

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

**Location**

Dulles International Airport (IAD)  
Loudoun County, Virginia

**Proposed Federal Action**

The proposed federal action is associated with the Dominion Virginia Power (Dominion) request for an easement acquisition from Washington Dulles International Airport (IAD) for a proposed 230-kilovolt (kV) transmission line corridor. The easement acquisition will require modifications to the existing Airport Layout Plan (ALP).

**Project Description**

The Project is referred to as the Poland Road 230-kV transmission Line (Project) and includes the construction of an approximately 4-mile overhead 230-kV transmission line connecting the proposed Poland Road Substation to the existing electric transmission network. Approximately 1 mile of the transmission line falls within the IAD property. The majority of the new transmission line will be built using steel single-pole structures; however, engineering and/or design requirements at heavy angle locations may require the use of two-pole structures. The average height for the proposed poles is 110 feet with an average 700 foot span, the foundations are proposed to be approximately 5 foot diameter poured concrete and the proposed right-of-way width is 100 feet. A total of 45.2 to 55.1 acres of ROW would be required for the Project, 11.6 to 13.0 acres of which would be located on IAD property.

**Purpose and Need**

The purpose of the Project is to build new electric transmission infrastructure that will provide a new source of power to serve the northern Virginia growth area. The Project is needed due to the increased energy demand from new economic development, particularly in the commercial/high-tech sector. New development increases the electrical load and has outgrown the current infrastructure. In order to construct the new infrastructure, an easement is needed from IAD for the transmission line corridor.

**Alternatives**

A routing study was completed for Dominion in May 2015. Based on the routing study, a preferred route and alternative routes were identified and submitted to the State Corporation Commission (SCC). All of the alternatives in the routing study were designed to avoid airport infrastructure. The local jurisdiction, Loudoun County, voiced their objection and detailed public opposition to the preferred route in the SCC case and introduced several new routes that were not included by Dominion in the original SCC application. These routes were later adjusted by Dominion to limit the impact on houses that would be adjacent to, or within the proposed corridor, as well as avoid placing towers on airport property where they could be an obstruction to air traffic. Four of the new routes, Alternative 2B, Alternative 4, Alternative 5, and Alternative 6 were retained for further consideration and were evaluated as part of the Environmental Assessment (EA) along with Dominion's originally preferred route and the no Action Alternative. The four build alternatives extend north onto IAD property east of the intersection of Perimeter Road and Vance Road (621), while the routing study alternative

(Alternative 6) avoids impacts to IAD property. The alternatives were evaluated to determine if they were reasonable and feasible.

Alternative #1 (No Action): The No Action Alternative would not require transmission easements from IAD. This alternative would not fulfill the stated purpose and need to provide a new source of power to serve the growth area of northern Virginia. The population in the surrounding region would continue to grow, which would result in load growth on the transmission infrastructure in the area. Dominion would be unable to supply the power necessary to keep up with this load growth. This inability to meet electric system demands may result in increased power outages. Under the No-Action Alternative, there will be no impact environmental resources.

Alternative #2b, Alternative 4 and Alternative 5: Each of these alternatives extend north onto IAD property east of the intersection of Perimeter Road and Vance Road. The alternatives cross Perimeter Road before turning and extending northwest for approximately 0.5 mile, crossing Paint Road and both lanes of Loudoun County Parkway (Rt. 606). The alternatives parallel the west side of Loudoun County Parkway for approximately 0.4 mile north. At this point, Alternative 2B turns and extends west and exits the IAD property. Alternative 4 continues north for approximately 150 feet before turning and extending northwest for approximately 520 feet to the edge of IAD property and exiting. Alternative 5 continues north for approximately 770 feet to the edge of IAD property directly north before exiting IAD property. All three alternatives would require clearing a 100 foot-wide corridor along the length of the transmission line. All three alternatives have identical impacts to IAD property. Alternative #2b, 4 and 5 each fulfill the Project's purpose and need.

Alternative #6 (Preferred Alternative): Alternative #6 is the Preferred Alternative for the Proposed Action as discussed above in the Project Description. This alternative also extends north onto IAD property east of the intersection of Perimeter Road and Vance Road. The alternative crosses Perimeter Road before turning and extending northwest for approximately 0.5 mile, crossing Paint Road and both lanes of Loudoun County Parkway. The alternative parallels the west side of Loudoun County Parkway for approximately 0.4 mile. Alternative 6, like Alternative 5, continues north for approximately 770 feet to the edge of IAD property directly north before exiting IAD property. The preferred alternative has identical impacts to IAD property as Alternatives 2B, 4 and 5, and would also require clearing a 100 foot-wide corridor along the length of the transmission line. Alternative 6 also fulfills the project's purpose and need and was selected by Dominion to replace the Routing Study Preferred Alternative.

Routing Study Preferred Alternative: The Routing Study Preferred Alternative follows transportation corridors (Route 50) and would have less impacts associated with the natural environment; however, as there is a potential conflict with future planned transportation projects and opposition from the Local Government, this was not chosen as the preferred alternative. Although the alternative meets the project's purpose and need, the alternative was not carried forward due to conflicts with future proposed roadway network improvements along Route 50, specifically at the Route 50 and Loudoun County Parkway intersection.

## **Discussion**

The attached Short EA Form addresses the effect of the Proposed Action on the quality of the human and natural environment and is made a part of this Finding. The following impact analysis highlights the more thorough analysis presented in the document.

## **Air Quality**

The project area is designated as a nonattainment area for the 8 hour Ozone 2008 standard. The area is in attainment for all other National Ambient Air Quality Standards (NAAQS) pollutants. The Proposed Action is not a power generation facility, and is not anticipated to create operational emissions. Temporary increases are associated with construction. The net emissions increase calculated for construction emissions will not result in exceedances of the applicable *de minimis* thresholds.

## **Endangered and Threatened Species:**

The Proposed Action is not anticipated to impact protected species or impact critical habitat. The Northern Long-Eared Bat (*Myotis septentrionalis*) (NLEB) is listed as a Federally Threatened species, as this project is located within the species habitat range, there is a potential individuals may occur in the project area, although there are no documented roosting trees or known hibernacula near the project area. The U.S Fish and Wildlife Service (USFWS) concurred that the Proposed Action may affect the NLEB, but is not likely to cause prohibited incidental take of the listed species. This determination relies on the findings of the January 5, 2016 Programmatic Biological Opinion for Final 4(d) Rule on the NLEB as a type of activity excepted from take prohibitions; therefore, project-specific section 7 responsibilities with the USFWS have been fulfilled.

The Virginia Department of Conservation and Recreation (VDCR) identified suitable habitat capable of supporting several state-threatened animal species. The species include the wood turtle (*Glyptemys insculpta*), upland sandpiper (*Bartramia longicauda*), loggerhead shrike (*Lanius ludovicianus*), Henslow's sparrow (*Ammodramus henslowii*), and the green floater (*Lasmigona subviridis*). No confirmed species were noted within the project area. Avoidance was also recommended by the Virginia Department of Game and Inland Fisheries (VDGIF) of undisturbed forest, wetlands, and streams and avoidance of ground-clearing activities during the primary songbird nesting season (March 15 to August 15). To prevent impacts to songbirds, the project proposes to conduct songbird visual surveys of the clearing corridor before clearing trees. Any trees noted as having a songbird nest will be marked to not be cut until the birds have left the nest.

## **Section 4(f) Resources**

The proposed easements for the transmission line corridor are located outside of the IAD Historic District. The Virginia State Historic Preservation Officer (SHPO) issued a Statement of Concurrence concluding no Historic Properties will be affected within, or in close proximity, to the Proposed Action including the IAD Historic District boundary; therefore, there will be no adverse impacts to 4(f) resources.

## **Historic, Architectural, Archaeological, and Cultural Resources**

A phase 1 architectural and archaeological study was completed for the Proposed Action. One (1) historic district is located within 1.0 mile of the project corridor, two (2) properties listed in the National Register of Historic Places (NRHP) are located within 1.0 mile of the project corridor; and no

properties that are eligible for listing in the NRHP are located within 0.5 mile or within the project corridor. The IAD Historic District boundary is located approximately 1.5 miles from the Proposed Action. The project corridor falls within areas previously surveyed for archaeological resources. No archaeological resources are located within the project corridor. SHPO concurred that the project would have no effect on architectural or archaeological resources and that no further study would be required.

### **Land Use**

The Proposed Action is within the glideslope of two existing runways at IAD. Analysis was conducted to determine the maximum allowable height of the proposed transmission line poles. In compliance with 14 CFR Part 77 Safe, Efficient Use, and Preservation of Navigable Airspace, FAA Form 7460-1 was submitted to the Metropolitan Washington Airport Authority (MWAA) and the FAA. The form has been approved by both MWAA and the FAA allowing for a maximum pole height of 419 feet above mean sea level. This approval process resulted in lowering several poles on, and adjacent to, IAD property.

### **Noise and Noise Compatible Land Use**

Temporary noise impacts will occur during construction. Construction activities would create intermittent and short-term noise only when such activities are ongoing. Potential sources of noise from construction activities include: construction of foundations at each transmission structure site; transmission structure site preparation; erection of structures at individual tower sites; material and staff vehicle transportation; and construction staff interactions and activities. The structure and site preparation will be completed using conventional construction equipment. Construction noise will be limited to those areas where workers are conducting construction activities. Due to the intermittent and temporary nature of construction noise, an impact to the Day/Night Sound Level (DNL) to any noise sensitive area is not expected.

Noise impacts during operation and maintenance of the Project are expected to be negligible. Noise attributed to maintenance would occur when and if maintenance needs arise, with field vehicles used to access the maintenance areas and from the actual maintenance activity. These impacts would be short-term and would typically be of low intensity. The operation of the proposed transmission line would result primarily in corona-generated noise, occurring in the atmosphere near the conductor. Changes to local atmospheric pressure may result in a hissing or cracking sound that may be heard directly under the transmission line or within a few feet of the transmission corridor, depending on weather, altitude, and system voltage, with the level of corona noise receding with distance. Maximum noise levels associated with corona noise typically do not exceed 50 dBA, as heard from the edge of the transmission line corridor during extreme weather events, and noise levels typically do not exceed 25 dBA during fair weather events. The nearest sensitive receptors (residences) are located approximately 0.5 mile away. These residences are not close enough to be impacted by operational noise from the transmission line.

### **Water Resources**

#### **Wetlands**

A field investigation within the Project corridor delineated four wetlands totaling 0.65 acres of palustrine forested (PFO) and palustrine emergent (PEM) wetlands. An approved jurisdictional determination was received from the Corps of Engineers (Corps) on September 12, 2016 based upon the

submitted delineation. It is anticipated that the project will receive a Nationwide Permit 12 from the Corps.

There may be some temporary fill material in wetlands that will be placed on filter cloth and removed after construction in order to return wetlands to their original contours. Clearing forested wetlands will also be required for the Proposed Action. Any forested wetlands that require clearing will be hand-cut to minimize wetland disturbance. As clearing PFO wetlands is a conversion impact, it will be mitigated offsite at a 1:1 ratio as per the requirements of the Corps, if required. Mitigation will be done through offsite measures according to 2008 compensatory mitigation rule, either mitigation banking and/or in-lieu fee. Based the Corps Regulatory In-lieu Fee and Bank Information (RIBITS) database, there are available wetland credits within the watershed.

### Surface Waters

Streams will be avoided by offsetting the pole foundations and implementing 100 foot buffer zones at stream crossings (Appendix 5). If trees need to be removed within the buffer zone, they will be cut by hand so that the root system is not disturbed to help maintain bank stabilization. As there are no proposed permanent access roads, there are no additional impacts to surface waters associated with the project.

All clearing and soil disturbing activities will be done in accordance with Dominion's General Erosion and Sedimentation Control Specification for Transmission Lines, which are approved annually by VDEQ. Dominion will use sediment barriers along all waterways and steep slopes during construction to protect waterways from soil erosion and sedimentation. The Proposed Action will require completion of a Stormwater Pollution Prevention Plan (SWPPP) and will be receiving a Virginia Stormwater management program (VSMP) Permit, which is Virginia's version of the National Pollutant Discharge Elimination System (NPDES) Permits for land disturbance.

### Other Impact Categories

Additional categories addressed in the EA include, but are not limited to, climate, coastal resources, farmlands, hazardous materials, solid waste and pollution prevention, natural resources and energy supply, socioeconomics, environmental justice, children's health and safety risks, floodplains, and visual effects including light emissions. It is the FAA's finding that the Proposed Action will not have any significant effect on any of the addressed categories within the EA.

### Mitigation Measures/Conditions of Approval

The VDGIF recommended adherence to a Time of Year Restrictions for songbird nesting, March 15-August 15. To prevent impacts to songbirds, the project will conduct songbird visual surveys of the clearing corridor before clearing of trees. Any trees noted as having a songbird nest will be marked to not be cut until the birds have left the nest.

Contractors will use existing access roads and right-of-ways to the maximum extent practicable during construction. No new access roads are expected on IAD property outside of the transmission line corridor. If new access roads are required, they will be routed where practicable to follow present land contours and minimize clearing and possible surface damage.

If required by the Corps, impacts to PFO wetlands will be mitigated at a 1:1 ratio. Required mitigation will be done through offsite measures according to 2008 compensatory mitigation rule, either through mitigation banking and/or in-lieu fee. Should any clearing involve wetlands, Dominion would use the least intrusive method reasonably possible to clear the ROW. In jurisdictional wetlands, mats will be used for all construction equipment. Any forested wetlands that require clearing will be hand-cut to minimize wetland disturbance.

Streams will be avoided by offsetting the pole foundations and implementing 100 foot buffer zones at stream crossings. If trees need to be removed, they will be cut so that the root system is not disturbed to help maintain bank stabilization. Clearing within 100 feet of a stream will be done by hand so that the VDGIF recommended 100 foot buffer around the Proposed Action is followed. Dominion will use sediment barriers along all waterways and steep slopes during construction to protect waterways from soil erosion and sedimentation. Dominion may need to install a culvert, ford, or temporary bridge to cross small creeks and streams. In such a case, there may be some temporary fill material in wetlands that will be placed on filter cloth and removed after construction in order to return the wetland to its original contours.

Best Management Practices (BMPs) shall be implemented during construction to minimize erosion and sediment transport into surface waters. All clearing and soil disturbing activities will be done in accordance with Dominion's General Erosion and Sedimentation Control Specification for Transmission Lines, which are approved annually by VDEQ.

A VSMP permit for disturbances greater than 1 acre will be required for the Proposed Action. As part of the VSMP permit, development of a SWPPP plan, including a project-specific Erosion and Sediment Control Plan (ESC), will be required. The SWPPP must be developed in accordance with the Virginia Stormwater Management Program (VSMP) permit regulations. The ESC plan must be prepared in accordance with the Virginia Erosion and Sediment Control Law and Virginia Erosion and Sediment Control Regulations (VESCR) and the most current version of the Virginia Erosion and Sediment Control Handbook.

Fugitive dust must be kept to a minimum by using control methods outlined in 9 Virginia Administrative Code (VAC) 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. The Proposed Action must also meet the requirements under 9 VAC 5-130 et. seq. of the regulations for open burning if any of the removed timber is burned.

All required permits and approved plans for the Proposed Action must be obtained prior to construction.

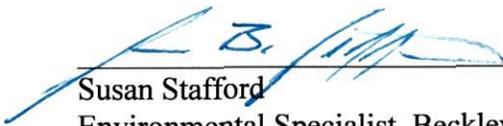
### **Public Involvement**

A public notice was published in The Washington Post on April 10, 2017. Copies of the draft EA were made available for the public to review at the Centreville Regional Library (14200 St. Germain Dr. Centreville, VA), Chantilly Regional Library (4000 Stringfellow Rd. Chantilly, VA), and Fairfax City Regional Library (10360 North Street, Fairfax, VA), and electronically at <https://www.dom.com/about-us/news-center/electric-projects-and-initiatives/power-lin-projects/poland-road-project>. The fifteen (15) day review period ended on April 25, 2017.

No comments were received during the fifteen (15) day review period for the draft EA.

**Conclusion and Approval**

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

Recommended:  5/01/17  
Susan Stafford Date  
Environmental Specialist, Beckley AFO

Approved:  5/3/17  
Matthew DiGiulian Date  
Manager, Beckley AFO

Disapproved: \_\_\_\_\_ Date  
Matthew DiGuilian  
Manager, Beckley AFO