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#### United States Department of the Interior

NATIONAL PARK SERVICE Northeast Region United States Custom House 200 Chestnut Street Philadelphia, PA 19106

Colonel Jason E. Kelly, PMP Commander, Norfolk District U.S. Army Corps of Engineers 803 Front Street Norfolk, VA 23510

Dear Colonel Kelly,

The National Park Service appreciates the USACE's continued progress on the Section 106 process for the Surry-Skiffes Creek-Whealton Transmission Line Project as well as the opportunity to provide comments on the Cultural Resources Effects Assessment, Surry-Skiffes Creek-Whealton Transmission Line Project, Surry, James City, and York Counties, Cities of Newport News and Hampton, Virginia (to be referred herein as the Stantec report) prepared by Stantec Consulting Services Inc. for Dominion Virginia Power, dated September 29, 2015. Once again, before providing specific input on the report we reiterate that the NPS feels strongly that the proposal to construct an overhead power line across the James River in this location would result in an unacceptable level of damage to this historically important area.

As we have stated in the past, the proposed overhead line would cross through Virginia's "Historic Triangle" and have substantial impacts on several nationally significant historic properties listed on the National Register of Historic Places. The power line would cross directly over the water route of the Captain John Smith Chesapeake National Historic Trail and be within sight of Jamestown Island, the Colonial Parkway, Carter's Grove Plantation National Historic Landmark (NHL), and several other significant historic resources. The damage to the historic integrity of these resources should be avoided at all costs. In no other place in United States do we have a concentration of historic resources like this, in particular, Jamestown, the country's very first permanent English settlement.

#### Summary of NPS Review of Stantec Assessment of Effects

The NPS recognizes and appreciates the extensive efforts the USACE has undertaken in the Section 106 process for this project. As a result of extensive consultation, the project APE was established and a list of historic properties that could be affected was agreed upon. The Stantec report represents the next step, and an extremely important part of the Section 106 process, assessing effects of the project on historic properties. We believe the Stantec report is a major step toward completing this step in the Section 106 process.

The NPS finds that most of the descriptions regarding National Register eligibility for historic properties are sound as are many of the assessments of effect. However the NPS has several major concerns related to the described methodology for assessing effects and we disagree with a number of the assessments.

The Stantec assessment of effects begins with a methodology that categorizes all of the identified historic properties into two groups: architectural resources and archaeological resources. As we describe in detail below (comments on Section 1.0), initiating an analysis of effects with a framework of either archaeological or architectural resources taints the entire assessment as many of the most significant historic properties being evaluated are neither architectural or archaeological but in fact landscape-based resources. Thus, it should come to no surprise that the NPS disagrees with Stantec's assessment of effect for resources like Jamestown, the Colonial Parkway and Hog Island, among other properties, that are landscape-based resources or have landscapes associated with them. Assessing the effects of a project such as the proposed power line is an entirely different approach when considering an archaeological resource or historic structure versus an historic landscape or district.

Another difficulty we have with the Stantec report is how the character of the James River and its shoreline within the APE are repeatedly described. In fact, this issue is not confined only to the Stantec report as it has been perpetuated throughout the project's Section 106 process. We recognize that the character of the James River and its shoreline within the APE is "not pristine" as Stantec states. However, the description of existing development and modern intrusions is in many instances, exaggerated, even so far as to be called "industrial." While in other instances Stantec states significant portions are protected through conservation and USACE describe the modern intrusions as "found to be low density intrusions that become relatively lost within the overall landscape." An inaccurate description of the character of the James River and its shoreline within the APE results in inconsistent and unjustified assessment of effects for many of the resources being evaluated.

Our specific comments below reflect that the NPS agrees with the Stantec assessment of effect for many of the historic properties and completely disagrees with others. Findings of no adverse effects determinations for resources such as Fort Huger and Fort Crafford are simply confusing to us and we feel Stantec has severely minimized the description of the adverse effect to Hog Island. Additionally, while the USACE determined, and we agree, that the project would have adverse effects on Jamestown and Colonial Parkway, Stantec was able to determine a finding of no adverse effect.

NPS review of the Stantec report included an array of NPS professionals in various fields of expertise, including archeologists, historical architects, historical landscape architects, etc. During our ongoing participation in this Section 106 process we have continually commented on, and often disagreed with, how landscape resources, such as Jamestown, Colonial Parkway and the Captain John Smith Trail are recognized and evaluated. Expertise in historic landscapes is critical to this process given the resources at stake. As described below in more detail, our

review team has noted a potential disconnect in Stantec's level of understanding regarding archaeological and architectural resources versus landscape resources.

A continuing issue throughout this Section 106 process remains that Stantec has yet to recognize the Captain John Smith Trail as a National Register eligible historic resource of its own. While related to many of the surrounding historic properties, and included within the Eligible Historic District, the Trail is a historic property with its own history, significance and integrity and effects to the Trail must be assessed specifically as is done with other resources. After lengthy discussion and consultations resulting in a determination by the Keeper that the Trail is eligible for the National Register, it must be recognized as an individual resource. The eligible portion of the Trail may well be contained within the larger Historic District but so is Colonial, Jamestown and other properties. Effects to each of these resources must assessed individually as well as for the District as a whole.

While the NPS finds much of the information and analysis in the Stantec report to be sound, we disagree on several major issues. These issues begin with the methodology invoked that does not adequately recognize landscape resources and the mischaracterization of the James River and its shoreline. These factors set the stage for an effects assessment that is flawed and minimizes the severity of potential impacts to so many nationally significant historic properties.

Following are comments on specific sections of the Stantec report.

#### 1.0 Introduction and Project Background

#### 1.4 Summary of Resources Included in Effects Assessment

As the result of extensive discussion between the consulting parties and guidance from the Advisory Council on Historic Preservation and the Keeper of the National Register, a lengthy list of historic properties has been identified to exist within the APE and includes historic sites, historic structures, archeological sites and historic districts. The Stantec effects assessment begins by categorizing all of these historic properties into two groups: architectural resources and archaeological resources. While categorization of historic properties is not uncommon, this twocategory methodology is completely inappropriate to adopt here given the nature of the historic properties that have been identified. Many of the identified historic properties within the APE are landscape-based resources or have extensive landscapes associated with them such as (but not limited to) Jamestown, the Colonial Parkway, Carter's Grove, Hog Island and the Captain John Smith Chesapeake NHT. This misguided categorization at the start of the effects assessment results in two major flaws: 1.) Stantec's methodology for assessing effects is based on which aspects of historic integrity the National Register identifies as most important for these two types of historic properties. As we demonstrate below, this results in an effects analysis for landscapebased resources being evaluated as if they were a historic structure, and 2.) Stantec's effects assessments (in many cases) do not recognize or downplay the effects of the project on the feeling or setting of certain historic properties, two aspects of historic integrity that are most often critical to historic properties that are landscape based. Our comments on section 2.0 and 3.0 of the report provide further explanation on this topic.

#### 2.0 Methodology - Assessment of Effects

2.1 Recommendations of Effects

To assess effects, Stantec considered the NRHP eligibility criteria and the "applicable" aspects of integrity associated with each historic property. As described above, categorizing landscape-

based resources as architectural allowed a scenario that did not fully respect aspects of integrity that are critical to defining landscape-based resources: *setting* and *feeling*.

In this same section the report states "Stantec's Architectural Historian and Senior Principal Investigator reviewed both indirect and direct effects. For above-ground resources, (i.e. architectural properties)...". As we have described in earlier comments, there seems to be a lack of recognition and understanding that many of the historic properties are landscapes or have landscapes associated with them. This disconnect resulted in an unfortunate misrepresentation of the historic properties being evaluated and analyzed. NPS historical landscape architects who participated in the review of the report immediately recognized this flaw. It is not clear if the project team contained an appropriate level of expertise to assess effects on historic landscapes.

#### 2.2 Visual Effects Assessment - Methodology

The NPS recognizes that the character of the James River and its shoreline within the APE is "not pristine" as Stantec describes. However, in this section (and in 3.35 and 5.0) Stantec describes an existing character within the APE that would leave one to believe that the shoreline is more developed than not and that the James River is busy with shipping activity. Over the past year the shoreline has even been described as "industrial," which is far from reality. In fact the character of the river and its shoreline within the APE has a fairly natural character, recognizing there is some modern development. In Section 5.2.1.1 of the Stantec report they admit themselves that "significant portions" of the APE are protected through conservation measures. The USACE recognized early on that the modern intrusions "were found to be low density intrusions that become relatively lost within the overall landscape" (May 17, 2015).

Stantec's evaluation of the character of the landscape becomes problematic for conducting an effects assessment, particularly when considering effects to the historic properties in which setting and feeling are important aspects of historic integrity. Describing the character of the APE as modern or developed sets the stage for downplaying the effects of a major modern structure directly within the historic district and within view of several nationally significant historic properties. Further comments on section 3.0 elaborate on this topic.

The section begins with "Visual effects assessments were conducted by Stantec for all above-ground resources identified as Historic Properties. This includes those resources listed or eligible for listing on the NRHP...". The report repeatedly describes how the previously recognized Jamestown Island-Hog Island cultural landscape has been replaced with the "Eligible Historic District" that includes the Captain John Smith Chesapeake NHT. As demonstrated in section 3.35, the Eligible Historic District is recognized and effects analyzed. However, Stantec takes an approach that since the effects to the District are assessed, analyzing effects to the Captain John Smith Chesapeake NHT would be redundant. The Captain John Smith Chesapeake NHT and its eligibility determination must be recognized and effects specific to that individual resource must be analyzed. As is clearly evident with other historic properties, analyzing effects is specific to a resource's historical significance and integrity. As demonstrated in the Stantec report, a project may have a different effect on historic resources that have different areas of significance or other

important aspects of integrity. In addition, Stantec only analyzes indirect effects for all of the resources identified as "architectural." The Historic District and the Captain John Smith

Chesapeake NHT itself would be crossed by the power line, having both the power line and towers located directly within them, and therefore need to be analyzed for direct effects as well.

Additionally, Stantec describes their methodology for assessing effects to each resource "with respect to the NRHP eligibility criteria as well as the applicable aspects of integrity so that an appropriate recommendation of effect could be made." It is not clear that the consultant's assessment methodology considered the Virginia Department of Historic Resources (DHR) document titled Assessing Visual Effects on Historic Properties which provides guidance on how to define issues, outline the tools needed to assess visual effects, and present options for mitigating adverse visual impacts on historic properties in Virginia.

Finally, NPS has found multiple projects, research articles and reports that produced a much more objective, thorough and articulate methodology of analysis of visual effects that should be considered for an accurate assessment of the potential effects along the James River. These projects include the Northern Pass Transmission Line Project EIS, Offshore Wind Turbine Visibility and Visual Impact Threshold Distances, Wind Turbine Visibility and Visual Impact Threshold Distances in Western Landscapes. It is not clear that the consultant's assessment considered any of the related protocols that similar types of projects consider in effects assessments.

#### 3.0 Effects Assessment - Architectural Resources

#### 3.2 Fort Huger

Stantec accurately states that Fort Huger is listed on the National Register under Criterion A for the site's importance and association with the Civil War in Virginia and Criterion D for its potential to provide important archaeological data relating both to the fort and the lives of Civil War soldiers residing there in 1861-1862. Stantec also recognizes that the site retains integrity of setting, location, feeling, and association as well as the integrity of design. They go on to admit that the power line would be visible from the shoreline of the property but would be partially obstructed by the presence of the Ghost Fleet and that combined with distance and "atmospheric" conditions the project will not have an adverse effect on the Fort.

The NPS-prepared document Analysis of Visual Impacts to Historic Properties dated September 15, 2015 provides an objective analysis of predictable and quantifiable visual impacts to historic properties, including Fort Huger, which would stem from construction of the proposed Surry-Skiffes-Whealton Creek transmission corridor project. This analysis showed the potential visibility of up to 44 towers in the No-Vegetation Scenario and up to 26 towers in the Existing Vegetation Scenario. Additionally, many of the towers that will require lighting are among the towers visible to Fort Huger.

Furthermore, the locations selected for photographic analysis, the quality of the photography and the environmental conditions under which photographs were taken do not enable an adequate assessment of the visual impacts of the towers across the entire site.

The mere presence of the towers, with as many as 26 visible from the Fort, constructed within the setting of the Fort will certainly detract from the Fort's setting and feeling resulting in a determination of adverse effect.

#### 3.19 Hog Island Wildlife Management Area

Several issues exist regarding the assessment of effects for Hog Island. Stantec recognizes Hog Island's eligibility for the National Register under both Criteria A and D. Under Criterion A they also recognize that setting and feeling are important aspects of Hog Island's integrity. Stantec determines that the project will have an adverse effect to Hog Island. However, the narrative and the conclusion both simply state the project "will have an adverse effect" and "detract from the resource's integrity of setting and feeling." Stantec's assessment of effects for other resources often adds qualifiers to the analysis stating the severity of the effects and how an effect may be minimal, for example. The proposed power line will be within just a few hundred feet along two sides of Hog Island, and the remainder of the line crossing the river will be in direct, close up view to Hog Island. How, in the case of Hog Island, can Stantec not absolutely clarify, and admit, that the project will have an adverse effect that will completely destroy the setting and feeling of this resource?

Furthermore, Hog Island is a contributing element to the Eligible Historic District and a contributing resource to the Captain John Smith Chesapeake National Historic Trail itself. The effects to Hog Island must also be considered as part of the assessment of effects to the larger District and to the Trail.

#### 3.28 Fort Crafford

The Stantec report states that "Although the NRHP nomination does not indicate the specific criteria under which the resource was listed, it is reasonable to assign significance to this resource under Criterion A for its significance to the Civil War and as a well-preserved example of a Civil War period strategically placed earthwork and under Criterion D for its potential to yield significant archaeological information about the Civil War period and fort construction." In addition to Criteria A and D, the statement above also suggests that Fort Crafford should address eligibility for listing under Criterion C recognizing it as a well-preserved earthwork.

Similar to our comments regarding Fort Huger, the NPS-prepared document, Analysis of Visual Impacts to Historic Properties dated September 15, 2015 provides an objective analysis of predictable and quantifiable visual impacts to historic properties, including Fort Crafford, which would stem from construction of the proposed power line. This analysis showed the potential visibility of up to 44 towers in the No-Vegetation Scenario and up to 12 towers in the Existing Vegetation Scenario. Additionally, many of the towers that will require lighting are among the towers visible to Fort Crafford.

Furthermore, the locations selected for photographic analysis, the quality of the photography and the environmental conditions under which photographs were taken do not enable an adequate assessment of the visual impacts of the towers across the entire site.

The mere presence of the towers, with as many as 12 visible from the Fort, constructed within the setting of the Fort will certainly detract from the Fort's setting and feeling resulting in a determination of adverse effect.

## 3.33 Colonial National Historical Park and Associated Resources 3.33.2 Colonial Parkway Historic District National Register Status - NRHP listed Criteria A and C

Colonial National Historical Park was listed on the National Register of Historic Places (NRHP) in 1966. The primary purpose of the park is to commemorate the Colonial and Revolutionary periods of American History. The park is made up of three major units: Jamestown Island, the Colonial Parkway (Parkway), and the Yorktown Battlefield. Though related thematically, the three major units of the park are distinct enough that National Register of Historic Places documentation has been separately submitted for each unit. The individual NRHP nomination for the Parkway was accepted and filed by the Keeper in 2001. The nomination determined that the Parkway's period of significance is 1930-1958 and it is eligible under Criterion C. It retains integrity of location, design, setting, materials, workmanship, feeling, and association from the period of significance. Of these seven aspects of integrity, setting was determined to be the most fragile when the Parkway documentation was completed. The setting of the Parkway was considered threatened due to development outside of the Parkway corridor, which the NPS has attempted to screen in places with vegetation. Along the James River segment of the Parkway, the sweeping views of the river were specifically mentioned in the National Register nomination for the ability to connect the visitor with the historic nature of the area.

A cultural landscape inventory (CLI) was completed for Jamestown Island in 1999, which was updated in 2008 after the devastation caused by Hurricane Isabel. The CLI was submitted to the SHPO, and received concurrence in September of that year. The cultural landscape of Jamestown Island was determined eligible for the NRHP under Criteria A, C, and D. The CLI determined the period of significance to be 1607-1958 and demonstrated that the landscape retained integrity, in particular relative to the 1957-1958 time period. Views and vistas figure prominently in the assessed landscape; in particular, the views from Black Point, at the easternmost end of Jamestown Island, are profound. The CLI determined that the landscape of Jamestown Island retained integrity of location, setting, feeling, association, and workmanship.

The Yorktown unit of Colonial National Historical Park is mainly comprised of Yorktown Battlefield, where the last major battle of the American Revolution occurred in 1781. The draft NRHP documentation for the Yorktown Unit was submitted to the SHPO in 2012. The park determined that the Yorktown Unit was significant under NRHP Criteria A, B, C, D, and Criteria Consideration G. Concurrence was received on the park's findings in the draft in September of 2012. The Yorktown Unit's period of significance begins prior to European contact, in the Archaic period, and extends into the historic era. The period of significance for the historic era is 1639-1976. The unit was determined to retain significance in location, setting, workmanship. design, feeling, materials, and association.

#### 3.33.1.1 Description of Resource

The Parkway, in addition to its utility as a scenic roadway connecting visitors to Jamestown, Williamsburg, and Yorktown, was constructed to ensconce the visitor in the feeling and spirit of the Colonial period. The road surface was selected to make it resemble an unpaved country road. The "1933 Outline of Development" best sums up the intent and purpose of the Parkway; "...the Parkway is not intended to be a speedway or pleasure boulevard, but rather a convenient way for the visitor to see the historic landmarks that lie along the road and to absorb the Colonial feeling of the landscape ... the character of pavement and drainage system will be selected so as best to conserve the Colonial atmosphere" (NPS 1933:184). Maintaining the surrounding views in concert with the historical nature and purpose of the Parkway is integral to the visitor experience. It is one of the main reasons the Parkway was situated where it is today with designed Colonial Revival architectural elements.

#### 3.33.1.4 Colonial Parkway Historic District - Effects Analysis

The report describes from where analytical photographs were taken, including "along several stretches of the eastern portion of this section of parkway where there are few trees; where the parkway runs very close to the shore along a narrow isthmus; at several interpretive pull offs adjacent to the shoreline; and where the north end of Hog Island does not interfere with the view down river. Visibility would be less apparent [in some locations] because of the dense vegetation present in this vicinity along the shoreline." The Parkway planting plans call for keeping much of the views along the Parkway open to showcase the views along the river. In recent years, the vegetation has grown up along the river and it obscures these views. Were the park to conduct a viewshed restoration by restoring the vegetation to the planting plans, the views of the river and the proposed power line would be far more evident.

The report goes on to describe Stantec's review of its simulations, which according to the analysts "indicate that the [towers] would be visible from locations along the Colonial Parkway. However, the distance between the parkway and the proposed crossing diminishes the view of the proposed structures...Point B...was located at approximately 3.5 miles north of the James River Bridge and adjacent transmission line crossing. The view of the structures from this location was distant and faded and a similar result would be expected on a similar day for views from the Colonial Parkway. The structures would be visible, but would appear distant."

Other energy project visual impact analysis studies offer a more robust assessment of distances where visual impacts can be noticed. Specifically, Offshore Wind Turbine Visibility and Visual Impact Threshold Distances concluded that high visual impacts would occur within 0-5 miles, moderate visual impacts would occur at 5-8 miles, low visual impacts would occur between 8.1 and 14.9 miles and that visual impacts would only be insignificant at distances beyond 14.9 miles. Stantec's assessment does not appear to take into account an industry-accepted, more sophisticated method of assessing visual impacts and should, at a minimum, consider day/night/seasonal perspective studies to present a more comprehensive analysis. Weather plays an important role in visibility on the James River. Rain, humidity, cloud cover, and other atmospheric factors all affect visibility and vary widely from day to day. On clear days, within the APE, visibility can be well over ten miles.

The report goes on to state that light intrusions already exist, including channel markers, as well as light pollution "from nearby Kingsmill Resort, the Surry Power Station and the Busch Gardens Theme Park. The minimal impact and intensity of the structure lighting at this distance would not adversely affect or detract from the resource's primary characteristics qualifying it for listing on the NRHP."

Height, intensity and clustering of proposed lights would be much greater than existing lights noted. This report does not admit that the proposed lights indeed would be visible from the noted observation points. Additionally, this is an exceedingly poor analysis of cumulative effects. The Parkway cultural landscape report/cultural landscape inventory (CLR/CLI) specifically notes the views of the James River along this stretch of the Parkway as contributing features. Page 401 of the CLR for the Parkway specifically mentions potential future development in the river would threaten the landscape's integrity, which would fit the description of this project.

Stantec concludes this section by sharing its belief that the proposed project will have no adverse effect on the Colonial Parkway Historic District and will not detract from or adversely affect the Colonial Parkway's status for listing on the NRHP; however, in acknowledgement of the USACE Public Notice, published May 21, 2015, it is required to state is that the project would have an Adverse Effect, and would detract from the resource's characteristics and integrity.

Given that the USACE made a determination of adverse effect previously (5/21/15 USACE Public Notice) it is unclear how Stantec could possibly reach a determination of no adverse effect for the Parkway. Analysis of Visual Impacts to Historic Properties finds that 22 towers would be visible from the site in the Existing Vegetation Scenario. No objective analysis could possibly conclude that the visibility of this many towers with the naked eye would not create a noticeably adverse effect to a resource such as the Parkway, compromising the integrity of the resource's setting, feeling and association. The construction of a power line that could be seen from the Colonial Parkway would be in direct opposition to the purpose and intent of the Colonial Parkway; therefore, it would adversely affect a character-defining feature of the Parkway landscape.

3.33.1.4 Jamestown National Historic Site/Jamestown Island Historic District - Effects Analysis As described above, a cultural landscape inventory (CLI) was completed for Jamestown Island in 1999, and updated in 2008 after the devastation caused by Hurricane Isabel. The cultural landscape of Jamestown Island was determined eligible for the NRHP under Criteria A, C, and D. The CLI determined the period of significance to be 1607-1958 and demonstrated that the landscape retained integrity, in particular relative to the 1957-1958 time period. The CLI determined that the landscape of Jamestown Island retained integrity of location, setting, feeling, association, and workmanship.

In this section of the report, Stantec acknowledges that the setting on Jamestown Island "consists of the open public areas as well as wooded, non-public areas which are maintained as a natural landscape. The location and feeling of the site also retains integrity as does the site's association

with the Colonial period in Virginia and the location of the Jamestown Fort. Also integral to the significance of the site are the archaeological sites and above-ground architectural remains

associated with the 1607 fort and subsequent occupation of the island in the early seventeenth century."

Stantec does not appear to have consulted the site's cultural landscape inventory, prepared in 1999 and revised in 2008, which indicates that the post-WWII landscape of Jamestown Island is additionally significant and contributing to Colonial National Historical Park. This extends the aforementioned period of significance to 1958. The SHPO concurred on this finding. This document (CLI) is readily available at both Colonial National Historical Park and the Department of Historic Resources in Richmond. Please see:

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1997/2006 Cultural Landscapes Inventory: Jamestown Island Area, Colonial National Historical Park. Prepared by the National Park Service, Northeast Regional Office, Philadelphia, Pennsylvania. Manuscript on-file with Colonial National Historical Park, Yorktown.

Additionally, the Keeper has stated that Jamestown Island should be considered to fall within the boundary of the John Smith Trail. Therefore, effects to this resource should additionally be assessed in relation to the John Smith Trail as an individual resource.

Stantec erroneously concludes that "the proposed transmission line - specifically the Surry to Skiffes Creek 500 kV segment – will not directly affect the Jamestown Historic District because there will be no ground disturbing or physical impacts to the resource's assets or character defining elements which include the site of the James Fort, visitor center, associated monuments and archaeological sites, indirect effects to the property, however, were determined to be

primarily visual, therefore visual effects assessments were conducted."

The island is not only individually listed on the National Register; it is also included within the boundary of the John Smith Trail, in addition to being a contributing property in the Eligible Historic District described below. The setting, feeling, location and associations of this resource, the very character-defining features that contribute to its national significance and have enabled its recognition as both an individual listing, and a contributing resource to the larger district, will clearly be affected by the proposed transmission line.

The report proceeds to describe the locations chosen for line-of-site modeling, and the results of the analysis. It concludes "the proposed transmission line crossing including both land-based and riverine portions, would be visible from this location (Figure 149). However, because of the bend in the river as well as the natural landscape of Hog Island, only two of the structures associated with the segment would be completely visible. ...in a direct, unobstructed sight line from Black Point." According to Stantec, other structures would only be partially visible due primarily to the distance and natural obstructions.

As in other line-of-site analyses conducted by Stantec, a defensible methodology is lacking, and does not account for potential effects on the view should existing vegetation be destroyed due to

uncontrollable circumstances including climate change, sea level rise or disease. More importantly, as articulated above, the view from Black Point is particularly significant. The 1997

Cultural Landscape Inventory indicated that the direct view of the Surry Nuclear Power Plant is the only non-contributing portion of this view from Black Point. The other surrounding views, immediately on both sides of the power plant, are contributing, and need to remain that way.

The Stantec report goes on to describe the visual assessment toward the existing James River Bridge crossing. At 3.5 miles, "the view of the towers from this location was distant and faded and a similar result would be expected on a similar day for views from Jamestown Island and particularly Black Point. While the LOS model indicated that the towers would be visible, they are just over 3.0 miles away. The towers would appear very distant and would not be easily discernable from this vantage point. Thus, the towers would not detract from the resource's overall integrity of association, location, setting, or feeling."

Comparable energy project visual impact analysis studies (as cited in section 2 above) offer a more robust assessment of distances from where visual impacts can be noticed. Specifically Offshore Wind Turbine Visibility and Visual Impact Threshold Distances concluded that high visual impacts would occur within 0-5 miles, moderate visual impacts would occur at 5-8 miles, low visual impacts would occur between 8.1 and 14.9 miles and that visual impacts would only be insignificant at distances beyond 14.9 miles. This assessment does not appear to take into account an accepted and more sophisticated method of assessing visual impacts and should, at a minimum, consider day/night/seasonal perspective studies to present a more comprehensive analysis. Additionally, the fact that the towers are visible does, in fact, detract from the integrity of the view. Repeatedly stating otherwise in several locations in the report does not make it true and no compelling evidence is offered to support these statements.

Later, relative to its lighting assessment, Stantec concludes "although 10 of the 17 structures crossing the James River require lighting at the top with several requiring mid-level lighting, it is not likely that the lights would affect the integrity of the portion of the Jamestown Historic District located within the project APE nor diminish its NRHP qualifying characteristics...the lights would only blink at night at a maximum frequency of 40 FPM. In addition, some light intrusions already exist in the viewshed for the resource including a number of lighted channel markers within the James River as well as light pollution from nearby Kingsmill Resort, the Surry Power Station and the Busch Gardens Theme Park."

Height, intensity and clustering of proposed lighting is much greater than that of existing lights (in particular, channel markers). To conclude that mid- and high-level lighting of up to 17 towers would only nominally increase existing light pollution is ridiculous.

Stantec concludes at the end of this section that "the proposed project would have no adverse effect on Jamestown National Historic Site/Jamestown Island Historic District" and would not detract from or adversely affect contributing characteristics of the listed district. Again, however, it must acknowledge USACE's May 21, 2015 finding of an adverse effect, and reluctantly agree. That Stantec makes this assessment on September 28, 2015 in spite of the May 21, 2015 USACE Public Notice is confounding. No objective reasoning could possibly conclude that the visibility

of this many towers with the naked eye would not create a noticeable adverse effect, compromising the integrity of the resource's setting, feeling and association.

#### 3.33.4 Summary - Colonial National Historical Park and Associated Resources

While the Stantec report rightfully claims that the nature of Colonial NHP requires an assessment of effects on individual components before calculating adverse effects on the larger resource, it ignores the additional value that Colonial provides by protecting the character-defining features of the John Smith Trail along this stretch of the James. The park, as a permanently protected cultural landscape, additionally protects the integrity of the John Smith Trail in this unique location, the site of the first permanent English settlement in North America. As intertwined as the three designated components of the NHP are, they also support the integrity of the Trail, which should be noted here, as well as in a separate section analyzing the project's effects directly on the Trail.

#### 3.34 Battle of Yorktown

#### 3.34.4 Battle of Yorktown - Effects Analysis

Stantec determined through its line-of-sight analysis that the project would have minimal effect on the battlefield due to the sheer distance between the southernmost point and the proposed project (Figure 22 in the report). Comparable energy project visual impact analysis studies (cited earlier in section 2) offer a substantially more robust assessment of distances from where visual impacts can be noticed. Specifically, Offshore Wind Turbine Visibility and Visual Impact Threshold Distances concluded that high visual impacts would occur within 0-5 miles, moderate visual impacts would occur at 5-8 miles, low visual impacts would occur between 8.1 and 14.9 miles and that visual impacts would only be insignificant at distances beyond 14.9 miles. This assessment does not appear to take into account more sophisticated methods of assessing visual impacts and is therefore insufficient.

The Stantec report recommends that the project will not detract from those elements qualifying the Battle of Yorktown for listing on the NRHP. Using a flawed methodology (already elaborated upon above), Stantec suggests that the proposed project will not have an Adverse Effect to the Battle of Yorktown, or detract further from those elements qualifying the battlefield for listing. Further, it claims that indirect visual effects would not compromise the resource's overall integrity. In contrast, the proposed towers in the river reflect a direct impact to the resources associated with naval battle of Yorktown. The resource is best experienced on the water, from which the viewer has unobstructed, 360-degree views of the battlefield. The James retains a high integrity of setting and feeling, as it does not currently contain any physical intrusions. No objective reasoning could possibly conclude that the visibility of this many towers with the naked eye would not create a noticeably adverse effect, compromising the resource's integrity.

It should be noted that the Battle of Yorktown is identified by VA DHR as potentially eligible, however there has been no formal determination of eligibility completed. Therefore any characteristics or aspects of integrity that might be important to this resource have not been clarified. A proper assessment of effects for the Battle of Yorktown would require Stantec to complete a DOE for the resource.

### **3.35 Eligible Historic District** 3.35.1 Description of Resource

The Stantec report erroneously claims that "the definition of the Eligible Historic District does not introduce new resources or significantly alter the effects that have been assessed for the project." This interpretation fails to recognize the Keeper of the National Register's determination that the portion of the Captain John Smith Chesapeake National Historic Trail within the limits of the Indirect APE established for the river crossing is eligible for listing on the NRHP as a historical district. NPS feels that the proposed project represents a Direct Effect to the Captain John Smith Chesapeake National Historic Trail - specifically visual impacts - as well as many of the other historic resources being considered in the Section 106 Process. NPS continues to await a full assessment of potential impacts to this NRHP eligible resource. Recognizing the John Smith Trail as a historic property within the Eligible Historic District does not constitute an assessment of effect. Upon review and consideration of direct effects on the Trail, the consultant report would also need to re-examine the indirect effects in proper context as well as cumulative effects.

#### 3.35.1 Description of Resource

Stantec states in its report that "although there are undeveloped areas along the shoreline, the general setting within the overall vicinity of the Eligible Historic District has been compromised and diminished by these modern intrusions." This is a subjective statement that does not accurately take into account the overall character of the area of study, which includes the water surface area of the James River. As articulated above in response to section "2.2 Visual Effects Assessment - Methodology" Stantec's evaluation baseline becomes problematic for conducting an effects assessment, setting the stage for downplaying the the effects of a major modern structure within clear view. As the river is currently devoid of electrical transmission structures, there can be no argument that the proposed project will impose modern intrusions onto an area that has been free of permanent structural disturbance since the dawn of time.

The cultural landscape inventory (CLI) conducted for Jamestown Island in 1997 and updated in 2008 focused on the views from the island. Much of the historic district is visible from different vantage points on Jamestown Island. Most of the modern intrusions referenced in Stantec's report existed at the time the report was compiled. Despite this fact, the authors still found that the landscape retained integrity, as did the SHPO, who concurred with this finding. The Jamestown CLI does not appear to have been reviewed during this effects analysis, which is counter to the findings of the CLI.

The Stantec report erroneously claims that "The proposed transmission line crossing does not adversely affect the Captain John Smith Chesapeake National Historic Trail's ability to contribute to the larger historic district in which it is located because the historic significance of the district is its association with events and important persons and potential to yield important information." The Keeper's decision that the proposed historic district is eligible for listing on National Register of Historic Places is based upon the proposed district's high level of integrity of setting, association, feeling and location. The summary comments of Stantec's assessment of these criteria were at best dismissive of the important resources of the John Smith Trail and, at worst, pejorative in nature in an attempt to diminish the historic, cultural and natural resources

the trail represents and protects. The Keeper determined that the Eligible Historic District, inclusive of a portion of the Trail, is eligible as a historic district under Criterion A (nationally-

significant events), Criterion B (important persons), and Criterion D (potential to yield important information), as well as Criterion C, and as such, effects of the proposed transmission line directly crossing the Trail should be assessed accordingly.

#### Setting

With regard to the Trail's setting, Stantec claims "The project does not change the flow or ability to recognize that (the James River) was the river used as important routes and voyages (of Captain John Smith)." This statement is incoherent; an objective analysis of the route of the John Smith Trail, identified as the James River, would show that the construction of 17 electrical transmission structures would significantly impact the character of the river where several documented voyages occurred, and countless others with Jamestown as the English settlement's base of operations. As articulated in response to section "2.1 Recommendations of Effects" above, Stantec's chosen methodology led to a dismissal of aspects of integrity that are critical to defining landscape-based resources: setting and feeling. Further, the Cumulative Effects Assessment (5.3.1.21 Historic District) contradicts Stantec's own report, which states that "the presence of proposed transmission structures will contribute to the cumulative adverse effects to the integrity of setting and feeling [italics added] of the Eligible Historic District."

To state that the project would not change the flow of the river or disguise it in a way to make the river indistinguishable as a body of water where historic events took place is a dismissive and inarticulate analysis of the physical impacts the proposed project will have on the river and associated landscape, which directly supports the Trail's national significance.

#### **Feeling**

Stantec claims that "existing modern structures or changes in vegetation and tree cover over time have already diminished the integrity of the feeling (of the James River's expression of the aesthetic or historic sense of a particular period of time)." This statement contradicts the Keeper of the National Register's Determination of Eligibility and ignores the large tracts of conserved properties within the APE. Public and private land conservation efforts over the last century have controlled the magnitude of negative impacts that arise from residential and commercial development along the James River, and enabled the landscape within the Indirect APE to retain a high level of integrity.

Later in this report, the Cumulative Effects Assessment (5.3.1.21 Historic District) contradicts this statement by stating that "the presence of proposed transmission structures will contribute to the cumulative adverse effects to the integrity of setting and feeling of the Eligible Historic District."

#### Association

The Stantec report erroneously states "...the river trail remains intact, therefore there are no adverse effects (to the direct link between an important historic event or person and a historic property)." This statement undermines the Keeper's Determination of Eligibility by deliberately downplaying the substantial visual impact that 17 electrical transmission structures will have on the public's association with John Smith's 17th century voyages on the James River. Stantec's flawed methodology (response to section 2.1 Recommendations of Effects," above) sets the stage

for downplaying the visual effects of 17 newly visible towers on the national significance and associated visitor experience of the John Smith Trail.

In the absence of the consultant's consideration of visual impacts to the resources of the John Smith Trail, the NPS-produced document Analysis of Visual Impacts to Historic Properties should be referenced as an objective analysis of predictable and quantifiable visual impacts to historic properties, including the John Smith Trail, which would stem from construction of the proposed Surry-Skiffes-Whealton Creek transmission corridor project.

Stantec describes that while it took multiple photographs from within the bounds of the resource, "a representative sample were chosen for inclusion in the report to present a broad overview of the resource and the landscape as well as examples of the shoreline integrity throughout the area (Figure 171; Figures 166-179)." Isolated photographs cannot accurately capture the visual impacts on panoramic views across and along the James River. Additionally, these photographs were taken on an overcast day (September 1, 2015) when visibility was reduced. As stated above in section "2.2 Visual Effects Assessment - Methodology" an objective visual assessment should consider related, accepted protocols that produce a more objective, thorough and articulate analysis of potential impacts. Further analysis should include imagery from multiple times of day, under clear sky conditions and with unlimited visibility, and consider seasonal variation. A range of available, more sophisticated methods exist to assess impacts on the viewshed from multiple vantage points.

#### 5.0 Cumulative Effects Assessment

#### 5.1 Methodology

The Stantec assessment of cumulative effects generally follows recommendations set forth in the documents Considering Cumulative Effects Under the National Environmental Policy Act (CEQ 1997) and Consideration of Cumulative Impacts in EPA Review of NEPA Documents (EPA 1999). CEQ 1997 states that "it is critical to incorporate cumulative effects analysis into the development of alternatives for an EA or EIS. Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized." The cumulative effects assessment should be used to develop all alternatives and inform the preferred alternative, not to justify impacts.

While the Stantec report attempts to assess cumulative impacts within the Section 106 Process, cumulative impacts by definition extend well beyond the focus of only historic properties. There are multiple federal Cumulative Effects Analysis documents that provide guidance in evaluating indirect, secondary and cumulative impacts. Among those that should also be considered are those outlined in NEPA, the Endangered Species Act (ESA), fishery management applications of NOAA fishery services as well as an economic impact analysis. A conclusive study of impacts to multiple resources is required in order to present a proper cumulative effects assessment.

#### Step 2

The Stantec report methodology for cumulative effects states that time periods for reasonably foreseeable future actions often look at 10 year planning horizons for land development, such as countywide comprehensive plans, while planning for energy development typically uses a longer

forecast (10 years). Based on this contradictory statement it is not clear what time frame Stantec used to determine foreseeable future actions.

#### Step 4

Stantec states that the existing conditions of the historic properties have been well documented in "previous archaeological and architectural" investigations. Two aspects of this statement are problematic. First, the "Eligible Historic District" is a newly recognized historic property eligible for the National Register, that has not been well documented or analyzed yet. Second, stating that the historic properties in the APE are well documented in "previous archaeological and architectural" investigations relates to our previously stated point that resources that are actually landscape-based are being repeatedly categorized and referred to as architectural. As with the assessment of effects in Section 3.0, cumulative effects assessments for landscape-based resources will be flawed if they are approached with an architectural lense alone.

#### 5.2 Past, Present, and Reasonably Foreseeable Future Actions

The NPS recognizes and appreciates that the cumulative effects analyzes includes both potential adverse effects and the benefits of land conservation efforts to create a more holistic evaluation of cumulative effects. However, the discussion of land conservation efforts is used here to document the inability, in some cases, for future adverse effects. This is a contradiction to earlier statements in the report that claim the character of the river and shoreline within the APE are already scattered with modern intrusions.

In addition, this section states that actions "that have or may adversely affect" historic properties are included in the analysis of cumulative effects. While this approach is justified, a cumulative effects analysis must go beyond simply recognizing existing or possible future adverse effects. The cumulative effects analysis must add the existing, future and current (the project) effects to determine if they collectively result in an adverse effect. Each action or effect on its own may not result in an adverse effect, but the combination of the effects of several past, present and future actions could collectively result in an adverse effect. A critical point in this analysis as there are many minor intrusions already existing that combined with the power line could be the tipping point for damaging the historic integrity of any of the historic resources within the APE. This "addition" of effects to determine an overall effect is critical to determining cumulative effects. In fact, it could be said that it is at the heart of determining cumulative effects and it is not an exercise that was completed within the Stantec report.

#### 5.2.1.5 Utility and Power

The Stantec report states that the Surry Power Station containment domes for the reactors are visible from many vantage points within the Indirect APE. Photographic evidence and visual tours of the area around Hog Island indicates that the views to the containment domes are largely hidden when on the James River. In fact, only sight lines that follow the water intake/release pipelines or transmission lines allow for a direct views of the domes. From the majority of locations within the APE, it is difficult to notice the presence of the power plant, due largely in part to the design efforts in the late 1960's that sought to minimize the visual impacts to the area.

#### 5.2.3.3 Utilities

This section of the report outlines Dominion's future plans for utility projects within the APE, discussing proposals for 2015 - 2017. As stated previously, reasonably foreseeable actions must be considered, extending out beyond even a ten-year span. There is no evidence that any Dominion projects beyond 2017 were considered. For example, Surry Nuclear Plant currently operates 2 reactors but was originally designed to support 4 reactors. The utility and power assessment does not take into account the possibility of this project leading to an increased probability of the construction of new transmission crossings or additional reactors at this site.

#### 5.3.1.1 Fort Huger

The Stantec assessment of effect for Fort Huger in Section 3 concludes a no adverse effect determination as a result of the project, in part based on intrusions such as the Ghost Fleet. While the NPS disagrees with that assessment, we also find fault in the analysis of cumulative effects for Fort Huger. It is the existence of these other described intrusions that make a cumulative effects analysis necessary for resources such as Fort Huger, rather than being dismissed. The addition of the power line within this setting needs critical evaluation to determine the totality of the effects were the power line be added to the viewshed. These comments regarding Fort Huger also apply to several other Stantec assessments, such as Fort Boykin and Fort Crafford among others.

#### 5.3.1.6 Colonial National Historical Park: Colonial Parkway Historic District

The experience of travelling on the Colonial Parkway, free from modern intrusions, is at the heart of the design concept for the parkway. The Colonial Parkway's primary purpose is to keep the visitor ensconced in the feeling of the Colonial period while visiting Colonial National Historical Park and Colonial Williamsburg. Views along the Parkway and from the Parkway are critical to its historical significance, and listing on the National Register. The Stantec report claims that the power line will be visible only at few locations along the Parkway and that the power line would be visible only in the background. As previously stated, the experience of the Parkway is centered on the concept of having no modern intrusions. Any views from the Parkway, and its parking areas, would be greatly affected by the addition of the power line whether it is "in the background" or not. Essentially, the power line would become the distant terminus of views from the Parkway. While there are few existing effects on the Parkway now, the power line combined with the few existing intrusions would greatly erode the historic integrity of a resource designed and managed around the importance of its views.

#### 5.3.1.7 Jamestown National Historic Site/Jamestown Island Historic District

Similar to the analysis of the Colonial Parkway, the Stantec report claims that the power line will be visible on Jamestown Island only at Black Point and that it would be visible only in the background. While the NPS agrees with the above statement, we disagree with the determination that the cumulative effects are "not expected to be significant." While some modern intrusions exist within view of Jamestown Island, the addition of the power line combined with the few existing intrusions would greatly erode the historic integrity of such an important historic site.

#### 5.3.1.21 Historic District

The cumulative effects analysis for the Historic District are troubling in that the project effects are assessed as an indirect effect. While the effects are visual in nature, the project will pass directly through and be located within the heart of the District, resulting in clear direct effects.

As we noted in regards to Section 3.35 where the effects to the District are assessed, the same approach needs to be taken in the cumulative effects assessment. Discussing the effects as indirect, minimizes the reality of the project passing directly through the district. Direct adverse effects must be the starting point for how cumulative effects are assessed for the District. This

section should conclude in assessment that the addition of the power line centrally through the District would not only add to cumulative adverse effects, but should also recognize the magnitude of the effect the power line will have on the District.

While Dominion states that they have no current plans for additional utility projects across the James at this time, there very well could be in the future. At a minimum, the cumulative effects analysis should acknowledge the fact that the proposed crossing of the James River could impact the resources to an extent that would make future crossings of the James "less impactful" as the proposed crossing would be looked upon as an existing impact. This recognition should be considered in the cumulative effects analysis for other historic properties as well such as Colonial, Jamestown, Carter's Grove, the John Smith Trail, etc.

#### 5.4 Cumulative Effects Summary

Stantec states that the cumulative adverse effects will not result from any reasonably foreseeable future actions proposed by Dominion. They also state that potential future actions within the APE are not connected to the Dominion proposal. While both of these statements may be accurate, they are irrelevant to assessing cumulative effects for this project and lead to a concern that the methodology for assessing cumulative effects is not clearly understood. Who is responsible for a future action has no impact on how or if that action is considered in a cumulative effects analysis.

The report states that within Dominion's short-term and long-term goals, there are no plans for additional transmission line crossings of the James River or the expansion of Surry Power Station, and the proposed Surry – Skiffes Creek – Whealton transmission line is not expected to lead to or cause additional development within the Indirect APE. Again, while there may not be any plans for additional crossings at this time, there very well could be in the future. At a minimum, the cumulative effects analysis should acknowledge the fact that the proposed crossing of the James River could impact the resources to an extent that would make future crossings of the James "less impactful" as the proposed crossing would be looked upon as an existing impact.

The cumulative effects summary also states the for "architectural properties that will not be adversely affected by the proposed transmission line, no cumulative effects are expected as a result of this project..." This statement assumes that effects must be adverse in and of themselves in order to be considered for cumulative effects. The very nature of cumulative effects is that less significant effects can add to other effects (such as the huge impact of the proposed power line) to create an adverse effect.

Furthermore, in the Stantec cumulative effects summary is the conclusion that "the cumulative adverse effects to these properties are not expected to be significant or greater than the visual adverse effects of the transmission line as evaluated in Section 3." As discussed earlier,

cumulative effects must be considered as an additive process and that at some point the collective effect of multiple actions creates an adverse effect. The cumulative adverse effects analysis fails to identify the impact that Dominion's proposed project would have on degrading the resources it is assessing, which would ultimately extend well beyond the visual adverse effects noted.

Further, Analysis of Visual Impacts to Historic Properties, generated by the National Park Service, provides a more robust analysis of visual impacts and the project applicant has not yet acknowledged or responded to this report. The final determination of cumulative effects should remain open until discussion or interpretation of the NPS report is factored in to the evaluation listed in Section 3 and Section 2 - Methodology.

As noted in comments on Section 3, it is apparent that Stantec and the National Park Service have a very different opinions of how the existence of a massive modern intrusion in the James River at this location will affect the incredibly high density of historic properties within the APE.

#### 6.0 Summary and Conclusions

Stantec, on behalf of Dominion Virginia Power, has completed a substantial amount of work on the USACE's Section 106 process for this proposal. Through extensive consultations an acceptable APE was established as was a list of historic properties that could be affected by the project. The NPS concurs with both the APE as established and the current list of historic properties identified. A major flaw in this scenario remains that Stantec has yet to recognize the Captain John Smith Trail as an eligible historic property requiring an assessment of effects specific to that resource. Evaluating effects to the Trail by default within the larger Eligible Historic District does not constitute addressing effects to the Trail. The historical significance, boundaries and National Register eligibility of the District are broader than that of the Trail and effects analysis could well be different for the two resources.

As mentioned previously the NPS has major concerns over the methodology used by Stantec to assess effects. Foremost is the categorization of resources as only architectural resources and archaeological resources. As we stated, this two-category methodology is completely inappropriate to adopt here given the nature of the historic properties that have been identified, many of them being landscape based resources or having extensive landscapes associated with them. We feel strongly that this misguided approach so early in the assessment of effects process created a scenario of insufficient assessments for many of the historic properties.

While the NPS agrees with the Stantec assessment of effect for many of the historic properties, we completely disagree with others. The no adverse effects determinations for resources such as Fort Huger and Fort Crafford are simply confusing to us. The NPS does not understand how the magnitude of the adverse effect to Hog Island is not recognized. Although the USACE determined, and we agree, that the project would have adverse effects on Jamestown and Colonial Parkway, how was Stantec able to determine a finding of no adverse effect?

Another area of concern to us is how Stantec evaluates cumulative effects. The inability to consider the view of towers in the distance of such significant historic properties as adverse itself or adding to cumulative effects that Stantec recognizes exist is astounding.

We find much of the information presented in the Stantec report sound, such as many of the descriptions of historical significance and the assessment of effects for archaeological resources. However, as you consider the multiple and profound inadequacies we found in this report, and in particular the flawed methodology and misguided approach to assessing effects to landscape

resources, we would repeat that we feel strongly that an Environmental Impact Statement is the proper way to fully assess the direct and indirect effects of a large-scale infrastructure proposal on an irreplaceable landscape. The EIS process will enable a far more thorough evaluation of the range of impacts on cultural and natural resources implicated across a series of alternatives, and can inform options for a solution that avoids or minimizes cumulative effects on historic properties and other resource values. The NPS remains a resource for expertise in landscape architecture and other natural and cultural resource disciplines as you move forward.

We thank you for your continued serious attention on this matter, which I believe you already know, is of great concern to the NPS.

Respectfully,

Michael A. Caldwell Regional Director Northeast Region

#### cc:

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