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Special Use Permit Application

Hollymeade Substation Expansion Project
Albemarle County, Virginia

GAI Project Number: R22036.00

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Dominion Energy®

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1.0 Project Proposal

This application for special use is submitted to Albemarle County (the "County") by Dominion Energy Virginia, (the "Applicant"), a wholly owned subsidiary of Dominion Energy, Inc. ("Dominion"), to provide for the installation of an air core series reactor on Line 2054 at the Hollymeade Substation. To relieve line congestion and improve service reliability, the substation will be expanded to provide space for the new equipment. New perimeter fencing will be installed to match the existing station fence. Additionally, an internal separation fence must be installed to prohibit personnel and equipment approach to the new reactors while energized.

The Project is located on Parcel 03200-00-00-03700 ("Project Parcel"), at 3317 Worth Crossing situated just off U.S. Route 29 approximately 10 miles north of the Interstate 64 intersection in the community of Hollymead. The Project Parcel is owned by Virginia Electric & Power Company, a wholly owned subsidiary of Dominion. See Appendix A for Conceptual Layouts depicting existing and proposed site features.

The Project Parcel is currently zoned R-1 and R-15. It is currently utilized as the location for the existing Hollymeade Substation. The existing substation and equipment will remain on site with the site being expanded to provide space for the new equipment. Limited demolition of existing fence and utilities within the proposed expansion area will be required. No modifications will be required to the existing access road and driveway entrance. The parcel totals 6.72 acres and is comprised of approximately 3.45 acres (51%) of wooded tree canopy coverage, 1.46 acres (22%) of existing graveled substation site, and 1.81 acres (27%) of open meadow/maintained right-of-way.

The Project Site is in the Powell Creek Watershed within the larger South Fork Rivanna Reservoir Watershed. Although the site expansion will remove existing vegetation and replace it with a mix of graveled pad and maintained right-of-way, the project's unique use does not impact water quality as a traditional impervious development would, due to low potential for pollutant runoff using stormwater management best management practices (BMP) and the purchase of water quality mitigation credits to account for the increase in phosphorous loading.

The proposed facility expansion will provide the serviced community with increased reliability in their electric service distribution, while requiring minimal to no use of County services such as water, wastewater, schools, and other infrastructure.

The project will be constructed and operated in accordance with all applicable Federal, State, and Local building codes and regulations.

1.1 Residential – R-1 Zoning Designation

The Project Site, Parcel 03200-00-00-03700, where the substation facility and proposed expansion are located is zoned Residential R-1 ("R-1"). The Albemarle County Code of Ordinance, Chapter 18, Sec. 13, allows for electrical power substations, transmission lines and related towers owned by a public utility in R-1 Zoning by Special Use Permit (SP). The intent of the R-1 Zoning is created to establish a plan implementation zone that recognizes the existence of previously established low density residential districts in communities and the urban area; provides incentives for clustering of development and provision of locational, environmental and development amenities; and provides for low density residential development in community areas and the urban area.

1.2 Residential - R-15 Zoning Designation

The Project Site, Parcel 03200-00-00-03700, along the western portion of the parcel where the existing access is located, is zoned Residential R-15 ("R-15"). The Albemarle County Code of Ordinance,

Chapter 18, Sec. 13, allows for electrical power substations, transmission lines and related towers owned by a public utility in R-15 Zoning by Special Use Permit (SP). The intent of the R-15 Zoning provides for compact, high-density residential development; permits a variety of housing types; and provides incentives for clustering of development and provision of locational, environmental, and developmental amenities. R-15 districts may be permitted within the community and urban area locations designated on the comprehensive plan.

2.0 Consistency with Comprehensive Plan

2.1 Natural Resources

Recognizing the value that natural resources bring to the area, the County's 2015 Comprehensive Plan identifies certain objectives regarding the protection of natural resources within the county. The following is a list of some of those objectives and a narrative on how Dominion meets the intent of those objectives.

Objective 1: "Ensure clean and abundant water resources for public health, business, healthy ecosystems, and personal enjoyment by preventing shortages and contamination."

The Applicant will continue to adhere to VSMP requirements to help protect and preserve water resources. Where land disturbance will occur, grading has been designed to ensure stormwater is responsibly managed to protect downstream resources according to County and State guidance.

Objective 2: "Protect air quality."

The project does not impact local and regional air quality negatively. By utilizing and expanding an existing facility already in use, the expansion projects allow the Applicant to improve service to the local community without having to develop a new site.

Objective 4: "Protect the biological diversity and ecological integrity of the County in both the Rural Area and Development Areas."

Through maintaining existing screening and landscaping coverage at the project site combined with encouraging the use of native plants in landscaping to protect and provide habitat for native biodiversity, to save water, and to connect adjacent landowners to the local ecosystem.

2.2 Historic, Cultural, and Scenic Resources

Objective 6: "Continue to protect and enhance scenic resources for residents and tourists."

The Applicant will continue to promote voluntary measures to protect scenic resources and minimize/prevent negative impact to neighbors by maintaining adequate vegetation and screening along the property boundary.

3.0 Impacts on Public Facilities & Public Infrastructure

3.1 Public Infrastructure

As noted, the Hollymeade Substation expansion will not create any additional burden on County services such as schools, roads, or other public utilities. At the conclusion of construction, visits to the site will be limited to routine operations and maintenance currently experienced at the site. Therefore, the project will not introduce a burden to county roads or facilities. Due to there being no permanent, on-site staff for the facility, no impact to public facilities is expected.

3.2 Neighboring Parcels

Fifteen parcels border the Project Parcel. Seven adjacent parcels are single-family residential; two are residential townhouse; one is Conservation Use – private open space; two are designated open space; one is Vacant Residential Land; and one is designated unassigned Planned Residential Development.

Table 1: Adjacent Parcels

Landower	Parcel ID	Parcel Address	Tax Type
Worth Crossing Owners Association	046B4-02-00-000A1	PO Box 5207, Charlottesville VA, 22905	Regular Taxable
Thomas W Desimini	046B4-02-0A-00100	3321 Worth Crossing	Regular Taxable
Forest Lakes Community Association Incorporated	032J0-01-00-000B0	N/A	Regular Taxable
Steven M or Laurie Dale Malone	032J0-01-00-01400	1406 Decatur Drive	Regular Taxable
Casey Robinson and Reiko Igarashi	032J0-01-00-01500	1416 Decatur Drive	Regular Taxable
Marisa Goodwin	032J0-01-00-01600	1422 Decatur Drive	Regular Taxable
Rick Boby Mathew and Neetha Elizabeth Makil	032J0-01-00-01700	1428 Decatur Drive	Regular Taxable
Brian and Jennifer Lohnes	032J0-02-00-01800	1434 Decatur Drive	Regular Taxable
Christopher Ngoc Hoang	032J0-02-00-01900	1440 Decatur Drive	Regular Taxable
Forest Lakes Community Association Incorporated	032J0-02-00-000C0	N/A	Regular Taxable
Forest Lakes Community Association	046B4-00-00-000A0	N/A	Regular Taxable
Highlife Townhomes Incorporated	046B4-00-04-000B0	N/A	Regular Taxable
Parwiz Aryan Waziry	046B4-00-04-01400	N/A	Regular Taxable
CC Forest Lakes LLC	046B4-00-00-00200	1752 Timberwood Boulevard	Regular Taxable

Vahid Farmehini and Saeideh Mastali	046B4-00-04-01300	2043 Landon Lane	Regular Taxable

The Project will mitigate impacts to neighboring parcels through maximizing the use of naturally occurring vegetative screening paired with the installation and maintenance of both adequate setbacks and additional vegetative buffer areas, as necessary. Due to safety and maintenance requirements, vegetation will be limited in the right-of-way under overhead lines.

3.3 Visual

Recognizing the importance of scenic resources conservation, great care was taken to design the Project in a way that protects the viewshed of the neighboring properties and roadways. This is accomplished by adhering to all setback requirements, maintaining mature vegetative buffering in place where available and supplementing vegetative buffering with additional native vegetation where appropriate.

The existing and proposed equipment to be installed will not exceed the 35-foot height restriction, measured from the base of the structure to its highest point; however, a new backbone static pole structure for the transmission line will need to be installed as part of the new project. This pole will be of similar height to the existing transmission structures. There will be no signage on site, except for that required by Dominion for safety, security, or site operations.

Existing slopes, mature vegetation, and supplemental vegetation will further reduce the visual impact to adjacent parcels. There will be no additional visual impact to any other parcels adjacent to the Project Site.

Vegetative screening will adhere to the requirements set out in Chapter 18, Sec. 32.7.9.7, of the Zoning Ordinance.

3.4 Real Estate

The Project is projected to have no impact, positive or negative, on the value of neighboring properties based on the presence of the existing substation facility at the project site.

3.5 Noise

Noise characteristics will be typical of an electrical substation and sound levels will be in compliance with the County's noise ordinance. A sound study of existing conditions has been conducted and will be submitted.

3.6 Lighting

All lighting at the Project site will comply with all applicable sections of the Albemarle County Code of Ordinance (Zoning Ordinance) and will be kept to the minimum illumination necessary to ensure the safe operation of the facility. All lighting will be designed to prevent spillover lighting and will be arranged or shielded to reflect light away from adjoining residences and roads.

3.7 Charlottesville-Albemarle Airport

Because the project is located within 3-miles of an airport, a notice will need to be filed with the Federal Aviation Administration (FAA). The proposed new pole structure will need to be entered into the FAA's Notice Criteria Tool to determine filing requirements. The Applicant will coordinate this throughout the SUP and permitting process.

3.8 Water Resources

The Project will be designed to minimize impacts to waterways onsite and downstream of the Project Site. Both water quality and quantity will be considered and protected as the facility design progresses. See Appendix A for a Conceptual Grading, Stormwater, and Erosion and Sediment Control Plan and for Conceptual Stormwater Details and Calculations. These conceptual plans depict the preliminary project design and will be updated to include final equipment selection and feedback from the County. The Applicant will continue to solicit and incorporate County Engineering feedback through the Site Plan Approval process.

With the Project requiring some tree clearing and the expansion of gravel pad area, establishment of additional visual vegetative buffers and healthy vegetative cover are proposed. The establishment of healthy ground cover post construction will be heavily monitored and emphasized as the first step in water quality protection. The temporary erosion and sediment control measures and the permanent stormwater Best Management Practices (BMPs) that will be implemented in accordance with DEQ VSMP guidance will also protect water quality. Vegetation outside the Project Limits of Disturbance (LOD) will be untouched and preserved.

3.9 Hazardous Materials Statement

The Project does not pose a risk to public health due to the presence of hazardous materials as there are no hazardous materials stored onsite.

4.0 Impacts on Environmental Features

4.1 Critical Slopes

The Project design will not encroach on any large contiguous areas of critical slopes, as defined in Chapter 18, Article I, Section 3.1 and described in Chapter 18, Article II, Section 4.2 of the Zoning Ordinance.

4.2 Wildlife

As part of the environmental due diligence performed on the Project Site, a determination of the likelihood of encountering any State or Federally listed Threatened or Endangered species was completed. The complete Threatened and Endangered Species Review conducted on the Project site is available in Appendix B; below is an excerpt from that review:

Table 2: Threatened and Endangered Species Review

Agency	Database
U.S. Fish and Wildlife Services	Information, Planning and Consultations System
Virginia Department of Game and Inland Fisheries	Virginia Fish and Wildlife Information System
Virginia Department of Game and Inland Fisheries	Wildlife Environmental Review Map Services
Virginia Department of Game and Inland Fisheries	Northern Long-eared Bat Winter Habitat and Roost Locator

Virginia Department of Game and Inland Fisheries	Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts Locator
Virginia Department of Game and Inland Fisheries	Division of Natural Heritage Database
The Center for Conservation Biology Virginia	Eagles Nest Locator

The comprehensive review identified the potential for the following species to be present on the Project site:

Common Name	Scientific Name	Status	Agency Source
Northern Long-eared Bat	Myotis septentrionalis	Federal Threatened	USFWS
Little Brown Bat	Myotis lucifugus	State Endangered	VDWR

Based on the results of the desktop review, a comprehensive field habitat study will be conducted to determine if species identified in the State and Federal databases have potential habitat present on the Project Site.

4.3 Cultural and Historical Resources

A desktop background review of historical resources was completed through a search of the Virginia Department of Historical Resources (VDHR) Virginia Cultural Resource Information System (V-CRIS). Based on the results, the project is not expected have an impact on nearby resources. A summary of this background review showing eligible locations within one-half mile of the project site is in the table below.

Table 3: V-CRIS Background Review Findings

DHR ID	Site Category	Site Type	Time Period	Evaluation Status
44AB0301	Domestic	Dwelling, single	19th Century: 2Nd Half (1850-1899)	DHR Staff: Not Eligible
44AB0349	Domestic	Camp, Temporary		DHR Staff: Not Eligible
44AB0460	Domestic	Dwelling, single	Reconstruction and Growth (1866-1916), World War I to World War II (1917 -1945), The New Dominion (1946-1991), Post-Cold War (1992 – Present)	DHR Staff: Not Eligible

As part of the previous State Corporation Commission (SCC) approval process, a Cultural Resource clearance was provided October 19, 2011.

4.4 Streams and Wetlands

A wetland delineation was performed by GAI Consultants to identify all streams and wetlands on the Project Site. The complete delineation can be reviewed in Appendix C See the Conceptual Grading &

SWM/ESC Plan in Appendix A for a conceptual depiction of proposed stream and wetland setbacks. The Project will not impact any delineated streams or wetlands. The Project will be developed and constructed in conformance with all applicable federal, state, and local laws and regulations, including the Chesapeake Bay Act, Clean Water Act, and VA-DEQ Stormwater Management Program Regulations.

5.0 Facility Considerations

5.1 Equipment Design

The Project will provide for the installation of an air core series reactor on Line 2054 at the Hollymeade Substation. This equipment is required to relieve line congestion and improve service reliability, the substation will be expanded to provide space for the new equipment. In additional to new equipment, new perimeter fencing will be installed to match the existing station fence. Additionally, an internal separation fence must be installed to prohibit personnel and equipment approach to the new reactors while energized.

5.2 Project Site Access

Access to the Project Site will occur by an existing single gravel access road off Worth Crossing. Minimal impact to traffic is expected during construction. Once operational, there will be no daily staff at the Project Site, and site visits are expected to be limited to routine operations and maintenance typical of the existing substation.

5.3 Vegetative Buffer

Existing mature vegetation will be utilized as buffer wherever possible on the Project Site. Any needed additional vegetative screening is identified in Appendix A and will adhere to the requirements set out in Chapter 18, Sec. 32.7.9.7, of the Zoning Ordinance. Native, non-invasive species will be utilized for all installed vegetative buffering. Vegetative buffering will be maintained throughout the life of the Project.

5.4 Fencing and Security

All new facility equipment will be enclosed in a perimeter fence matching the height and style of the existing fence. The fencing serves to prevent unauthorized personnel from entering the Project Site and will protect the system components from damage by wildlife. Security gates will be installed to allow for ingress and egress of authorized personnel. Temporary fencing will be installed, as necessary, for safety and security during construction. Access will be limited to authorized personnel, including designated County officials. Safety and security signs will be located along the perimeter fence. Temporary instructional or safety signs will be posted during construction, as appropriate and necessary.

5.5 Lighting

All lighting at the Project site will comply with all applicable sections of the Albemarle County Code of Ordinance (Zoning Ordinance) and will be kept to the minimum illumination necessary to ensure the safe operation of the facility. All lighting will be designed to prevent spillover lighting and will be arranged or shielded to reflect light away from adjoining residences and roads.

6.0 Facility Permitting

6.1 Stormwater Management Plan

Understanding the need for protecting clean water sources, the Applicant, as authorized by the Virginia Stormwater Management Program (“VSMP”) through their approved Annual Standards and

Specifications, will, through an authorized independent third-party reviewer, coordinate the review and approval of the stormwater management plan. In development of the stormwater management plan, the applicant will continue to solicit and incorporate County Engineering feedback. The Project's conceptual Stormwater Management Plan can be viewed in Appendix A.

6.2 Erosion and Sediment Control

The Applicant will ensure strict compliance with all applicable erosion and sediment control laws and regulations. Management practices utilized on site will be designed specifically to prevent the discharge of sediment and other pollutants into nearby streams and bodies of water. The Applicant, as authorized by Virginia DEQ through their approved Annual Standards and Specifications, will, through an authorized independent third-party reviewer, coordinate the review and approval of the erosion and sediment control plan. In development of the erosion and sediment control plan, the applicant will continue to solicit and incorporate County Engineering feedback. The Project's conceptual Erosion and Sediment Control Plan can be seen in Appendix A.

7.0 Facility Construction

Construction of the substation expansion project is expected to take less than 12 months, beginning in early 2023, and concluding in late-2023/early 2024.

A Dominion construction manager will coordinate, direct, and manage all logistical and workforce aspects of construction. It is estimated there will be approximately 20 personnel on site daily during construction, with some construction activities requiring fewer personnel. Personnel will park only in designated areas during construction of the facility.

On-site construction activities consist of the following main categories:

- Civil & Environmental: Temporary erosion and sediment control Best Management Practices (BMPs), permanent stormwater management BMPs, internal site expansion and road construction, construction entrances and material laydown area
- Fence: Permanent fence surrounding Project Site
- Mechanical: Foundations and equipment installation
- Electrical: Mounting of electrical equipment, trenching, and installation of conduit and wire

Materials and equipment necessary to construct the Project will be manufactured off site but will be delivered to the Project Site by truck. Trucks delivering project materials may be staged and unloaded on the Project Site. Major materials may be stored on site prior to installation. Other materials arriving by truck for more immediate installation include fencing, conduit, concrete, reinforced steel, wire management hardware, communication equipment, and other electrical components. The existing gravel pad area may be used as a temporary gravel construction laydown and parking area.

8.0 Attachments

Appendix A – Preliminary Site Plan and Area Map

Appendix B – Topographic Survey

Appendix C – Environmental Site Assessment and Wetland Delineation

Appendix D – Cultural/Historical Resource Review

APPENDIX A
Preliminary Site Plan and Area Map

APPENDIX B
Topographic Survey

APPENDIX C
Environmental Site Assessment and Wetland Delineation

APPENDIX D
Cultural/Historical Resource Review