# APPALACHIAN POWER COMPANY BEFORE THE VIRGINIA STATE CORPORATION COMMISSION CASE NO. PUR-2021-00049

# APPLICATION FOR APPROVAL AND CERTIFICATION OF ELECTRICAL TRANSMISSION LINE

Reusens to New London 138 kV Rebuild Project

VOLUME 2 OF 2

Siting Memo & VDEQ Supplement

April 2021

#### REUSENS TO NEW LONDON 138 KV REBUILD SITING MEMO

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## **Siting Memo**

## Reusens to New London 138-kV Rebuild Project SCC Case No. PUR-2021-00049

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April 2021



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Transmission Line Relocation on VOF Easement



### **Key Terminology**

Constraints	Specific areas that should be avoided to the extent reasonably practical during the route development and site selection process.
Diversion	A minor adjustment to the existing route where no other alternative is considered.
Encroachment	Any structure or activity within an existing right-of-way that could interfere with the safe, reliable operation of transmission facilities.
Land Use	Describes the human use of the land and activities at a given location such as agricultural, residential, industrial, mining, commercial, and recreational uses. It differs from land cover which only describes the physical characteristics (summarized from EPA.gov).
Opportunity Feature(s)	Areas or existing linear features along which the transmission line may have less disruption to area land uses and the natural and cultural environment.
Project	The proposed rebuilt transmission facilities studied in the siting memo.
Proposed Route	The alignment on which the applicant/Siting Team proposes to construct a transmission line. The Proposed Route (1) reasonably minimizes adverse impacts on area land uses and the natural and cultural environment; (2) minimizes special design requirements and unreasonable costs; and (3) can be constructed and operated in a safe, timely, and reliable manner.
Siting Team	A multidisciplinary team of experts in transmission line routing, environmental impact assessment, impact mitigation, engineering, and construction management.
Project Area	The territory in which the transmission line will be rebuilt to feasibly meet the Project's functional requirements and, at the same time, minimize environmental impacts and Project costs.
Substation	Substations or stations are facilities that transform bulk electric voltage down to distribution levels and/or provide protection and controls for the transmission electric grid. Typical equipment includes switches, circuit breakers, buses, and transformers.
Transmission Line	An electric line that operates at 69 kilovolts and/or above and has the purpose of moving power from a generation facility to a substation or between substations.



#### **ACRONYMS**

AEP American Electric Power

Company Appalachian Power Company

CPCN Certificate of Public Convenience and Necessity

GIS Geographic information system

HOA Homeowners Association

kV kilovolt

LiDAR Light Detection and Ranging

NCED National Conservation Easement Database

NHD National Hydrography Dataset

NHL National Historic Landmark

NLCD National Land Cover Database

NRHP National Register of Historic Places

NWI National Wetlands Inventory

Project Reusens to New London 138-kV Rebuild Project

ROW right-of-way

SCC State Corporation Commission

U.S. United States

USACE United States Army Corps of Engineers
USFWS United States Fish and Wildlife Service

VDCR Virginia Department of Conservation and Recreation

VDEQ Virginia Department of Environmental Quality

VDH Virginia Department of Health

VDHR Virginia Department of Historic Resources

VOF Virginia Outdoors Foundation



#### 1.0 PROJECT DESCRIPTION

Appalachian Power Company (Company) is planning to rebuild an existing transmission line due to the combination of risk, condition and performance of the infrastructure and to ensure adequate and reliable electric service in Bedford County, the City of Lynchburg, and the surrounding area. The Reusens to New London 138-kilovolt (kV) Rebuild Project (Project) involves rebuilding an 11.6-mile portion of the Company's existing Reusens - Altavista 138-kV Transmission Line between the Reusens, Boonsboro, Forest and New London substations. The Project has a double-circuit section (approximately 5.5 miles) between the Reusens Substation, located off Old Trents Ferry Road in the City of Lynchburg, and existing Structure 5-10, and a single-circuit section (approximately 6.1 miles) between existing Structure 5-10 and the New London Substation, located off Thomas Jefferson Road in Bedford County. The Project will be constructed largely within existing right-of-way (ROW); however, the Project includes minor deviations from the existing centerline to optimize the design or avoid constraints. As part of the Project, a portion of the Company's existing Reusens – South Lynchburg 138-kV transmission line will be relocated where it crosses the Reusens - Altavista 138-kV Transmission Line, and which is also where the Project transitions from double-circuit to single-circuit. The Company's existing Brush Tavern Substation, located in Campbell County, will be upgraded in its current location to accommodate the future electrical upgrades. The Project is depicted in Attachment A - Project Area Map.

The existing transmission structures are primarily single-circuit wooden H-frame structures and double-circuit steel lattice tower structures that were constructed in the 1940s. The Company plans to rebuild the 138 kV transmission line primarily using dulled galvanized steel double-circuit monopole structures and steel single-circuit monopole and H-frame structures. The structures on the double-circuit portion will range from 90 feet to 140 feet tall, with an average structure height of approximately 115 feet, and the structures on the single-circuit portion will range from 55 to 100 feet tall, with an average structure height of approximately 85 feet (**Figures 1 and 2**). The proposed structures for the rebuilt line will be taller, but will be constructed near the existing locations.





Figure 1. Comparable Existing and Proposed Double-Circuit Structure
Existing Steel Lattice (top) and Proposed Steel Monopole (bottom)



Figure 2. Comparable Existing and Proposed Single-Circuit Structure
Existing Wood H-frame (top) and Proposed Steel Monopole (bottom)



The Project was initiated in the spring of 2020 with a kick-off meeting held among the Siting Team members. The Siting Team includes American Electric Power (AEP) employees and outside consultants with expertise in, but not limited to: transmission line siting, impact assessment for natural resources and the human environment, impact mitigation, engineering, construction management, project management, and public relations. The Siting Team introduced the Project and met with Bedford County and the City of Lynchburg officials in September 2020 and announced the Project to the public with a virtual open house and news release in October 2020. During the siting process, the Siting Team collected data and reviewed the existing ROW, as discussed in Section 2.0. The Siting Team determined a proposed route in March 2021.

The Project requires a Certificate of Public Convenience and Necessity (CPCN) from the Virginia State Corporation Commission (SCC). The Company will seek approval from the Virginia SCC to rebuild the transmission line generally within a 200-foot-wide filing corridor (100 feet on either side of the route centerline) and a slightly wider corridor in constrained areas. The filing corridor allows for design flexibility in determining the final centerline and ROW width, which will be based on ground surveys, environmental studies, additional landowner input, and final engineering. If approved, the Company will complete the preliminary engineering and work with the affected landowners to update existing easements, as necessary, and provide fair compensation for any new easements. After receiving the above input, the Company will finalize the proposed structure locations and ROW width within the SCC-approved filing corridor. The Company will also work with the necessary local, federal, and state agencies during permitting and construction phases. The proposed in-service date for the Project is December 2023.

#### 2.0 DATA COLLECTION AND DUE-DILIGENCE

#### 2.1 Review of Existing ROW

The Siting Team reviewed the use of the existing ROW as part of the initial due-diligence efforts for the Project. Using the existing ROW generally minimizes impacts on the natural and human environments. Specifically, this approach is consistent with Sections 56-46.1 and 56-259 of the Code of Virginia, which suggest that existing ROWs should be given priority when adding new transmission facilities, and which promote the use of existing ROW for new transmission facilities. After review of the existing ROW, the Siting Team determined that the Project can largely follow the centerline of the existing ROW for most of its length to minimize impacts on the natural and human environments.

#### 2.2 Geographic Information Systems (GIS)

The Siting Team used GIS data obtained through publicly available agency databases and aerial photography during the siting process. Data was reviewed and collected to review the existing



ROW and potential impacts to existing and proposed land uses, natural resources, cultural resources, transportation facilities, and existing utility and linear features. The primary sources of aerial imagery used in the route identification, analysis, and selection effort for the Project include: Esri (2020), Google (Imagery dates vary by location), and Light Detection and Ranging (LiDAR) (flown for the line in June 2020). A detailed table of data sources is provided in **Attachment B – GIS Data Sources**.

GIS data sources vary with respect to their accuracy and precision, so GIS-based calculations and maps presented should be considered reasonable approximations of the resource or geographic feature they represent and not absolute measures or counts. Updated information, such as the location of new residences, outbuildings, and other constraints, was collected through a combination of aerial photography, field review, LiDAR survey, and information received during the public involvement process. The Siting Team used LiDAR imagery to verify building and structure locations and was considered the best available data prior to filing with the Virginia SCC.

#### 2.3 Federal, State, and Local Government Coordination

The Siting Team obtained information from or contacted various federal, state, and local agencies and/or officials to inform them of the Project and request data for the route planning process. Twenty-seven agencies were contacted on October 16, 2020 as part of the data collection effort and six responses have been received to date. Copies of the agency letters, contact list, and correspondence are included in **Attachment C – Agency Correspondence**.

The Siting Team coordinated with local government agencies/officials to aid the route review process. Members of the Siting Team met virtually with officials from Bedford County, including the directors of Economic Development, Parks and Recreation, and Community Development, and the Building Official on September 25, 2020. In addition, a virtual meeting was held with officials from the City of Lynchburg, including the City Manager and Planning Director, on September 30, 2020. The purpose of these meetings was to introduce the Project to local officials, review the existing ROW, and obtain information to aid in the route review process. The Siting Team reviewed the municipalities' future land uses and specific comprehensive plan goals in order to evaluate areas of constraints and opportunities based on local planning documents. The local officials provided information about potential stakeholders such as residential subdivision homeowners association (HOA) groups including, but not limited to, the Boonsboro Apartment Complex and Irvington Park HOA in the City of Lynchburg, and the Lake Vista HOA in Bedford County. Overall, local officials were supportive of the Project need and no future development



plans were identified as potential impacts to the Project. According to the input received from local officials, no specific "important," "prime," or "unique" farmlands or forest lands were noted as potential impacts to the Project, as stated in Virginia State Code Section 3.2-205.

#### 2.4 Virtual Open House

An in-person public open house was not advisable during the COVID-19 pandemic given the travel restriction and social distancing recommendations and requirements of the Centers for Disease Control and Prevention and the Executive Orders issued by the Governor of the Commonwealth. In lieu of an in-person public meeting, a virtual open house was created on the Project website (www.AppalachianPower.com/Reusens-NewLondon). The Project was publicly announced with a news release and virtual open house on October 9, 2020. The content provided during the virtual open house was made similar to that of in-person public open houses. The virtual open house provided content related to engineering and design of the structures, Project need, ROW, and construction. In addition, the virtual open house allowed landowners and the public to submit comments to the Siting Team and identify properties through an address search tool.

Aerial maps at a scale of one-inch equals 200 feet were provided on the Project website during the virtual open house and were available to download. Features on the maps included existing infrastructure and the portions of the 138-kV transmission lines to be rebuilt. Participants were encouraged to identify the location of their houses, places of business, properties of concern, or other sensitive resources on the mapping and submit comments to the Siting Team. Comments received through the virtual open house were digitized and entered into a GIS database.

The Project website includes updates and news releases, an interactive map, fact sheet information, and Project timeline. In addition to the comments submitted through the virtual open house, questions and comments were also welcomed on the website through the contact page. A total of 29 comment cards were either returned to the Company or received through the Project website.

Landowners within a 500-foot corridor (250 feet on either side of a route centerline) of the transmission line to be rebuilt were notified of the October 2020 virtual open house. Landowner addresses were obtained from the City of Lynchburg and Bedford County. The notification included the following means:

1. A news release was distributed by the Company on October 9, 2020 to announce the Project and virtual open house.



- 2. Three separate Project mailings were sent to 266 landowner addresses on October 9, 16, and 23, 2020. The outreach mailings included a letter, postcard, fact sheet, comment card with a prepaid postage return envelope, and trifold letter of Project information.
- 3. Advertisements were circulated in the greater Lynchburg and Forest areas to introduce the Project and announce the virtual open house. One advertisement was published on October 16, 2020 in the Lynchburg News Advance and a second advertisement was published on October 20, 2020 in the Bedford Bulletin.
- 4. Two automated telephone notifications from the Company were made on October 19 and November 2, 2020 to notify landowners about the virtual open house. A total of 120 landowners were reached through the voicemail message on October 19, 2020 and 114 landowners were reached on the November 2, 2020.

A total of 29 comment cards were either returned to the Company or received through the Project website. Those comments were entered into the Project public comment database, and generally related to how the rebuild will differ from the existing line, whether it will affect landowner property in the vicinity, and potential impacts due to access and construction. Because the Project will largely use existing ROW, minimal new impacts are anticipated. The Siting Team coordinated with stakeholders and landowners where rebuilding on the existing centerline may not be feasible due to the presence of constraints.

#### 3.0 OPPORTUNITIES AND CONSTRAINTS

The majority of the Project will be rebuilt on the centerline of the existing ROW; however, in a few places, deviations from the existing centerline are necessary to optimize the design or avoid constraints. The existing ROW crosses areas characterized predominantly by forested, agricultural, pasturelands, and commercially developed land uses and residential areas. The double-circuit section is located in the northern extents of the City of Lynchburg, and crosses residential and commercially developed areas. The eastern extents of Bedford County are crossed by the single-circuit section, which includes areas of forested, agricultural, pasturelands, and commercial and residential land uses. The Project area includes the following large constraints: multiple National Register of Historic Places (NRHP) sites, a transmission line crossing, concentrated residential and commercial areas, a golf course, and multiple Virginia Outdoors Foundation (VOF) conservation easements. Given the availability of existing ROW, the statutory preference given to the use of existing ROW, and because additional residential and environmental impacts would be associated with the acquisition of and construction on new ROW, the Company did not consider any alternative routes requiring significantly new ROW for



the Project. Opportunities and constraints for rebuilding the existing transmission line are described below and referenced on **Attachment A – Project Area Map**.

#### 3.1 Route Review

Alternative routes were not considered for the Project given the opportunity to use existing ROW, which is consistent with the primary goal of the Project, public preferences, general siting guidelines, and which minimizes impacts of the natural and human environments. The Project will largely be rebuilt on the centerline of the existing ROW except for two slight deviations to optimize the design or avoid constraints. The Proposed Route for the Project is 11.6 miles long and includes an approximately 5.5 mile double-circuit section in the City of Lynchburg and an approximately 6.1 mile single circuit section in Bedford County (**Table 1**).

The double-circuit portion of the Proposed Route begins at the Reusens Substation, off Old Trents Ferry Road, and continues in existing ROW for approximately 5.5 miles through the City of Lynchburg. The first deviation occurs at the crossing with the Reusens – South Lynchburg 138-kV Transmission Line (between proposed Structures 4-30A and 4-32A), which is also where the Project transitions from double-circuit to single-circuit. Both transmission line ROWs crossing the VOF easement will be shifted slightly in order to combine the lines onto one proposed triplecircuit structure at the point of intersection, thus reducing the number of transmission structures that are located on the parcel. As a result, the Company will shift the centerlines of the Reusens - Altavista 138-kV Transmission Line approximately 40 feet to the west of the existing centerline and the Reusens - South Lynchburg 138-kV transmission line approximately 40 feet to the southwest of the existing centerline in order to co-locate the conductors onto the proposed Structure 4-31A. The Proposed Route transitions to single-circuit at proposed Structure 4-31A and continues in existing ROW until the second deviation occurs between proposed Structures 4-41A and 4-47A on the Colonial Hills Golf Club in order to minimize recreational impacts to the fairways and greens of the course. From the Colonial Hills Golf Club, the Proposed Route continues in existing ROW to the New London Substation in Bedford County.



Table 1. Project Evaluation Criteria								
Criteria		Double-Circuit Section	Single-Circuit Section	Proposed Route				
General								
Length	miles	5.5	6.1	11.6				
Natural Environment								
Total streams crossed (NHD)	count	N/A	N/A	33				
Total wetlands in ROW (NWI) <sup>1</sup>	acres	N/A	N/A	5.26				
Prime and unique farmland soil <sup>2</sup> in the ROW (based on SSURGO data)	acres	14.5	29.1	43.6				
Farmland of statewide importance <sup>3</sup> in the ROW (SSURGO)	acres	45.5	23.6	69.1				

No Section 10 navigable waterways are crossed by the Proposed Route. No special natural areas are crossed or within 250 feet of the Proposed Route.

Human Environment				
Number of parcels <sup>4</sup> crossed by ROW	count	76	54	128
Unique landowners <sup>5</sup> within ROW	count	62	41	102
Pasture/rangeland crossed in ROW (SSURGO)	acres	10	40	50
Cropland crossed in ROW (SSURGO)	acres	0	2	2
Barns, outbuildings, shed, garages, and silos <sup>6</sup> in the ROW (excludes abandoned features)	count	6	1	7
Residences/single-family dwellings within ROW <sup>7</sup>	count	1	0	1
Residences/single-family dwellings within 100 feet of centerline	count	27	2	29
Residences/single-family dwellings within 250 feet of centerline	count	86	21	107
Residences/single-family dwellings within 500 feet of centerline	count	224	57	281
Multi-family dwellings within ROW	count	0	0	0
Multi-family dwellings within 100 feet of centerline	count	5	0	5
Commercial buildings within ROW <sup>7,8</sup>	count	1	0	1



Table 1. Project Evaluation Criteria								
Criteria	Unit	Double-Circuit Section	Single-Circuit Section	Proposed Route				
Designated places of worship within 1,000 feet of centerline	count	1	0	1				
Schools within 1,000 feet of centerline	count	1	0	1				
Parks and recreation areas crossed by the ROW		0	1	1				
Conservation easements crossed by 100-foot ROW <sup>9</sup>	count	1	3	3				
Conservation easements crossed by 100-foot ROW	acres	3.1	18.3	21.4				
NRHP-listed sites within one mile of the centerline	count	3	3	6				
NRHP-eligible sites within 0.5-mile of the centerline	count	0	1	1				
National Historic Landmarks within 1.5 miles of the centerline	count	1	0	1				

No Historic Districts are located within one mile of the Proposed Route. No listed or eligible archaeological sites are located within the ROW of the Proposed Route.

Constructability				
U.S. highways crossed	count	2	1	3
State highways crossed	count	2	3	5
Local roads and streets crossed	count	22	13	35
Railroads crossed	count	0	1	1
Existing 138-kV Transmission Lines Crossed	count	N/A	N/A	1
Existing 138-kV Transmission Lines Paralleled	miles	1	0.0	1
Proposed Route centerline located entirely outside of the existing 100-ft ROW	feet	0.0	188.3	188.3

No interstate highways or scenic byways are crossed by the Proposed Route. The Proposed Route does not cross any known pipelines.



#### Reusens to New London 138-kV Rebuild Project

Siting Memo

<sup>&</sup>lt;sup>1</sup>The potential wetland classifications within the ROW are likely PEM or PSS; however, PFO conditions may have developed if the ROW has not been maintained. Field verification would be required to confirm wetland classifications.

<sup>&</sup>lt;sup>2</sup> Prime farmland is land that has the best combination of physical and chemical characteristics for producing crops (based on USDA-NRCS SSURGO data).

<sup>&</sup>lt;sup>3</sup> Soils that do not meet the prime farmland category but are still recognized for their productivity by states may qualify as soils of statewide importance (based on USDA-NRCS SSURGO data).

<sup>&</sup>lt;sup>4</sup> The number of parcels crossed refers to the number of individual plots of owned land recorded by the City of Lynchburg or Bedford County.

<sup>&</sup>lt;sup>5</sup> The number of landowners within the ROW represent the number of individual landowners, who each may own one or more parcels, including the Company.

<sup>&</sup>lt;sup>6</sup> Footprints for buildings were obtained from LiDAR imagery.

<sup>&</sup>lt;sup>7</sup> A residence, a fire station and a business have encroached on the existing ROW. Based on its engineering analysis to date, the rebuilt line can be designed as to avoid the affected buildings in the conductor zone. Accordingly, and subject to completion of final engineering and ROW negotiations with affected landowners, the Company does not expect that any residences and/or public buildings will need to be removed to accommodate the rebuilt line.

<sup>&</sup>lt;sup>8</sup> Commercial development includes public facilities, retail, service, office, restaurants, and lodging establishment.

<sup>&</sup>lt;sup>9</sup> Three VOF conservation easements are crossed by the Proposed Route; however, one of the VOF conservation easements is crossed by both the double-circuit and single-circuit sections of the line to be rebuilt.



#### 3.2 Natural Environment

The natural environment includes water, soil, sensitive species, and wildlife habitat. Potential impacts are based on publicly available maps and data, as well as coordination with federal, state and local agencies. A desktop review of wetland and streams as it relates to the character of the Project is described in the Desktop Wetland and Stream Delineation Report, located in the Volume 2 of the Company's CPCN Application.

Responses were received from the Virginia Department of Conservation and Recreation (VDCR), the United States Army Corps of Engineers (USACE), and the Virginia Department of Health (VDH) Office of Drinking Water. In a letter received on November 12, 2020, the VDCR noted that the Judith Creek Stream Conservation Unit is located near the Reusens Substation and has a moderately significant biodiversity ranking (B4); however, the Project does not cross Judith Creek and therefore minimal impacts are anticipated to the stream conservation unit as the Project will rebuild within existing ROW. No highly categorized ecological core areas with significant integrity, as determined by the VDCR, were identified within the Project area; although there are multiple "General" C5 core areas, the lowest category regarding ecological integrity, located in the Project area based on VDCR's Virginia Natural Heritage Data Explorer. The Project crosses a total of 33 National Hydrography Dataset (NHD) features and 5.26 acres of National Wetland Inventory (NWI) features, at or near existing crossings. The Project does not cross any state scenic rivers. A response was received from the USACE on October 23, 2020 stating the Project will not result in discharges of dredged and/or fill material into waters of the United States; however, the Company will coordinate with the USACE during permitting phase of the Project. A response was received from the Virginia Department of Environmental Quality (VDEQ) Office of Environmental Impact Review on October 26, 2020 noting different environmental review agencies and database assistance. A response was received from the VDH on November 19, 2020 stating receipt of the letter, and no comments or concerns were noted for the Project. No letter was received from the Virginia Marine Resources Commission or the VDEQ's Office of Wetland and Stream Protection's and Blue Ridge regional office for comment on the Project. The responses received from the VDEQ, VDCR, USACE, and VDH are included in Attachment C.

The Project crosses rolling terrain with grasslands, forested areas, and open fields that could be habitat for various species. The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation project planning tool was used to determine if any threatened or endangered wildlife or plant species have the potential to occur in the Project area. One threatened mammal species was identified, the northern long-eared bat (*Myotis septentrionalis*), but no critical habitat was identified. The Project does not intersect any of the VDCR's predictive



models identifying potential habitat for natural heritage resources and no special natural areas are crossed by the Project based on the input received from the VDCR. The Project does not cross any scenic rivers or Section 10 navigable waterways. Minimal tree clearing will be required to maintain the generally 100-foot-wide ROW and accounts for the removal of danger trees or other vegetation that may be located within or immediately adjacent to the ROW.

Coordination and review with the VDEQ, USACE, and Virginia Marine Resources Commission will be conducted during the Project's environmental studies.

#### 3.3 Human Environment

The human environment includes the use of the land and activities at a given location such as agricultural, forestry, residential, industrial, commercial, institutional, scenic assets, and recreational uses. The approximately 5.5-mile double-circuit section is located in the northern extents of the City of Lynchburg and crosses residential and commercially developed areas surrounding United States (U.S.) Routes 501 (Northwest Expressway) and 501 Business (Boonsboro Road). The eastern extents of Bedford County are crossed by the approximately 6.1mile single-circuit section, which includes areas of forested, agricultural, pasturelands, and commercial and residential land uses. Because the existing ROW was available to rebuild the Project, no viable alternative routes were identified, as they would add impacts to human environments, such as potential conflicts with existing and proposed land uses. In discussions with local officials, no proposed developments or future land uses were identified as potential impacts to the Project. No response was received from the United States Department of Agriculture's National Resources Conservation Service for comment on agricultural lands related to the Project. Designated prime farmlands, which are identified by their unique soil characteristics or high productivity, were not specified by Bedford County or City of Lynchburg officials during the route review process; however, it is noted that agricultural lands in both jurisdictions are a predominant land use in the Project area. There are no active timbering areas crossed by the Project and thus impacts to forestry resources are minimal.

The existing transmission line associated with the Project crosses 128 parcels and 102 unique landowners where there are existing easements. In some cases supplemental easements may be required. A residence, a fire station and a business have encroached on the existing ROW. Based on engineering analysis to date, the rebuilt line can be designed as to avoid the affected buildings in the conductor zone. There are seven outbuildings located within the ROW of the Project, based on LiDAR imagery. Accordingly, and subject to completion of final engineering and ROW



negotiations with affected landowners, the Company does not expect that any residences and/or public buildings will need to be removed to accommodate the rebuilt line.

Given the opportunity to use existing ROW, the Project will have minimal impacts to recreational facilities and areas. The Project does not cross any scenic byways or rivers. One church and elementary school are located within 1,000 feet of the Project, but the transmission line will be rebuilt in the existing ROW at these locations. There are no local or state public parks located in the Project area; however, the existing ROW crosses the Colonial Hills Golf Club course, located off Gumtree Road. In discussions with the landowner, a minor shift of the ROW between proposed Structures 4-41A and 4-47A would minimize impacts and relocate structures a greater distance from the fairways and greens of the course. More significant relocation of the existing centerline across the golf course property is not feasible because it could require a new ROW crossing of an adjoining VOF conservation easement.

Background research was conducted for the Project area to identify all previously recorded cultural resources and potential cultural resource locations through the review of historic documents, agency and public input, and various archives, including the Virginia Department of Historic Resources (VDHR) database. A letter was received from the VDHR on November 18, 2020 (see Attachment C). There are six NRHP-listed architectural resources within one mile and one NRHP-eligible site located within 0.5 mile of the Project. The Rothsay (VDHR#009-0065) and Woodbourne (VDHR# 009-0033) historical properties are located in Bedford County and are approximately 0.2 mile from the Proposed Route; however, no more than a minimal impact is anticipated given the historic homes are located farther and the intervening vegetation limits views of the Project. The Bowling Eldridge House (VDHR# 009-5283), Virginia Episcopal School (VDHR# 118-0224), Locust Grove (VDHR# 118-0219), and Presbyterian Orphans Home (VDHR# 118-5240) architectural resources are located in the City of Lynchburg, more than 0.5 mile from the Proposed Route; however, no more than a minimal impact is anticipated given the intervening vegetation and that development largely limits visibility of the Project. The Reusens Dam (VDHR# 118-0218) is an NRHP-eligible architectural resource located within 0.5 mile of the Proposed Route, northeast of the Reusens Substation at the James River. The Proposed Route is screened by topography and travels south and away from the resource; no impact is anticipated. There is one National Historic Landmark (NHL) located within 1.5 miles of the Project. Poplar Forest (VDHR# 009-0027) is a designated NHL located 1.12 miles from the Proposed Route; however, a historical home is centrally located on the property, roughly 1.86 miles from the Proposed Route. The landscape between the Poplar Forest property and the Proposed Route is moderately to densely developed with a mix of suburban residential and commercial properties in the forest area and thus no impact is anticipated. No NRHP-listed Historic Districts or NRHP-



listed or eligible archeological sites are located near the Project. Based on the information obtained from the VDHR database, no known cemeteries are located within 250 feet of the Project. Given the primary use of existing ROW for the Project, impacts to any NHLs, NRHP-listed or -eligible historic resources are either not anticipated or minimal due to the intervening vegetation; development largely limits visibility of the Project. The extent of these cultural resources are detailed in the VDHR Pre-Application Analysis in support of the CPCN Application (included in Volume 2 of the Company's CPCN Application).

#### 3.3.1 Virginia Outdoors Foundation Correspondence

Three VOF conservation easements are crossed by the existing ROW. The Reusens – Altavista 138-kV Transmission Line ROW crosses approximately 7.3 acres of VOF easements and the Reusens – South Lynchburg 138-kV transmission line ROW crosses approximately 2.9 acres of VOF easements. The Company requested comments on the Project from the VOF and the Virginia Department of Forestry in a letter dated October 16, 2020 (see **Attachment C**). The Project Team met virtually with VOF staff on October 19, 2020 to discuss the Project and VOF easements crossed by the existing ROW. The Project will be rebuilt on existing centerline on two VOF conservation easements; however, the Project proposes a slight relocation on a VOF easement where the 138-kV transmission lines cross. Members of the Siting Team reviewed constructible and feasible options to rebuild the Reusens – Altavista and Reusens – South Lynchburg 138-kV transmission lines on a VOF easement to optimize the design and reduce the number of transmission structures on the easement.

The VOF staff provided information to members of the Siting Team regarding their conversion-diversion process for new development, including utility line construction on existing conservation easements, which are determined and approved by their board. The Company noted the ROW for the Reusens – Altavista 138-kV Transmission Line had been relocated to its current location when the Reusens – South Lynchburg 138-kV transmission line was constructed in the 1950s. During the meeting, members of the Siting Team noted that relocating the Reusens – Altavista 138-kV Transmission Line to the previous ROW limits would result in a design option that could reduce the structure footprint on the conservation easement parcel and thus limit new visual impacts (**Figure 3**). The Siting Team and VOF staff agreed that constructing a new triple-circuit Structure 4-31A would reasonably minimize impacts as compared to the other options presented. As a result, the Proposed Route will be relocated approximately 40 feet to the west of the existing centerline of the Reusens – Altavista 138-kV Transmission Line and approximately 40 feet to the southwest of the Reusens – South Lynchburg 138-kV transmission



line in order to co-locate the conductors onto the proposed Structure 4-31A, and reduce the number of transmission structures on the VOF easement parcel.

The VOF staff reviewed the Company's summary of land rights provided to them on January 19, 2021 and agreed with the conclusions that the existing easements grant the right to build, operate, and maintain both 138-kV lines crossing the VOF easement. A response was not received from the Virginia Department of Forestry regarding the Project. No other known existing or proposed local or state conservation easements are crossed by the Project.

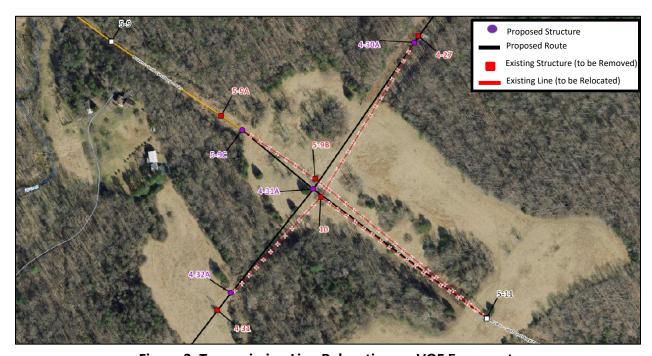


Figure 3. Transmission Line Relocation on VOF Easement

#### 3.4 Constructability

Potential engineering and construction challenges are important to consider when siting a transmission line. Heavy angles, steep topography, nearby communication towers, antennas, and airfields along with ROW alignments are all elements that could ultimately require extensive or non-standard engineering and lead to an increase in impacts and overall cost. The use of the existing ROW for the Project minimizes construction challenges given the availability to use existing access roads, minimizes disturbance to areas not previously crossed by the ROW, and minimizes crossings of new roads or other linear infrastructure, including but not limited to, utility lines and railroads. As with paralleling existing infrastructure, crossing over transmission lines, distribution lines, and pipelines may require specialized construction techniques and



scheduled outages on the existing lines. The Siting Team attempted to minimize engineering challenges during route review by predominantly using existing ROW.

The Reusens – Altavista 138-kV Transmission Line generally parallels the Company's existing Reusens – Roanoke 138-kV transmission line for approximately one mile as it exits the Reusens Substation. The Project does not parallel any pipeline, highway, or railroad corridors; however, the Project crosses a number of roadways and highways, including U.S. Routes 221 (Forest Road), 501 (Northwest Expressway) and 501 Business (Boonsboro Road), and crosses one railroad at or near existing locations. In addition, the Proposed Route crosses State Routes 645 (Trents Ferry Road), 660 (Hawkins Mill Road), 620 (Wiggington Road), 621 (Cottontown Road), and 622 (Everett Road). No response was received from the Virginia Department of Transportation -Lynchburg District regarding the Project. During a virtual meeting with Bedford County on September 25, 2020, county officials noted a potential sidewalk improvement project along Forest Road and near the Forest Substation, where the Project unavoidably crosses the road, but in existing ROW. County officials noted the improvement project was in a preliminary planning phase and not yet funded, and the Project would not impact the county's future improvement project. A letter received from the Virginia Department of Aviation on October 20, 2020 indicated that no portion of the Project is located within 20,000 linear feet of a public use airport (see Attachment C). Additional coordination with the Virginia Department of Aviation, Federal Aviation Administration, and the Virginia Department of Transportation will be conducted during the Project's permitting phases.

#### 4.0 RESULTS AND CONCLUSION

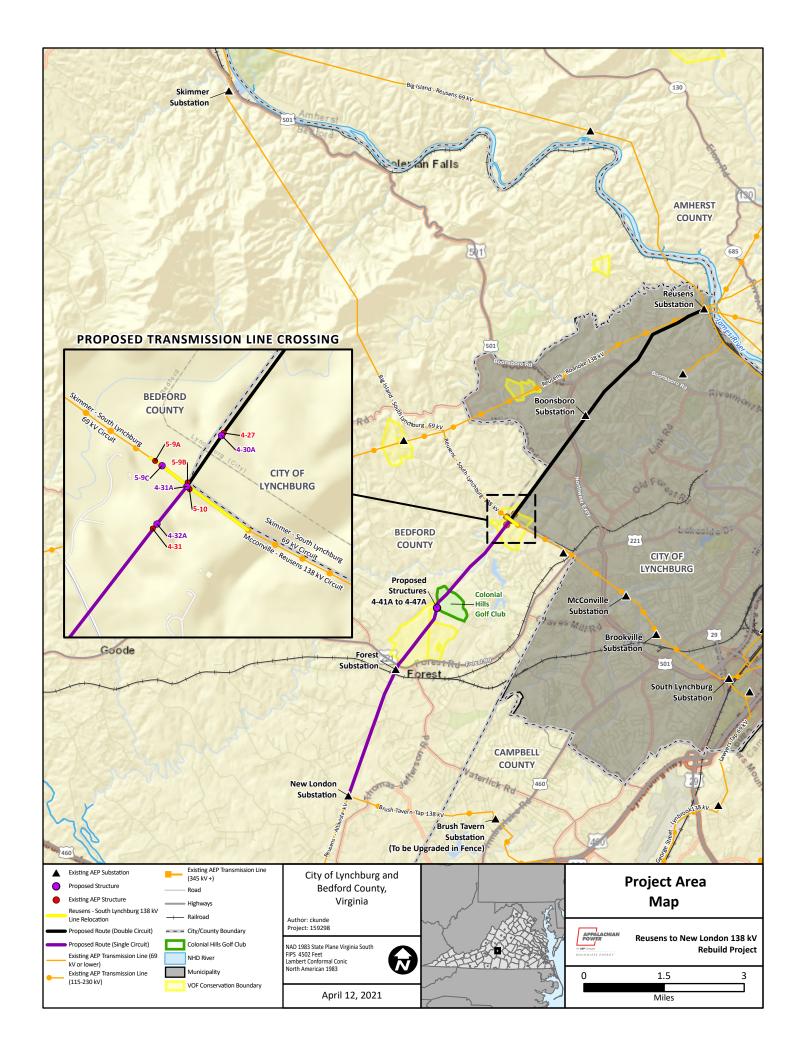
The Proposed Route (including the double-circuit and single-circuit sections) is approximately 11.6 miles. Alternative routes were not considered for the Project given the opportunity to use existing ROW, which is consistent with the primary goal of the Project, public preferences, general siting guidelines, and minimizes impacts of the natural and human environments. The Siting Team reviewed the existing ROW and determined areas where diversions from the existing centerline were necessary and feasible to identify a Proposed Route. The Proposed Route diverts from the existing centerline where it crosses the Company's Reusens—South Lynchburg 138-kV transmission line (between proposed Structures 4-30A and 4-32A), which is also where the Project transitions from double-circuit to single-circuit. The second deviation occurs at the Colonial Hills Golf Club course between proposed Structures 4-41A and 4-47A to minimize recreational impacts to the fairways and greens of the course. The Proposed Route is depicted in Attachment A – Project Overview Map.



The Project will primarily cross landowners with existing easements, though supplemental easements may be required. Two minor deviations optimize the design and avoid constraints. The Proposed Route crosses 128 parcels and 102 unique landowners; no new landowners are affected by the proposed centerline deviations. The Proposed Route uses existing ROW for the majority of its length, which minimizes impact to natural and human environments, including agricultural landscapes; and reduces constructability challenges in a Project area populated with conservation easements, residential and commercial developments, and recreational areas. The proposed structures for the rebuilt line will be taller due to engineering requirements but will be constructed near the existing locations.

Collectively, the Siting Team believes the Proposed Route is: (1) most consistent with the siting guidelines; (2) reasonably minimizes adverse impacts on area land uses and the natural and cultural environment by using existing ROW; (3) minimizes special design requirements and unreasonable costs; and (4) can be constructed and operated in a safe, timely, and reliable manner.

## Attachment A: Project Area Map



### **Attachment B: GIS Data Sources**



	Attachment B. GIS Data Sources							
Siting Criteria	Source	Description						
Natural Environment								
Number of NHD stream and waterbody crossings within the ROW	USGS NHD (2021)	The NHD is a comprehensive set of digital spatial data prepared by the USGS that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells.						
Acres of NWI wetland crossings within the ROW	USFWS NWI (2021)	The NWI produces information on the characteristics, extent, and status of the Nation's wetlands and deepwater habitats.						
Acres of public lands crossed by the route	The Protected Areas Database of the United States (PAD-US) (2020)	Acres of local public lands crossed by the ROW.						
Acres of prime farmland soils and soils of statewide importance, and pasture/rangelands or croplands within the ROW	USDA-NRCS SSURGO Database (June 2020)	Acres of soil associations crossed by the ROW characterizedas prime farmland or farmland of statewide importance, or pasture/rangeland or cropland.						
Threatened, endangered, rare or sensitive species occurrence within the Project vicinity	USFWS (2020)	Known occurrences; locations of potential habitat based on land use.						
Special natural areas crossed by the ROW and within 250 feet	USFWS (2020)	Location of special natural areas in proximity to ROWs.						
	Human Envii	ronment						
Number of parcels crossed by the ROW	Virginia Geographic Information Network (2020), City of Lynchburg (downloaded 2020), and Bedford County (2020)	Count of the number of parcels crossed by the ROW.						



	Attachment B. GIS Data Sources							
Siting Criteria	Source	Description						
Number of residences within	Digitized from LiDAR (2020)	Count of the number of residences within the ROW and						
100, 250, and 500 feet of the route centerline		within 100, 250, and 500 feet of potential routes.						
Number of commercial buildings within ROW	Digitized from LiDAR (2020)	Count of the number of commercial buildings within the ROW.						
Land use acreage and distance	National Land Cover Database	The NLCD 2016 (NLCD 2016) compiled by the Multi-						
crossed by the ROW	[NLCD] (2016)	Resolution Land Characteristics (MRLC) Consortium includes 15 classes of land cover from Landsat satellite imagery.						
Acres of conservation easements crossed by ROW	National Conservation EasementDatabase (NCED)	Private conservation easements crossed by the routes from the NCED which is comprised of voluntarily reported						
casements of essea 27 from	(2020), VOF (2021), DOF (2020)	conservation easement information from land trusts and public agencies, including VOF and DOF easements were referenced.						
Number of archeological	Virginia Department of Historic	Previously identified archeological resources listed or						
resources within the ROW and	Resources (VDHR) Virginia Cultural	eligible on the National Register of Historic Places (NRHP)						
within 250 feet of route centerline	Resources Information System (VCRIS) (2021)	acquired through Dutton (2021).						
Number of historic	Virginia Department of Historic	Previously identified historic architectural resource sites and						
architectural resources within	Resources (VDHR) Virginia Cultural	districts listed or eligible on the NRHP acquired through						
the ROW, within 0.5 and one	Resources Information System	Dutton (2021).						
mile of centerline	(VCRIS) (2021)	This dataset includes the locations of comptonies, shurches						
Institutional uses (schools, places of worship and	United States Geological Survey's GNIS (2020)	This dataset includes the locations of cemeteries, churches, hospitals, parks, and schools. Features within 250 and 1,000						
cemeteries) within 250 and	301 VEY 3 GIVI3 (2020)	feet of potential routes were field verified.						
1,000 feet of the route		rect of potential routes were field verified.						
centerline								
	Constructa	bility						
Route length	Measured in GIS	Length of route in miles						



Attachment B. GIS Data Sources							
Siting Criteria	Source	Description					
Number of road crossings	Esri road file (2020)	Count of federal, state and local roadway crossings.					
Number of transmission line crossings	AEP TGIS (2020)	Number of high voltage (100 kV or greater) transmission lines crossed by the ROW.					
Length of transmission line parallel	AEP TGIS (2020)	Miles of the route parallel to existing high voltage transmission lines.					
Length of pipeline parallel	United States Department of Transportation National Pipeline Mapping System (2020)	Miles of the route parallel to existing pipelines.					
Length of road parallel	Esri road file (2019)	Miles of the route parallel to existing roadways.					

## Attachment C: Agency Correspondence

Reusens to New Londo	n 138 kV Rebuild	d Project Agenc	y Correspondence								
Jurisdiction	Last Name	First Name	Title	Organization	Telephone Number	Email Address	Street Address	Address 2	City	State	Zipcode
			_	VA Department of Wildlife Resources (DWR) Environmental							
	Ewing	Amy	Biologist	Services Section	(804) 367-2211	Amy.Ewing@dgif.virginia.gov	P. O. Box 90778		Henrico	Virginia	23228
	Orndorff	Wil	Karst Protection Coordinator	VDCR Natural Heritage Program	540-230-5960	wil.orndorff@dcr.virginia.gov	8 Radford Street	Suite 102A	Christiansburg	Virginia	24073
	Official	wiii	Kaist Protection coordinator	VDCK Natural neritage Program	340-230-3900	wil.orndorn@dcr.viiginia.gov	o Radioid Street	Suite 102A	Cillistialisoting	viigiiia	240/3
	Hypes	René	Environmental Review Coodinator	VDCR Natural Heritage Program	804.371.2708	Rene.Hypes@dcr.virginia.gov	600 East Main Street	24th Floor	Richmond	Virginia	23219
				-							
	Wilson	Irvine	Natural Area Protection Specialist	VDCR Planning and Recreation	804.786.6745	irvine.wilson@dcr.virginia.gov	600 East Main Street	24th Floor	Richmond	Virginia	23219
					540-562-6870						24153
	Weld	Robert	Regional Director	VDEQ - Blue Ridge Regional Office	540-562-6870	Robert.Weld@deq.virginia.gov	901 Russell Drive		Salem	Virginia	24153
	Henicheck	Michelle	Senior Wetland Ecologist	VDEQ - Central Office	804-698-4007	michelle.henicheck@deq.virginia.gov	1111 East Main Street	Suite 1400	Richmond	Virginia	23219
			Manager, Environmental Impact								
	Rayfield	Bettina	review	VDEQ Office of Environmental Impact Review	804-698-4204	Bettina.Rayfield@deq.virginia.gov	1111 East Main Street	Suite 1400	Richmond	Virginia	23219
				VDEQ Office of Wetland and Stream Protection - Blue Ridge							
	Roberts	Jay	VWP Permit Manager	Regional Office	540-562-6785	Jesse.Roberts@deq.virginia.gov	901 Russell Drive		Salem	Virginia	24153
	Watkinson		Chief of Hobban Manager	VMRC Habitat Management	757.247.8062	T W-M @	2500 W1:	Third Floor		A Promise to	23607
	watkinson	Tony	Chief of Habitat Management	Virginia Department of Agriculture and Consumer Services-	/5/.24/.8002	Tony.Watkinson@mrc.virginia.gov	2600 Washington Avenue	Inira Floor	Newport News	Virginia	23007
State	Neel	Danny	Region 4	Southwest Region Office	276-228-5501	danny.neel@vdacs.virginia.gov	250 Cassell Road		Wytheville	Virginia	24382
						,					
	Kirchen	Roger	Director, Review & Compliance Division	VDHR Division of Review and Compliance	804.482.6091	roger.kirchen@dhr.virginia.gov	2801 Kensington Avenue		Richmond	Virginia	23221
	Little	Martha	Deputy Director of Stewardship	VOF	804.577.3337	mlittle@vof.org	600 East Main Street	Suite 402	Richmond	Virginia	23219
	Santucci	Mike	Forestland Conservation Program Manager	VDOF		mike.santucci@dof.virginia.gov	900 Natural Resources Drive		Charlottesville	Virginia	22903
	Santucci	IVIIKE	Manager	VDOF		mike.santucci@dor.virginia.gov	900 Natural Resources Drive		Charlottesville	virginia	22903
	Boswell	Joe	Senior Area Forester	VDOF Blue Ridge Work Area	434-981-4548	joe.boswell@dof.virginia.gov	P.O. Box 465		Amherst	Virginia	24521
	Denny	Scott	Senior Aviation Planner	Virginia Department of Aviation	804-236-3638 ext. 63638	Scott.Denny@doav.virginia.gov	5702 Gulfstream Road		Richmond	Virginia	23250
			Director, Division of Geology and								
	Skorupa	Phil	Mineral Resources	Virginia Department of Mines, Minerals, and Energy	434-951-6310	dgmrinfo@dmme.virginia.gov	900 Natural Resources Drive	Suite 400	Charlottesville	Virginia	22903
	Wells	Jeffrey	Office of Drinking Water	Virginia Department of Health, Danville Field Office	434-836-8416	Jeff.Wells@vdh.virginia.gov	211 Nor Dan Drive	Suite 1040	Danville	Virginia	24540
	Wells	zemey	Office of Drinking Water	Virginia Department of Ficulty, Darvine Field Office	434 030 0410	Jen. Wenze von. Highino.gov	E11 NO DAI DINC	June 1040	Dunvinc	viiginio	24340
	Winstead	Chris	District Engineer	VDOT Lynchburg District	434-947-6559	chris.winstead@VDOT.virginia.gov	4219 Campbell Avenue		Lynchburg	Virginia	24501
	Bradley	Kevin	District Environmental Manager, Lynch	VDOT	434-856-8288	Kevin.Bradley@VDOT.virginia.gov	4219 Campbell Avenue		Lynchburg	Virginia	24501
	F	Jennifer	Chief Western Ministry Barrier	USACE Norfolk District, Western Section	540-344-1498	jennifer.s.frye@usace.army.mil	210 Franklin Road SW		Roanoke	Virginia	24011
	Frye	Jennirer	Crier, Western Virginia Regulatory Sect	USACE NOTION DISTRICT, Western Section	540-344-1498	jennirer.s.rrye@usace.army.mii	210 Franklin Road SW		Roanoke	virginia	24011
	Cosmo	Servidio	Regional Administrator	U.S. Environmental Protection Agency Region 3	215.814.2900	R3 RA@epa.gov	1650 Arch Street		Philadelphia	Pennsylvania	19103-2029
	Schulz	Cindy	Field Supervisor	USFWS Virginia Ecological Services	804-693-6694	cindy_schulz@fws.gov	6669 Short Lane		Gloucester	Virginia	23061
Federal	Anderson	Troy	Supervisory Fish & Wildlife Biologist	USFWS Virginia Ecological Services	804-824-2428	troy_andersen@fws.gov	6669 Short Lane	1	Gloucester	Virginia	23061
	Bricker	John	State Conservationist	U.S. Department of Agriculture; Natural Resources Conservation Service Virginia	804-287-1691	jack.bricker@va.usda.gov	1606 Santa Rosa Road	Suite 209	Richmond	Virginia	23229
				USDOT Federal Highway Administration Virginia		grand grand gov	Junta maja maja				
	Simpkins	John	Planning and Environment team Lead		804.775.3347	john.simkins@dot.gov	400 North 8th Street	Suite 750	Richmond	Virginia	23219-4825
	1										
	Slaughter	Jeff	Manager	USDOT-FAA Flight Standards District Office	804-222-7494	N/A	5707 Huntsman Road	Suite 100	Richmond	Virginia	23250
	Solomon	Jennifer	Regional Administrator	FAA Eastern Region Planning and Programming Branch - Roanoke	540-265-2290	jennifer.solomon@faa.gov	5815 Airport Road	Suite B	Roanoke	Virginia	24012
	Joinnoy	penniner	regional Autimistrator	INCUITORC	340-203-2230	permier.solomoneraa.gov	DOTO WILDOLD KORD	ouite 6	nuariuse	viigiiiid	24012



October 16, 2020

[Name] [Title, company] [Address 1] [Address 2]

Subject: Appalachian Power Company: Reusens – New London Transmission Line Rebuild Project,

Bedford County and the City of Lynchburg, Virginia

[Insert Greeting Line]:

Appalachian Power Company is proposing the Reusens – New London Transmission Line Rebuild Project (the Project) in Bedford County and the City of Lynchburg, Virginia. Appalachian Power Company contracted POWER Engineers, Inc. (POWER) to conduct a siting study and prepare the Certificate of Public Convenience and Necessity application for filing the Project with the Virginia State Corporation Commission (SCC).

The Project will address electric reliability by rebuilding aging infrastructure. The existing Reusens – Altavista 138 kilovolt (kV) Transmission Line will be rebuilt between the Reusens, Boonsboro, Forest and New London substations (about 12 miles) and will be rebuilt in or near the existing right-of-way.

Appalachian Power Company and POWER have identified a study area for the existing 138 kV transmission line to be rebuilt, as shown in **Attachment 1**. Appalachian Power Company is interested to know if your agency has any specific concerns about the Project. We appreciate your input and your comments will be incorporated into the filing with the SCC. Please distribute this notification to staff members who may be involved with this Project for review and comment.

Should you have questions, please contact me via email at <a href="mailto:cepritt@aep.com">cepritt@aep.com</a> or by phone at 540-759-5606.

Sincerely,

**Craig Pritt** 

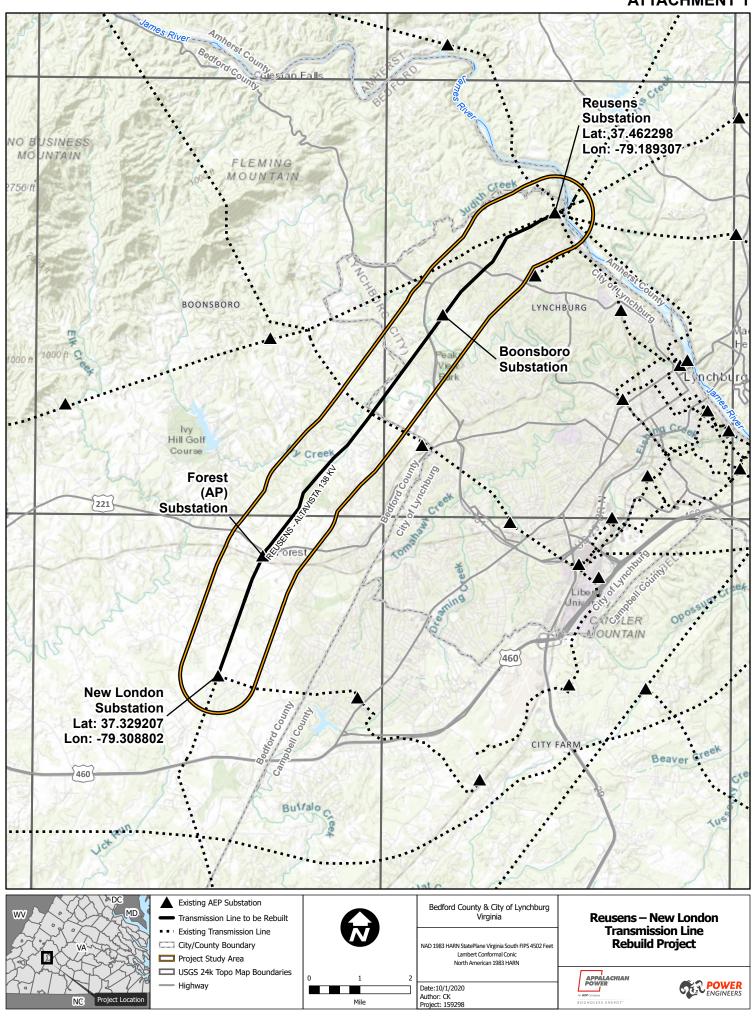
**Enclosures:** 

Attachment 1 – Project Study Area and Transmission Line to be Rebuilt

#### ATTACHMENT 1

## PROJECT STUDY AREA AND TRANSMISSION LINE TO BE REBUILT

#### **ATTACHMENT 1**



From: Craig E Pritt <cepritt@aep.com>
Sent: Tuesday, October 20, 2020 4:23 PM
To: Page Wilson; Fisher, Kyle; Pardis, Roya

Subject: FW: [EXTERNAL] New London transmission Line Rebuild Project

FYI

From: Scott Denny < <a href="mailto:scott.denny@doav.virginia.gov">scott.denny@doav.virginia.gov</a>>

Sent: Tuesday, October 20, 2020 16:08
To: Craig E Pritt <cepritt@aep.com>

Subject: [EXTERNAL] New London transmission Line Rebuild Project

This is an **EXTERNAL** email. **STOP**. **THINK** before you CLICK links or OPEN attachments. If suspicious please click the 'Report to Incidents' button in Outlook or forward to incidents@aep.com from a mobile device.

Dear Mr. Pritt:

The Virginia Department of Aviation has reviewed the proposed rebuild project presented in your October 16, 2020 letter. Following our review it does not appear as though any portion of the proposed project lies within 20,000 linear feet of a public use airport. Therefore a 7460 form will only have to be submitted if the ultimate above ground elevation of the support structures or a temporary crane reaches 200' above the ground.

If you have any questions regarding this matter, please contact me at (804) 236-3638.

Sincerely,

S. Scott Denny Senior Aviation Planner

--

S. Scott Denny Senior Aviation Planner Virginia Department of Aviation 804-236-3638 scott.denny@doav.virginia.gov



# DEPARTMENT OF THE ARMY US ARMY CORPS OF ENGINEERS NORFOLK DISTRICT FORT NORFOLK 803 FRONT STREET NORFOLK VA 23510-1011

October 23, 2020

Western Virginia Regulatory Section Action ID Number: NAO-2020-01933

Mr. Craig Pritt Appalachian Power Company 40 Franklin Road SW Roanoke, Virginia 24011

Dear Mr. Pritt:

This letter is in response to your request for an environmental review of the Reusens-New London Transmission Line Rebuild Project, dated October 16, 2020. The proposed project will address electric reliability by rebuilding aging infrastructure in portions of Bedford County and the City of Lynchburg. The project area includes the transmission line between the Reusens, Boonesboro, Forest and New London substations in Bedford County and the City of Lynchburg, Virginia. This project has been assigned Action ID Number: NAO-2020-01933; please reference this number on any future correspondence.

Based on an initial review of the maps you provided and all available electronic and online resources, it appears that this project would not result in discharges of dredged and/or fill material into waters of the United States; however, this is not a final Corps jurisdictional determination. As you are probably aware, both temporary and permanent discharges of dredged and/or fill material into waters of the United States are subject to the permitting requirements of Section 404 of the Clean Water Act (33 CFR 323). It does not appear that the proposed project area includes a navigable water of the United States, as defined pursuant to the Rivers and Harbors Act of 1899.

We strongly encourage the project proponent to contact the Corps, as early as possible during the design phase, to verify the presence and geographic limits or the absence of waters of the U.S. within the project limits. Please note that coordination with other agencies may be required to ensure compliance with other Federal Laws, such as the Endangered Species Act, and the National Historic Preservation Act.

We appreciate the opportunity to provide comments on your proposed project. Should you have any questions or concerns, please do not hesitate in contacting me at (540) 344-1409 or via email at <a href="mailto:dana.m.heston@usace.army.mil">dana.m.heston@usace.army.mil</a>.

Sincerely,

Dana Heston

**Environmental Scientist** 

ana Heston

Western Virginia Regulatory Section



## COMMONWEALTH of VIRGINIA

#### DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

October 26, 2020

David K. Paylor Director

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

Chris Pritt Appalachian Power Company 40 Franklin Road SW Roanoke. VA 24011

RE: Appalachian Power Company: Reusens - New London Transmission Line Rebuild Project, Bedford County and the City of Lynchburg, Virginia

Dear Mr. Pritt:

Matthew J. Strickler

Secretary of Natural Resources

This letter is in response to the scoping request for the above-referenced project.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of environmental impacts for electric power generating projects and power line projects in conjunction with the licensing process of the State Corporation Commission.

#### **DOCUMENT SUBMISSIONS**

In order to ensure an effective coordinated review of the environmental impact analysis may be sent directly to OEIR. We request that you submit one electronic to <a href="eir@deq.virginia.gov">eir@deq.virginia.gov</a> (25 MB maximum) or make the documents available for download at a website, file transfer protocol (ftp) site or the VITA LFT file share system (Requires an "invitation" for access. An invitation request should be sent to <a href="eir@deq.virginia.gov">eir@deq.virginia.gov</a>.). The required "Wetlands Impact Consultation" can be sent directly to Michelle Henicheck at michelle.henicheck @deq.virginia.gov or at the address above.

#### **ENVIRONMENTAL REVIEW UNDER VIRGINIA CODE 56-46.1**

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the environmental impact analysis document. Accordingly, Appalachian Power should coordinate with the following state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- o DEQ Regional Office
- Air Division
- o Office of Wetlands and Stream Protection
- o Office of Local Government Programs

- o Division of Land Protection and Revitalization
- o Office of Stormwater Management

Department of Conservation and Recreation

Department of Health

Department of Agriculture and Consumer Services

Department of Game and Inland Fisheries

Virginia Marine Resources Commission

Department of Historic Resources

Department of Mines, Minerals, and Energy

Department of Forestry

Department of Transportation

#### DATA BASE ASSISTANCE

Below is a list of databases that may assist you in the preparation of a NEPA document:

DEQ Online Database: Virginia Environmental Geographic Information Systems

Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:

- o www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx
- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

Virginia's coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:

- o http://128.172.160.131/gems2/
- MARCO Mid-Atlantic Ocean Data Portal

The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

 $\frac{\text{http://portal.midatlanticocean.org/visualize/\#x=-}}{73.24\&y=38.93\&z=7\&logo=\text{true\&controls}=\text{true\&basemap}=\text{Ocean\&tab=data\&legends}=\text{false\&layers}=\text{true}}$ 

• DHR Data Sharing System.

Survey records in the DHR inventory:

- o www.dhr.virginia.gov/archives/data\_sharing\_sys.htm
- DCR Natural Heritage Search

Produces lists of resources that occur in specific counties, watersheds or physiographic regions:

- o www.dcr.virginia.gov/natural heritage/dbsearchtool.shtml
- DGIF Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- o <a href="http://vafwis.org/fwis/">http://vafwis.org/fwis/</a>
- Total Maximum Daily Loads Approved Reports
  - $o \quad \underline{https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlde} \\ \underline{velopment/approvedtmdlreports.aspx}$
- Virginia Outdoors Foundation: Identify VOF-protected land
  - o http://vof.maps.arcgis.com/home/index.html
- Environmental Protection Agency (EPA) Comprehensive Environmental Response,
   Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:

- o www.epa.gov/superfund/sites/cursites/index.htm
- EPA RCRAInfo Search

Information on hazardous waste facilities:

- o www.epa.gov/enviro/facts/rcrainfo/search.html
- Total Maximum Daily Loads Approved Reports
  - o <a href="https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlde-velopment/approvedtmdlreports.aspx">https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlde-velopment/approvedtmdlreports.aspx</a>
- EPA Envirofacts Database

EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:

- o <u>www.epa.gov/enviro/index.html</u>
- EPA NEPAssist Database

Facilitates the environmental review process and project planning: http://nepaassisttool.epa.gov/nepaassist/entry.aspx

If you have questions about the environmental review process, please feel free to contact me (telephone (804) 698-4204 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

Bettina Rayfield, Program Manager Environmental Impact Review and

Long-Range Priorities

Matthew J. Strickler Secretary of Natural Resources

Clyde E. Cristman *Director* 



Rochelle Altholz Deputy Director of Administration and Finance

Russell W. Baxter
Deputy Director of
Dam Safety & Floodplain
Management and Soil & Water
Conservation

Nathan Burrell
Deputy Director of
Government and Community Relations

Thomas L. Smith Deputy Director of Operations

November 12, 2020

Roya Pardis Power Engineers, Inc. 11200 Forest Heights Lane Glen Allen, VA 23059

Re: Reusens-New London Transmission Line Rebuild

Dear Ms. Pardis:

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

According to the information currently in our files, the Judith Creek Stream Conservation Unit (SCU) is located within the project area. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Judith Creek SCU has been given a biodiversity ranking of B4, which represents a site of moderate significance. The natural heritage resource associated with this site is:

Aquatic Natural Community (SP-Middle James-Buffalo Third Order Stream) G2?/S2?/NL/NL

The documented Aquatic Natural Community is based on Virginia Commonwealth University's **INSTAR** (*Interactive Stream Assessment Resource*) database, which includes over 2,000 aquatic (stream and river) collections statewide for fish and macroinvertebrate. These data represent fish and macroinvertebrate assemblages, instream habitat, and stream health assessments. The associated Aquatic Natural Community is significant on multiple levels. First, this stream is a grade A-, as per the VCU-Center for Environmental Sciences (CES), indicating its relative regional significance, considering its aquatic community composition and the present-day conditions of other streams in the region. This stream reach also holds as a "Outstanding" stream designation as per the INSTAR Virtual Stream Assessment (VSS) score. This score assesses the similarity of this stream to ideal stream conditions of biology and habitat for this region. Lastly, this stream contributes to high Biological Integrity at the watershed level (6<sup>th</sup> order) based on number of native/non-native, pollution-tolerant/intolerant and rare, threatened or endangered fish and macroinvertebrate species present.

Threats to the significant Aquatic Natural Community and the surrounding watershed include water quality degradation related to point and non-point pollution, water withdrawal and introduction of non-native species. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water

management laws and regulations, establishment/enhancement of riparian buffers with native plant species and maintaining natural stream flow.

DCR recommends the development and implementation of an invasive species plan to be included as part of the maintenance practices for the right-of-way (ROW). The invasive species plan should include an invasive species inventory for the project area based on the current DCR Invasive Species List (<a href="http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf">http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf</a>) and methods for treating the invasives. DCR also recommends the ROW restoration and maintenance practices planned include appropriate revegetation using native species in a mix of grasses and forbs, robust monitoring and adaptive management plan

If permanent tree removal is proposed, the project will fragment Ecological Cores (**C5**) as identified in the Virginia Natural Landscape Assessment (<a href="https://www.dcr.virginia.gov/natural-heritage/vaconvisvnla">https://www.dcr.virginia.gov/natural-heritage/vaconvisvnla</a>), one of a suite of tools in Virginia Conservation that identify and prioritize lands for conservation and protection.

to provide guidance if initial revegetation efforts are unsuccessful or if invasive species outbreaks occur.

Ecological Cores are areas of unfragmented natural cover with at least 100 acres of interior that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Cores also provide benefits in terms of open space, recreation, water quality (including drinking water protection and erosion prevention), and air quality (including carbon sequestration and oxygen production), along with the many associated economic benefits of these functions. The cores are ranked from C1 to C5 (C5 being the least ecologically relevant) using many prioritization criteria, such as the proportions of sensitive habitats of natural heritage resources they contain.

Fragmentation occurs when a large, contiguous block of natural cover is dissected by development, and other forms of permanent conversion, into one or more smaller patches. Habitat fragmentation results in biogeographic changes that disrupt species interactions and ecosystem processes, reducing biodiversity and habitat quality due to limited recolonization, increased predation and egg parasitism, and increased invasion by weedy species.

Therefore minimizing fragmentation is a key mitigation measure that will preserve the natural patterns and connectivity of habitats that are key components of biodiversity. The deleterious effects of fragmentation can be reduced by minimizing edge in remaining fragments; by retaining natural corridors that allow movement between fragments; and by designing the intervening landscape to minimize its hostility to native wildlife (natural cover versus lawns). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: <a href="http://vanhde.org/content/map">http://vanhde.org/content/map</a>.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on statelisted threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

A fee of \$125.00 has been assessed for the service of providing this information. Please find attached an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, DCR Finance, 600 East Main Street, 24<sup>th</sup> Floor, Richmond, VA 23219. Payment is due within thirty days of the invoice date. Please note late payment may result in the suspension of project review service for future projects.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <a href="http://vafwis.org/fwis/">http://vafwis.org/fwis/</a> or contact Ernie Aschenbach at 804-367-2733 or <a href="mailto:Ernie.Aschenbach@dgif.virginia.gov">Ernie.Aschenbach@dgif.virginia.gov</a>.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,

S. René Hypes

Rem' Hy

Natural Heritage Project Review Coordinator



Matthew J. Strickler Secretary of Natural Resources

## **Department of Historic Resources**

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan Director

Tel: (804) 367-2323 Fax: (804) 367-2391 www.dhr.virginia.gov

November 18, 2020

Mr. Craig Pritt American Electric Power Services Corporation 40 Franklin Road SW Roanoke, Virginia 24011

Re: New London Transmission Line Rebuild Project

Bedford County and the City of Lynchburg, VA

DHR File No. 2020-0586

Dear Mr. Pritt:

Thank you for initiating consultation with the Virginia Department of Historic Resource (DHR) on the project referenced above. The project, as presented, consists of rebuilding approximately 12 miles of the Reusens – Altavista 138 kV Transmission line between the Reusens, Boonsboro, Forest and New London Substation. The proposed work will take place in or near the existing right-of-way. Our comments are provided as assistance to Appalachian Power Company in the preparation of an application to the State Corporation Commission (SCC). We reserve the right to provide additional comment through the Federal Section 106 process, if applicable.

A preliminary search of our Archives shows 30 recorded historic architectural resources within one-half (1/2) mile of the line, including five (5) properties listed or determined eligible for listing in the Virginia Landmarks Register (VLR) and National Register of Historic Places (NRHP).

Depending on the design specifics of the project, this project has the potential to both directly and indirectly affect significant historic resources. To aid in your assessment of potential impacts to historic resources and prior to finalizing Dominion's application to the SCC, we recommend that a pre-application analysis be prepared and submitted to DHR in accordance with Section I of the DHR's *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia*. Once an alternative is approved by the SCC, we are likely to recommend full architectural and archaeological studies and mitigation of all moderate to severe impacts to VLR/NRHP-eligible resources.

We look forward to working with Appalachian Power Company throughout this project. If you have any questions, please do not hesitate to contact me at <a href="mailto:tim.roberts@dhr.virginia.gov">tim.roberts@dhr.virginia.gov</a>.

Sincerely,

Timothy Roberts, Archaeologist Review and Compliance Division

> Eastern Region Office 2801 Kensington Avenue Richmond, VA 23221 Tel: (804) 367-2323 Fax: (804) 367-2391

Western Region Office 962 Kime Lane Salem, VA 24153 Tel: (540) 387-5443 Fax: (540) 387-5446 Northern Region Office 5357 Main Street PO Box 519 Stephens City, VA 22655 Tel: (540) 868-7029 Fax: (540) 868-7033 **From:** Wells, Jeffrey < jeff.wells@vdh.virginia.gov>

**Sent:** Thursday, November 19, 2020 14:06

To: Craig E Pritt <cepritt@aep.com>

Subject: [EXTERNAL] New London Transmission Line Rebuild Project

This is an **EXTERNAL** email. **STOP**. **THINK** before you CLICK links or OPEN attachments. If suspicious please click the 'Report to Incidents' button in Outlook or forward to incidents@aep.com from a mobile device.

Mr. Pritt,

We received your letter dated October 16, 2020 concerning the above mentioned project in Lynchburg.

We do not have any comments or concerns related to the project.

Thank you for the opportunity to comment.

Jeffrey S. Wells, P.E.

Field Director

VDH-Office of Drinking Water

211 Nor Dan Drive, Suite 1040

Danville, Virginia 24540

(434) 836-8416

FAX (434) 836-8424

From: Martha Little <a href="mittle@vof.org">mittle@vof.org</a>
Sent: Friday, January 29, 2021 7:10 AM
To: Christopher A Zane <a href="mailto:cazane@aep.com">cazane@aep.com</a>

**Cc:** Scott Kennedy <skennedy@aep.com>; Harry Hibbitts <<u>hhibbitts@vof.org</u>>

Subject: [EXTERNAL] RE: AEP's Reusens - Altavista Rebuild Project - McWane Property (VOF)

This is an **EXTERNAL** email. **STOP**. **THINK** before you CLICK links or OPEN attachments. If suspicious please click the 'Report to Incidents' button in Outlook or forward to incidents@aep.com from a mobile device.

Chris and Scott,

We have reviewed this with our attorneys and agree with your conclusions. We agree that the easement granting the right to build, operate, and maintain both lines should be construed to permit rebuilding of the lines at the end of their useful lives.

Let us know if you need anything else at this time.

Thanks, Martha

Martha H. Little Deputy Director of Conservation Virginia Outdoors Foundation

Phone: 8045773337 Email: mlittle@vof.org

From: Christopher A Zane < cazane@aep.com > Sent: Tuesday, January 19, 2021 1:51 PM

**To:** Martha Little < mlittle@vof.org > **Cc:** Scott Kennedy < skennedy@aep.com >

**Subject:** AEP's Reusens - Altavista Rebuild Project - McWane Property (VOF)

Alert: This email originated from outside VOF

Good afternoon Martha,

I hope all is well and that 2021 is off to a wonderful start for you and yours.

I wanted to reach out and follow up on our previous discussions, regarding AEP's upcoming rebuild projects- in particular, Reusens – Altavista, as it relates to the McWane property. This property (McWane, Nancy Lee, 2005 VOF Easement), is located about 5 miles west of the City of Lynchburg in Bedford County.

As discussed on 10/19/2020, we have compiled a "summary of existing rights" on this parcel, which is attached for your reference. Please note- we have included information pertaining to both existing facilities, and AEP's plans for the rebuild of this line (exhibit illustrating such is also contained within).

Upon your review of the attached, please feel free to reach out with any questions or concerns you might have.

Thank you in advance for your help and support on these matters.

Best regards,



CHRISTOPHER A ZANE | TRANS RIGHT OF WAY AGENT

CAZANE@AEP.COM | D:540.759.5525 | C:540.597.8965 | Gep.com | 40 FRANKLIN ROAD SW, ROANOKE, VA 24011

## **VDEQ SUPPLEMENT**

Reusens to New London 138 kV Rebuild Project

Bedford and Campbell Counties and City of Lynchburg, Virginia

**Prepared For:** 

**Appalachian Power Company** 

Prepared by:

POWER Engineers, Inc.

**April 2021** 

Based on consultations with the Virginia Department of Environmental Quality (VDEQ), POWER Engineers, Inc. on behalf of Appalachian Power Company has developed this VDEQ Supplement to facilitate review and analysis of the Reusens to New London 138 kilovolt Rebuild Project by the VDEQ and other relevant agencies.

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### **ATTACHMENTS**

ATTACHMENT 2.D.1: DESKTOP WETLAND AND STREAM DELINEATION REPORT

ATTACHMENT 2.E.1: HAZARDOUS WASTE INFORMATION

ATTACHMENT 2.F.1: USFWS IPAC REPORT ATTACHMENT 2.F.2: VDWR RESOURCES

ATTACHMENT 2.H.1: VDHR PRE-APPLICATION ANALYSIS

#### 1. PROJECT DESCRIPTION

Appalachian Power Company (the Company) is planning to rebuild an existing transmission line due to the combination of risk, condition and performance of the infrastructure and to ensure adequate and reliable electric service in Bedford County, the City of Lynchburg, and the surrounding area. The Reusens to New London 138-kilovolt (kV) Rebuild Project (the Project) involves rebuilding an approximately 11.6-mile portion of the Company's existing Reusens – Altavista 138-kV Transmission Line between the Reusens, Boonsboro, Forest and New London substations. The Project has a double-circuit section (approximately 5.5 miles) between the Reusens Substation, located off Old Trents Ferry Road in the City of Lynchburg, and existing Structure 5-10, and a single-circuit section (approximately 6.1 miles) between existing Structure 5-10 and the New London Substation, located off Thomas Jefferson Road in Bedford County. The Project will be constructed largely within the existing 100-foot-wide right-of-way (ROW); however, the Project includes minor deviations from the existing centerline to optimize the design or avoid constraints. As part of the Project, a portion of the Company's existing Reusens – South Lynchburg 138-kV transmission line will be relocated where it crosses the Reusens – Altavista 138-kV Transmission Line, and which is also where the Project transitions from double-circuit to single-circuit. The Company's existing Brush Tavern Substation, located in Campbell County, will be upgraded in its current location to accommodate the future electrical upgrades.

The Company's application to the Virginia State Corporation Commission (SCC), describes the overall need and necessity for the Project.

#### 2. ENVIRONMENTAL ANALYSIS

The Company and POWER Engineers, Inc. (POWER) solicited input from 27 federal, state, and local agencies and/or officials regarding the Project. Responses to the Project were received from six representatives of various federal, state, and local agencies, and are included in Attachment C to the *Reusens to New London 138-kV Rebuild Siting Memo* (the "Siting Memo") in Volume 2 of the Application. POWER also obtained relevant environmental data from field verification (see Section H), online databases, and other publicly available sources.

#### A. Air Quality

The Project does not involve the construction or expansion of any thermal emission generating sources and therefore no direct operational emissions from the Project are anticipated. During construction, emissions from heavy equipment and dust would occur, but kept at a minimum. No permanent impacts on air quality are anticipated, and temporary impacts will only last the duration of the construction phase. The Company does not expect to burn cleared material but, if burning becomes necessary, the Company will coordinate with the responsible locality to obtain permits and will comply with conditions imposed by the locality. The Company's tree-clearing methods can be found in Section II.A.7 of the SCC Response to Guidelines in Volume 1 of the Application.

#### B. Water Source

The Project, including the Brush Tavern Substation, is located in four sub-watersheds: James River – Judith Creek (Hydrologic Unity Code [HUC]12 020802030301); Ivy Creek – Cheese Creek (HUC12 020802030303); Buffalo Creek (HUC12 030101011502); and Elk Creek – Chestnut Branch (HUC12 030101011403). The Project is located in the Middle James – Buffalo sub-basin (HUC8 02080203)

and the Upper Roanoke sub-basin (HUC8 03010101). No water source is required for either the transmission line or substation operation.

The Company and POWER solicited comments from a number of environmental agencies in a letter dated October 16, 2020. A response was received from the Virginia Department of Health's Office of Drinking Water on November 19, 2020 noting receipt of the letter, and no comments or concerns were identified for the Project. The Project Team submitted a project review request to the Virginia Department of Conservation (VDCR), Virginia Natural Heritage Program and a response was received on November 12, 2020. Per the VDCR letter, the Judith Creek Stream Conservation Unit is located near the Reusens Substation and has a moderately significant biodiversity ranking (B4); however, the Project does not cross Judith Creek and therefore minimal impacts are anticipated to the stream conservation unit as the Project will rebuild within existing ROW at this location. A response was received from United States Army Corps of Engineers (USACE) on October 23, 2020 stating the Project is not anticipated to result in discharges of dredged and/or fill material into waters of the United States. No response was received from the Virginia Department of Environmental Quality (VDEQ) Office of Wetland and Stream Protection, VDEQ Blue Ridge Regional Office, or the Virginia Marine Resources Commission (VMRC) regarding the Project.

Responses from the Virginia Department of Health's Office of Drinking Water, VDCR, and VDEQ in regard to water sources is included in the Siting Memo in Volume 2 of the Application. Coordination and review with the VDEQ, USACE, and VMRC will be conducted during the Project's environmental studies.

#### C. Discharge of Cooling Waters

No discharge of cooling waters is associated with the Project.

#### D. Tidal and Non-tidal Wetlands

No tidal wetlands are associated with the Project and no response was received from the VMRC. A desktop wetland and stream delineation report was prepared in March 2021 and identified potential wetlands and streams for the Project (Attachment 2.D.1). The desktop features were identified within the proposed 100-foot-wide ROWs for the Reusens – Altavista 138-kV Transmission Line to be rebuilt and the slight relocation of the Reusens – South Lynchburg 138-kV Transmission Line, where the Project transitions from double circuit to single circuit. No desktop delineated wetlands were identified in the ROW of the Reusens – South Lynchburg 138-kV Transmission Line to be rebuilt where it crosses the Reusens – Altavista 138-kV Transmission Line; however one low probability stream totaling 175 linear feet was identified and will likely be spanned if present (see Attachment A within Attachment 2.D.1 of this supplement). The results of the desktop wetland and stream delineation report are briefly summarized below.

The tables below show the criteria used to determine the wetland and stream probability for the Proposed Route for the Project. The current potential streams and wetlands were assigned a probability of low potential, moderate potential, or high potential of being a regulated resource.

WETLAND PROBABILITY	ASSESSMENT CRITERIA			
High	<ul> <li>Aerial imagery (color and color infrared [CIR]) and/or topography combined with two other indicators such as National Wetlands Inventory (NWI) wetlands, National Hydrography Dataset (NHD) streams, hydric soils, or a regulated floodplain.</li> </ul>			
Moderate	<ul> <li>Aerial imagery (color and CIR) and/or topography combined with one other indicator such as NWI wetlands, NHD streams, hydric soils, or a regulated floodplain.</li> </ul>			
Low	Areas identified as wetland with topography and aerial photography only.			

STREAM PROBABILITY	ASSESSMENT CRITERIA			
High	Streams identified with NHD and aerial imagery (color and CIR).			
Moderate	<ul> <li>Streams identified with aerial imagery (color and CIR) and/or topography combined with one other indicator such as NWI wetlands, county or city stream data, or hydric soils.</li> </ul>			
Low	Areas identified as streams with topography or aerial photography only.			

The Proposed Route for the Project is largely on centerline in the existing ROW for most of its length. Within a 100-foot-wide ROW, the desktop wetland and stream delineation identified 20 potential wetlands (6.45 acres total) and 40 potential streams (approximately 6,108 linear feet). The results are summarized in the table below and provided in Attachment 2.D.1.

PROBABILITY	POTENTIAL WETLAND/STREAM CLASSIFICATION*	ESTIMATED NUMBER OF OCCURRENCES	ESTIMATED ACREAGE/LINEAR FEET WITHIN ROW	
High				
	PEM/PSS/PFO	7	2.69 acre	
	PUB	3	1.42 acre	
	Streams	24	3,678 feet	
Moderate				
	PEM/PSS/PFO	4	1.15 acre	
	Streams	9	1,349 feet	
Low				
	PEM/PSS/PFO	6	1.18 acre	
Streams		7	1,081 feet	
	Wetland Total	20	6.44 acre	
	Stream Total	40	6,108 feet	

<sup>\*</sup>Note: The potential wetland classifications within the ROW are likely PEM or PSS; however, PFO conditions may have developed if the ROW has not been maintained. Field verification would be required to confirm wetland classifications.

A total of 20 potential wetlands (totaling 6.44 acres) and 40 potential streams (approximately 6,108 linear feet) were identified within the ROW of the Proposed Route. Three potential palustrine unconsolidated bottom (PUB) wetlands were identified within the proposed ROW and appear to be within maintained manmade ponds and are unlikely to have a change in Cowardin et al. (1979) classification; the remaining 17 wetlands identified appeared to be either palustrine emergent (PEM), palustrine scrub-shrub wetland (PSS) and/or palustrine forested (PFO) wetlands based on the best available imagery and desktop data (Virginia Base Mapping Program 2018).

In general, temporary and permanent impacts to wetlands and streams during construction of transmission lines can be avoided through strategic placement of transmission structures/ foundations to minimize impacts to regulated resources. In most cases, wetlands and streams can be spanned entirely by a transmission line. Where avoidance is not possible, impacts to wetlands and streams are generally minimal due to the relatively small footprint of transmission line structure foundations. In addition, impacts to wetlands from access roads, which are required to construct the transmission lines, can be minimized through the use of timber mats and impacts are often temporary. A field delineation would verify wetland habitat types. Given the Project will largely rebuild within existing ROW, impacts to potential wetlands and streams are minimal as the ROW has already been disturbed.

#### E. Solid and Hazardous Waste

A database search was conducted to identify solid and hazardous waste sites near the Project. The database search included the United States Environmental Protection Agency's (USEPA's) National Priority List (NPL); the USEPA's Superfund Enterprise Management System; the USEPA's Resource Conservation and Recovery Act Information System (RCRA); the USEPA's Toxics Release Inventory (TRI); the VDEQ's Solid Waste Management Facilities; and the VDEQ's Voluntary Remediation Program. Results from the solid and hazardous waste database search are included in Attachment 2.E.1 to this supplement.

The USEPA's Superfund NPL online mapper and Superfund Enterprise Management System database (database last updated November 2019) identified zero NPL sites in proximity to the Project. The RCRA database (database last updated November 2020 for the City of Lynchburg and Bedford County, and January 2021 for Campbell County) includes information on facilities that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Facilities are classified as large quantity generators, small quantity generators, or conditionally exempt small quantity generators depending on the amount of waste they handle. The USEPA's RCRA database identified 162 active RCRA facilities in the City of Lynchburg, 64 sites within Bedford County and 74 sites within Campbell County (RCRAInfo). The closest active RCRA facilities to the Project in the City of Lynchburg, and Bedford and Campbell Counties are 0.1 to 0.5 mile from the Proposed Route and not to be crossed or impacted by the Project. The TRI database (database last updated in 2018) includes information about toxic chemical releases and pollution prevention activities reported by industrial and federal facilities. The TRI database identified a total of 16 TRI sites within a 15 mileradius of the Project. The closest TRI site to the Project is located nearly 0.85 mile away and will not be crossed or impacted by the Project. In addition, no facilities registered in the Voluntary Remediation Program database (last updated in January 2021) are in proximity to the Project.

There are 25 convenience centers and collection sites that are operating and located in Bedford County. The Forest Convenience Center is a full-service waste disposal and recycling site located approximately 0.8 mile east of the Project. The City of Lynchburg and Campbell County are members

of the Region 2000 Services Authority, which operates landfills in both localities. Additionally, Campbell County operates eight rural transfer household waste. The closest convenience centers and collection sites in the City of Lynchburg and Campbell County are located more than six miles from the Project, including the Brush Tavern Substation.

Care will be taken to operate and maintain construction equipment to prevent any fuel or oil spills. Any waste created by the construction crews will be disposed of in a proper manner and recycled where appropriate and will be further detailed in the Company's stormwater pollution prevention plan, a component of the Virginia Stormwater Management Program, which will be submitted to the VDEQ. The Project crosses through predominantly pasturelands and residential areas and will be rebuilt in or near the existing ROW. The Company will monitor soil and groundwater quality in areas of soil disturbance locations, which will be outlined in the stormwater pollution prevention plan.

#### F. Natural Heritage, Threatened and Endangered Species

A United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) report was generated to verify potential habitat occurrences of threatened and endangered species. One USFWS-listed species (northern long-eared bat, listed as threatened) was identified to potentially occur within two miles of the transmission line to be rebuilt. The IPaC is included as Attachment 2.F.1 to this supplement.

In a letter received from the VDCR's Division of Natural Heritage on November 12, 2020, ecological core areas were identified throughout the Project area. VDCR defines ecological cores as areas of unfragmented natural cover with at least 100 acres of interior that provide habitat for a wide range of species, and are numerically ranked based on their ecological integrity and relative contribution to the ecosystem and natural heritage systems in the area. No highly categorized cores with significant integrity, as determined by the VDCR, were identified within the Project area; although there are multiple "General" C5 core areas, the lowest category regarding ecological integrity (Virginia Natural Heritage Data Explorer 2017). The VDCR recommends following the Project's maintenance practices for the ROW as preventative measures to protect potential habitats of statelisted species and minimize impacts to ecological cores:

- Invasive species plan including invasive species inventory for the Project based on the current VDCR Invasive Species List from VDCR's website; methods for treating the invasive species.
- ROW restoration and revegetation including native species in a mix of grasses and forbs;
   monitoring and adaptive management plan for unsuccessful restoration efforts.

The Project Team submitted a project review request to the Virginia Department of Wildlife Resources (VDWR). The Company did not receive comments from the VDWR. A review of the VDWR's online mapper was used to view sensitive species and resulted in a five-mile radius from a central location along the Project rebuild. Four USFWS-listed species (northern long-eared bat, James spinymussel, Roanoke logperch, and yellow lance) and ten state listed species were identified by the VDWR (see Attachment 2.F.2). The Project is not located in proximity to any potential Northern long-eared bat, little brown bat, or tri-colored bat habitat and roost tree locations according to the information obtained in VDWR's online mappers (various survey dates). One bald eagle nest documented by the Center for Conservation Biology's Bald Eagle Nest Locator is located about 0.5 mile north of the Reusens Substation (verified in 2011). The USFWS eagle guidance recommends that a 660-foot buffer between project activities and eagle nests be maintained; no

other bald eagle nest locations were identified in close proximity to the Project. Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the VDCR, the VDCR represents the VDACS in comments regarding potential impacts on state-listed, threatened, and endangered plant and insect species. According to the letter received from the VDCR on November 12, 2020, the Project will not affect any documented state-listed plants or insects. There were no State Natural Area Preserves noted under VDCR's jurisdiction in the Project vicinity. Coordination with the VDWR and USFWS will be conducted to verify if any species-specific surveys are required prior to construction activities.

A total of 15 state-listed species could occur within five miles of the Project based on the VDWR list. The full list can be found in Attachment 2.F.2 and in the below table.

VDWR-Listed Species within 5.0 miles of the Project					
SPECIES NAME	STATE STATUS				
James spinymussel	Endangered				
Roanoke logperch	Endangered				
Northern long-eared bat	Threatened				
Yellow lance	Threatened				
Little brown bat	Endangered				
Tri-colored bat	Endangered				
Spirt supercoil	Endangered				
Peregrine falcon	Threatened				
Henslow's sparrow	Threatened				
Loggerhead shrike	Threatened				
Migrant loggerhead shrike	Threatened				
Atlantic pigtoe	Threatened				
Green floater	Threatened				
Orangefin madtom	Threatened				
Carolina darter	Threatened				

The Company will coordinate with the VDWR, the USFWS, and the VDCR as appropriate to minimize impacts on these resources during the environmental permitting phase of the Project.

#### G. Erosion and Sediment Control

The Company's General Erosion and Sediment Control Specifications for the Construction and Maintenance of Electric Utility Lines are submitted annually to the VDEQ for all upcoming projects. The approved General Erosion and Sediment Control Specifications will be implemented for all transmission facility construction related to the Project, which includes, but is not limited to, transmission line construction, ROW clearing, structure erection, substation upgrades inside the existing fence, construction and use of existing access roads, when practicable. In addition, a site-specific erosion and sediment control plan will be prepared for the Project as required by the VDEQ.

#### H. Archaeological, Historic, Scenic, Cultural or Architectural Resources

Per the Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia (2008) or simply the "Guidelines",

issued by the Virginia Department of Historic Resources (VDHR), POWER, who contracted Dutton + Associates, completed a Pre-Application Analysis (see Attachment 2.H.1). The below table summarizes these results. The Company will continue to work with the VDHR to minimize impacts to cultural resources as the Project progresses.

Radial Buffer from Project (miles)	Considered Resources	Proposed Route
0.0 to 1.5	National Historic Landmarks	Poplar Forest (VDHR# 009-0027)
		Virginia Episcopal School (VDHR# 118-0224)
		Locust Grove (VDHR# 118-0219)
0.0 to 1.0	NRHP (listed) (e.g., Historic Landscapes,	Presbyterian Orphans Home (VDHR# 118-5240)
0.0 to 1.0	Battlefields, Rural Historic District)	Woodbourne (VDHR# 009-0033)
		Rothsay (VDHR# 009-0065)
		Bowling Eldridge House (VDHR# 009-5283)
0.0 to 0.5	NRHP-eligible (determined by VDHR)	Reusens Dam (VDHR# 118-0218)
0.00 (within ROW)	Archaeological sites	None

Poplar Forest (VDHR# 009-0027) is a designated NHL and located 1.12 miles from the Proposed Route; however, the historical home is centrally located on the property and roughly 1.86 miles from the Proposed Route. The landscape between the Poplar Forest property and the Proposed Route is moderately to densely developed with a mix of suburban residential and commercial properties in the Forest area and thus no impact is anticipated. There are six NRHP-listed architectural sites located within one mile of the Proposed Route. The Rothsay and Woodbourne historical properties are located in Bedford County and in proximity to the Proposed Route (approximately 0.2 mile), but the historical homes are located farther and the intervening vegetation limits views of the Project. No more than a minimal impact is anticipated to these NRHPlisted historical resources identified in Bedford County. The Bowling Eldridge House, Virginia Episcopal School, Locust Grove, and Presbyterian Orphans Home architectural resources are located in the City of Lynchburg and more than 0.5 mile from the Project. Minimal impact is anticipated for these NRHP-listed resources in the City of Lynchburg given intervening vegetation and development largely limits visibility of the Project. The Reusens Dam is an NRHP-eligible site located within 0.5 mile of the Proposed Route, northeast of the Reusens Substation and at the James River. The Proposed Route travels south and away from the resource, which is located in a developed area, and no impact is anticipated. Based on the Pre-Application Analysis, the transmission line rebuild will have no more than a minimal impact on the historical resources identified given the intervening vegetation, topography and current developed areas.

#### I. Chesapeake Bay Preservation Areas

Construction, installation, operation, and maintenance of electric transmission lines are conditionally exempt from the Chesapeake Bay Preservation Act as stated in the exemption for public utilities, railroads, public roads, and facilities in 9 VAC 25-830-150. The Company will meet applicable conditions.

#### J. Wildlife Resources

As noted in Section 2.F, one USFWS-listed species (northern long-eared bat) was identified by the USFWS to potentially occur within two miles of the transmission line to be rebuilt. Three additional USFWS-listed species (James spinymussel, Roanoke Logperch, and yellow lance) were identified by the VDWR. The IPaC and VDWR resources are included as Attachment 2.F.1 and 2.F.2 to this supplement, respectively. Consultation with the USFWS, the VDWR, and the VDCR will be on-going as the Project progresses. As required, the Company will coordinate with the USFWS, the VDWR, and the VDCR as appropriate to determine whether surveys are necessary and to minimize impacts wildlife resources. The Project will be in or near its existing ROW for most of its length and thus minimizes habitat fragmentation and tree clearing to the extent possible. Minimal tree clearing will be required to maintain the generally 100-foot-wide ROW and accounts for the removal of danger trees or other vegetation that may be located within or immediately adjacent to the ROW.

#### K. Recreation, Agricultural, and Forest Resources

The general character of the Project area is characterized predominantly by forested, agricultural, pasturelands, and commercially developed land uses and residential areas. The Project will largely follow existing centerline with the exception of two deviations required to optimize the design or avoid constraints (see Exhibit 3 in Volume 1). As a result, impacts to recreation, agricultural, and forest resources are anticipated to be minimal.

Under the Virginia Open-Space Land Act, any public body can acquire title or rights to real property to provide means of preservation of open-space land as conservation easements. Three Virginia Outdoors Foundation (VOF) conservation easements are crossed by the existing ROW. The Project will be rebuilt on existing centerline on two VOF conservation easements; however, the first centerline deviation occurs on one of the VOF easements, and where the Reusens – Altavista and Reusens – New London 138 kV transmission lines cross (between proposed structures 4-30A and 4-32A). Both transmission line ROWs will be shifted slightly in order to combine the lines onto one transmission structure at the point of intersection, thus reducing the number of transmission structures on the easement. Correspondence with the VOF about the ROW relocations is detailed in the Siting Memo, located in Volume 2 of the Application. No proposed VOF conservation easements were noted in the Project area during a virtual meeting on October 19, 2020. The Company requested comments on the Project from the Virginia Department of Forestry (VDOF) in a letter dated October 16, 2020, but no response was received. There are no proposed VDOF conservation easements in the Project area according to their publicly available database.

The Project does not cross any local or state parks between the Reusens and New London substations; however, the Project does cross the Colonial Hills Golf Club course. The second deviation occurs where the existing ROW crosses the Colonial Hills Golf Club course. The Company proposes a minor shift of the ROW at this location between proposed structures 4-41A and 4-47A in order to relocate certain structures a greater distance from the fairways and greens of the course,

which is being done with the consent of the property owner. No other public parks or recreational areas are crossed by the Project.

The Proposed Route crosses approximately 69 acres of farmland of statewide importance1 and approximately 43 acres of prime and unique farmland soil² at or near existing locations. These designations are based on soil characteristics and established by the United States Department of Agriculture's Natural Resources Conservation Service's (NRCS) Soil Survey Geographic Database (SSURGO) data. Nevertheless, impacts on agricultural land from the Project are expected to be minimal. The permanent loss of soils or farmable land would be generally limited to the structure foundation locations. As the ROW has been in use since the 1940s, it is not expected that the Project will permanently impact farmland, as most farming uses currently co-exist with the transmission line.

There are no other local or state conservation lands or easements, parks, designated wilderness areas, or game lands located in the Project area or in proximity to any route. Overall, there are pockets of forested cover along the Project, but the transmission line will largely be rebuilt in existing ROW and is anticipated to have minimal impacts to forested resources. Minimal tree clearing will be required to maintain the generally 100-foot-wide ROW and accounts for the removal of danger trees that may be located within or immediately adjacent to the ROW. The Company's tree clearing methods use the VDOF's best management practices (BMPs) for water quality. Specific sections of the BMPs that are pertinent to transmission line clearing operations include:

- Equipment Maintenance and Litter
- Harvest Closure (rehabilitation of the ROW after construction)
- Revegetation of Disturbed Areas

The Company will utilize the above BMPs for the Project. Further discussion of ROW clearing, rehabilitation and maintenance can be found in Section II.A.7 of the Response to Guidelines in Volume 1 of the Application.

#### L. Use of Pesticides and Herbicides

When herbicides are used to maintain the Company's transmission ROW, they are registered with the USEPA and with the Virginia Department of Agriculture and Consumer Services. All herbicides will be used in accordance with label and manufacturer directions. Regarding herbicide applications (additionally, see Section II.A.7 of the SCC Response to Guidelines in Volume 1 of the Application):

- Herbicides will not be applied when rainfall is imminent, during rainfall, or within one day of large rain events (usually greater than one centimeter) that result in soil moisture capacity occurring above field capacity.
- Buffer zones will be maintained around streams, ponds, karst features, springs, wetlands, and water supply wells in accordance and compliance with herbicide label and manufacturer

<sup>&</sup>lt;sup>1</sup> Prime farmland is land that has the best combination of physical and chemical characteristics for producing crops (based on USDA-NRCS SSURGO data).

<sup>&</sup>lt;sup>2</sup> Soils that do not meet the prime farmland category but are still recognized for their productivity by states may qualify as soils of statewide importance (based on USDA-NRCS SSURGO data).

directions.

 In karst features and channelized drainage ways (perennial or intermittent) draining to a karst feature, wetland-approved herbicides shall be used in accordance with label and manufacturer directions.

#### M. Geology and Mineral Resources

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Project is located in the Piedmont physiographic province of Virginia and consists primarily of gravel and sand, granite and granodiorite, and metavolcanic rock. The Company requested comments on the Project from the VDCR and Virginia Departments of Mines, Minerals, and Energy in a letter dated October 16, 2020, but no response was received regarding karst, geology, and mineral resources. According to the Division of Geology and Mineral Resources Interactive Geologic Map, no sinkholes, active mines or stone quarries are located within one mile of the Project. The Company does not anticipate that the Project will result in negative impacts on the geology or mineral resources.

#### N. Transportation Infrastructure

The width of the existing transmission line ROW is approximately 100 feet and is currently maintained for operation of the existing transmission facilities. The Project crosses 35 public and private roads and five state highways, including State Routes 645 (Trents Ferry Road), 660 (Hawkins Mill Road), 620 (Wiggington Road), 621 (Cottontown Road), and 622 (Everett Road). Additionally, the Project crosses three United States highways, including United States (U.S.) Routes 221 (Forest Road), 501 (Northwest Expressway), and 501 Business (Boonsboro Road). The Proposed Route crosses roadways and highways at or near existing locations. In addition, the Proposed Route crosses one railroad near the Forest Substation and at its existing location. During a virtual meeting with Bedford County on September 25, 2020, county officials noted a potential sidewalk improvement project along Forest Road and near the Forest Substation, where the Project crosses the road. County officials noted the improvement project was is in a preliminary planning phase and not yet funded, and the Project would not impact the county's future improvement project. No future transportation plans were noted for the City of Lynchburg in the Project area. The Company requested comments on the Project from the Virginia Department of Transportation (VDOT) — Lynchburg District in a letter dated October 16, 2020, but no response was received. No future VDOT transportation plans or widening projects were identified in the Project area based on publicly available information and planning documents. The Company will coordinate with VDOT during the environmental permitting phase of the Project to determine the extent of land use permits and traffic control plans, as needed for the Project.

In the early siting phase of the Project, the Company generated a Screening Result Summary using the Federal Aviation Administration's (FAA) Notice Criteria Tool to determine potential structure concerns. The screening result summary indicated the structures do not exceed flight traverse ways; however due to proximity to navigation facilities, all structures must be filed with the FAA. The FAA's website was reviewed to identify airports within 10 miles of the Project. Based on this review, four airports or heliports were identified: Lynchburg Regional Airport (approximately five miles); New London Airport (approximately six miles); Central Lynchburg General Hospital heliport (approximately seven miles); and Falwell private airport (approximately eight miles). A letter received from the Virginia Department of Aviation on October 20, 2020 indicated that no portion of the Project is located within 20,000 linear feet of a public use airport. The Company will coordinate with the Virginia Department of Aviation and FAA as necessary to obtain all appropriate approvals.

# ATTACHMENT 2.E.1: HAZARDOUS WASTE INFORMATION



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Search Parameters: City Name: Lynchburg

State Abbreviation: Virginia

**Select National Priority List Sites Only NPL** 

Results are based on data extracted on NOV-25-2019

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Search Parameters: County Name: Bedford

State Abbreviation: Virginia

**Select National Priority List Sites Only NPL** 

Results are based on data extracted on NOV-25-2019

No Results found.



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Search Parameters: County Name: Campbell

**State Abbreviation: VA** 

**Select National Priority List Sites Only NPL** 

Results are based on data extracted on JAN-29-2021

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#### **ERICSSON INC**

Handler ID: VAR000010819 314 JEFFERSON RIDGE PKWY LYNCHBURG, VA 24501

**County Name: LYNCHBURG CITY** 

**Latitude:** 37.40735 **Longitude:** -79.23926

**Hazardous Waste Generator:** 

**Owner Name:** ERICSSON AGENT

STATUTORY TRUST



\*You can navigate within the map with your mouse.

No BIENNIAL REPORT data is available for the facility listed above.

### LIST OF FACILITY CONTACTS

NAME	<u>STREET</u>	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
LEAH MORRELL	1 MOUNTAIN VIEW RD	LYNCHBURG	VA	24502	804-592- 3712	Public
LEAH MORRELL	1 MOUNTAIN VIEW RD	LYNCHBURG	VA	24502	804-592- 3712	Permit

#### HANDLER / FACILITY CLASSIFICATION

Unspecified Universe for the facility listed above.

<b>HANDLER</b>	LAND	INCINEDATOD	BOILER AND OR	STODACE	TDEATMENT
<b>TYPE</b>	<b>DISPOSAL</b>	INCINERATOR	INDUSTRIAL FURNACE	STORAGE	TREATMENT

No Handler information is available for the facility listed above.

No PROCESS INFORMATION is available for the facility listed above.

## HANDLER TYPE

No NAICS Codes are available for the facility listed above.

## LIST OF WASTE CODES AND DESCRIPTIONS

WASTE CODE	WASTE DESCRIPTION
D001	IGNITABLE WASTE
D002	CORROSIVE WASTE
D008	LEAD
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1- TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHODICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
U002	2-PROPANONE (I) (OR) ACETONE (I)
U080	METHANE, DICHLORO- (OR) METHYLENE CHLORIDE
U121	METHANE, TRICHLOROFLUORO- (OR) TRICHLOROMONOFLUOROMETHANE
U159	2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)
U161	4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-
U220	BENZENE, METHYL- (OR) TOLUENE
U226	ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

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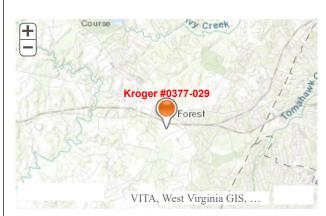
Handler ID: VAR000528349 15069 FOREST ROAD FOREST, VA 24551

**County Name: BEDFORD** 

**Latitude:** 37.36467 **Longitude:** -79.29232

**Hazardous Waste Generator:** 

Owner Name: THE KROGER CO.



<sup>\*</sup>You can navigate within the map with your mouse.

#### **BIENNIAL REPORT SUMMARY**

REPORT YEAR	GENERATION (Tons)	MANAGEMENT (Tons)	WASTE RECEIVED (Tons)	WASTE SHIPPED (Tons)	INCINERATION (Tons)	DISPOSAL (Tons)	ACUTE GENERATION (Tons)
2013	0			0			

#### LIST OF FACILITY CONTACTS

NAME	<u>STREET</u>	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
VONICE BROWN	3631 PETERS CREEK ROAD	ROANOKE	VA	24019	540-563- 3627	Public
VONICE BROWN	3631 PETERS CREEK ROAD	ROANOKE	VA	24019	540-563- 3627	Permit
VONICE BROWN	PETERS CREEK ROAD	ROANOKE	VA	24019	540-563- 3627	Permit
VONICE BROWN					540-563- 3627	Permit

#### HANDLER / FACILITY CLASSIFICATION

Unspecified Universe for the facility listed above.

<b>HANDLER</b>	LAND	INCINERATOR	<b>BOILER AND OR INDUSTRIAL</b>	STODACE	TREATMENT
<u>TYPE</u>	<b>DISPOSAL</b>	INCINERATOR	<u>FURNACE</u>	STORAGE	IKEATMENT

No Handler information is available for the facility listed above.

No PROCESS INFORMATION is available for the facility listed above.

## HANDLER TYPE

### LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION		
445110	SUPERMARKETS AND OTHER GROCERY (EXCEPT CONVENIENCE) STORES		
44511	SUPERMARKETS AND OTHER GROCERY (EXCEPT CONVENIENCE) STORES		

## LIST OF WASTE CODES AND DESCRIPTIONS

WASTE CODE	WASTE DESCRIPTION				
D001	IGNITABLE WASTE				
D002	CORROSIVE WASTE				
D005	BARIUM				
D006	CADMIUM				
D007	CHROMIUM				
D008	LEAD				
D009	MERCURY				
D010	SELENIUM				
D011	SILVER				
D016	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)				
D018	BENZENE				
D022	CHLOROFORM				
D024	M-CRESOL				
D035	METHYL ETHYL KETONE				
P001	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN $0.3\%$ (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN $0.3\%$				
P075	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS				
U002	2-PROPANONE (I) (OR) ACETONE (I)				
U010	AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8- [[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C				
U035	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL				
U044	CHLOROFORM (OR) METHANE, TRICHLORO-				
U058	2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE				
U059	5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN				
U089	DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-				
U129	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)-(OR) LINDANE				

U132	HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-
U144	ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE
U150	L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN
U187	ACETAMIDE, N-(4-ETHOXYPHENYL)- (OR) PHENACETIN
U188	PHENOL
U200	RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-
U201	1,3-BENZENEDIOL (OR) RESORCINOL
U202	1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS (OR) SACCHARIN, & SALTS
U204	SELENIOUS ACID (OR) SELENIUM DIOXIDE
U205	SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)
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#### WALMART NEIGHBORHOOD MARKET #3605

Handler ID: VAR000529875 22088 TIMBERLAKE ROAD LYNCHBURG, VA 24502

**County Name:** CAMPBELL

**Latitude:** 37.32321 **Longitude:** -79.25428

**Hazardous Waste Generator:** 

Owner Name: WAL-MART STORES

EAST, LP



\*You can navigate within the map with your mouse.

No BIENNIAL REPORT data is available for the facility listed above.

#### LIST OF FACILITY CONTACTS

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
CASSIE CLARK	PO BOX 8041	BENTONVILLE	AR	72712- 8041	479-204- 6188	Public
REBECCA HAYNIE	PO BOX 8041	BENTONVILLE	AR	72712- 8041	479-258- 6810	Permit
CARLO BERTANI	PO BOX 8041	BENTONVILLE	AR	72712- 8041	479-204- 8545	Permit
CASSIE CLARK	PO BOX 8041	BENTONVILLE	AR	72712- 8041	479-204- 6188	Permit

#### **HANDLER / FACILITY CLASSIFICATION**

### Unspecified Universe for the facility listed above.

No Handler information is available for the facility listed above.

No PROCESS INFORMATION is available for the facility listed above.

## HANDLER TYPE

### LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
452311	WAREHOUSE CLUBS AND SUPERCENTERS
452910	WAREHOUSE CLUBS AND SUPERCENTERS

### LIST OF WASTE CODES AND DESCRIPTIONS

WASTE CODE	WASTE DESCRIPTION
D001	IGNITABLE WASTE
D002	CORROSIVE WASTE
D003	REACTIVE WASTE
D004	ARSENIC
D005	BARIUM
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D010	SELENIUM
D011	SILVER
D013	LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)
D016	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
D018	BENZENE
D024	M-CRESOL
D025	P-CRESOL
D026	CRESOL
D027	1,4-DICHLOROBENZENE
D030	2,4-DINITROTOLUENE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
D040	TRICHLORETHYLENE

P001	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
P075	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS
U002	2-PROPANONE (I) (OR) ACETONE (I)
U034	ACETALDEHYDE, TRICHLORO- (OR) CHLORAL
U035	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL
U058	2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE
U072	BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE
U089	DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-
U122	FORMALDEHYDE
U129	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE
U132	HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-
U134	HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
U150	L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN
U154	METHANOL (I) (OR) METHYL ALCOHOL (I)
U165	NAPHTHALENE
U188	PHENOL
U200	RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-
U205	SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)
U210	ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE
U249	ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS
U279	CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE
U411	PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR

Go To Top Of The Page

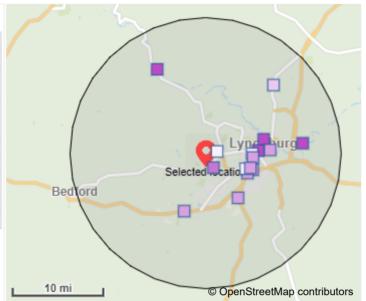
**Total Number of Facilities Retrieved: 1** 

## Summary of 16 TRI facilities within 15 miles of Ridgeview Dr, Lynchburg, Virginia, 24503

#### Facilities Summary - Reporting Year 2019

This screen summarizes Toxics Release Inventory data for the facilities in the area you specified.

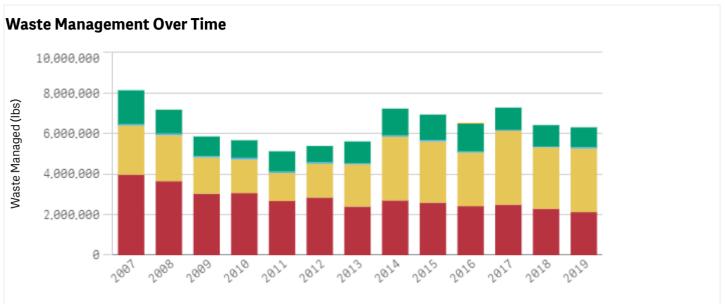
	<b>Current Selection</b>	United States
Number of TRI Facilities	16	21,393
Total Production-Related	6,310,885 lbs	30,688,074,282
Waste Managed		lbs
Total Disposal or Other Releases	2,127,568 lbs	3,432,728,241 lbs
Total On-site	1,093,777 lbs	2,962,482,307 lbs
•Air	536,068 lbs	600,034,889 lbs
•Water	519,957 lbs	201,246,751 lbs
•Land	37,753 lbs	2,161,200,668 lbs
Total Off-Site	1,033,791 lbs	470,245,933 lbs



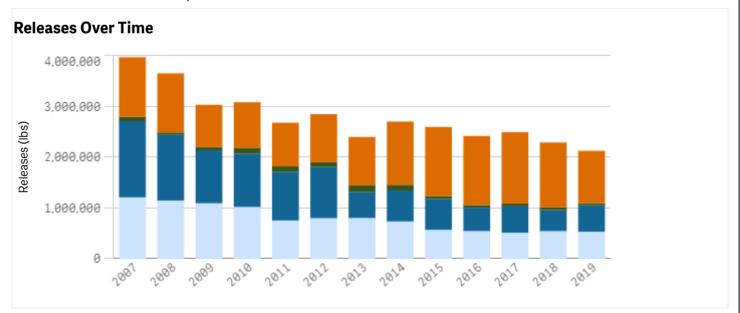
The following charts represent releases of TRI-covered chemicals into the environment in the area you specified. A

<sup>&</sup>quot;release" of a chemical means that it is emitted into the air or water, placed in some type of land disposal, or transferred off

The graph below shows the change in the total quantity of production-related waste managed at the TRI facilities in the area you selected. EPA encourages facilities to first eliminate waste at its source (referred to as "source reduction"). For waste that is generated, the preferred management method is recycling, followed by energy recovery, treatment, and as a last resort, disposing of or otherwise releasing the waste. Looking at the change in these quantities over time helps track industry progress in reducing waste generation and moving towards safer waste management methods.



site to another location for disposal or release.



TRI Homepage Search Interface

GRIFFIN PIPE PRODUCTS CO (Industry Sector 331 Primary Metals)

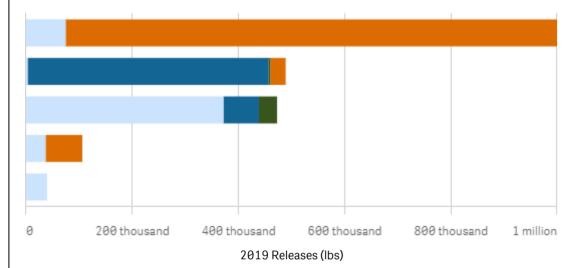
BWXT NUCLEAR OPERATIONS GROUP INC (Industry Sector 332 Fabricated Metals)

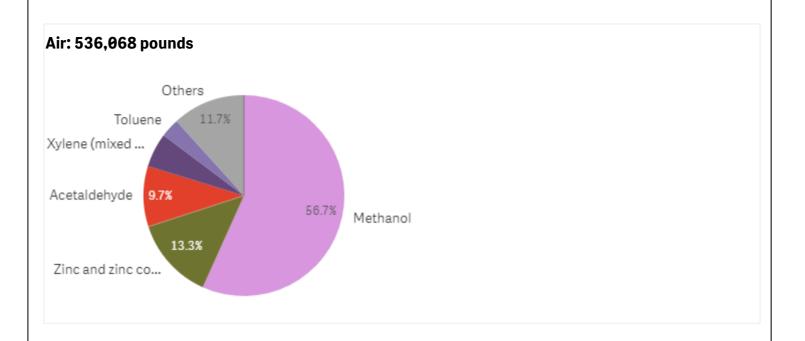
GEORGIA-PACIFIC BIG ISLAND MILL (Industry Sector 322 Paper)

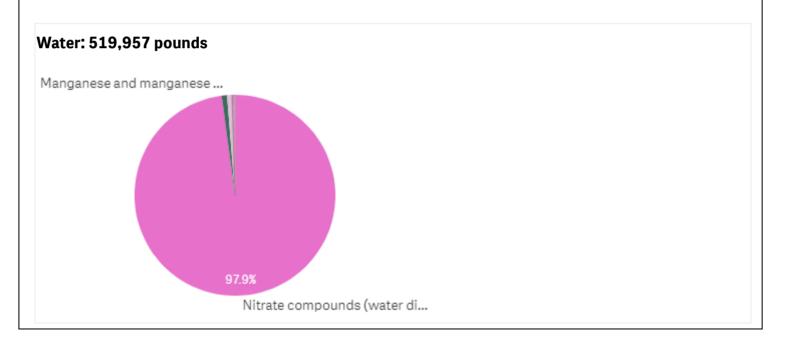
SLOCUM ADHESIVES CORP (Industry Sector 325 Chemicals)

NORCRAFT COS (Industry Sector 337 Furniture)

### Top Five Facilities Based on Total Disposal or Other Releases in 2019







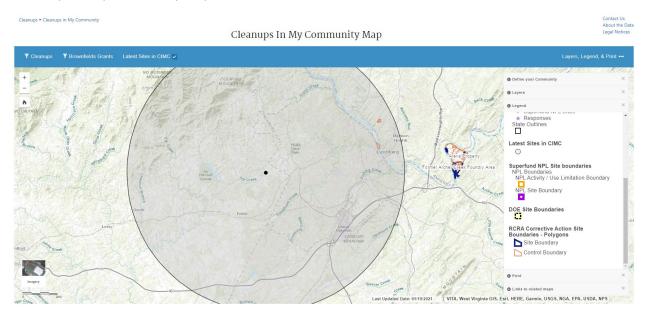
#### National Priority List and Superfunds Enterprise Management System:



#### Website Link:

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1

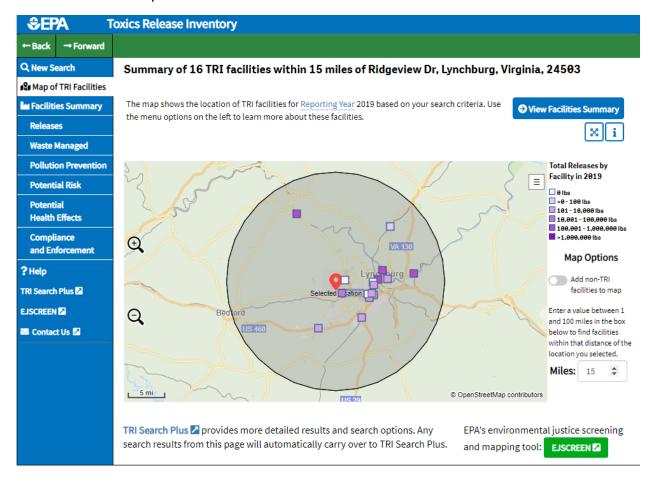
#### Clean Ups in My Community Map:



#### Website Link:

https://ofmpub.epa.gov/apex/cimc/f?p=CIMC:MAP::::71:P71\_WELSEARCH:NULL%7CCleanup%7C%7C%7C%7C%7Cfalse%7

#### Toxic Release Inventory:



Website Link: <a href="https://www.epa.gov/toxics-release-inventory-tri-program?">https://www.epa.gov/toxics-release-inventory-tri-program?</a>

# ATTACHMENT 2.F.1: USFWS IPAC REPORT

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location





## Local office

Virginia Ecological Services Field Office

**\( (804) 693-6694** 

**(804) 693-9032** 

6669 Short Lane Gloucester, VA 23061-4410

http://www.fws.gov/northeast/virginiafield/

# Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## **Mammals**

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis

Threatened

Wherever found

No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act $^{1}$  and the Bald and Golden Eagle Protection Act $^{2}$ .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The <u>Migratory Birds Treaty Act</u> of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <a href="http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php">http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php</a>
- Measures for avoiding and minimizing impacts to birds
   <a href="http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php">http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php</a>
- Nationwide conservation measures for birds <a href="http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf">http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</a>

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.
"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

#### Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

#### Eastern Whip-poor-will Antrostomus vociferus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

#### Prothonotary Warbler Protonotaria citrea

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

#### Red-headed Woodpecker Melanerpes erythrocephalus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

#### Rusty Blackbird Euphagus carolinus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

#### Wood Thrush Hylocichla mustelina

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

### Breeds Sep 1 to Jul 31

Breeds May 1 to Aug 20

#### Breeds Apr 1 to Jul 31

Breeds May 10 to Sep 10

## Breeds elsewhere

#### Breeds May 10 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

#### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

#### Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

#### No Data (–)

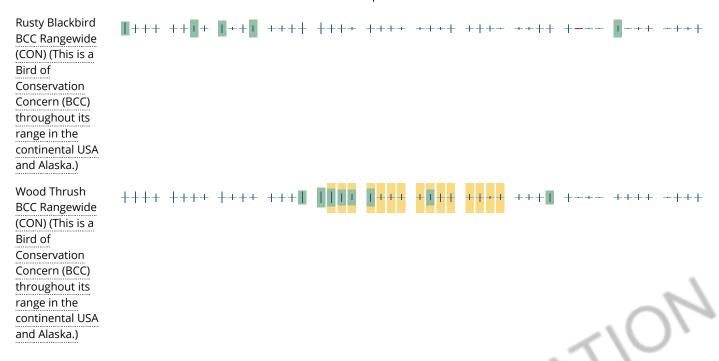
A week is marked as having no data if there were no survey events for that week.

#### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

#### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>AKN Phenology Tool</u>.

# What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen</u> science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

#### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting

point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## **Facilities**

## National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

PEM1C

PEM1Ch

FRESHWATER FORESTED/SHRUB WETLAND

PFO1A

PSS1A

PSS1Ah

PFO1Ch
PFO1Ah
PSS1/EM1Ch
PFO1C

FRESHWATER POND
PUBHh
PABHh
PUBH
PUSCh
PUBHx

LAKE
L2UBHh

RIVERINE
R5UBH
R3UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

#### **Data limitations**

R4SBC R2UBH

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal,

state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

# ATTACHMENT 2.F.2: VDWR RESOURCES



## Virginia Department of Game and Inland Fisheries

Home » By Coordinates » VaFWIS GeographicSelect Options

Known or likely to occur within a 5 mile radius around point 37,23,39.5 -79,15,50.9 in 019 Bedford County, 031 Campbell County, 680 Lynchburg City, VA

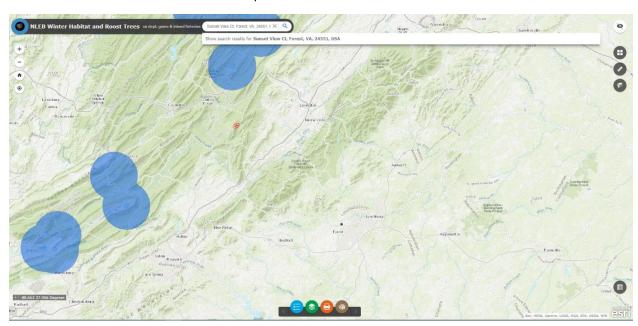
View Map of Site Location

577 Known or Likely Species ordered by Status Concern for Conservation (displaying first 37) (37 species with Status\* or Tier I\*\* or Tier II\*\*)

VaFWIS Search Report Compiled on 1/26/2021, 4:05:41 PM

BOVA Code	Status*	Tier**	Common Name	Scientific Name
060017	FESE	la	<u>Spinymussel, James</u>	Parvaspina collina
010214	FESE	lla	Logperch, Roanoke	Percina rex
050022	FTST	la	Bat, northern long-eared	Myotis septentrionalis
060029	FTST	lla	Lance, yellow	Elliptio lanceolata
050020	SE	la	Bat, little brown	Myotis lucifugus
050027	SE	la	Bat, tri-colored	Perimyotis subflavus
110240	SE	la	Supercoil, spirit	Paravitrea hera
040096	ST	la	Falcon, peregrine	Falco peregrinus
040293	ST	la	Shrike, loggerhead	Lanius Iudovicianus
040379	ST	la	Sparrow, Henslow's	Centronyx henslowii
060173	FPST	la	Pigtoe, Atlantic	Fusconaia masoni
060081	ST	lla	Floater, green	Lasmigona subviridis
010127	ST	IIb	Madtom, orangefin	Noturus gilberti
010353	ST	IIc	<u>Darter, Carolina</u>	Etheostoma collis
040292	ST		Shrike, migrant loggerhead	Lanius Iudovicianus migrans
030031	CC	IIIc	Kingsnake, scarlet	Lampropeltis elapsoides
030012	cc	IVa	Rattlesnake, timber	Crotalus horridus
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#### NLEB Winter Habitat and Roost Trees Map:



### MYLU PESU Habitat Map:

