers Permit for North Anna Power Station Unit 3.

On August 2, 2010, VMRC received the Joint Permit Application for the above-referenced project. The project was assigned VMRC #10-1256.

As proposed, the project will require both a tidal wetlands permit from the King William County Local Wetlands Board for the Mattaponi River roll off ramp and a VMRC subaqueous permit for the ramp, the North Anna River Route 30 temporary bridge crossing and the proposed NAPS-to-Ladysmith Transmission Line for its aerial encroachment over the drowned North Anna River main channel within Lake Anna. These permits are required pursuant to the Virginia Tidal Wetlands Act (28.2-1300 et seq of the Virginia Code) and the Submerged Lands Act (28.2-1200 et seq).

Representatives from VMRC, the Virginia Institute of Marine Science and the King William Wetlands Board staff met with Dominion recently to identify the additional information needs required to complete our regulatory review of the project. Representatives were also present from DEQ and the U. S. Army Corps of Engineers.

Public hearings may be scheduled by both the local wetlands board and VMRC in the next few months. I will keep you apprised of any permit decisions reached.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

January 20, 2011

Ms. Ellie Irons
Office of Environmental Impact Review
Department of Environmental Quality
629 East Main Street, 6th Floor
Richmond, Virginia 23219

RE: Review for Federal Consistency Certification for NRC COL and USACE 404 CWA Permit Unit 3 at Dominion's North Anna Power Station, Louisa County, Virginia

Dear Ms. Irons:

The Virginia Water Protection (VWP) Permit Program, administered by the Office of Wetlands and Water Protection, has reviewed a federal consistency certification dated September 30, 2010, from Dominion Virginia Power (Dominion) for a U.S. Nuclear Regulatory Commission (NRC) Combined Operating License (COL) and U.S. Army Corps of Engineer's (USACE) Section 404 Clean Water Act (CWA) permit to construct and operate the proposed Unit 3 at the North Anna Power Station (NAPS) as it pertains to activities within the purview of the VWP Permit Program. The proposed project activities discussed in the document include construction related activities to support Unit 3 (cooling towers, intake structure, site separation activities, and Route 700 Parcels laydown areas), large component transport route, shoreline wetland impacts associated with a 3 inch increase in water elevation, and a transmission line.

Construction Related Activities to Support Unit 3

Construction activities associated with Unit 3 will occur at the NAPS site and on another property owned by Dominion known as the Route 700 Parcels. The Route 700 Parcels is located southwest of NAPS, adjacent to Haley Drive and Kentucky Spring Road in Louisa County. Construction activities propose to permanently impact 4.15 acres of palustrine forested (PFO) wetland, 0.40 acre of palustrine emergent (PEM) wetland, 0.26 acre of open water (of which 0.24 acre is associated with dredging 637 cubic yards of lake-bottom associated with the construction of the water intake structure) and 0.33 acre (6,380 linear feet) of stream channel. The activities also propose to temporarily impact 0.51 acre of open water.

Large Component Transport Route Related

The activities associated with this aspect of the project consist of the transportation of the reactor pressure vessel and other oversized/overweight equipment required to construct Unit 3. Portions of the proposed

route were previously used to transport large components associated with the construction of Units 1 and 2. The surface water impacts proposed due to these activities are temporary and located at the off-loading site near Walkerton Landing. The proposed temporary impacts are to 0.06 acre of PEM wetland, 0.18 acre of tidal emergent wetland and 0.47 acre (308 linear feet) of stream channel.

Shoreline Wetland Impacts Associated with Increase in Water Elevation

The effects of the proposed major surface withdrawal were assessed by the permittee during the Instream Flow Incremental Methodology (IFIM) study conducted upon the request of DEQ and the Virginia Department of Game and Inland Fisheries during their review of the project under Virginia's Coastal Zone Management Act. The IFIM study evaluated dam releases to the North Anna River and reviewed potential impacts on aquatic habitats and recreation in the North Anna and Pamunkey Rivers, including under low flow conditions. As a result of the IFIM study, it was concluded that the effects of the Unit 3 operational withdrawal would be mitigated by an increase of 3 inches in the normal target pool elevation of Lake Anna and the water level in the WHTF.

Based upon VWP Permit Program staff's review of this proposed activity, the proposed 3 inch increase in water elevation in the normal target pool of Lake Anna and the water level in WHTF has potential to result in a temporal change in shoreline wetland function and/or acreage. Compensation for the temporal change to shoreline wetlands associated with a permanent increase of 3 inches in the normal target pool elevation of Lake Anna and the water level in the Waste Heat Treatment Facility is proposed to be provided at a ratio of 1:1 (8.14 wetland credits) through the purchase of wetland credits from an approved wetland mitigation bank.

Transmission Line

The activities proposed with this portion of the project include the construction of an additional 500-kV transmission line to maintain grid reliability within the interconnection of the proposed Unit 3 into the existing transmission system. The proposed line will be constructed within an existing transmission corridor that is approximately 275 feet wide. The existing line begins at the NAPS substation and travels 15 miles east to the Ladysmith switching substation. The counties crossed by this proposed line are Louisa, Spotsylvania and Caroline Counties. No impacts to surface waters are proposed as part of these activities.

VWP Permit Program Comments

As mentioned in the document, Department of Environmental Quality, VWP Permit Program received a Joint Permit Application (JPA) on July 16, 2010, and addendums to the JPA on September 28, 2010, November 5, 2010 and December 15, 2010. These documents were also submitted to the USACE and Virginia Marine Resources Commission for their review and permitting. This JPA corresponds to Part I of the project. Dominion has submitted three separate VWP applications for three VWP Permits corresponding to three different parts of the current VWP permitting effort for the project. The three parts of the project are summarized below:

- Part I – Surface Water Construction Related Impacts, VWP Permit No. 10-1256. Part I of the project proposes surface water impacts related to construction activities. The activities reviewed include construction related activities to support Unit 3, Large Component Transport Route

related activities, and transmission line. The shoreline wetland impacts associated with a 3 inch increase in water elevation were included in this JPA; however, Dominion requested on December 20, 2010, that VWP Permit Program considered this activity under Part III (Major Water Withdrawal for Operational Activities) of the project instead of Part I in response to citizen concerns.

- Part II – Minor Surface Water Withdrawal for Construction Activities, VWP Permit No. 10-1496. Part II of the project proposes a minor surface water withdrawal for construction related activities. A JPA for a VWP permit for this activity was received on September 9, 2010.

- Part III – Major Surface Water Withdrawal for Operational Activities and Temporal Change to Shoreline Wetlands, Joint Permit Application No. 10-2001. Part III of the project proposes a major surface water withdrawal associated with the operational activities of Unit 3 and shoreline wetland impacts associated with a 3 inch increase in water elevation. A JPA for a VWP permit for this activity was received on December 20, 2010.

Staff understands the withdrawal of surface water from Lake Anna is an activity not regulated by the USACE.

Draft VWP permits for Part I (JPA No. 10-1256) and Part II (JPA No. 10-1496) were mailed to Dominion on January 10, 2011. Joint public hearings for both draft permits will be held on February 17, 2011. Staff is currently processing the application for Part III (JPA No. 10-2001). VWP Permit Program staff's determination of consistency for the VWP Permit Program for Parts I and II was made along with our analysis of the JPAs and evidenced by mailing draft VWP permits to the applicant. The proposed VWP permits for Parts I and II will be presented to the State Water Control Board for their consideration and final determination. Determination of consistency for Part III of the project will be made along with our analysis of the JPA and will be evidenced by a draft VWP permit for that portion of the project.

Should you have any questions, please contact Sarah Marsala at (703) 583-3898 or at Sarah.Marsala@deq.virginia.gov.

Respectfully,

Trisha M. Beasley

Trisha M. Beasley
Regional VWP Permit Program Manager

cc: David L. Davis, CPWD, PWS, Director, Office of Wetlands & Water Protection – VIA EMAIL

COMMONWEALTH of VIRGINIA

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

To: Ellie Irons, Environmental Impact Review Manager

From: Thomas Faha, Northern Regional Office

Date: April 28, 2011

Subject: NRO Comments on FCC for Combined Construction and Operating Permit for Proposed Unit 3 at North Anna Power Station

NRO has reviewed the comments with respect to VWP and VPDES regulations. All of the comments received as part of the Federal Consistency Certification public comment process have been previously received and addressed by DEQ as part of the VWP and VPDES permit issuance processes.

Attached are the following:

- A chart depicting the various VWP and VPDES permits that are anticipated for the addition of Unit 3 at the North Anna Nuclear Power Plant. This is attached to make clear the water related permits that Dominion must obtain from the Virginia State Water Control Board before it can construct and or operate Unit 3.

- A summary of comments DEQ received during the issuance process of two of three VWP permits as well as staff's response to each comment. This summary is divided into four sets of comments.

- A summary of comments DEQ received during the issuance process of VPDES permit VA0052451 in 2007.

The Virginia State Water Control Board (SWCB) issued two VWP permits, VWP Permit No. 10-1256 and VWP No. 10-1496, on April 15, 2011, authorizing impacts to surface waters from construction related activities and impacts from surface water withdrawals during construction related activities. In issuing the two permits, the SWCB determined those impacts to surface waters and the withdrawal of water for Unit 3 construction related activities do not contravene Virginia's water quality standards if the activities are in accordance with the permits. DEQ is currently working on a third VWP permit for a major surface water withdrawal for the operation of Unit 3. The attached summary of comments and staff responses includes comments concerning this withdrawal. As this permit process is ongoing, staff has no additional responses to those in the attachments; the SWCB will act on this permit later this year.

With regards to comments received concerning the VPDES permit, specifically, the operation of and the temperature within the Waste Heat Treatment Facility, the SWCB answered these questions when it issued VPDES permit VA0052451 in 2007. A copy of the summary of comments received, and staff's response, for that permit is also attached. With regard to those comments concerning the appeal of that permit, which are not in the attached summary, DEQ's position is that in accordance with the August 2010 Court of Appeals ruling, VPDES permit VA0052451 was prepared correctly and issued correctly and no alterations is required. DEQ has not received any applications for the VPDES permits in the attached chart.

SUMMARY OF NORTH ANNA POWER STATION ACTIVITIES REGULATED BY VWP AND VPDES

UNIT(S) REGULATED	PROGRAM	ACTIVITIES REGULATED	DESCRIPTION OF ACTIVITIES	PERMIT NO.	PERMIT ACTION REQUIRED	PERMIT TERM	EXP. DATE
Unit 3 (proposed)	VWP	Impact to surface waters	Impacts to surface waters associated with: ▪ Construction related activities to support Unit 3 ▪ Large Component Transport Route	draft VWP Permit No. 10-1256 (Part I)	New Permit	15 years (proposed)	TBD
		Withdrawal from surface water	Minor water withdrawal for construction related activities: ▪ Dust and moisture control ▪ Cleaning of rock surfaces prior to inspection ▪ Irrigation to establish vegetative erosion and sediment control measures ▪ Construction equipment cleaning ▪ Fire protection	draft VWP Permit No. 10-1496 (Part II)	New Permit	15 years (proposed)	TBD
		Withdrawal from surface water / Lake level rise	▪ Major water withdrawal for operation of Unit 3 ▪ Temporal change to shoreline wetlands associated with a proposed 3 inch increase in water levels	Application under review (JPA No. 10-2001) (Part III)	New Permit	15 years (proposed)	TBD
	VPDES	Discharge to surface waters	Anticipate the following activities: ▪ Industrial Process Discharges ▪ Domestic Wastewater Discharges ▪ Industrial Storm Water Discharges	VA0052451 (application not received)	Modification / Reissuance	5 years	TBD
			Work Force Construction Wastewater ▪ Discharge from a proposed wastewater treatment plant utilized during construction only	N/A (application not received)	New Permit	5 years	TBD
			Proposed Wastewater Treatment Plant ▪ General Watershed Permit For Total Nitrogen And Total Phosphorus Discharges And Nutrient Trading In The Chesapeake Bay Watershed ▪ Nitrogen and Phosphorus discharges from new or expanding wastewater treatment plants	N/A (application not received)	New Permit	5 years	TBD
Units 1 and 2 (existing)	VWP	Withdrawal from surface water	Water withdrawal for operation of existing Units 1 and 2	N/A	Excluded by 9VAC25-210-60.B.1	N/A	N/A
	VPDES	Discharge to surface waters	▪ Industrial Process Discharges ▪ Domestic Wastewater Discharges ▪ Industrial Storm Water Discharges	VA0052451	Existing Permit	5 years	10-24-12

Douglas W. Domenech
Secretary of Natural Resources

David A. Johnson
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

MEMORANDUM

DATE: January 7, 2011

TO: John Fisher, DEQ

FROM: Roberta Rhur, DCR, Environmental Impact Review Coordinator

SUBJECT: DEQ 10-167F, Nuclear Regulatory Commission - Combined License 7 US Army Corps of Engineers Permit for North Anna Power Station Unit 3

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

North Anna 3 Project Site

According to the information currently in our files, this site may support habitat appropriate for Small whorled pogonia (*Isotria medeoloides*, G2/S2/LT/LE) in forested areas within the proposed project areas. Small whorled pogonia grows in a variety of woodland habitats in Virginia, but tends to favor mid-aged woodland habitats on gently north or northeast facing slopes often within small draws. Direct destruction as well as habitat loss and alteration are principle reasons for the species' decline (Ware, 1991). Please note that Small whorled pogonia is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS).

DCR has reviewed the Survey for the Small Whorled Pogonia North Anna Power Station dated June 4, 2010 and concurs with the methodology and negative findings of the report. However, due to the legal status of this species, DCR recommends coordination with the USFWS to ensure compliance with protected species legislation.

North Anna to Ladysmith Transmission Corridor

According to the information currently in our files, the Blanton's Powerline Conservation Site is within the powerline corridor. Conservation sites are tools for representing key areas of the landscape that

warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant.

The Blanton's Powerline Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources occurring within this conservation site are:

Stachys eplingii	Epling's Hedge-nettle	G5/S1/NL/NL
Carex buxbaumii	Brown Bog Sedge	G5/S2/NL/NL
Dichanthelium consanguineum	Blood Witchgrass	G5/S1?/NL/NL

DCR concurs with the findings of the July 2010 Detailed Survey for the Epling's Hedge-nettle, Blanton's Powerline Conservation Site. DCR supports avoidance of these rare plants within the powerline right-of-way during project construction and maintenance activities through the use of the existing service road within the transmission line corridor as well as strict adherence to E & S control measures as stated on page 3 of 4 of the survey report.

Large Component Transport Route

In addition, Swamp pink (*Helonias bullata*, G3/S2S3/LT/LE) may occur in specific areas along the large component transport corridor, Swamp pink inhabits groundwater-influenced, perennially saturated, nutrient-poor headwater wetlands and is sensitive to hydrologic alterations to its habitat. The major direct threat to this species is habitat loss. Indirect threats result from activities that affect the hydrologic regime including such upslope activities as timber harvesting, land clearing and development, and agriculture. Downstream threats to the hydrology of a swamp pink habitat arise from flooding caused by road crossings with culverts that become blocked and beaver activity (VanAlstine, 1994). In Virginia, swamp-pink is currently known from 45 locations, 3 of which are historic.

Please note that this species is currently classified as threatened by the United States Fish and Wildlife Service (USFWS) and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS)

According to the information provided, existing roads will be used for this project activity therefore DCR does not anticipate impact to Swamp pink. However, if the scope of the project changes including road widening, DCR requests re-coordination with this office to determine potential impacts.

Walkerton Roll-off Location

According to the information currently in our files, the Walkerton-Horse Landing Conservation Site has been documented within the project site at the Walkerton Roll-off location. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's

conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Walkerton-Horse Landing Conservation Site has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resources of concern at this site are:

Haliaeetus leucocephalus	Bald Eagle	G5/S2S3B,S3N/NL/NL
Bacopa innominata	Tropical Water-hyssop	G3G5/S2/NL/NL
Eriocaulon parkeri	Parker's Pipewort	G3/S2/NL/NL

The Bald Eagle breeds from Alaska eastward through Canada and the Great Lakes region, along coastal areas off the Pacific and Atlantic Oceans, and the Gulf of Mexico, and in pockets throughout the western United States (NatureServe, 2009). In Virginia, it primarily breeds along the large Atlantic slope rivers (James, Rappahannock, Potomac, etc) with a few records at inland sites near large reservoirs (Byrd, 1991). Bald Eagle nest sites are often found in the midst of large wooded areas near marshes or other bodies of water (Byrd, 1991). Bald Eagles feed on fish, waterfowl, seabirds (Campbell et. al., 1990), various mammals and carrion (Terres, 1980). Please note that this species is currently classified as threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

Threats to this species include human disturbance of nest sites (Byrd, 1991), habitat loss, biocide contamination, decreasing food supply and illegal shooting (Herkert, 1992). Due to the legal status of the Bald eagle, DCR recommends coordination with VDGIF to ensure compliance with protected species legislation.

Tropical water-hyssop, a state endangered species, has been documented in the meandering sections of tidal tributaries to the Chesapeake Bay on narrow shores or on the borders of freshwater marshes (Porter, 1991; Rawinski, 1987). Threats to tropical water-hyssop in Virginia include erosion and activities leading to wetland destruction such as shoreline development activities, impoundments, and marina development (Virginia Natural Heritage Program, 1988). Tropical water-hyssop is currently known from 13 locations in Virginia, of which 5 occurrences are historic.

Parker's pipewort is classified as very rare to uncommon in Virginia. This diminutive pipewort species displays a greyish-white button flower and often occurs with other rare mudwort species in the intertidal zone of tidal regions from Maine to North Carolina. Potential threats include activities that alter natural river currents causing sedimentation, which could inhibit germination of seeds or smother seedlings, and/or erosion of the habitat. Other potential threats include activities that result in increased salinity levels, water pollution, and displacement by aggressive species (J. C. Ludwig, 1996). Parker's pipewort is known from 21 current occurrences in Virginia, and 9 historic occurrences.

In addition, Small waterwort (*Elatine minima*, G5/S1/NL/NL) has been historically documented in the project area. Small waterwort is often found in the same intertidal habitats as Parker's pipewort and tropical water-hyssop: narrow shores and marsh edges (J.C. Ludwig, pers. com.). Virginia is the southern limit of this species range, where it is limited to three counties. These tiny plants reach less than two inches in height. At the base of their leaves, pin-head sized, transparent pod contain the plant's seeds (Hotchkiss, 1972). Small waterwort is known from three locations in Virginia.

DCR has reviewed the September 2010 Survey of Submerged Aquatic Vegetation (SAV) and Other Aquatic Habitats of the Mattaponi River associated with the proposed Large Component Transport Route and concurs with the findings. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations.

Our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Shirl Dressler at (804) 367-6913.

Division of State Parks

The Division of State Parks has determined that Lake Anna State Park will be impacted by the proposed 3 inch normal pool rise in Lake Anna as a result of Unit 3. At this time we are unable to determine the full impact to the park due to the proposed lake level increase and request a representative from Dominion Virginia Power contact Warren Wahl at (804) 786-5055 or Warren.Wahl@dcr.virginia.gov to discuss potential impacts to the park.

Division of Chesapeake Bay Local Assistance

The proposed temporary large component off-loading location, along the Mattaponi River, is within King William County. In King William County, the areas protected by the *Chesapeake Bay Preservation Act*, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores, and a minimum 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include all areas of the county not included in the RPA. The temporary off-loading area is located within the 100' RPA buffer. While the temporary off-loading activity is considered to be water-dependent and therefore permitted, any land disturbance and resulting removal of vegetation within the 100' RPA buffer must be mitigated once the temporary off-loading activity has concluded. This mitigation should be done in accordance with the Division's *Riparian Buffers Modification and Mitigation Guidance Manual.*

Regarding the proposed electric transmission line, Section 9 VAC 10-20-150 B 1 of the Regulations, electric transmission lines and their appurtenant structures are conditionally exempt from the Regulations provided that their construction, installation, operation, and maintenance are in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law (§ 10.1-560 et seq. of the Code of Virginia) and the Virginia Stormwater Management Act (§ 10.1-603.1 et seq. of the Code of Virginia), (ii) and erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation, or (iii) local water quality protection criteria at least as stringent as the above state requirements.

The proposed surface water and wetland impacts associated with the North Anna Power Station Unit 3 improvements are not subject to the Regulations and therefore the Division of Chesapeake Bay Local Assistance has no comments on these aspects of the project.

The proposed construction related improvements associated with the North Anna Power Station Unit 3 improvements are not located within an area that is covered by the Regulations and therefore the Division of Chesapeake Bay Local Assistance has no comments on this aspect of the project.

Provided adherence to the above requirements, the project would be acceptable under the *Chesapeake Bay Preservation Area Designation and Management Regulations.*

Division of Soil and Water Conservation

Erosion & Sediment Control:
The property owner is responsible for submitting a project specific erosion and sediment control (ESC) plan to Louisa County for review and approval pursuant to the local ESC requirements, if the project involves a land-disturbing activity of equal to or greater than 10,000 square feet. Depending on local requirements the area of land-disturbance requiring an ESC plan may be less. The ESC plan must be approved by the locality prior to any land-disturbing activity at the project site. All regulated land-disturbing activities associated with the project, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project must be covered by the project specific ESC plan. Local ESC program requirements must be requested through the local government. [Reference: Virginia Erosion and Sediment Control Law §10.1-563; Virginia Erosion and Sediment Control Regulations §4VAC50-30-30, §4VAC50-30-40]

Stormwater Management:
Dependent on local requirements, a Stormwater Management (SWM) plan may be required. Local SWM program requirements must be requested through the county. [Reference: Virginia Stormwater Management Act §10.1-603.3; Virginia Stormwater Management (VSMP) Permit Regulations §4VAC50-60-110]

General Permit for Discharges of Stormwater from Construction Activities:
The operator or owner of construction activities involving land disturbing activities equal to or greater than one acre are required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). Construction activities requiring registration also includes the land-disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will ultimately disturb equal to or greater than one acre. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Permit Regulations. General information and registration forms for the General Permit are available on DCR's website at
http://www.dcr.virginia.gov/soil_and_water/index.shtml
[Reference: Virginia Stormwater Management Law Act §10.1-603.1 et seq.; VSMP Permit Regulations §4VAC-50 et seq.]

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

CC: Tylan Dean, USFWS
Ernie Aschenbach, VDGIF

Literature Cited

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Porter D.M. 1991. Mat-forming water-hyssop. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia. pp. 141-143.

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Virginia Natural Heritage Program. 1988. Status survey report for *Bacopa stragula* (Mat-forming Water-hyssop) in Virginia. Unpublished report submitted to the Department of Agriculture and Consumer Services, Bureau of Plant Protection and Pesticide Regulation.

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: John E. Fisher **DEQ - OEIA PROJECT NUMBER: 10 – 167F**

PROJECT TYPE: ☐ STATE EA / EIR **X FEDERAL EA / EIS** ☐ SCC

X CONSISTENCY CERTIFICATION

PROJECT TITLE: COMBINED LICENCE & U. S. ARMY CORPS OF ENGINEERS PERMIT FOR NORTH ANNA POWER STATION UNIT 3

PROJECT SPONSOR: NUCLEAR REGULATORY COMMISSION

PROJECT LOCATION: **X PARTLY OZONE MAINTENANCE AND EMISSION CONTROL AREA FOR NOX & VOC**

REGULATORY REQUIREMENTSMAY BE APPLICABLE TO:
X CONSTRUCTION
X OPERATION

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

1. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 F – STAGE II Vapor Recovery
3. ☐ 9 VAC 5-40-5490 et seq. – Asphalt Paving operations
4. **X 9 VAC 5-130 et seq. – Open Burning**
5. **X 9 VAC 5-50-60 et seq. Fugitive Dust Emissions**
6. ☐ 9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to_____
7. ☐ 9 VAC 5-50-160 et seq. – Standards of Performance for Toxic Pollutants
8. ☐ 9 VAC 5-50-400 Subpart_____, Standards of Performance for New Stationary Sources, designates standards of performance for the_____
9. ☐ 9 VAC 5-80-10 et seq. of the regulations – Permits for Stationary Sources
10. ☐ 9 VAC 5-80-1700 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the _____
11. ☐ 9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
12. ☐ 9 VAC 5-80-800 et seq. Of the regulations – Operating Permits and exemptions. This rule may be applicable to _____

COMMENTS SPECIFIC TO THE PROJECT:

All precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_X) during construction activities in Spotsylvania and Hanover counties. For construction & operation permit needs our Northern Virginia Regional Office.

K. S. Narasimhan

(Kotur S. Narasimhan)
Office of Air Data Analysis **DATE: December 3, 2010**

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

MEMORANDUM

TO: John Fisher, Environmental Program Planner

FROM: Paul Kohler, Waste Division Environmental Review Coordinator

DATE: January 12, 2011

COPIES: Sanjay Thirunagari, Waste Division Environmental Review Manager; file

SUBJECT: Environmental Impact Report: Combined License & U.S. Army Corps of Engineers Permit for North Anna Power Stations Unit 3; 10-167F

The Waste Division has completed its review of the Environmental Impact report for the Combined License & U.S. Army Corps of Engineers Permit for North Anna Power Stations Unit 3 project in Louisa County, Virginia. We have the following comments concerning the waste issues associated with this project:

Activities associated with the proposed Unit 3 project can be divided into five different components. The components are: (1) construction of Unit 3 at the NAPS site, including site separation activities that will occur prior to the construction of Unit 3, (2) additions to the existing NAPS-to-Ladysmith transmission line, (3) modifications to the large component transport route (LCTR), (4) the placement of construction material on the Route 700 parcels near the entrance to the NAPS site, and (5) operation of Unit 3. Component 5, however, is not a subject of this review.

Regarding component 1, both solid and hazardous waste issues were addressed in the report. The report did include a search of waste-related data bases. The Waste Division staff conducted a cursory review of its data files including a GIS database search in the vicinity of the North Anna Power Station, but did not identify any waste sites that would impact or be impacted by the proposed construction. The power station facility itself is a hazardous waste storage, treatment or disposal facility (TSDF) (VAD065376279, NORTH ANNA POWER STATION, TSDF).

Regarding component 4, the Route 700 parcels are located within the same zip code as component 1. Therefore, comments for component 1 are also applicable to component 4.

Regarding components 2 and 3, the existing NAPS-to-Ladysmith transmission line and the modifications to the large component transport route respectively, these components cross numerous zip codes. Therefore, for these components, the applicant should conduct an environmental investigation on and near the property to identify any solid or hazardous waste

sites or issues before work can commence. This investigation should include a search of waste-related databases. Please see the attached page regarding this database search.

Kathryn Perszyk and Willard Keene of DEQ's solid waste and hazardous waste programs respectively were contacted for their review of this determination and their comments are as follows.

> Paul,
> I'm not seeing any solid waste permitting issues here.
>
> Kathryn J. Perszyk

> Paul,
>
> The only comment that I have related to this request is related to the relocation of the existing paint shop, vehicle maintenance shop. The facility would need to ensure that any HW either currently managed or generated as a result of relocation activities are handled in accordance with the VHWMR. According to RCRAInfo, North Anna Power Station is a Small Quantity Generator of hazardous waste. If the facility managed any waste in tanks in these areas as a Small Quantity Generator the regulations require the removal of all hazardous waste from such tanks, discharge control equipment, and discharge confinement structures as specified in 40 CFR 265.201(d)). Any hazardous waste that may be generated as a result of construction activities must be managed in accordance with the VHWMR. If you have any questions, please let me know.
>
> Please note that this email should not be considered a legal opinion or a case decision as defined by the Administrative Process Act, Code of Virginia § 2.2-4000 et seq.

Any soil that is suspected of contamination or wastes that are generated during construction-related activities must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous materials, 49 CFR Part 107.

Also, all structures being demolished/renovated/ removed should be checked for asbestos-containing materials (ACM) and lead-based paint prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed.

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Paul Kohler at (804) 698-4208.

Attachment: Waste Information

Waste Information

There are four Waste Division databases that are to be used to complete this review. These are the Solid Waste Database, CERCLA Facilities, Voluntary Remediation Program, and Hazardous Waste Facilities databases.

The Solid Waste Database
A list of active solid waste facilities in Virginia.

CERCLA Facilities Database
A list of active and archived CERCLA (EPA Superfund Program) sites.

Hazardous Waste Facilities Database
A list of hazardous waste generators, hazardous waste transporters, and hazardous waste storage and disposal facilities. Data for the CERCLA Facilities and Hazardous Waste Facilities databases are periodically downloaded by the Waste Division from U.S. EPA's website.

Accessing the DEQ Databases:
The report author should access this information on the DEQ website at http://www.deq.state.va.us/waste/waste.html . Scroll down to the databases which are listed under Real Estate Search Information heading.

The ***solid waste information*** can be accessed by clicking on the Solid Waste Database tab and opening the file. Type the county or city name and the word County or City, and click the Preview tab. All active solid waste facilities in that locality will be listed.

The ***Superfund information*** will be listed by clicking on the Search EPA's CERCLIS database tab and opening the file. Click on the locality box, click on sort, then click on Datasheet View. Scroll to the locality of interest.

The ***hazardous waste*** information can be accessed by clicking on the Hazardous Waste Facility tab. Go to the Geography Search section and fill in the name of the city or county and VA in the state block, and hit enter. The hazardous waste facilities in the locality will be listed.

The ***Voluntary Remediation Program*** GPS database can be accessed by clicking on "Voluntary Remediation," then "What's in my backyard" in the center shaded area, and then under "Mapping Applications," click on "What's in my backyard" again.

This database search will include most waste-related site information for each locality. In many cases, especially when the project is located in an urban area, the database output for that locality will be extensive.

Fisher, John (DEQ)

From: Matthews, Barry (VDH)
Sent: Wednesday, January 05, 2011 11:00 AM
To: Fisher, John (DEQ)
Cc: LePrell, Rebecca (VDH); Dietrich, Daniel (VDH)
Subject: RE: EPI-DEE response to DEQ request for comments re: Lake Anna Power Station
Attachments: DEQComments_DRD_RL.DOC

John –

I understand that the first request was for consistency; however, VDH's Office of Epidemiology did provide the attached comments at that time and are a re-statement of comments made in 2006. These concerns have not changed in the intervening years. Please use the attached as our comments of record for the formal analysis by the Virginia Department of Health.

Barry E. Matthews, P.G.
Department of Health
James Madison Building
Office of Drinking Water, Room 621
Construction Assistance, Planning and Policy
109 Governor Street
Richmond, VA 23219
804 864-7515 (w)
804 864-7520 (fax)
barry.matthews@vdh.virginia.gov

From: Dietrich, Daniel (VDH)
Sent: Friday, October 29, 2010 1:04 PM
To: Matthews, Barry (VDH)
Cc: LePrell, Rebecca (VDH)
Subject: EPI-DEE response to DEQ request for comments re: Lake Anna Power Station

Barry:

Please find attached the Division of Environmental Epidemiology's requested comments.

Sincerely,
Dan Dietrich, MS
Program Coordinator, Waterborne Hazards Control
Virginia Department of Health, Office of Epidemiology
Division of Environmental Epidemiology
109 Governor St, Suite 414 West
Richmond, VA 23218
ph: 804.864.8128
fax: 804.864.8131
cell: 804.239.9723

TO: VIRGINIA DEPARTMENT OF HEALTH, OFFICE OF DRINKING WATER

FROM: DAN DIETRICH, REBECCA LEPRELL, VIRGINIA DEPARTMENT OF HEALTH (VDH), OFFICE OF EPIDEMIOLOGY, DIVISION OF ENVIRONMENTAL EPIDEMIOLOGY

SUBJECT: DEQ REQUEST DATED 10/18/2010 FOR VDH COMMENTS REGARDING A FEDERAL CONSISTENCY DETERMINATION – NORTH ANNA POWER STATION

DATE: 1/5/2011~~10/29/2010~~

Summary of DEQ comments request:

DEQ seeks "Virginia resource agency" input regarding the possible installation and operation of a third nuclear reactor at the North Anna Power Station (NAPS). DEQ requests materials be reviewed and we respond with regard to whether there is sufficient information and analysis to address issues under our jurisdiction.

Summary of Dominion Virginia Power federal consistency certification for a combined license documentation dated 9/30/2010:

Dominion Virginia Power (Dominion) has submitted documentation to DEQ required to address permitting concerns related to the possible construction and operation of a third nuclear reactor at the NAPS. This document addresses DEQ comments and feedback provided to Dominion in 2006 regarding permitting requirements. Specific topics addressed include:

- Management of habitat for fish and wildlife
- Heavy equipment access to the site
- Waste heat water discharges (point source pollution)
- Lake level and downstream water releases to maintain water flow
- Public recreation impacts

Background

VDH responded to DEQ requests for comments regarding potential health affects that may result from increased water temperatures due to more waste heat discharge in a July 2006 letter to DEQ. DEQ, in its November 2006 letter to

Dominion, included VDH comments and recommendations regarding heat-related concerns which were namely:

- Swimming in waters greater than 113ºF may result in burns, depending on contact time

- Swimming in waters greater than 104 ºF should be avoided

- Waters greater than 95 ºF may increase the risk of acquiring primary amebic meningoencephalitis (PAM) and people should avoid water exposure altogether or should avoid forceful entry of water up nasal passages.

VDH in its July 2006 response to DEQ did not recommend that signs be posted warning the public of these concerns in portions of Lake Anna that have elevated temperatures.

Comments

- Dominion states that the operation of a third nuclear reactor would not result in an increase in the amount of "detectable heat" in the lake. (Dominion document, p. 32)

- Dominion states that "Lake Anna was created specifically to meet the water requirements for the NAPS." They further state that adverse effects on recreational use of the lake at Lake Anna State Park are not expected from construction and operation of a third nuclear reactor. (Dominion document, p. 28)

- Elevated ambient water temperatures' potential to result in elevated public health risks is not specifically addressed.

- VDH previously recommended avoiding recreational swimming use in waters where temperatures were elevated. VDH did not recommend that warning signs be posted or similar public notification be incorporated by Dominion in its operational plans in 2006 comments to DEQ.

- VDH recommends warning signs be posted in areas where waters have exceeded or have the potential to exceed 104ºF. Supporting information on the areal extent of lake water that has exceeded or may exceed 104ºF would further assist VDH in managing public health risks potentially related to Lake Anna.

- Dominion states that the water temperature would not increase in the lake. Based on this assertion, it is reasonable to assume that existing heat and

microbial-related illness risks would not change if a third nuclear reactor was operating at NAPS.

Fisher, John (DEQ)

From: Croonenberghs, Robert (VDH)
Sent: Tuesday, February 08, 2011 12:05 PM
To: Fisher, John (DEQ)
Cc: Skiles, Keith (VDH)
Subject: RE: Invitation to Participate in NAPS Informational Session

John:

There would not be a potential impact to public health aspects of shellfish at this site.

Bob

From: Fisher, John (DEQ)
Sent: Tuesday, February 08, 2011 11:20 AM
To: Croonenberghs, Robert (VDH)
Subject: RE: Invitation to Participate in NAPS Informational Session

Bob:

One component of this project is the construction of a wharf on the Mattaponi River at Walkerton in King William County for the unloading of large components of the reactor from barges. Is there any potential to impact shellfish resources at this site?

John

John E. Fisher
Virginia Department of Environmental Quality
Division of Environmental Enhancement
Office of Environmental Impact Review
629 East Main Street, #634
Richmond, Virginia 23219
(804) 698-4339
(804) 698-4319 fax
john.fisher@deq.virginia.gov
www.deq.virginia.gov

From: Croonenberghs, Robert (VDH)
Sent: Tuesday, February 08, 2011 11:07 AM
To: Fisher, John (DEQ)
Cc: Knapp, Allen (VDH); Skiles, Keith (VDH)
Subject: RE: Invitation to Participate in NAPS Informational Session

John,

The Division of Shellfish Sanitation will not participate in this because the permit does not affect shellfish growing waters.
Bob

From: Fisher, John (DEQ)
Sent: Tuesday, February 08, 2011 9:11 AM
To: Knapp, Allen (VDH); Croonenberghs, Robert (VDH)
Subject: FW: Invitation to Participate in NAPS Informational Session

Fisher, John (DEQ)

From: Lunney, Melanie [Melanie.Lunney@VDOT.Virginia.gov]
Sent: Thursday, December 16, 2010 9:47 AM
To: Fisher, John (DEQ)
Subject: FW: Combined Licence & Corp Permit for NAPS Unit 3 - DEQ # 10-167F

John,

The Culpeper District Planning section has also reviewed the above referenced project and has provided the following comments. Comments were provided to you from the Fredericksburg District Planning section on Wednesday, December 15th. Please notify if there are any questions. I am aware these comments are being submitted after the requested deadline.

Melanie Allen Lunney
Environmental Program Planner
melanie.lunney@vdot.virginia.gov | 804-786-0868 | 1401 E. Broad Street Richmond, VA 23219

From: Proctor, Charles C.
Sent: Wednesday, December 15, 2010 5:08 PM
To: Lunney, Melanie
Cc: Barron, L. Marshall; Haynes, Stephen P.; Svejkovsky, Ronald
Subject: Combined Licence & Corp Permit for NAPS Unit 3 - DEQ # 10-167F

Melanie,

I have completed my review of the Combined License & U.S. Army Corps of Engineer Permit for North Anna Power Station Unit 3 under development by Dominion Power and have the following comments:

- This project has been reviewed a number of times over the past several years;
- The Traffic Impact section of the document appears to be consistence with the previous document;
- The study states that VDOT "would work with Dominion to ensure the roads in the vicinity of the NAPS site are maintained and necessary improvements are in place prior to any major activities at the project site.";
- The study states that "VDOT has requested a traffic impact analysis from Dominion; this analysis would compare the current background traffic levels in the area with future traffic, including traffic during construction ("total traffic"), and would identify areas of potential impacts. The impacts, which would include both temporary (construction) and permanent impacts, are the responsibility of Dominion. The traffic impact analysis will provide mitigation measures to reduce the impacts.";
- The study also states that "Dominion would develop and implement a construction management traffic plan to reduce roadway congestion in the vicinity of the NAPS site and coordinate with VDOT and local jurisdictions on transportation related issues";
- The study also identified a Large Component Transport Route. This route will need to be closely evaluated by VDOT and Dominion to ensure the facilities are adequate for this type of use, and to identify the necessary improvements that will be required to these facilities.

Some additional items of concern are:

- The affected area around the site will involve coordination with several district (i.e. Richmond, Fredericksburg, and Culpeper) to ensure that the impacted areas are identified and mitigated;
- In some of the earlier documentation there was discussed the use of rail for material transport to the site. This should be throughly explored and well documented before discounted;
- As stated in comments dated November 8, 2010 and initial prescoping meeting for the Traffic Impact study was held on Nov. 18, 2010 with some preliminary discussion on some of the above issues and the need to coordinate these with various VDOT departments in mulitiply district.

These are the main points identified in the study that are pertain the transportation.

Let me know if there are any questions.

Chuck

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Please consider the environment before printing this email.

Virginia Department of Transportation

Fredericksburg District Planning Office
86 Deacon Road
Fredericksburg, Virginia 22405

Review of:
FEDERAL CONSISTENCY CERTIFICATION
FOR A COMBINED LICENSE (COL) AND
UNITED STATES ARMY CORPS OF ENGINEERS PERMIT
FOR NORTH ANNA POWER STATION UNIT 3:
Supplement to November 21, 2006 VDEQ Conditional
Concurrence for Early Site Permit (ESP)

DATE: **December 08, 2010**
TO: **Melanie Allen, Environmental Program Planner**

FROM: **Stephen Haynes, Assistant Planning Manager**
SUBJECT: **Review of Dominion North Anna Unit 3 Supplemental CZMA Certification**

This office has reviewed the "Dominion North Anna Unit 3 Supplemental CZMA Certification" and associated attachments. We offer the following comments.

Note: Please relate all comments to the attached map.

Three distinct activities will affect transportation within the VDOT Fredericksburg District. They are:

1. Temporary traffic associated with construction of Unit 3 (reactor/generator)
2. Temporary traffic associated with the construction of the transmission line
3. Permanent traffic associated with the upgraded North Anna Power Station (NAPS)

The document states that, "The (traffic) impacts, which would include both temporary (construction) and permanent impacts, are the responsibility of Dominion."

Furthermore, the document states, "VDOT has requested a traffic impact analysis from Dominion; this analysis would compare the current background traffic levels in the area with future traffic, including traffic during construction ("total traffic"), and would identify areas of potential impacts," and, "The traffic impact analysis will provide mitigation measures to reduce the impacts. In accordance with the VDOT responses, Dominion would develop and implement a construction management traffic plan to reduce roadway congestion in the vicinity of the NAPS."

This TIA has not been received by VDOT. Until such time as a TIA is available, our comments are largely speculative.

The reviewed document did not address the routing of general construction traffic and the transport of most construction materials. While NAPS is located in Louisa County, a great deal of construction traffic will access the site by way of roads leading in from Caroline and Spotsylvania Counties. It should be anticipated that significant volumes of vehicles will travel along Route 208 from the populated area in the vicinity of the City of Fredericksburg and from I-95 to the north. (The commuting pattern of current NAPS employees may reflect this, to some degree.) Additional trips bound for NAPS will depart I-95 at Exits 104, 110, 118 and 126. Most of these trips will travel several miles on the system of Secondary Roads. These patterns may or may not mimic current commuter patterns to and from NAPS. All of these potential routings should be analyzed in the suggested TIA for both the construction phase and the post-construction phase of Unit 3 and associated improvements.

Large items bound for NAPS will be transported up the Mattaponi River by barge to King William County opposite Walkerton, Virginia, where they will be loaded onto trucks and transported to the construction site along State Highways.

This route - the "Large Component Transport Route" - is represented on the attached map in dark red. It begins at Walkerton, and follows Route 629 for two miles south to Route 30, then westward on Route 30 before leaving the Fredericksburg District at the North Anna River crossing. (The remaining portions of the LCTR are in Hanover County and Louisa County, which are in the Richmond and Culpeper Districts respectively.) Significant hindrances along the route include the narrowness of Route 629, the significant traffic volume on Route 30 and the intersections of Primary Routes 360 and 301. The majority of the LCTR within the Fredericksburg District is not elaborated upon in the document. Mention is briefly made of a temporary river crossing structure at the North Anna River on Route 30. While no explanation is offered, it is assumed that the existing bridge has inadequate capacity, in some way. This temporary structure will require right-of-way or easement in two counties/districts in order to construct/operate/remove. From the North Anna River westward, the LCTR is located outside the Fredericksburg District. The document states, "In locations where culverts and pipes require additional protection to support the loads, steel plating or crane mats will be used. Replacement or improvement of existing culverts and pipes is not expected to be necessary." Additional details of this procedure and the locations proposed are needed in order to properly analyze this statement. Furthermore, general details regarding truck width, length, weight, speed, etc. are needed in order for us to provide constructive comments.

The construction of a 500 kV transmission line between NAPS and the Ladysmith Substation (to be located entirely within the existing transmission corridor) will place large vehicles on several secondary roads in Caroline and Spotsylvania Counties. Some of the routes that may be affected are shown in yellow on the map. It would seem logical that equipment will exit I-95 at Ladysmith, although several other viable options exist. No details on this matter are included in the document. The traffic impact analysis should include all interchanges indicated on the map as well as the intersections of Route 1 with the various connecting roads.

It is likely that frequent interruptions in service will occur on the highways affected by various aspects of the construction of Unit 3. The details of these interruptions should be made known to VDOT as soon as information becomes available.

Currently funded VDOT construction projects located within the realm of the NAPS proposal are:

UPC #18115, 95516, 93253 **Route 208** - Courthouse Bypass - Phase II in Spotsylvania County - Under Construction

UPC #78621 **Route 639** - Spot improvement (turn lanes) between Route 1 and I-95 in Caroline County - Advertisement scheduled for 2012

UPC #86081 **I-95** - Interchange improvements @ Exit #104 - Relocation of Route F-160 in Caroline County - Advertisement scheduled for 2013

UPC #10614 **Route 604** - Reconstruction - King William County - Note: Minor impact to Route 30 - Advertisement scheduled for 2013

UPC #74838 **Route 659** - Surface-treatment of unpaved road - Spotsylvania County - Note: Minor impact to Route 208 - Advertisement scheduled for 2032

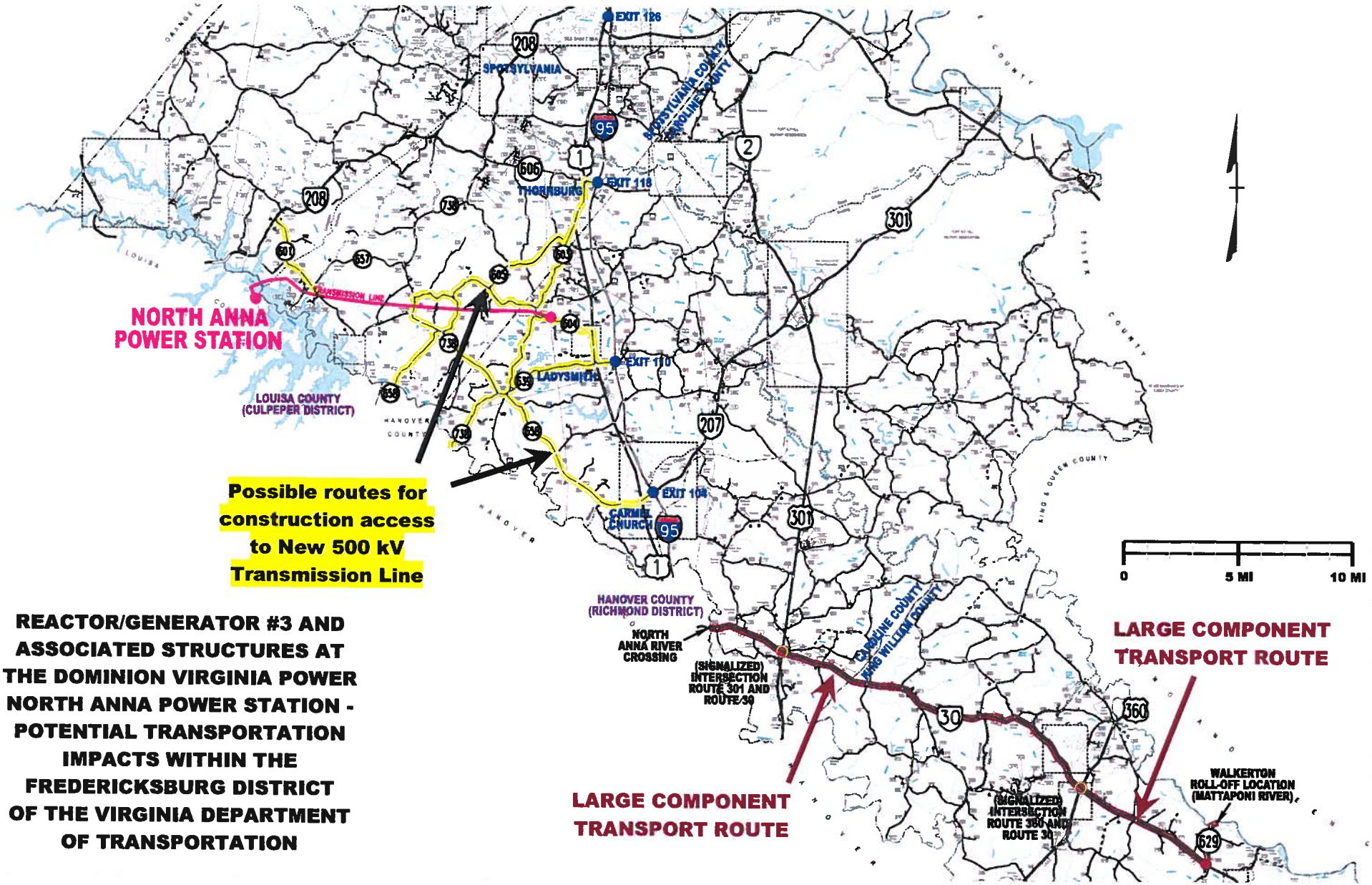
UPC #93136 **Route 1** - Construction of turn lanes at Route 606 – Spotsylvania County – Advertisement is currently unscheduled

Significant maintenance and paving operations occur regularly.

U.S. Bicycle Route 1 follows Route 603 in Caroline County. Any construction activities or transportation of materials on this road should provide for bicycle accommodation.

As the schedule for NAPS Unit 3 becomes clearer, VDOT should be contacted for details on such activities, as well as any additions to the list of construction projects.

Thank you for the opportunity to comment on this project.



REACTOR/GENERATOR #3 AND ASSOCIATED STRUCTURES AT THE DOMINION VIRGINIA POWER NORTH ANNA POWER STATION - POTENTIAL TRANSPORTATION IMPACTS WITHIN THE FREDERICKSBURG DISTRICT OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION

Fisher, John (DEQ)

From: Kirchen, Roger (DHR)
Sent: Tuesday, December 28, 2010 10:46 AM
To: Fisher, John (DEQ)
Subject: Combined License for North Anna Power Station Unit 3 (DEQ #10-167F; DHR File No. 2000-1210)

DHR has been in direct consultation with the Nuclear Regulatory Commission and Virginia Dominion Power regarding the potential impacts of this project on historic resources. Please request that the NRC and the US Army Corps of Engineers continue to consult with us pursuant Section 106 of the National Historic Preservation Act.

Roger

Roger W. Kirchen, Archaeologist
Office of Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221
phone: (804) 367-2323 x153
fax: (804) 367-2391
web: www.dhr.virginia.gov

*** Learn more about DHR's ePIX - Electronic Project Information Exchange ***

Fisher, John (DEQ)

From: Groh, Todd (DOF)
Sent: Tuesday, February 08, 2011 1:00 PM
To: Fisher, John (DEQ)
Subject: Combined License & US Army Corps of Engineers Permit for North Anna Power Station Unit 3

John,

Better late then never... I hope.

Combined License & U.S. Army Corps of Engineers Permit for North Anna Power Station Unit 3, Project #10-167F

The Department of Forestry finds no significant impact to the forest resources of the Commonwealth for this project.

Todd A. Groh, Assistant Director
Forest Resource Management Division
Virginia Department of Forestry
900 Natural Resources Drive, Suite 800
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