

Stantec Consulting Services Inc. 5209 Center Street Williamsburg VA 23188

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 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

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



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.

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					

Table 1. James River Crossing Structures



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,

Christin 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.

<u>CHECK ONE, if applicable:</u>	Pre-Construction Notification (For Nationwide Permits ONL)	on (PCN)	SPGP		
1. PROJECT LOCATION INFOR (Attach a copy of a detailed map boundary, so that it may be loca	RMATION 9, such as a USGS topographic ted for inspection. Include an	c map or street i arrow indicatin	map showing the site location and project ig the north direction.)		
Street Address		City/County/Zip Surry, James Cit Newport News a	code y and York Counties, as well as the Citites of nd Hampton		
Subdivision		Lot/Block/Parce Skiffes Creek Swi	l # itching Station: Tax Map 592, DC 01, Lot 2		
Name of water body(ies) within pro James River, Skiffes Creek, Lee-Hall R Wood Creek, Skiffes Creek, Jones Rur	oject boundaries and drainage a eservoir& Harwood's Mill Reservoi n, Brick Kiln, Newmarket Creek & V	rea (acres or squ ir (DA>5sq mi) Whiteman Swamp	are miles) (DA<5sq mi)		
Iames	River Poquoson River and Back Riv	<i>ver</i>			
Tributary(ies) to: Basin: <u>James River & Poquo</u> son River (<i>Example: Basin: <u>James River</u></i>	Subbasin: <u>Lower James/La</u> Subbasin: <u>Middle James River</u>	wnes Creek and Ly)	vnnhaven-Poquoson Creek		
Special Standards (based on DEQ	Water Quality Standards 9VAC	25-260 et seq.):			
Project type (check one)	× Single user (pri Multi-user (com	vate, non-comme imunity, commerc	ercial, residential) cial, industrial, government)		
Latitude and longitude at center of	Start at Surry Nuclear project site: <u>Terminus at Whealton</u>	Power Station- 37°09 n Substation- 37°01'5	9'42.48"N 76°41'47.41"W 9.39" <u>N 76°2</u> 5'52.95"W		
USGS topographic map name:	Hog Island (1964,1985), Yorktown (1	1984, 1994), Poquoso	n West (1983, 1996), Newport News North (1965,1986)		
8- digit USGS Hydrologic Unit Cod If known, indicate the 10-digit and 0208020607, 0208020608, 0208020609,	le (HUC) for your project site (Se 12-digit USGS HUCs (see <u>http://</u> 0208010801 02080 02080	ee <u>http://cfpub.ep</u> //dswcapps.dcr.vii)2060704, 0208020600)2060906, 020801080	a.gov/surf/locate/index.cfm): 02080206, 02020208 rginia.gov/htdocs/maps/HUExplorer.htm : 802, 020802060901, 020802060901, 020801080102, 103		
Name of your project (Example: W	/ater Creek driveway crossing) _	Surry	- Skiffes Creek - Whealton		
Is there an access road to the proj	ect? <u></u> Yes No. If yes, chec	k all that apply: <u>x</u>	: public \underline{x} private \underline{x} improved \underline{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)? <u>X</u> Yes <u>No</u> If so, name those localities: _{Surry County, James City County, York County, the City of Newport News, and the City of Hampton}					
	FOR AGENC	Y USE ONLY			
		Notes:			

JPA#

 APPLICANT, AGENT, PRO The applicant(s) is/are the leg the person/people/company(i the applicant(s). If a compan or indicate no registration witl 	PERTY al entity es) that y, pleas h the S0	OWNEF y to whic t intend(s se use th CC.	R, AND CONTRA h the permit may b) to undertake the e company name	CTOR INFORMATION be issued. The applicant(s) can e e activity. The agent is the persor that is registered with the State C	eithe n or Corp	er be the p company oration Co	roperty owner(s) or that is representing ommission (SCC),
Applicant(s) (For a company, use	e SCC-	registere	d name)	Agent (if applicable) (For a com	pan	y, use SC	C-registered
Virginia Electric & Power Co. (Dominion) Attn: Courtney Fisher			name) Stantec Consulting Servi	ices,	Inc./Chri	stine Conrad, PhD	
Mailing address 701 E. Cary Street, 12th Floor			Mailing address 5209 Center Street				
City		State	Zip Code	City		State	Zip Code
Richmond		VA	23219	Williamsburg		VA	23188
Phone number w/area code	Fax			Phone number w/area code	Fa	ах	
(804) 771-6408				(757) 220-6869	(7	57) 220-45	507
Mobile/pager	E-mai	I		Mobile/pager	E	-mail	
					ch	ristine.cor	arad@stantec.com
State Corporation Commission I	D numb	per (if app	olicable)	State Corporation Commission ID number (if applicable)			
0006317-2				F1493189			
Certain permits or permit authori electronic mail, please provide a	izations n e-ma	may be il addres	provided via elect s here: <u>christine.c</u>	tronic mail. If the applicant wishes conrad@stantec.com	s to	receive th	eir permit via
Property owner(s), if different fro use SCC-registered name)	m appli	icant (Fo	r a company,	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 n	umber (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?				
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 of (If yes, please explain)	or litigation involving the property?Yes $\underline{\times}_{No}$				

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 lii	ne.
Property owner's name	Mailing address	City	State	Zip code
Please see attached list				
Name of newspaper having ger	neral circulation in the area of the proje	ct: Daily Press	1	<u>I</u>
Address and phone number (in	cluding area code) of			
newspaper7505 Warwick Blvd., N	Jewport News, VA 23607 (757) 247-4700			
Have adjacent property owners	been notified with forms in Appendix /	A?Yes _ × _No (attach copie	es of distri	outed 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 le	ocated within o	or adjacent t	o the project s	site? X	Yes _	No	Uncertain
If Yes, p	please provide a ma	p showing the	location of t	he historic pro	perty withi	n or ad	jacent to the	project site.

Are there any buildings or structures 50 years old or older located on the project site?	Yes	<u> </u>	No _	Uncertain
If Yes, please provide a map showing the location of these buildings or structures on the p	roject site.			

< *2*

Is your project located within a historic district?	Yes <u>X</u> No Uncertain

8. HISTORIC RESOURCES INFORMAT	ION (Continued)						
Has a survey to locate archeological sites <u>×</u> Yes No Uncertain	and/or historic structures been	carried out on the property?					
If Yes, please provide the following information: Date of Survey:							
Name of firm: Cultural Res	sources, Inc and Stantec						
Is there a report on file with the Virginia D	epartment of Historic Resource	es? Yes No U	Incertain Proposed Approximately 20.2-mile Dominion				
Title of Cultural Resources Mana	agement (CRM) report:	Virginia Power Skiffes Creek to Whealt York Counties, and the Cities of Newpo Site 44/C0662 for Dominion Virginia P	on 230 kV Transmission Line in James City and rt News and Hampton, VA: Phase II Evaluation over Skiffes Creek Switching Station: Phase I				
Was any historic property locate	d? <u>X</u> Yes No Un	Cultural Resources Survey of the Propo Surry 500 kV Transmission Line Altern Proposed BASF Alternative in James Ci	eed Dominion Virginia Power Skiffes Creek to ative and Phase I Cultural Resources Survey of the ty and Surry Counties, Virginia				
9. WETLANDS, WATERS, AND DUNES	S/BEACHES IMPACT INFORM	IATION Please See Attached In	1pacts Table				
Report each impact site in a separate of ensure that the associated project draw dredging, mining, and excavating project	olumn. If needed, attach add vings clearly depict the locat acts, use Section 18.	litional sheets using a simila ion and footprint of each nu	r table format. Please nbered impact site. For				
	Impact site number	Impact site number	Impact site number				
Impact description (use all that apply):	I	2	3				
EX=excavation							
S-Structuro							
T=tidal							
NT=non-tidal							
TE=temporary							
PE=nermanent							
PR=nerennial							
IN=intermittent							
SB=subagueous bottom							
DB=dune/beach							
IS=hvdrologically isolated							
V=vegetated							
NV=non-vegetated							
MC=Mechanized Clearing of PFO							

(Example: F, NT, PE, V) Wetland/waters impact area

Dune/beach impact area (square feet)

Volume of fill below Mean High Water or Ordinary High Water (cubic yards) Cowardin classification of impacted wetland/water or geomorphological

Example stream: wide; bank eroding;

Stream dimensions at impact site (length and average width in linear feet,

and area in square feet)

classification of stream Example wetland: PFO;

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)

braided channel;

(square feet)

9. WETLANDS/WATERS IMPACT INFORMA	FION (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 ^(a) – 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 CO	NTRACTOR CERTIFICA	TIONS					
If the Applicant(s), Agent(s), Owner(s), or registered with the State Corrotation Comm	r Contractor(s) is/are a	company, please use the co	ompany name(s) that is/are				
READ ALL OF	THE FOLLOWING CAR	EFULLY BEFORE SIGNING	With a strike weath				
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.							
<u>CERTIFICATION</u> : I am hereby applying for per- Local Wetlands Boards for the activities I have regulatory or advisory agency to enter upon the conditions, both in reviewing a proposal to issue	nits typically issued by the described herein. I agreed premises of the project st a permit and after perm	e DEQ, VMRC, U.S. Army Corr to allow the duly authorized re site at reasonable times to insp it issuance to determine compli	ps of Engineers, and presentatives of any ect and photograph site iance 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 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	? <u>×</u> Yes No						
Applicant's name & title (printed or typed)	Seco	ond applicant's name & title, if a	applicable (printed or typed)				
Virginia Electric & Power Company (Dominion Vi	ginia Power)	and applicantle clanativia	x				
Applicant's signature	Sec	ono applicantis signatere					
Date 0 11 / 10 1 20	Date						
(Required for VMRC permit actions only) Property owner's name, if different from Applic	ant (Red Sec	uired for VMRC permit ections ond property owner's name, if a	only) applicable				
Owner's signature, if different from Applicant	Sec	ond owner's signature					
Date	Date)					

 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)												
Virginia Electric & Power Company												
APPLICANT'S NAME(S) – complete the second blank if more than one Applicant												
hereby certify that I (we) have authorized <u>Stattec Consulting Services, Inc.</u> (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	Second applicant's signature, if applicable											
Date 11/10/2014	Date											
Agent's signature and tille	Second agent's signature and title, if applicab	le										
Date 12/12/14	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	ond blank if more than one Contractor											
to perform the work described in this Joint Permit Application, sign	ned 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?YesNo. Describe how:
Will any structure(s) be placed in the stream to create riffles, pools, meanders, etc.?YesNo
21. UTILITY CROSSINGS
Type of crossing x ×overheadtrencheddirectionally-drilled
Method of clearing corridor of vegetation (check all that apply): mechanized land clearing that disturbs 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.
Nerrinel system veltage if preject invelves power lines. 500 bV w 1 220 bV
Nominal system voltage, if project involves power lines: <u>500 kV and 230 kV</u>
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:
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 beat grade ofabove 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?150-250feet
22. ROAD CROSSINGS
Have you conducted hydraulic studies to verify the adequacy of the culverts?YesNo
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 bettom?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?
For all bridges proposed over navigable waterways (including all tidal water bodies), you will be required to contact the U.S. Coast
On separate sheets of paper, describe the materials to be used, the method of construction (including the use of conferdams), 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
Rease 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., <u>4 VAC 20-336-10 et seq.</u> , 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? 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,

 $imes_{
m L}$ Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow,

____ Tidal shores,

<u>X</u> 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),

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, <u>not</u> 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. 7, PE, PR, SB	Tower 582/18 F. S. 7, 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. 57, PE, PR, SB	Tower 582/25 F, S, T, PE, PR, SB	Tower 582/26 F. S. 7. 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
(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												
Average stream flow at site (flow rate under normal rainfall conditions) (cubic feet per second)	> 5 ft ³ /sec.	> 5 ft ³ /sec.	> 5 ft³/sec.	> 5 ft ³ /sec.	> 5 ft³/sec.	> 5 ft ³ /sec.	> 5 ft³/sec.	> 5 ft³/sec.	> 5 ft³/sec.	> 5 ft ³ /sec.	> 5 ft³/sec.	> 5 ft ³ /sec.	> 5 ft³/sec.	> 5 ft³/sec.					
Contributing drainage area (acres or square miles)	>5 mi²	>5 mi²	>5 mi²	>5 mi²	>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	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	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site	Impact site									
	number PU18	number PU19	number PU20	number PU21	number PU22	number PU23	number PU24	number PU25	number PU26	number PU27	number PU28	number PU29	number PU30	number PU31	number PU32	number PU33	number PU34	number PU35	number PU36	number PU37	number PU38	number PU39
Impact Description (use all that apply) F= Fill EX= excavation S= structure T=ridal 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									
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									
Contributing drainage area (acres or square miles)	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi²	<5 mi2	<5 mi2	<5 mi2									
DEQ classification of impacted resource(s): Estuarine Class II Mountainous zone water Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands 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									