Stantec Consulting Services Inc.
5209 Center Street
Williamsburg VA 23188

US Army Corps of Engineers
Norfolk District Regulatory Office
Received by: RLS
Date: Dec 22, 2014

December 22, 2014
File: 203446520

Attention: Mr. Randy Steffey and Mr. Ben Stagg
U.S. Army Corps of Engineers
Norfolk District Office
803 Front Street
Norfolk, VA 23501

Mr. Ben Stagg
Virginia Marine Resources Commission (VMRC)
2600 Washington Avenue, 3rd floor
Newport News, Virginia 23607

Re: NAO-2012-0080/VMRC #13-0408
Surry – Skiffes Creek – Whealton Joint Permit Application Modification
James River Structure Design Updates

Dear Mr. Steffey and Mr. Stagg:

On behalf of the applicant, Dominion Virginia Power (Dominion), Stantec is providing information to amend the Joint Permit Application (JPA) for the Surry – Skiffes Creek – Whealton 500 kV / 230 kV Line. The information provided in this JPA amendment reflects the impacts and subaqueous encroachment associated with the current design of the James River transmission structure foundation systems and the fender system, as described in the letter to the VMRC dated December 4, 2014. A revised JPA and Jurisdictional Area Impacts Map are provided for your review (Attachments 1 and 2). Changes to the JPA and Jurisdictional Area Impacts Map are limited to updates of the area of permanent river impacts from the tower foundation piles and area of subaqueous bottom encroachment from the tower footprints. All other information previously submitted in the BASF modification request dated November 12, 2014 remains unchanged.

Construction Specifications and Impacts

Specifications of the James River towers and fender system and impacts associated with those structures were provided in the December 4, 2014 letter to the VMRC; however, for completeness of this JPA modification request, that information is being resubmitted herein.

There are 17 towers proposed for construction within the James River. All towers are proposed to be steel lattice structures, each requiring four separate foundation supports. Foundations will generally consist of steel pile supports with a concrete cap located approximately 6 feet above mean high water (mhw). The 24 inch pilings will be encased in a protective jacket

Reference: Joint Permit Application Modification James River Structure Updates

resulting in a maximum outer diameter of 26 inches per piling. The jacket will extend from the bottom of the concrete cap to approximately 4 feet below the river bottom. Pilings will be driven using a hammer. The number of pile supports and foundation design are dependent upon the tower size and height. There are three (3) distinct tower types, and therefore three (3) foundation types proposed to be utilized (Table 1). These are described in further detail below. The spacing between foundations depends on the height of the specific tower; tower footprints for each structure are also provided in Table 1.

Table 1. James River Crossing Structures

Structure No.	Impact No.	Tower Design/ Foundation System	Size of Tower Footprint (ft. x ft.)	Permanent River Bottom Impact (SF)	Subaqueous Encroachment (SF)
582/12	PU1	5V DEA/PP8	42 x 42	118	1764
582/13	PU2	5V HT/PP4	28 x 22	59	616
582/14	PU3	5V HT/PP4	28 x 22	59	616
582/15	PU4	5V HA/PP8	36 x 36	118	1296
582/16	PU5	5V HT/PP4	28 x 22	59	616
582/17	PU6	5V HT/PP4	28 x 22	59	616
582/18	PU7	5V HT/PP4	34 x 26	59	884
582/19	PU8	5V HT/PP4	34 x 26	59	884
582/20	PU9	5V DEA/PP8	42 x 42	118	1764
582/21	PU10	Channel Crossing/PP10	52 x 52	148	2704
582/22	PU11	Channel Crossing/PP10	52 x 52	148	2704
582/23	PU12	5V HT/PP4	41.6 x 31.4	59	1302
582/24	PU13	5V HT/PP4	41.6 x 31.4	59	1302
582/25	PU14	Channel Crossing/PP10	48 x 48	148	2304
582/26	PU15	Channel Crossing/PP10	48 x 48	148	2304
582/27	PU16	5V HT/PP4	39.2 x 29.6	59	1200
582/28	PU17	5V HT/PP4	39.2 x 29.6	59	1200
582/21 Fender	-	-	-	294	894
582/22 Fender	-	-	-	294	894
582/25 Fender	-	-	-	294	894
582/26 Fender	-	-	-	294	894
Total				**2,712**	**27,652**

Reference: Joint Permit Application Modification James River Structure Updates

PP4 Foundations

Attachment 3, Sheet 2 depicts the PP4 foundation system. For each tower leg, one vertical and three battered piles will be driven and capped with a concrete block. Thus, a total of 16 piles will be required for each tower utilizing this type of foundation. With an outer diameter of 26 inches, a direct impact to 59 SF of subaqueous bottom would occur for each tower. A total of ten (10) towers are proposed with the PP4 foundation (Table 1), resulting in 590 SF of impacts. The total footprint of these towers over subaqueous bottom is 9,236 SF.

PP8 Foundations

The PP8 foundation system utilizes three vertical and five battered steel piles per tower leg (Attachment 3, Sheet 3). Thus, towers with this type of foundation will require a total of 32 pilings per tower. This equates to a total of 118 SF of direct impact to river bottom. There will be three (3) towers with the PP8 foundation (Table 1). The total footprint of these towers over subaqueous bottom is 4,824 SF.

PP10 Foundations - Channel Crossing

The four channel crossing towers will have the PP10 foundation design (Attachment 3, Sheet 4). Each of the four foundations will have three vertical and seven battered steel piles for a total of 40 pilings per tower. Each tower will result in 148 SF of direct impact to the river bottom. The total footprint of these towers over subaqueous bottom is 10,016 SF.

Fender System

Fender systems will be installed at the towers adjacent to the two shipping channels to protect the towers from collision (Attachment 4). Each of the four fenders will be 600 linear feet and constructed with 12 inch by 12 inch fiberglass reinforced seatimber wales attached to 30-inch diameter hollow fiberpiles on typical 10-foot centers. Dominion Virginia Power is leaving the fiberpile installation method (impact driven or vibratory) up to the contractor. Five wales will be attached to each fiberpile starting at approximately 2 ft. below mhw elevation and extending to nearly 8 ft. above mhw. Each seatimber wale will be spaced using 8 inch by 12 inch by 12 inch seatimber blocks. A total of 60 fiberpiles will be required for each fender. Each fiberpile will directly impact 4.9 SF of river bottom; therefore, each fender will have 294 SF of direct impact to subaqueous bottom. Since the fender system wales will be 1 foot wide and 600 feet long, an additional 600 SF of encroachment over subaqueous bottom will be associated with each fender, making the entire subaqueous encroachment 894 SF for each fender.

Please feel free to contact me if I can provide any further information.

Reference: Joint Permit Application Modification James River Structure Updates

Regards,

Stantec Consulting Services Inc,

Christine F. Conrad

Christine F. Conrad, Ph.D.
Senior Associate – Environmental Services
Phone: 757-220-6869
Fax: 757-229-4507
Christine.conrad@stantec.com

Attachment 1. Revised Joint Permit Application
Attachment 2. Revised Jurisdictional Area Impacts Maps
Attachment 3. Tower Foundation Designs
Attachment 4. Fender System Design

cc: Ms. Courtney Fisher, Dominion Virginia Power

Attachment 1

Revised Joint Permit Application

PLEASE PRINT OR TYPE ALL ANSWERS. If a question does not apply to your project, please print N/A (not applicable) in the space provided. ***If additional space is needed, attach extra 8 ½ x 11 inch sheets of paper.***

CHECK ONE, if applicable:	Pre-Construction Notification (PCN) ☐ (*For Nationwide Permits ONLY*)	SPGP ☐

1. PROJECT LOCATION INFORMATION
(Attach a copy of a detailed map, such as a USGS topographic map or street map showing the site location and project boundary, so that it may be located for inspection. Include an arrow indicating the north direction.)

Street Address	City/County/Zipcode Surry, James City and York Counties, as well as the Citites of Newport News and Hampton
Subdivision	Lot/Block/Parcel # Skiffes Creek Switching Station: Tax Map 592, DC 01, Lot 2

Name of water body(ies) within project boundaries and drainage area (acres or square miles)
James River, Skiffes Creek, Lee-Hall Reservoir& Harwood's Mill Reservoir (DA>5sq mi)
Wood Creek, Skiffes Creek, Jones Run, Brick Kiln, Newmarket Creek & Whiteman Swamp (DA<5sq mi)

Tributary(ies) to: James River, Poquoson River and Back River
Basin: James River & Poquoson River Subbasin: Lower James/Lawnes Creek and Lynnhaven-Poquoson Creek
(*Example: Basin: James River Subbasin: Middle James River*)

Special Standards (based on DEQ Water Quality Standards 9VAC25-260 et seq.): _____

Project type (check one) ___×___ Single user (private, non-commercial, residential)
___×___ Multi-user (community, commercial, industrial, government)

Latitude and longitude at center of project site: Start at Surry Nuclear Power Station- 37°09'42.48"N 76°41'47.41"W
Terminus at Whealton Substation- 37°01'59.39"N 76°25'52.95"W

USGS topographic map name: Hog Island (1964,1985), Yorktown (1984, 1994), Poquoson West (1983, 1996), Newport News North (1965,1986)

8- digit USGS Hydrologic Unit Code (HUC) for your project site (See http://cfpub.epa.gov/surf/locate/index.cfm): 02080206, 02020208
If known, indicate the 10-digit and 12-digit USGS HUCs (see *http://dswcapps.dcr.virginia.gov/htdocs/maps/HUExplorer.htm* :
0208020607, 0208020608, 0208020609, 0208010801 020802060704, 020802060802, 020802060901, 020802060901, 020801080102, 020802060906, 020801080103

Name of your project (*Example: Water Creek driveway crossing*) Surry - Skiffes Creek - Whealton

Is there an access road to the project? _x_ Yes __ No. If yes, check all that apply: _x_ public _x_ private _x_ improved _x_ unimproved

Provide driving directions to your site, giving distances from the best and nearest visible landmarks or major intersections:
The project may be access from the Surry Nuclear Power Station in Surry County. This is a restricted access installation. Please contact the agent or applicant to schedule a visit. The river crossing may be accessed from the James River. In James City County, the route may be access by Utility Rd. approximately 0.25 miles from Baseline Rd. and from the proposed Switching Station via the Dominion ROW. Follow ROW approximately 0.5 miles until intersection with another Dominion ROW. This is the southwest corner of the proposed Switching Station. The Whealton Substation may be accessed by heading west on RT 258/ Mercury Blvd. Take right on Whealton Rd., then right on Threechopt Rd. Substation approximately 0.3 miles down on left.

Does your project site cross boundaries of two or more localities (i.e. cities/counties/towns)? _X_ Yes __ No
If so, name those localities: Surry County, James City County, York County, the City of Newport News, and the City of Hampton

FOR AGENCY USE ONLY	
	Notes:
JPA#	

2. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION

The applicant(s) is/are the legal entity to which the permit may be issued. The applicant(s) can either be the property owner(s) or the person/people/company(ies) that intend(s) to undertake the activity. The agent is the person or company that is representing the applicant(s). If a company, please use the company name that is registered with the State Corporation Commission (SCC), or indicate no registration with the SCC.

Applicant(s) (For a company, use SCC-registered name)			Agent (if applicable) (For a company, use SCC-registered name)		
Virginia Electric & Power Co. (Dominion) Attn: Courtney Fisher			Stantec Consulting Services, Inc./Christine Conrad, PhD		
Mailing address 701 E. Cary Street, 12th Floor			Mailing address 5209 Center Street		
City Richmond	State VA	Zip Code 23219	City Williamsburg	State VA	Zip Code 23188
Phone number w/area code (804) 771-6408	Fax		Phone number w/area code (757) 220-6869	Fax (757) 220-4507	
Mobile/pager	E-mail		Mobile/pager	E-mail christine.conrad@stantec.com	
State Corporation Commission ID number (if applicable) 0006317-2			State Corporation Commission ID number (if applicable) F1493189		

Certain permits or permit authorizations may be provided via electronic mail. If the applicant wishes to receive their permit via electronic mail, please provide an e-mail address here: christine.conrad@stantec.com

Property owner(s), if different from applicant (For a company, use SCC-registered name)			Contractor, if known (For a company, use SCC-registered name)		
Mailing address			Mailing address		
City	State	Zip code	City	State	Zip code
Phone number w/area code	Fax		Phone number w/area code	Fax	
Mobile/pager	E-mail		Mobile/pager	E-mail	
State Corporation Commission ID number (if applicable)			State Corporation Commission ID number (if applicable)		

3. PROVIDE A DESCRIPTION OF THE PROJECT, PROJECT PRIMARY AND SECONDARY PURPOSES, PROJECT NEED, INTENDED USE, AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)

- The purpose must include any new development or expansion of an existing land use and/or proposed future use of residual land
- Describe the physical alteration of surface waters
- Include a description of alternatives considered to avoid or minimize impacts to surface waters, including wetlands, to the maximum extent practicable. Include factors such as, but not limited to, alternative construction technologies, alternative project layout and design, alternative locations, local land use regulations, and existing infrastructure
- For utility crossings, include both alternative routes and alternative construction methodologies considered
- For major surface water withdrawals, public surface water supply withdrawals, or projects that will alter in-stream flows, include the water supply issues that form the basis of the proposed project.

In order to maintain reliability and keep up with increased demand in the Hampton Roads Area, Dominion proposes to construct a new 7.76 mile 500 kV line from the Surry Nuclear Power Station in Surry County to the proposed Skiffes Creek Switching Station in James City County, including construction of the Switching Station, as well as reconfigure an existing ROW from the proposed Switching Station to the existing Whealton Substation in the City of Hampton to accommodate a new 230 kV line. For this project, 17 structures and a fender system will be placed in the James River requiring encroachment over 27,652 SF of subaqueous bottom. The river structures require pipe pile foundations and will impact 1,536 SF of river bottom, while the pipe pile foundations for the fender system will impact 3,576 SF of river bottom. The placement of 22 structures in wetlands will be required resulting in impacts to 220 SF. The project requires a total of 21,932 LF of aerial crossing of tidal waters (MLW to MLW) as well as 49 LF crossings of both Lee-Hall Reservoir and 2 of Harwood's Mill Reservoir, which have a drainage area greater than 5 sq. miles. All tidal crossings outside the James River will be spanned. Clearing and expansion of the new ROW will result in selective hand clearing of 0.52 AC of Palustrine Forested (PFO) wetlands to Palustrine Scrub-Shrub (PSS) wetlands. Construction access will be provided through existing roads, timber paths and along the existing ROW. See Permit Support Document for further details.

3. PROVIDE A DESCRIPTION OF THE PROJECT (Continued)

Date of proposed commencement of work (MM/DD/YYYY) Pending regultory approvals (April 2015)_	Date of proposed completion of work (MM/DD/YYYY) _____ April 2016_____
Are you submitting this application at the direction of any State, local, or Federal agency? _____Yes __X__No	Has any work commenced or has any portion of the project for which you are seeking a permit been completed? _____ Yes __X__ No

If you answered "yes" to either question above, give details stating when the work was completed and/or when it commenced, who performed the work, and which agency (if any) directed you to submit this application. In addition, you will need to clearly differentiate between completed work and proposed work on your project drawings.

N/A

Are you aware of any unresolved violations of environmental law or litigation involving the property? _____Yes __X__No
(If yes, please explain)

4. PREVIOUS SITE VISITS AND/OR PERMITS RELATED TO THE PROPOSED WORK (Include all Federal, State, and Local pre-application coordination or previous permits)

Agency	Activity	Permit/Project number, and explanation of non-reporting Nationwide permits previously used	Action taken ** and Date of Action	If denied, give reason for denial
Corps	Preliminary JD - 230 kV Line	NAO-2011-01096	7/26/2012	
	Preliminary JD - Switching Station Preliminary JD - 500 kV Line	NAO-2012-01096 NAO-2013-00451	6/132013 6/5/2013	

** Issued, denied, site visit

5. PROJECT COSTS

Approximate cost of the entire project, including materials and labor: $ 155 Million

Approximate cost of only the portion of the project affecting State waters (below mean low water in tidal areas and below ordinary high water mark in nontidal areas): $ >500,000

6. PUBLIC NOTIFICATION (Attach additional sheets if necessary)

- Complete information for all property owners adjacent to the project site and across the waterway, if the waterway is less than 500 feet in width. If your project is located within a cove, you will need to provide names and mailing addresses for all property owners within the cove.
- If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line.

Property owner's name	Mailing address	City	State	Zip code
Please see attached list				

Name of newspaper having general circulation in the area of the project: Daily Press

Address and phone number (including area code) of newspaper 7505 Warwick Blvd., Newport News, VA 23607 (757) 247-4700

Have adjacent property owners been notified with forms in Appendix A? ____Yes _X_No (attach copies of distributed forms)

7. THREATENED AND ENDANGERED SPECIES INFORMATION

Please provide any information concerning the potential for your project to impact state and/or federally threatened and endangered species (listed or proposed). Attach correspondence from agencies and/or reference materials that address potential impacts, such as database search results or your Corps' waters and wetlands delineation confirmation. Contact information for the Virginia Department of Game and Inland Fisheries and the Virginia Department of Conservation and Recreation, Division of Natural Heritage can be found on page 4 of this package. Please See Modification Letter and Appendix D

8. HISTORIC RESOURCES INFORMATION

Note: Historic properties include but are not limited to archeological sites, battlefields, Civil War earthworks, graveyards, buildings, bridges, canals, etc. Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. Please See Modification Letter

Are any historic properties located within or adjacent to the project site? X Yes ____ No _____ Uncertain
If Yes, please provide a map showing the location of the historic property within or adjacent to the project site.

Are there any buildings or structures 50 years old or older located on the project site? ____ Yes X No _____ Uncertain
If Yes, please provide a map showing the location of these buildings or structures on the project site.

Is your project located within a historic district? ____ Yes X No ____ Uncertain
If Yes, please indicate which district: _____

8. HISTORIC RESOURCES INFORMATION (Continued)

Has a survey to locate archeological sites and/or historic structures been carried out on the property?
_X_ Yes ___ No ___ Uncertain

If Yes, please provide the following information: Date of Survey: June 2012/February 2013/July 2012 and September 2014

Name of firm: Cultural Resources, Inc and Stantec

Is there a report on file with the Virginia Department of Historic Resources? _X_ Yes ____ No ___ Uncertain

Title of Cultural Resources Management (CRM) report: Phase I Cultural Resource Survey of the Proposed Approximately 20.2-mile Dominion Virginia Power Skiffes Creek to Whealton 230 kV Transmission Line in James City and York Counties, and the Cities of Newport News and Hampton, VA; Phase II Evaluation Site 44JC0662 for Dominion Virginia Power Skiffes Creek Switching Station; Phase I Cultural Resources Survey of the Proposed Dominion Virginia Power Skiffes Creek to Surry 500 kV Transmission Line Alternative and Phase I Cultural Resources Survey of the Proposed BASF Alternative in James City and Surry Counties, Virginia

Was any historic property located? _X_ Yes ____ No __ Uncertain

9. WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION

Please See Attached Impacts Table

Report each impact site in a separate column. If needed, attach additional sheets using a similar table format. Please ensure that the associated project drawings clearly depict the location and footprint of each numbered impact site. For dredging, mining, and excavating projects, use Section 18.

	Impact site number 1	Impact site number 2	Impact site number 3
Impact description (use all that apply): F=fill EX=excavation S=Structure T=tidal NT=non-tidal TE=temporary PE=permanent PR=perennial IN=intermittent SB=subaqueous bottom DB=dune/beach IS=hydrologically isolated V=vegetated NV=non-vegetated MC=Mechanized Clearing of PFO (*Example: F, NT, PE, V)*			
Wetland/waters impact area (square feet)			
Dune/beach impact area (square feet)			
Stream dimensions at impact site (length and average width in linear feet, and area in square feet)			
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)			
Cowardin classification of impacted wetland/water or geomorphological classification of stream *Example wetland: PFO;* *Example stream: wide; bank eroding; braided channel;* *Example stream: 'C' channel*			
Average stream flow at site (flow rate under normal rainfall conditions in cubic feet per second)			
Contributing drainage area (acres or square miles)			

9. WETLANDS/WATERS IMPACT INFORMATION (Continued)

DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone waters Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII			

For DEQ permitting purposes, also submit as part of this section a wetland and waters boundary delineation map[4] – see the Footnotes section in the form instructions.

For DEQ permitting purposes, also submit as part of this section a written disclosure of all wetlands, open water, or streams that are located within the proposed project or compensation areas that are also under a deed restriction, conservation easement, restrictive covenant, or other land-use protective instrument.

10. APPLICANT, AGENT, OWNER, AND CONTRACTOR CERTIFICATIONS

If the Applicant(s), Agent(s), Owner(s), or Contractor(s) is/are a company, please use the company name(s) that is/are registered with the State Corporation Commission (SCC).

READ ALL OF THE FOLLOWING CAREFULLY BEFORE SIGNING

PRIVACY ACT STATEMENT: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.

CERTIFICATION: I am hereby applying for permits typically issued by the DEQ, VMRC, U.S. Army Corps of Engineers, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Is/Are the Applicant(s) and Owner(s) the same? _x_ *Yes* ___ *No*

Applicant's name & title (printed or typed) Virginia Electric & Power Company (Dominion Virginia Power)	Second applicant's name & title, if applicable (printed or typed)
Applicant's signature C.R. Fish	Second applicant's signature
Date 11 / 10 / 2014	Date
(Required for VMRC permit actions only) Property owner's name, if different from Applicant	*(Required for VMRC permit actions only)* Second property owner's name, if applicable
Owner's signature, if different from Applicant	Second owner's signature
Date	Date

10. APPLICANT, AGENT, OWNER, AND CONTRACTOR CERTIFICATIONS (Continued)

If the Applicant(s), Agent(s), Owner(s), or Contractor(s) is/are a company, please use the company name(s) that is/are registered with the State Corporation Commission (SCC).

CERTIFICATION OF AUTHORIZATION TO ALLOW AGENT(S) TO ACT ON APPLICANT'S(S') BEHALF (IF APPLICABLE)

I (we), Virginia Electric & Power Company (and) _____.
APPLICANT'S NAME(S) – *complete the second blank if more than one Applicant*

hereby certify that I (we) have authorized Stantec Consulting Services, Inc. (and) _____
AGENT'S NAME(S) – *complete the second blank if more than one Agent*

to act on my (our) behalf and take all actions necessary to the processing, issuance, and acceptance of this permit and any and all standard and special conditions attached. I (we) hereby certify that the information submitted in this application is true and accurate to the best of my (our) knowledge.

Applicant's signature CRfish	Second applicant's signature, if applicable
Date 11/10/2014	Date
Agent's signature and title Christine F. Carroll	Second agent's signature and title, if applicable
Date 12/22/14	Date

CONTRACTOR ACKNOWLEDGEMENT (IF APPLICABLE)

I (we), _____ (and) _____.
APPLICANT'S NAME(S) – *complete the second blank if more than one Applicant*

have contracted _____ (and) _____
CONTRACTOR'S NAME(S) – *complete the second blank if more than one Contractor*

to perform the work described in this Joint Permit Application, signed and dated _____.

I (we) will read and abide by all conditions as set forth in all Federal, State, and Local permits as required for this project. I (we) understand that failure to follow the conditions of the permits may constitute a violation of applicable Federal, State, and Local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes.

In addition, I (we) agree to make available a copy of any permit to any regulatory representative visiting the project site to ensure permit compliance. If I (we) fail to provide the applicable permit upon request, I (we) understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all of the terms and conditions.

Contractor's name or name of firm (printed/typed)	Contractor's or firm's mailing address	
Contractor's signature and title	Contractor's license number	Date
Applicant's signature	Second applicant's signature, if applicable	
Date	Date	

END OF GENERAL INFORMATION

The following sections are activity-specific. Fill out only the sections that apply to your particular project.

20. NONTIDAL STREAM CHANNEL MODIFICATIONS (Continued)

Will low-flow channels be maintained in the modified stream channel? _ _Yes _ _No.
Describe how:

Will any structure(s) be placed in the stream to create riffles, pools, meanders, etc.? _____Yes _ _No
If yes, please explain:

21. UTILITY CROSSINGS

Type of crossing x ✕ ___overhead _____trenched _____directionally-drilled

Method of clearing corridor of vegetation (check all that apply): __ __ mechanized land clearing that disturbs the soil surface
__✕__ cutting vegetation above the soil surface

Describe the materials to be used in the installation of the utility line (including gravel bedding for trenched installations, bentonite slurries used during direction-drilling, etc.) and a sequence of events to detail how the installation will be accomplished (including methods used for in-stream and dry crossings).

The support structures will be a combination of new single steel pole and galvanized lattice, using different designs that vary in height depending on tower location. All material will be delivered and assembled at each structure location in ROW. Towers have been designed using pipe pile or existing foundations. Please see Permit Support Document for further detail.

For overhead crossings over navigable waterways (including all tidal waterways), please indicate the height of other overhead crossings or bridges over the waterway relative to mean high water, mean low water, or ordinary high water mark:

Please refer to the previously submitted James River Crossing Plan and Profile. Average river minimum vertical clearance is 60 feet. The 230 kV line vertical clearances will be equal to or greater than the existing lines and will be greater than 26 feet.

Nominal system voltage, if project involves power lines: 500 kV and 230 kV

Will there be an excess of excavated material? _ __Yes _✕__No
If so, describe the method that will be undertaken to dispose of, and transport, the material to its permanent disposal location and give that location:

Will any excess material be stockpiled in wetlands? _____Yes _ ✕ __No
If so, will the stockpiled material be placed on filter fabric or some other type of impervious surface? _____Yes _____No

21. UTILITY CROSSINGS (Continued)

Will permanent access roads be placed through wetlands/streams? ____Yes __×__No
If yes, will the roads be _____at grade or _____above grade (check one)?

Will the utility line through wetlands/waters be continually maintained (e.g. via mowing or herbicide)? __×__Yes _____No

If maintained, what is the maximum width? _____150-250_____feet

22. ROAD CROSSINGS

Have you conducted hydraulic studies to verify the adequacy of the culverts? _____Yes _____No
If so, please attach a copy of the hydraulic study/report.
Virginia Department of Transportation (VDOT) standards require that the backwater for a 100 year storm not exceed 1 foot for all road, culvert, and bridge projects within FEMA-designated floodplains.

Will the culverts be countersunk below the stream bottom? _____Yes _ × _No. If no, explain: _____

If the project entails a bridged crossing and there are similar crossings in the area, what is the vertical distance above mean high water, mean low water, or ordinary high water mark of those similar structures? _____feet above _____
For all bridges proposed over navigable waterways (including all tidal water bodies), you will be required to contact the U.S. Coast Guard to determine if a permit is required of their agency.

On separate sheets of paper, describe the materials to be used, the method of construction (including the use of cofferdams), and the sequence of construction events. Include cross sections and profile plans of the culvert crossings including wing walls or rip rap.

23. PRIVATE AND COMMERCIAL AQUACULTURE ACTIVITIES

Please review VMRC regulations related to aquaculture activities if you are completing this section. An abbreviated application is available for certain private oyster gardening activities by a riparian owner. Also, separate information is required by the VMRC Fisheries Management Division for the review of commercial projects that may qualify for the Virginia Marine Resources Commission General Permit #4 FOR TEMPORARY PROTECTIVE ENCLOSURES FOR SHELLFISH. The VMRC aquaculture regulations can be found on the agency web page at: http://www.mrc.state.va.us/regulations/regindex.shtm.
Please see regulations 4 VAC 20-335-10 et seq., 4 VAC 20-336-10 et seq., and 4 VAC 20-1130-10 et seq.

Briefly describe your proposed aquaculture activity from the time of acquisition (seed, fingerlings, etc.) to time of harvest, and indicate which species you intend to culture. Attach additional sheets if needed.

Source of the animals/plants that you want to culture: _____

Note: VMRC Regulation 4VAC 20-754 et seq. "Pertaining to the Importation of Fish, Shellfish or Crustacea" sets forth the requirements for importing organisms from out of state.

Describe below the number, type, and dimensions of the structures that will be used (e.g., 4' x 2' x 18" floats, 3' x 3' x 1' bottom cages, etc.) and the overall dimensions of the area to be occupied by the aquaculture structures (e.g., two 40-foot by 10-foot bottom plots).

APPENDIX C

Chesapeake Bay Preservation Act Information

Please answer the following questions to determine if your project is subject to the requirements of the Bay Act Regulations:

1. Is your project located within Tidewater Virginia? _X_Yes ____No (See map on next page) - If the answer is "no", the Bay Act requirements do not apply; if "yes", then please continue to question #2.

2. Please indicate if the project proposes to impact any of the following Resource Protection Area (RPA) features:

   ____ Tidal wetlands,

   _X_ Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow,

   ____ Tidal shores,

   _X_ Other lands considered by the local government to meet the provisions of subsection A of § 9VAC 25-830-80 and to be necessary to protect the quality of state waters (contact the local government for specific information),

   _X_ A buffer area not less than 100 feet in width located adjacent to and landward of the components listed above, and along both sides of any water body with perennial flow.

If the answer to question #1 was "yes" and any of the features listed under question #2 will be impacted, compliance with the Chesapeake Bay Preservation Area Designation and Management Regulations is required. **The Chesapeake Bay Preservation Area Designation and Management Regulations** are enforced through locally adopted ordinances based on the Chesapeake Bay Preservation Act (CBPA) program. Compliance with state and local CBPA requirements mandates the submission of a ***Water Quality Impact Assessment (WQIA)*** for the review and approval of the local government. Contact the appropriate local government office to determine if a WQIA is required for the proposed activity(ies).

The individual localities, not the DEQ, USACE, or the Local Wetlands Boards, are responsible for enforcing the CBPA requirements and, therefore, local permits for land disturbance are not issued through this JPA process. **Approval of this wetlands permit does not constitute compliance with the CBPA regulations nor does it guarantee that the local government will issue land-disturbing permits for this project**.

Notes for all projects in RPAs

Development, construction, land disturbance, or placement of fill within the RPA features listed above *requires a review from the locality and may require an exception or variance from the local Bay Act program or zoning ordinance*. Please contact the appropriate local government to determine the types of development or land uses that are permitted within RPAs.

Pursuant to § 9VAC 25-830-110, *on-site delineation of the RPA is required for all projects in CBPAs*. Because USGS maps are not always indicative of actual "in-field" conditions, they may not be used to determine the site-specific boundaries of the RPA.

Notes for shoreline erosion control projects in RPAs

Re-establishment of woody vegetation in the buffer may be required to mitigate for the removal or disturbance of buffer vegetation associated with your proposed project. Please contact the local government to determine the mitigation requirements for impacts to the 100-foot RPA buffer.

Pursuant to § 9VAC 25-830-140.5.a(4), § 9VAC 25-830-140.1, and § 9VAC 25-830-130 of the Virginia Administrative Code, the locality will use the information provided in this Appendix and in the project drawings, along with other information in this permit application and a WQIA, to make a determination that:

1. Any proposed shoreline erosion control measure is necessary and consistent with the nature of the erosion occurring on the site, and the measures have employed the "best available technical advice"
2. Indigenous vegetation will be preserved to the maximum extent practicable
3. Proposed land disturbance has been minimized
4. Appropriate mitigation plantings will provide the required water quality functions of the buffer (§ 9VAC 25-830-140.3)
5. The project is consistent with the locality's comprehensive plan
6. Access to the project will be provided with the minimum disturbance necessary.

WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION																			
	Impact site number PU1	Impact site number PU2	Impact site number PU3	Impact site number PU4	Impact site number PU5	Impact site number PU6	Impact site number PU7	Impact site number PU8	Impact site number PU9	Impact site number PU10	Impact site number PU11	Impact site number PU12	Impact site number PU13	Impact site number PU14	Impact site number PU15	Impact site number PU16	Impact site number PU17	Impact site number PU40	Impact site number PU41
Impact Description (use all that apply) F= Fill EX= excavation S= structure T=tidal NT= non-tidal TE= temporary PE= permanent PR= perennial IN= intermittent SB= subaqueous bottom DB= dune/beach IS= hydrologically isolated V=vegetated NV= non-vegetated MC= mechanized clearing of PFO	Tower 582/12 F, S, T, PE, PR, SB	Tower 582/13 F, S, T, PE, PR, SB	Tower 582/14 F, S, T, PE, PR, SB	Tower 582/15 F, S, T, PE, PR, SB	Tower 582/16 F, S, T, PE, PR, SB	Tower 582/17 F, S, T, PE, PR, SB	Tower 582/18 F, S, T, PE, PR, SB	Tower 582/19 F, S, T, PE, PR, SB	Tower 582/20 F, S, T, PE, PR, SB	Tower 582/21 F, S, T, PE, PR, SB	Tower 582/22 F, S, T, PE, PR, SB	Tower 582/23 F, S, T, PE, PR, SB	Tower 582/24 F, S, T, PE, PR, SB	Tower 582/25 F, S, T, PE, PR, SB	Tower 582/26 F, S, T, PE, PR, SB	Tower 582/27 F, S, T, PE, PR, SB	Tower 582/28 F, S, T, PE, PR, SB	Fender System F, S, T, PE, PR, SB	Fender System F, S, T, PE, PR, SB
Wetland/waters impacts area (square feet)	F= 118 SB= 1764	F= 59 SB= 616	F= 59 SB= 616	F= 118 SB= 1296	F= 59 SB= 616	F= 59 SB= 616	F= 59 SB= 884	F= 59 SB= 884	F= 118 SB= 1764	F= 148 SB=2704	F= 148 SB=2704	F= 59 SB= 1302	F= 59 SB= 1302	F= 148 SB=2304	F= 148 SB=2304	F= 59 SB= 1200	F= 59 SB= 1200	F= 588 SB= 1788	F= 588 SB= 1788
Dune/Beach impact area (square feet)																			
Stream dimensions at impact site (length and average width in linear feet, and in area sq. ft.)																			
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)																			
Cowardin classification of impacted wetland/water of geomorphological classification of stream	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1
Average stream flow at site (flow rate under normal rainfall conditions) (cubic feet per second)	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.	> 5 ft^3/sec.
Contributing drainage area (acres or square miles)	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2	>5 mi^2
DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone water Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II	Estuarine Class II

WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION																						
	Impact site number PU18	Impact site number PU19	Impact site number PU20	Impact site number PU21	Impact site number PU22	Impact site number PU23	Impact site number PU24	Impact site number PU25	Impact site number PU26	Impact site number PU27	Impact site number PU28	Impact site number PU29	Impact site number PU30	Impact site number PU31	Impact site number PU32	Impact site number PU33	Impact site number PU34	Impact site number PU35	Impact site number PU36	Impact site number PU37	Impact site number PU38	Impact site number PU39
Impact Description (use all that apply) F= Fill EX= excavation S= structure T=tidal NT= non-tidal TE= temporary PE= permanent PR= perennial IN= intermittent SB= subaqueous bottom DB= dune/beach IS= hydrologically isolated V=vegetated NV= non-vegetated MC= mechanized clearing of PFO	Tower 58/278 F, S, NT, PE, V	Tower 58/279 F, S, NT, PE, V	Tower 58/280 F, S, NT, PE, V	Tower 58/281 F, S, NT, PE, V	Tower 58/282 F, S, NT, PE, V	Tower 58/287 F, S, NT, PE, V	Tower 58/288 F, S, NT, PE, V	Tower 58/289 F, S, NT, PE, V	Tower 58/290 F, S, NT, PE, V	Tower 292/595 F, S, NT, PE, V	Tower 292/596 F, S, NT, PE, V	Tower 292/599 F, S, NT, PE, V	Tower 292/607 F, S, NT, PE, V	Tower 292/608 F, S, NT, PE, V	Tower 292/613 F, S, NT, PE, V	Tower 292/626 F, S, NT, PE, V	Tower 292/627 F, S, NT, PE, V	Tower 292/628 F, S, NT, PE, V	Tower 292/629 F, S, NT, PE, V	Tower 292/608 F, S, NT, PE, V	Tower 292/613 F, S, NT, PE, V	Tower 292/626 F, S, NT, PE, V
Wetland/waters impacts area (square feet)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Dune/Beach impact area (square feet)																						
Stream dimensions at impact site (length and average width in linear feet, and in area sq. ft.)																						
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)																						
Cowardin classification of impacted wetland/water of geomorphological classification of stream	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS	PEM/PSS
Average stream flow at site (flow rate under normal rainfall conditions) (cubic feet per second)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Contributing drainage area (acres or square miles)	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi^2	<5 mi2	<5 mi2	<5 mi2
DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone water Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII	Wetlands Class VII