III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

C. Detail the nature, location, and ownership of each building that would have to be demolished or relocated if the project is built as proposed.

Response: During the Company's initial review of the existing right-of-way, it became aware of approximately 15 unauthorized encroachments. The majority of the encroachments are sheds in the easement. The encroachments will need to be addressed with the respective property owners as the Company continues to investigate the right-of-way.

In support of the Rebuild Project, the Company will be reviewing the entire corridor width prior to construction and plans to address unauthorized encroachments and easement violations as appropriate.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

D. Identify existing physical facilities that the line will parallel, if any, such as existing transmission lines, railroad tracks, highways, pipelines, etc. Describe the current use and physical appearance and characteristics of the existing ROW that would be paralleled, as well as the length of time the transmission ROW has been in use.

Response: Chesterfield-Lakeside 230 kV Line #217 is within an existing transmission line corridor that begins in Chesterfield County and traverses Henrico County. It parallels several different electric transmission lines along the majority of the corridor. While Line #217 does not parallel any railroad corridors or highways, it crosses over these facilities. It currently crosses, and will continue to cross, CSX and Norfolk Southern railroad right-of-way, as well as Interstate 95, Interstate 64, and Route 895. The general character of the Rebuild Project area transitions from rural at the south terminus to suburban and urban toward the northern terminus.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

E. Indicate whether the Applicant has investigated land use plans in the areas of the proposed route and indicate how the building of the proposed line would affect any proposed land use.

Response: The Company reviewed *The Comprehensive Plan for Chesterfield County* and *Henrico County Vision 2026: Comprehensive Plan* to evaluate the potential effect the Rebuild Project could have on future development. The placement and construction of electric transmission lines is not addressed within the plans. The portion of the Rebuild Project within Chesterfield County is entirely within Company property and would not affect land use. Henrico County has designated "Existing Character Preservation Areas" to focus on the preservation of scenic and/or historic qualities of portions of the county. The James River–East Corridor and New Market Road Corridor are Existing Character Preservation Areas within the Rebuild Project. The Rebuild Project is not expected to materially affect the character of these two areas, as the transmission corridor has been in use for at least 50 years.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

F. Government Bodies

1. Indicate if the Applicant determined from the governing bodies of each county, city and town in which the proposed facilities will be located whether those bodies have designated the important farmlands within their jurisdictions, as required by § 3.2-205 B of the Code.

2. If so, and if any portion of the proposed facilities will be located on any such important farmland:

a. Include maps and other evidence showing the nature and extent of the impact on such farmlands;

b. Describe what alternatives exist to locating the proposed facilities on the affected farmlands, and why those alternatives are not suitable; and

c. Describe the Applicant's proposals to minimize the impact of the facilities on the affected farmland.

Response:

1. Neither Chesterfield nor Henrico County have designated important farmlands within their jurisdiction. Neither locality has identified any agricultural districts within their jurisdiction.

2. Not applicable.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

G. Identify the following that lie within or adjacent to the proposed ROW:

1. **Any district, site, building, structure, or other object included in the National Register of Historic Places maintained by the U.S. Secretary of the Interior;**

2. **Any historic architectural, archeological, and cultural resources, such as historic landmarks, battlefields, sites, buildings, structures, districts or objects listed or determined eligible by the Virginia Department of Historic Resources ("DHR");**

3. **Any historic district designated by the governing body of any city or county;**

4. **Any state archaeological site or zone designated by the Director of the DHR, or its predecessor, and any site designated by a local archaeological commission, or similar body;**

5. **Any underwater historic assets designated by the DHR, or predecessor agency or board;**

6. **Any National Natural Landmark designated by the U.S. Secretary of the Interior;**

7. **Any area or feature included in the Virginia Registry of Natural Areas maintained by the Virginia Department of Conservation and Recreation ("DCR");**

8. **Any area accepted by the Director of the DCR for the Virginia Natural Area Preserves System;**

9. **Any conservation easement or open space easement qualifying under §§ 10.1-1009 – 1016, or §§ 10.1-1700 – 1705, of the Code (or a comparable prior or subsequent provision of the Code);**

10. **Any state scenic river;**

11. **Any lands owned by a municipality or school district; and**

12. **Any federal, state or local battlefield, park, forest, game or wildlife preserve, recreational area, or similar facility. Features, sites, and the like listed in 1 through 11 above need not be identified again.**

Response:

1. The Richmond National Battlefield occurs within and adjacent to the existing right-of-way for the Rebuild Project. The Brook Road Marker, Jefferson Davis Highway is adjacent to the existing right-of-way for the Rebuild Project.

2. Historic properties listed on the NRHP were provided in the response above. Within the existing right-of-way, there are four architectural resources that DHR has determined to be eligible for listing on the NRHP. Within the existing right-of-way, there are four archaeological resources that DHR has determined to be eligible for listing on the NRHP. The table below provides eligible historic resources within and adjacent to the Rebuild Project right-of-way.

Architectural and Archaeological Resources Eligible for Listing on the NRHP within or Adjacent to the Rebuild Project Right-of-Way

Listed or Eligible Architectural Resources			
DHR#	**Resource Name**	**DHR Determination**	**Distance to Line (Miles)**
043-0308	Savage Station Battlefield	DHR Eligible	0
043-0710	North Run Bridge	DHR Eligible	0
020-0121	Osbourne's Naval Battle (Archaeology Site)	DHR Eligible	0
121-5134	Chesapeake and Ohio Railroad, CSX Railroad	DHR Eligible	0
Listed or Eligible Archaeological Resources			
44HE0730	Woodland Occupation Site; 17th and 19th and 20th Century Historic Domestic Site	DHR Eligible	0
44HE0743	Middle Archaic Site; 18th Century Farmstead; 20th Century Domestic Site	DHR Eligible	0
44HE0753	Prehistoric/Unknown; 3rd Quarter 19th Century Earthworks	DHR Eligible	0
44HE0757	Archaic and Woodland Camp; 1st Half 20th Century Farmstead	DHR Eligible	0

3. Chesterfield County has designated historic districts; however, none are within the vicinity of the Rebuild Project. Henrico County has not designated historic districts. See Section III.E regarding Henrico County's "Existing Character Preservation Areas."

4. None.

5. None.

6. None.

7. None.

8. None.

9. There is one VOF conservation easement crossed by the existing right-of-way for the proposed Rebuild Project. The transmission line and right-of-way was present when the conservation easement was designated.

10. The James River has been identified as a qualified river for inclusion within the state scenic river program, but has not been designated as a scenic river.

11. The existing right-of-way for Line #217 crosses Henrico County-operated Meadowview Park and Vawter Street Park. Henrico County-operated parks within 500 feet of the existing right-of-way include Dorrey Park, Three Lakes Park, and Belmont Golf Course. The existing right-of-way for Line #217 crosses or is adjacent to several properties owned by the Henrico County School Board, including Mehfoud Elementary School, Baker Elementary School, John Rolfe Middle School, and Fairfield Middle School. The existing right-of-way does not cross any parks or similar facilities in Chesterfield County.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

H. List any registered aeronautical facilities (airports, helipads) where the proposed route would place a structure or conductor within the federally-defined airspace of the facilities. Advise of contacts, and results of contacts, made with appropriate officials regarding the effect on the facilities' operations.

Response: The Federal Aviation Administration ("FAA") is responsible for overseeing air transportation in the United States. The FAA manages air traffic in the United States and evaluates physical objects that may affect the safety of aeronautical operations through an obstruction evaluation. The prime objective of the FAA in conducting an obstruction evaluation is to ensure the safety of air navigation and the efficient utilization of navigable airspace by aircraft.

The Company reviewed the FAA's website[11] to identify airports within ten miles of the proposed Rebuild Project. Based on this review, six FAA-restricted airports were identified:

- Richmond International Airport, approximately 2.6 miles east of Line #217;
- Defense Supply Center Richmond Heliport, approximately 4.5 miles northwest of Chesterfield Power Station;
- Hanover County Municipal Airport, approximately 6.5 miles north of Lakeside Substation;
- Richmond Executive-Chesterfield County Airport, approximately 7.8 miles northwest of Chesterfield Power Station;
- Fort Lee AHP 3, approximately 9.6 miles south of Chesterfield Power Station; and,
- Fort Lee NR 1, approximately 9.9 miles south of Chesterfield Power Station.

In a letter dated April 24, 2018, the Virginia Department of Aviation stated that a Form 7460 will need to be submitted to the FAA to initiate an aeronautical study to ensure that the proposed Rebuild Project will not constitute a hazard to air navigation. The letter is included as Attachment 2.N.1 of the DEQ Supplement. The Company had previously initiated aeronautical studies with the FAA to determine any possible height restrictions due to the proximity of the Rebuild Project to Richmond International Airport. These studies determined that the proposed structures would not be a hazard, and that Form 7460 would not be required. However, if any structure heights change drastically before construction or a crane over 200 feet in height is used for structure installation, the FAA will be notified through Form 7460. A sample page of the FAA determination of no hazard to air navigation for one structure is attached as Attachment III.H.1.

[11] https://oeaaa.faa.gov/oeaaa/external/portal.jsp.

Several private airports and helipads are located within ten miles of the line and the Company will work with private entities as appropriate.

See also Section 2.N of the DEQ Supplement.

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2017-AEA-12625-OE

Issued Date: 12/19/2017

Nadiah F. Younus
Virginia Power and Electric Company
701 East Cary Street
12th Floor
Richmond, VA 23219

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line 217/11
Location:	Chester, VA
Latitude:	37-23-38.77N NAD 83
Longitude:	77-22-28.26W
Heights:	7 feet site elevation (SE)
	75 feet above ground level (AGL)
	82 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 1.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

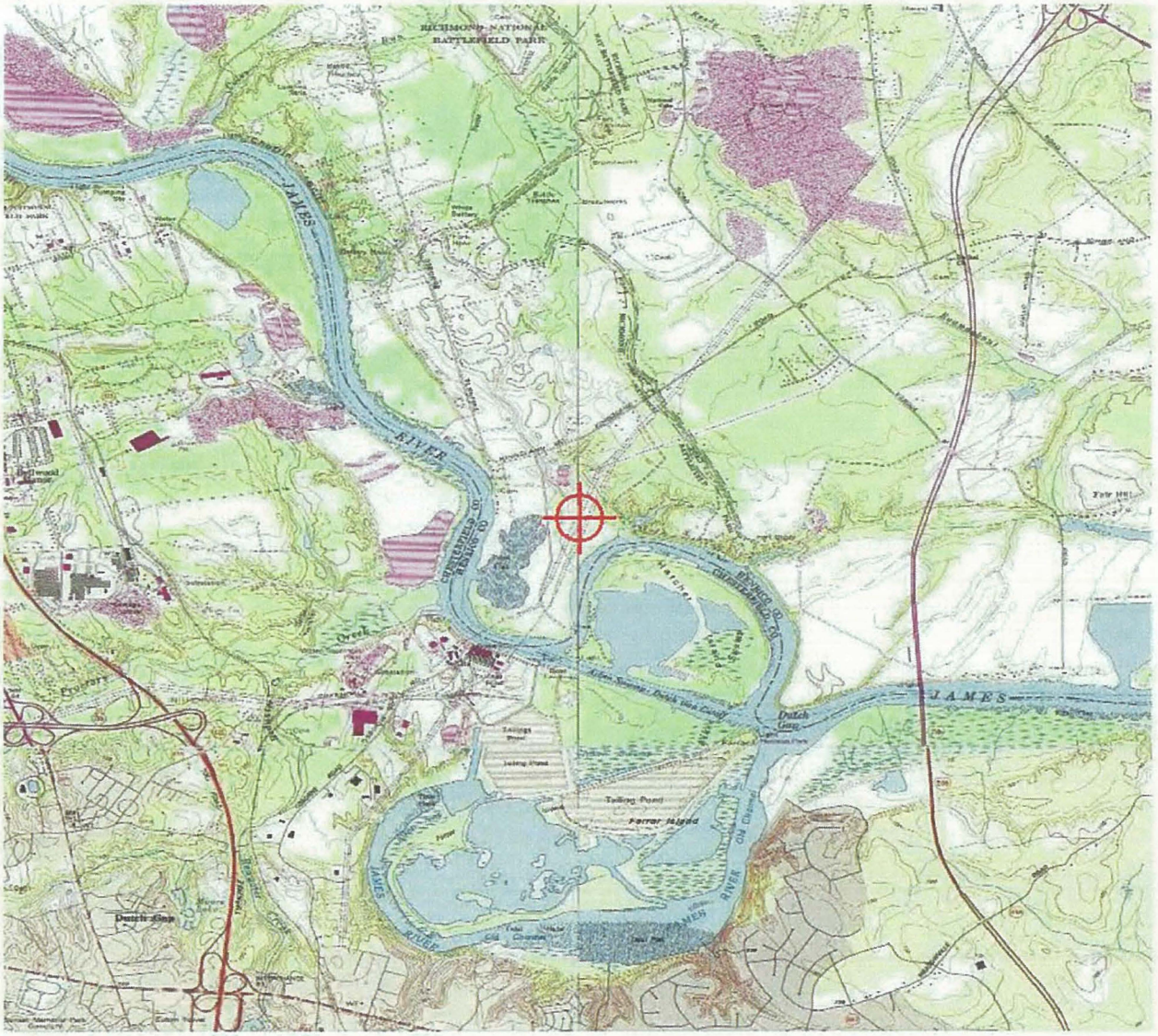
This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (404) 305-6645, or lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-AEA-12625-OE.

Signature Control No: 350690970-351558794 (DNE)
Lan Norris
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2017-AEA-12625-OE



III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

I. Advise of any scenic byways that are in close proximity to or that will be crossed by the proposed transmission line and describe what steps will be taken to mitigate any visual impacts on such byways. Describe typical mitigation techniques for other highways' crossings.

Response: The existing right-of-way to be used for the Rebuild Project crosses New Market Road, which has been designated as a scenic byway. The existing right-of-way to be used for the Rebuild Project also crosses Hoke-Brady Road, which is part of the Richmond National Battlefield Park. The Virginia Capital Trail, a multi-use paved trail from Richmond to Jamestown, was constructed in 2014 and has two crossings of the existing right-of-way. The Company will meet with stakeholders of these resources, and will explore mitigation measures if necessary.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

J. Identify coordination with appropriate municipal, state, and federal agencies.

Response: Below is a list of coordination that has occurred with municipal, state, and federal agencies:

- A wetland delineation has been completed and a request for preliminary jurisdictional determination was submitted to the Corps.
- Letters were sent to a number of Native American tribes providing information on the Rebuild Project and requesting comment.
- Letters dated April 12, 2018, were submitted to Chesterfield County and Henrico County to describe the Rebuild Project and to request comment. See Section V.D. The Company also met with staff and leadership from Henrico County to detail the Rebuild Project and solicit feedback.
- Letters were submitted to the agencies listed in Section V.C on April 16, 2018, describing the Rebuild Project and requesting comment. A sample letter is included as Attachment III.J.1.
- The FAA will be given notice for proposed structures and temporary construction cranes that exceed 200 feet above ground level, as directed by the Virginia Department of Aviation in a letter dated April 24, 2018. See Section III.J and Attachment 2.N.1 to the DEQ Supplement.
- In an email dated May 7, 2018, the DCR confirmed that no Planning and Recreation Resources are along the Rebuild Project route. See Attachment 2.K.2 to the DEQ Supplement.
- A letter from the DEQ was received on May 8, 2018, providing recommendations and potential permits. The Company will follow the recommendations and will notify the DEQ of any Rebuild Project changes.
- The Company submitted a GIS shapefile of the Rebuild Project to the DEQ on May 10, 2018.
- A Stage I Pre-Application was submitted to DHR on May 24, 2018.
- Coordination with the Corps, DEQ, and Virginia Marine Resources Commission will take place as appropriate to obtain necessary approvals for the Rebuild Project.
- A field meeting occurred on May 22, 2018 at Hoke Brady Road on the Richmond National Battlefield Park to discuss the Rebuild Project. The Company will continue to coordinate with the National Park Service throughout the Project.

Dominion Energy Virginia
701 East Cary Street, Richmond, VA 23219
DominionEnergy.com

Dominion Energy®

April 16, 2018

Ms. Bettina Rayfield
Department of Environmental Quality
Office of Environmental Review
P.O. Box 1105
Richmond, Virginia 23218

Reference: Dominion Energy Virginia Proposed Chesterfield to Lakeside 230 kV Electric Transmission Line Rebuild, Chesterfield and Henrico Counties, Virginia

Dear Ms. Rayfield,

Dominion Energy Virginia (the "Company") is proposing to rebuild a 230 kV electric transmission line between its Chesterfield Substation, located at the Chesterfield Power Plant in Chesterfield, and its Lakeside Substation, located off Hilliard Road in Henrico. Structures on this 21.3 mile 230 KV line were installed in the late 1950s and, although well maintained, are nearing the end of their service life. This Project is entirely within cleared and maintained transmission line right-of-way and no additional right-of-way is anticipated. Rebuilding this line will ensure safe and reliable electric service to customers in the area and bring the line up to date with current industry standards.

The Company intends to file an application for a certificate of public convenience and necessity with the State Corporation Commission (SCC) in the second quarter of this year. At this time, in advance of the SCC filing, the Company respectfully requests that the agency submit any comments or additional information that would have bearing on the proposed project within 30 days of the date of this letter. If the agency would like to receive a GIS shapefile of the transmission line route to assist in the project review or if there are any questions, please do not hesitate to contact me at (804) 771-6145 or amanda.m.mayhew@dominionenergy.com. Enclosed is an overview map of the project. Dominion Energy Virginia appreciates your assistance with this project review and looks forward to any additional information you may have to provide.

Sincerely,

Amanda Mayhew
Sr. Siting and Permitting Specialist

Attachment: Project Overview Map

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

K. Identify coordination with any non-governmental organizations or private citizen groups.

Response: Below is a list of coordination that has occurred with non-governmental organizations and private citizens groups:

- Details on the Rebuild Project with an invitation to provide feedback were sent to a number of county- and state-wide historic, cultural, and scenic organizations, including Preservation Virginia, Civil War Trust, Colonial National Historical Park, Council of Virginia Archaeologists, and Scenic Virginia.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

L. Identify any environmental permits or special permissions anticipated to be needed.

Response: See table below.

Potential Permits

Activity	Permit	Agency / Entity
Impacts to wetlands and waters of the U.S.	Nationwide Permit 12	U.S. Army Corps of Engineers
Impacts to wetlands and waters of the U.S.	Virginia Water Protection Permit	Virginia Department of Environmental Quality
Work within, over or under state subaqueous bottom	Subaqueous Bottom Permit	Virginia Marine Resources Commission
Work within or over Richmond National Battlefield	Special Use Permit	National Park Service
Discharge of Stormwater from Construction	Construction General Permit	Virginia Department of Environmental Quality
Work within VDOT right-of-way	Land Use Permit	Virginia Department of Transportation
Work within Henrico County Right-of-Way	Right-of-Way Permit	Henrico County Public Works
Work within CSX railroad right-of-way	Encroachment Permit	CSX Transportation
Work within Norfolk Southern railroad right-of-way	Encroachment Permit	Norfolk Southern

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

A. Provide the calculated maximum electric and magnetic field levels that are expected to occur at the edge of the ROW. If the new transmission line is to be constructed on an existing electric transmission line ROW, provide the present levels as well as the maximum levels calculated at the edge of ROW after the new line is operational.

Response: Public exposure to magnetic fields is best estimated by field levels from the power lines calculated at annual average loading. For any day of the year, the EMF levels associated with average conditions provide the best estimate of potential exposure. Maximum (peak) values are less relevant as they may occur for only a few minutes or hours each year.

This section describes the levels of EMF associated with the existing transmission lines #3, #17, #20, #92, #217, #283, #283, #284, #286, #287, #2053, and #557 compared with the proposed rebuild of the line #217, along with the other lines remaining in the corridor. EMF levels are provided for both historical (2017) and future (2020) annual average and maximum (peak) loading conditions.

Existing Lines –Historical Average Loading

EMF levels were calculated for the existing lines at the ***historical average*** load conditions shown in the table below:

Line No.	Voltage*	Attachments	Average (Amps)
3	121	II.A.5.y	157.81
17	121	II.A.5.c, e, g, I, k , m, q, s, u, & w	63.36
20	121	II.A.5.y	247.95
92	121	II.A.5.c	196.67
217	242	II.A.5.a, c, e, g, I, k, m, o, q, s, u, w, y, aa, cc, & ee	235.08
283	242	II.A.5.y, aa, & cc	252.93
284	242	II.A.5.s, u, & w	224.19
286	242	II.A.5.q & s	108.67
287	242	II.A.5.a & c	423.94
2053	242	II.A.5.u & w	100.3
557	525	II.A.5.cc	242.03

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at historical average load operating temperatures. The EMF levels at the edge of each side of the right-of-way for the existing lines at historical average loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	0.355	11.498	0.141	4.767
II.A.5.c	0.172	9.774	0.207	6.599
II.A.5.e	0.497	8.535	0.008	0.872
II.A.5.g	0.682	10.665	0.019	1.764
II.A.5.i	0.504	8.471	0.009	0.871
II.A.5.k	0.689	10.491	0.019	1.763
II.A.5.m	0.504	8.534	0.009	0.870
II.A.5.o	0.536	8.615	0.491	8.686
II.A.5.q	0.235	5.180	0.421	8.742
II.A.5.s	0.242	4.235	0.388	8.700
II.A.5.u	0.279	4.779	0.391	8.780
II.A.5.w	0.521	5.859	0.391	8.759
II.A.5.y	0.087	16.425	0.455	8.871
II.A.5.aa	0.043	10.245	0.457	8.765
II.A.5.cc	0.077	9.920	2.733	13.499
II.A.5.ee	0.068	2.240	0.500	8.685

Existing Lines – Historical Peak Loading

EMF levels were calculated for the existing lines at the ***historical peak*** load conditions shown in the table below:

Line No.	Voltage*	Existing Attachments	Peak (Amps)
3	121	II.A.5.y	378.65
17	121	II.A.5.c, e, g, I, k , m, q, s, u, & w	273.55
20	121	II.A.5.y	522.91
92	121	II.A.5.c	559.09
217	242	II.A.5.a, c, e, g, I, k, m, o, q, s, u, w, y, aa, cc, & ee	738.02
283	242	II.A.5.y, aa, & cc	758.04
284	242	II.A.5.s, u, & w	847.02
286	242	II.A.5.q & s	527.94
287	242	II.A.5.a & c	790.38
2053	242	II.A.5.u & w	540.05
557	525	II.A.5.cc	1318.25

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at historical peak load operating temperature. The EMF levels at the edge of each side of the right-of-way for the existing lines at historical peak loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	0.411	21.552	0.177	12.289
II.A.5.c	0.170	20.203	0.206	19.150
II.A.5.e	0.488	26.785	0.008	2.810
II.A.5.g	0.672	33.638	0.019	5.776
II.A.5.i	0.491	26.690	0.009	2.809
II.A.5.k	0.674	33.331	0.019	5.797
II.A.5.m	0.493	26.846	0.009	2.806
II.A.5.o	0.528	27.304	0.480	27.525
II.A.5.q	0.233	19.952	0.408	28.149
II.A.5.s	0.265	10.109	0.456	27.984
II.A.5.u	0.324	14.852	0.440	29.427
II.A.5.w	0.597	21.227	0.441	29.343
II.A.5.y	0.298	99.121	0.467	59.324
II.A.5.aa	0.053	30.936	0.445	27.825
II.A.5.cc	0.090	31.907	2.729	74.501
II.A.5.ee	0.066	7.048	0.489	27.545

Proposed Rebuild Project – Historical Average Loading

EMF levels were calculated for the proposed and remaining existing lines at a ***historical average*** load condition shown in the table below:

Line No.	Voltage*	Attachments	Average (Amps)
3	121	II.A.5.z	157.81
17	121	II.A.5.d, f, h, j, l, n, r, t, v, & x	63.36
20	121	II.A.5.z	247.95
92	121	II.A.5.d	196.67
217	242	II.A.5.b, d, f, h, j, l, n, p, r, t, v, x, z, bb, dd, & ff	235.08
283	242	II.A.5.z, bb, & dd	252.93
284	242	II.A.5.t, v, & x	224.19
286	242	II.A.5.r & t	108.67
287	242	II.A.5.b & d	423.94
2053	242	II.A.5.v & x	100.3
557	525	II.A.5.dd	242.03

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at historical average load operating temperature. The EMF levels at the edge of each side of the right-of-way for the proposed and remaining existing lines at historical average loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.b	0.313	11.720	0.264	7.211
II.A.5.d	0.182	9.892	0.205	6.584
II.A.5.f	0.764	9.145	0.007	0.939
II.A.5.h	1.033	11.416	0.019	1.891
II.A.5.j	0.771	9.086	0.009	0.938
II.A.5.l	1.067	11.316	0.021	1.899
II.A.5.n	0.766	9.197	0.008	0.937
II.A.5.p	0.756	9.367	0.756	9.367
II.A.5.r	0.242	5.377	0.696	9.345
II.A.5.t	0.248	4.215	0.665	9.216
II.A.5.v	0.288	4.821	0.665	9.310
II.A.5.x	0.546	5.904	0.662	9.325
II.A.5.z	0.087	13.676	0.709	8.128
II.A.5.bb	0.078	12.069	0.785	9.459
II.A.5.dd	0.073	9.911	2.729	13.441
II.A.5.ff	0.103	2.418	0.756	9.366

Proposed Rebuild Project – Historical Peak Loading

EMF levels were calculated for the proposed and remaining existing lines at a ***historical peak*** load condition shown in the table below:

Line No.	Voltage*	Attachments	Average (Amps)
3	121	II.A.5.z	378.65
17	121	II.A.5.d, f, h, j, l, n, r, t, v, & x	273.55
20	121	II.A.5.z	522.91
92	121	II.A.5.d	559.09
217	242	II.A.5.b, d, f, h, j, l, n, p, r, t, v, x, z, bb, dd, & ff	738.02
283	242	II.A.5.z, bb, & dd	758.04
284	242	II.A.5.t, v, & x	847.02
286	242	II.A.5.r & t	527.94
287	242	II.A.5.b & d	790.38
2053	242	II.A.5.v & x	540.05
557	525	II.A.5.dd	1318.25

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at historical peak load operating temperature. The EMF levels at the edge of each side of the right-of-way for the proposed and remaining existing lines at historical peak loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.b	0.338	23.449	0.283	19.716
II.A.5.d	0.180	20.599	0.204	19.101
II.A.5.f	0.764	28.585	0.008	2.987
II.A.5.h	1.036	35.785	0.523	6.092
II.A.5.j	0.771	28.418	0.009	2.985
II.A.5.l	1.048	35.054	0.022	6.097
II.A.5.n	0.767	28.747	0.009	2.983
II.A.5.p	0.759	29.480	0.759	29.480
II.A.5.r	0.240	20.489	0.698	29.607
II.A.5.t	0.248	17.688	0.667	29.556
II.A.5.v	0.288	19.644	0.661	29.839
II.A.5.x	0.545	24.579	0.664	29.857
II.A.5.z	0.093	37.468	0.717	29.518
II.A.5.bb	0.045	30.910	0.721	29.393
II.A.5.dd	0.087	31.872	2.725	74.302
II.A.5.ff	0.102	7.595	0.756	29.482

Proposed Rebuild Project – Projected Average Loading in 2020

EMF levels were calculated for the proposed and remaining existing lines at a ***projected average*** load condition shown in the table below:

Line No.	Voltage*	Attachments	Average (Amps)
3	121	II.A.5.z	161.41
17	121	II.A.5.d, f, h, j, l, n, r, t, v, & x	67.22
20	121	II.A.5.z	263.03
92	121	II.A.5.d	208.63
217	242	II.A.5.b, d, f, h, j, l, n, p, r, t, v, x, z, bb, dd, & ff	249.37
283	242	II.A.5.z, bb, & dd	268.31
284	242	II.A.5.t, v, & x	237.82
286	242	II.A.5.r & t	115.27
287	242	II.A.5.b & d	449.71
2053	242	II.A.5.v & x	106.40
557	525	II.A.5.dd	256.74

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at projected average load operating temperature. The EMF levels at the edge of each side of the right-of-way for the proposed and remaining existing lines at projected peak loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.b	0.340	12.292	0.286	7.595
II.A.5.d	0.182	10.496	0.206	6.985
II.A.5.f	0.768	9.701	0.008	0.996
II.A.5.h	1.040	12.111	0.020	2.006
II.A.5.j	0.775	9.639	0.009	0.995
II.A.5.l	1.051	11.843	0.022	2.002
II.A.5.n	0.771	9.758	0.009	0.994
II.A.5.p	0.762	9.936	0.762	9.936
II.A.5.r	0.242	5.705	0.702	9.912
II.A.5.t	0.248	4.472	0.671	9.774
II.A.5.v	0.288	5.115	0.665	9.876
II.A.5.x	0.545	6.263	0.667	9.891
II.A.5.z	0.087	17.372	0.721	9.969
II.A.5.bb	0.034	10.855	0.724	9.909
II.A.5.dd	0.074	10.516	2.729	14.255
II.A.5.ff	0.103	2.565	0.759	9.938

Proposed Rebuild Project – Projected Peak Loading in 2020

EMF levels were calculated for the proposed and remaining existing lines at a ***projected peak*** load conditions shown in the table below:

Line No.	Voltage*	Attachments	Average (Amps)
3	121	II.A.5.z	401.67
17	121	II.A.5.d, f, h, j, l, n, r, t, v, & x	290.18
20	121	II.A.5.z	554.70
92	121	II.A.5.d	593.08
217	242	II.A.5.b, d, f, h, j, l, n, p, r, t, v, x, z, bb, dd, & ff	782.89
283	242	II.A.5.z, bb, & dd	804.12
284	242	II.A.5.t, v, & x	898.51
286	242	II.A.5.r & t	560.04
287	242	II.A.5.b & d	838.43
2053	242	II.A.5.v & x	572.88
557	525	II.A.5.dd	1398.40

*Includes 5% overvoltage

The field levels were calculated at mid-span where the conductor is the closest to the ground and the conductors were at projected peak load operating temperature. The EMF levels at the edge of each side of the right-of-way for the proposed and remaining existing lines at projected peak loading are listed below:

Attachment	Left Edge Looking Towards Lakeside		Right Edge Looking Towards Lakeside	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.b	0.337	24.880	0.283	20.917
II.A.5.d	0.180	21.870	0.204	20.269
II.A.5.f	0.764	30.335	0.008	3.168
II.A.5.h	1.036	37.978	0.020	6.463
II.A.5.j	0.770	30.160	0.009	3.166
II.A.5.l	1.047	37.213	0.022	6.469
II.A.5.n	0.767	30.505	0.009	3.165
II.A.5.p	0.758	31.286	0.758	31.286
II.A.5.r	0.240	21.743	0.698	31.425
II.A.5.t	0.248	18.771	0.667	31.374
II.A.5.v	0.288	20.845	0.661	31.666
II.A.5.x	0.545	26.080	0.663	31.689
II.A.5.z	0.094	39.833	0.717	31.320
II.A.5.bb	0.047	32.830	0.720	31.192
II.A.5.dd	0.089	33.842	2.724	78.863
II.A.5.ff	0.102	8.058	0.755	31.288

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

B. If the Applicant is of the opinion that no significant health effects will result from the construction and operation of the line, describe in detail the reasons for that opinion and provide references or citations to supporting documentation.

Response: The conclusions of multidisciplinary scientific review panels assembled by national and international scientific agencies during the past two decades are the foundation of the Company's opinion that no adverse health effects will result from the operation of the proposed Rebuild Project. Each of these panels has evaluated the scientific research related to health and power-frequency EMF and provided conclusions that form the basis of guidance to governments and industries. The Company regularly monitors the recommendations of these expert panels to guide their approach to EMF.

The most recent major reviews on this topic include the report of the Scientific Committee on Emerging and Newly Identified Health Risks ("SCENIHR") of the European Commission, which was published in 2015. The SCENIHR report, similar to previous reviews, found that the scientific evidence does not confirm the existence of any adverse health effects of environmental or community exposures. This conclusion is consistent with conclusions of previous reviews conducted for other agencies, including the European Health Risk Assessment Network on Electromagnetic Fields Exposure ("EFHRAN"), the International Commission on Non-Ionizing Radiation Protection ("ICNIRP"), the World Health Organization ("WHO"), and the International Committee on Electromagnetic Safety ("ICES") (EFHRAN, 2010, 2012; ICNIRP, 2010; WHO, 2007; ICES, 2002).

Research on this topic varies widely in approach. Some studies evaluate the effects of high EMF exposures not typically found in people's day-to-day lives, while others evaluate the effects of common, weaker EMF exposures. Studies have evaluated the possibility of long-term effects (e.g., cancer, neurodegenerative diseases, reproductive effects) and others investigated short-term biological responses. Altogether, this research includes hundreds of epidemiologic studies of people in their natural environment and many more laboratory studies of animals (*in vivo*) and isolated cells and tissues (*in vitro*). Standard scientific procedures, such as the weight-of-evidence methods, were used by the expert panels to identify, review, and summarize the results of this large and diverse research.

The general scientific consensus of the health agencies that have reviewed this research is that the scientific evidence does not show that common sources of EMF in the environment, including transmission lines and other parts of the electric system, appliances, etc., are a cause of any adverse health effects. The WHO, for example, states on their website: "Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields" (WHO, 2018).

Thus, based on the conclusions of scientific reviews and the levels of EMF associated with the Rebuild Project, the Company has determined that no adverse health effects will result from the operation of the Rebuild Project.

References

European Health Risk Assessment Network on Electromagnetic Fields Exposure (EFHRAN). Report on the Analysis of Risks Associated to Exposure to EMF: *In Vitro* and *In Vivo* (Animals) Studies. Milan, Italy: EFHRAN, 2010.

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IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

C. Describe and cite any research studies on EMF the Applicant is aware of that meet the following criteria:

1. Became available for consideration since the completion of the Virginia Department of Health's most recent review of studies on EMF and its subsequent report to the Virginia General Assembly in compliance with 1985 Senate Joint Resolution No. 126;

2. Include findings regarding EMF that have not been reported previously and/or provide substantial additional insight into findings; and

3. Have been subjected to peer review.

Response: The Virginia Department of Health ("VDH") conducted its most recent review and issued its report on the scientific evidence on potential health effects of extremely low frequency ("ELF") EMF in 2000: "[T]he Virginia Department of Health is of the opinion that there is no conclusive and convincing evidence that exposure to extremely low frequency EMF emanated from nearby high voltage transmission lines is causally associated with an increased incidence of cancer or other detrimental health effects in humans."[12]

The continuing scientific research on EMF exposure and health has resulted in a number of peer-reviewed publications since 2000. The accumulating research results have been regularly and repeatedly reviewed and evaluated by national and international health, scientific, and government agencies. One of the most comprehensive and detailed reviews of the relevant scientific peer-reviewed literature was published by the WHO in 2007. The conclusion of the WHO, as currently expressed on its website, is consistent with the earlier VDH conclusions: "Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields."[13]

Research published in the peer-reviewed literature subsequent to the WHO report has been reviewed by several scientific organizations, including most notably:

- SCENIHR, a committee of the European Commission, that published its assessments in 2009 and 2015;

- The Swedish Radiation Safety Authority ("SSM"), formerly the Swedish Radiation Protection Authority ("SSI"), that has published annual reviews of

[12] http://www.vdh.virginia.gov/content/uploads/sites/12/2016/02/highfinal.pdf.
[13] http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html.

the relevant peer-reviewed scientific literature since 2003, with its most recent review published in 2016; and,

- EFHRAN, that published its reviews in 2010 and 2012.

The above reviews provide detailed analyses and summaries of relevant recent peer-reviewed scientific publications. The conclusions of these reviews that the evidence overall does not confirm the existence of any adverse health effects due to exposure to EMF are consistent with the conclusions of the VDH and the WHO reports. With respect to the statistical association observed in some of the childhood leukemia epidemiologic studies, the most recent comprehensive review of the literature by SCENIHR, published in 2015, concluded that "no mechanisms have been identified and no support is existing [sic] from experimental studies that could explain these findings, which, together with shortcomings of the epidemiological studies prevent a causal interpretation" (SCENIHR, 2015, p. 16).

While research is continuing on various aspects of EMF exposure and health, many of the recent publications have focused on an epidemiologic assessment of EMF exposure and childhood leukemia and neurodegenerative diseases. Of these, the following recent publications provided additional evidence and contributed to clarification of previous findings. Overall, new research results have not provided evidence to alter the previous conclusions of scientific and health organizations.

Recent epidemiologic studies of EMF and childhood leukemia:

- Sermage-Faure et al. (2013) used geocoded information on residential addresses and power line locations in France to evaluate distance of residence to high-voltage power lines and the risk of childhood leukemia. The study included 2,779 cases of childhood leukemia diagnosed between 2002 and 2007, and 30,000 control children. Overall, no statistically significant associations were reported between childhood leukemia risk and residential distance to high-voltage power lines.

- Bunch et al. (2014) included over 53,000 childhood cancer cases, diagnosed between 1962 and 2008, and over 66,000 healthy children as controls, in their case-control epidemiologic study in the United Kingdom. The study provided an update and extension of an earlier study (Draper et al., 2005). The update extended the study period by 13 years, included Scotland in addition to England and Wales, and included 132-kilovolt (kV) transmission lines in addition to 275-kV and 400-kV transmission lines. Unlike the earlier study (Draper et al., 2005) that relied on a smaller sample, the updated study by Bunch et al. (2014) reported no overall association between residential proximity to power lines and childhood cancer development. Data were also analyzed from the same case-control study in the United Kingdom to assess the potential association between residential proximity to high-voltage underground cables and childhood cancer development (Bunch et al., 2015). No statistically significant associations or trends were reported with either distance to underground cables or calculated

magnetic fields from underground cables for any type of childhood cancers.

- Pedersen et al. (2014, 2015) published two case-control studies that investigated the potential association between residential proximity to power lines and childhood cancer in Denmark. One of the studies included 1,698 childhood leukemia cases and twice as many controls; no statistical association with residential distance to power lines was reported (Pedersen et al., 2014). The other study included all cases of leukemia (n=1,536), central nervous system tumor, and malignant lymphoma (n=417) diagnosed before the age of 15 between 1968 and 2003 in Denmark, along with 9,129 healthy control children matched on sex and year of birth (Pedersen et al., 2015). Considering the entire study period, no statistically significant increases were reported for any of the childhood cancer types.

- Salvan et al. (2015) compared measured magnetic-field levels in the bedroom for 412 cases of childhood leukemia under the age of 10 and 587 healthy control children in Italy. Although the statistical power of the study was limited because of the small number of highly exposed subjects, no consistent statistical associations or trends were reported between measured magnetic-field levels and the occurrence of leukemia among children in the study.

- Crespi et al. (2016) conducted a case-control epidemiologic study of childhood cancers and residential proximity to high-voltage power lines (60 kV to 500 kV) in California. Childhood cancer cases, including 5,788 cases of leukemia and 3,308 cases of brain tumor, diagnosed under the age of 16 between 1986 and 2008, were identified from the California Cancer Registry. Controls, matched on age and sex, were selected from the California Birth Registry. Overall, no consistent statistically significant associations were reported for leukemia or brain tumor with residential distance to power lines.

Recent epidemiologic studies of EMF and neurodegenerative diseases:

- Seelen et al. (2014) conducted a population-based case-control study in the Netherlands and included 1,139 cases diagnosed with amyotrophic lateral sclerosis (ALS) between 2006 and 2013 and 2,864 frequency-matched controls. The shortest distance from the cases' and controls' residence to the nearest high-voltage power line (50 kV to 380 kV) was determined by geocoding. No statistically significant associations between residential proximity to power lines with voltages of either 50 to 150 kV or 220 to 380 kV and ALS were reported.

- Sorahan and Mohammed (2014) analyzed mortality from neurodegenerative diseases in a cohort of approximately 73,000 electricity supply workers in the United Kingdom. Cumulative occupational exposure to magnetic-fields was calculated for each worker in the cohort based on their job titles and job locations. Death certificates were used to identify deaths from neurodegenerative diseases. No associations or trends for any of the included

neurodegenerative diseases (Alzheimer's disease, Parkinson's disease, and ALS) were observed with various measures of calculated magnetic fields.

- Koeman et al. (2015, 2017) analyzed data from the Netherlands Cohort Study of approximately 120,000 men and women who were enrolled in the cohort in 1986 and followed up until 2003. Lifetime occupational history, obtained through questionnaires, and job-exposure matrices on ELF magnetic fields and other occupational exposures were used to assign exposure to study subjects. Based on 1,552 deaths from vascular dementia, the researchers reported a statistically not significant association of vascular dementia with estimated exposure to metals, chlorinated solvents, and ELF magnetic fields. However, because no exposure-response relationship for cumulative exposure was observed and because magnetic fields and solvent exposures were highly correlated with exposure to metals, the authors attributed the association with ELF magnetic fields and solvents to confounding by exposure to metals (Koeman et al., 2015). Based on a total of 136 deaths from ALS among the cohort members, the authors reported a statistically significant, approximately two-fold association with ELF magnetic fields in the highest exposure category. This association, however, was no longer statistically significant when adjusted for exposure to insecticides (Koeman et al., 2017).

- Fischer et al. (2015) conducted a population-based case-control study that included 4,709 cases of ALS diagnosed between 1990 and 2010 in Sweden and 23,335 controls matched to cases on year of birth and sex. The study subjects' occupational exposures to ELF magnetic fields and electric shocks were classified based on their occupations, as recorded in the censuses and corresponding job-exposure matrices. Overall, neither magnetic fields nor electric shocks were related to ALS.

- Vergara et al. (2015) conducted a mortality case-control study of occupational exposure to electric shock and magnetic fields and ALS. They analyzed data on 5,886 deaths due to ALS and over 58,000 deaths from other causes in the United States between 1991 and 1999. Information on occupation was obtained from death certificates and job exposure matrices were used to categorize exposure to electric shocks and magnetic fields. Occupations classified as "electric occupations" were moderately associated with ALS. The authors reported no consistent associations for ALS, however, with either electric shocks or magnetic fields, and they concluded that their findings did not support the hypothesis that exposure to either electric shocks or magnetic fields explained the observed association of ALS with "electric occupations."

- Pedersen et al. (2017) investigated the occurrence of central nervous system diseases among approximately 32,000 male Danish electric power company workers. Cases were identified through the national patient registry between 1982 and 2010. Exposure to ELF magnetic fields was determined for each worker based on their job titles and area of work. A statistically significant increase was reported for dementia in the high exposure category when

compared to the general population, but no exposure-response pattern was identified, and no similar increase was reported in the internal comparisons among the workers. No other statistically significant increases among workers were reported for the incidence of Alzheimer's disease, Parkinson's disease, motor neuron disease, multiple sclerosis, or epilepsy, when compared to the general population, or when incidence among workers was analyzed across estimated exposure levels.

References

Bunch KJ, Keegan TJ, Swanson J, Vincent TJ, Murphy MF. Residential distance at birth from overhead high-voltage powerlines: childhood cancer risk in Britain 1962-2008. Br J Cancer 110: 1402-1408, 2014.

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Sermage-Faure C, Demoury C, Rudant J, Goujon-Bellec S, Guyot-Goubin A, Deschamps F, Hemon D, Clavel J. Childhood leukaemia close to high-voltage power lines–the Geocap study, 2002-2007. Br J Cancer 108: 1899-1906, 2013.

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Swedish Radiation Safety Authority (SSM). Research 2016:15. Recent Research on EMF and Health Risk – Eleventh report from SSM's Scientific Council on Electromagnetic Fields, 2016. Including Thirteen years of electromagnetic field research monitored by SSM's Scientific Council on EMF and health: How has the evidence changed over time? Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2016.

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in the US, 1991-1999. J Expo Sci Environ Epidemiol 25: 65-71, 2015.

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V. NOTICE

A. Furnish a proposed route description to be used for public notice purposes. Provide a map of suitable scale showing the route of the proposed project. For all routes that the Applicant proposed to be noticed, provide minimum, maximum and average structure heights.

Response: A map showing the existing route to be used for the Rebuild Project is provided as Attachment V.A. A written description of the route is as follows:

The proposed route for the Rebuild Project is approximately 21.3 miles of existing transmission line corridor currently occupied by the existing 230 kV transmission Chesterfield – Lakeside 230 kV Line #217. The route is in Chesterfield (0.5 mile) and Henrico (20.8 miles) Counties. The Rebuild Project originates in Chesterfield County at the Chesterfield Substation located at the Chesterfield Power Station off Coxendale Road. From the Chesterfield Power Station, the route generally heads northeast from the station property for 0.5 miles and continues northeast into Henrico County after the line crosses the James River. The line continues in a northeasterly direction for approximately 5.6 miles. Then, for 2.4 miles, the line heads in a northwesterly direction before heading due north. The line continues in a north-northwesterly direction for 12.8 miles and terminates at Lakeside Substation in Henrico County off Hilliard Road. The existing structures for the entire Rebuild Project range in height from 45 to 228 feet, and the proposed structures range in height from 55 to 228 feet. The existing average structure height is 63 feet, and the proposed average structure height is 74 feet.

Line #217 crosses the following roads in Henrico County: Hoke Brady Road, Kingsland Road, Varina Road, Strath Road, Buffin Road, New Market Road (S.R. 5), Doran Road, Kinvan Road, Fourdale Lane, Beowulf Drive, Wilson Road, Route 895, South Laburnum Avenue, Messer Road, Darbytown Road, Charles City Road, Williamsburg Road (S.R. 60), Bedford Street, Gay Avenue, Interstate 64, Thornhurst Street, Colwyck Drive, Nine Mile Road (S.R. 33), Cedar Fork Road, Creighton Road, Mechanicsville Turnpike (S.R. 360), Richmond-Henrico Turnpike, Wilkinson Road, Interstate 95, and Brook Road (S.R. 1). Line #217 does not cross any roads in Chesterfield County.

The Company is also proposing to remove or replace certain existing structures on Chesterfield-Chickahominy Line #287 located on or near Chesterfield Power Station property.

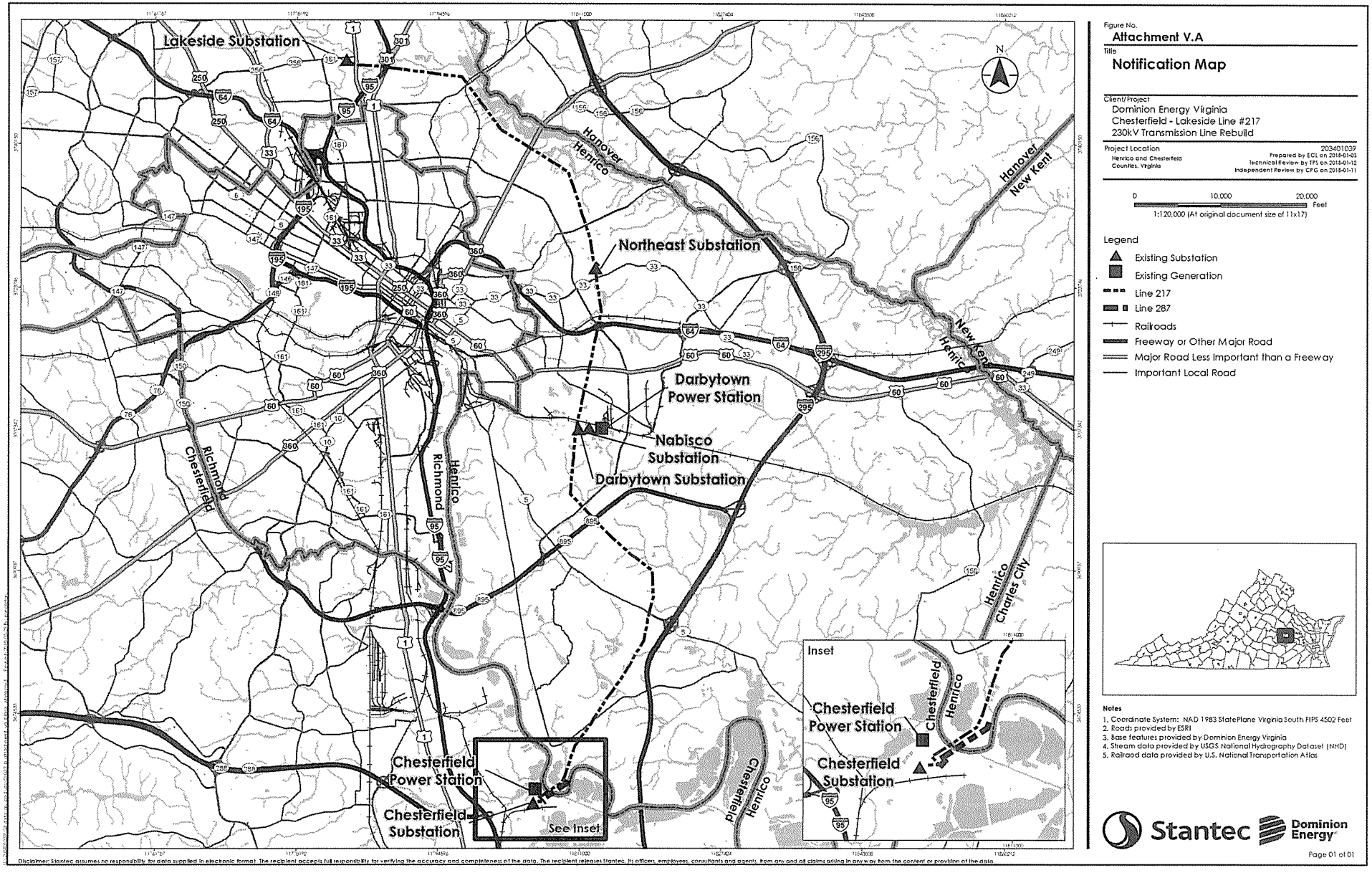

Figure No.
Attachment V.A

Title
Notification Map

Client/Project
Dominion Energy Virginia
Chesterfield - Lakeside Line #217
230kV Transmission Line Rebuild

Project Location
Henrico and Chesterfield Counties, Virginia

203401039
Prepared by ECL on 2018-01-03
Technical Review by TPS on 2018-01-12
Independent Review by CPG on 2018-01-11

0 10,000 20,000 Feet
1:120,000 (At original document size of 11x17)

Legend
- Existing Substation
- Existing Generation
- Line 217
- Line 287
- Railroads
- Freeway or Other Major Road
- Major Road Less Important than a Freeway
- Important Local Road

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Roads provided by ESRI
3. Base features provided by Dominion Energy Virginia
4. Stream data provided by USGS National Hydrography Dataset (NHD)
5. Railroad data provided by U.S. National Transportation Atlas

Stantec Dominion Energy

V. NOTICE

B. List Applicant offices where members of the public may inspect the application. If applicable, provide a link to website(s) where the application may be found.

Response: Dominion Energy Virginia
One James River Plaza, 12th Floor
701 E. Cary Street
Richmond, Virginia 23219
Attn: Amanda Mayhew

www.dominionenergy.com/ChesterfieldLakeside

V. NOTICE

C. List all federal, state, and local agencies and/or officials that may reasonably be expected to have an interest in the proposed construction and to whom the Applicant has furnished or will furnish a copy of the application.

Response: The following agency representatives may reasonably be expected to have an interest in the Rebuild Project. Instead of furnishing a copy of the Application to these parties, the Company has sent a letter noting the availability of the Application for the Rebuild Project on the Company's website.

Ms. Bettina Rayfield
Office of Environmental Impact Review
Department of Environmental Quality
P.O Box 1105
Richmond, Virginia 23218

Ms. S. Rene Hypes, Project Review Coordinator
Natural Heritage Program
Virginia Department of Conservation and Recreation
Division of Natural Heritage
600 East Main Street, 24th Floor
Richmond, Virginia 23219

Ms. Robbie Rhur
Planning Bureau
Department of Conservation and Recreation
600 East Main Street, 17th Floor
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Mr. Roger Kirchen, Director
Review and Compliance Division
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

Ms. Amy M. Ewing
Virginia Department of Games and Inland Fisheries
7870 Villa Park, Suite 400
Henrico, Virginia 23228

Mr. Keith Tignor
Endangered Species Coordinator
Virginia Department of Agriculture and Consumer Affairs
102 Governor Street
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Mr. Todd Groh
Forestland Conservation Division
Virginia Department of Forestry
900 Natural Resources Drive, Suite 800
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Mr. Tony Watkinson
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Virginia Marine Resources Commission
2600 Washington Avenue, 3rd Floor
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Mr. Troy Andersen
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Ecological Services Virginia Field Office
6669 Short Lane
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Ms. Silvia Gazzera
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Mr. Robert Alexzander
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FAA Eastern Regional Office
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Mr. Scott Denny
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Virginia Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250

Ms. Martha Little
Virginia Outdoors Foundation
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Dr. Joseph P. Casey
Chesterfield County
County Administration Office
P.O. Box 40
Chesterfield, Virginia 23832

Mr. John Vithoulkas
Henrico County Manager
P.O. Box 90775
Henrico, Virginia 23273-0775

Mr. Andrew Gillies
Chesterfield County
Planning Department
P.O. Box 40
Chesterfield, Virginia 23832

Mr. R. Joseph Emerson, AICP
Henrico Director of Planning
P.O. Box 90775
Henrico, VA 23273-0775

V. NOTICE

D. If the application is for a transmission line with a voltage of 138 kV or greater, provide a statement and any associated correspondence indicating that prior to the filing of the application with the SCC the Applicant has notified the chief administrative officer of every locality in which it plans to undertake construction of the proposed line of its intention to file such an application, and that the Applicant gave the locality a reasonable opportunity for consultation about the proposed line (similar to the requirements of § 15.2-2202 of the Code for electric transmission lines of 150 kV or more).

Response: Letters were sent to Chesterfield and Henrico Counties on April 12, 2018, describing the Rebuild Project and offering the localities an opportunity to comment. Copies of these letters are included as Attachment V.D.1.

Dominion Energy Virginia
701 East Cary Street, Richmond, VA 23219
DominionEnergy.com

April 12, 2018

Dr. Joseph P. Casey
Chesterfield County
County Administration Office
P.O. Box 40
Chesterfield, Virginia 23832

Reference: Dominion Energy Virginia Proposed Chesterfield to Lakeside 230 kV Electric Transmission Line Rebuild, Chesterfield and Henrico Counties, Virginia
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Dr. Casey,

Dominion Energy Virginia (the "Company") is proposing to rebuild a 230 kV electric transmission line between its Chesterfield Substation, located at the Chesterfield Power Plant in Chesterfield, and its Lakeside Substation, located off Hilliard Road in Henrico. Structures on this approximately 21.3 mile 230 KV line were installed in the late 1950s and, although well maintained, are nearing the end of their service life. This Project is entirely within cleared and maintained transmission line right-of-way and no additional right-of-way is anticipated. Rebuilding this line will ensure safe and reliable electric service to customers in the area and bring the line up to date with current industry standards.

The Company intends to file an application for a certificate of public convenience and necessity with the State Corporation Commission (SCC) in the second quarter of this year. In accordance with Section 15.2-2202 of the Code of Virginia, Dominion Energy Virginia is writing to notify you of the proposed project ahead of the SCC filing. The Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of receipt of this letter. Enclosed is an overview map of the project. Please do not hesitate to contact James K. Beazley with any questions at 804-814-5448 or james.k.beazley@dominionenergy.com Dominion Energy Virginia appreciates your assistance with this project review and looks forward to any additional information you may have to provide.

Sincerely,

Amanda Mayhew
Sr. Siting and Permitting Specialist

cc: James K. Beazley, Dominion Energy
Dorothy Jaeckle, Chair, Board of Supervisors
William Dupler, Deputy County Administrator

Attachment: Project Overview Map

Dominion Energy Virginia
701 East Cary Street, Richmond, VA 23219
DominionEnergy.com

April 12, 2018

Mr. John Vithoulkas
Henrico County Manager
P.O. Box 90775
Henrico, Virginia 23273-0775

Reference: Dominion Energy Virginia Proposed Chesterfield to Lakeside 230 kV Electric Transmission Line Rebuild, Chesterfield and Henrico Counties, Virginia
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Vithoulkas,

Dominion Energy Virginia (the "Company") is proposing to rebuild a 230 kV electric transmission line between its Chesterfield Substation, located at the Chesterfield Power Plant in Chesterfield, and its Lakeside Substation, located off Hilliard Road in Henrico. Structures on this approximately 21.3 mile 230 KV line were installed in the late 1950s and, although well maintained, are nearing the end of their service life. This Project is entirely within cleared and maintained transmission line right-of-way and no additional right-of-way is anticipated. Rebuilding this line will ensure safe and reliable electric service to customers in the area and bring the line up to date with current industry standards.

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Sincerely,

Amanda Mayhew
Sr. Siting and Permitting Specialist

cc: James K. Beazley, Dominion Energy
Randy R. Silber, deputy county manager, Henrico County

Attachment: Project Overview Map