

Part 3

18020847

BERKIN

**REMAND DIRECT TESTIMONY
OF
JON M. BERKIN
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUE-2015-00107**

1 **Q. Please state your name, position of employment, and business address.**

2 A. My name is Jon M. Berkin, and I am employed as a Partner with Environmental
3 Resources Management, Inc. (“ERM”). My business address is 1000 IDS Center, 80
4 South Eighth Street, Minneapolis, Minnesota 55402. ERM recently acquired my former
5 company, Natural Resource Group, LLC (“NRG”).

6 **Q. Have you previously sponsored or submitted testimony in this proceeding?**

7 A. Yes. I adopted the pre-filed direct testimony of Jeffrey R. Thommes, which was
8 submitted on behalf of Virginia Electric and Power Company (“Dominion Energy
9 Virginia” or the “Company”) to the State Corporation Commission of Virginia (the
10 “Commission”) in this proceeding on November 6, 2015. I also submitted pre-filed
11 rebuttal testimony on behalf of the Company on June 9, 2016. Finally, I testified at the
12 evidentiary hearing on direct and rebuttal on June 21, 2016, and June 22, 2016,
13 respectively.

14 **Q. What is the purpose of your remand direct testimony?**

15 A. I am providing remand direct testimony in continuing support of the Company’s
16 application to (i) convert its existing 115 kV Gainesville-Loudoun Line #124, located in
17 Prince William and Loudoun Counties, to 230 kV operation; (ii) construct in Prince
18 William County, Virginia and the Town of Haymarket, Virginia a new 230 kV double

1 circuit transmission line from a tap point approximately 0.5 mile north of the Company's
2 existing Gainesville Substation on the converted Line #124 to a new 230-34.5 kV
3 Haymarket Substation; and (iii) construct a 230-34.5 kV Haymarket Substation on land in
4 Prince William County to be owned by the Company (collectively, the "Project").

5 Specifically, I will address the Company's proffered additional variations to the proposed
6 routes in the record. I will also update certain information pertinent to routing
7 considerations.

8 **Q. Are you sponsoring any exhibits as part of your rebuttal testimony?**

9 A. Yes. Company Exhibit No. __, JMB, consisting of Remand Direct Schedules 1-2, was
10 prepared under my direction and supervision, and is accurate and complete to the best of
11 my knowledge and belief. My Remand Direct Schedule 1 is the route map for the I-66
12 Overhead Route, and my Remand Direct Schedule 2 is the route map for the I-66 Hybrid
13 Route. Each schedule shows the route as originally filed in this proceeding, as well as
14 variations that have developed as this case has been pending and that will be discussed in
15 my remand direct testimony.

16 **Q. What are the proposed routes in the record?**

17 A. The Company originally submitted for consideration a total of five routes, which
18 included: (1) the Proposed I-66 Overhead Route; (2) the Carver Road Alternative Route;
19 (3) the Madison Alternative Route; (4) the I-66 Hybrid Alternative Route; and (5) the
20 Railroad Alternative Route.

21 On April 6, 2017, the Commission issued an Interim Order, which, among other things,
22 found with respect to routing that "both the Railroad Route and the Carver Road Route

1 meet the statutory criteria [for approval] in this case.” (Interim Order at 11.) The Interim
2 Order also explained how, though both routes met the statutory criteria for approval, the
3 Commission found the Railroad Route preferable to the Carver Road Route. (Interim
4 Order at 13-14.) Because the Railroad Route crossed property controlled by Prince
5 William County, the Commission directed the Company to request Prince William
6 County to take the actions necessary to remove any legal constraints blocking
7 construction of the Railroad Route, and to file written confirmation of any response
8 within 60 days. (Interim Order at 14-15.)

9 On June 5, 2017, the Company notified the Commission that construction of the Railroad
10 Route was not feasible due to the legal inability to procure the necessary rights-of-way.

11 On June 23, 2017, the Commission entered a Final Order wherein it approved
12 construction and operation of the Proposed Project along the Carver Road Route.

13 On July 24, 2017, the Company requested the Commission hold the proceeding in
14 abeyance while it evaluated certain issues with the Carver Road Route. And, on
15 September 22, 2017, the Company notified the Commission that through its detailed
16 surveying and engineering processes, the Company had identified a property interest held
17 by Prince William County in certain land along the Carver Road Route, which is
18 dedicated for an extension of Somerset Crossing Drive. The Company noted that it sent a
19 letter to Prince William County on September 8, 2017, in which it formally requested that
20 Prince William County confirm that it will not approve the grant of an easement to
21 Dominion Energy Virginia for the construction and operation of the Project along the
22 Carver Road Route. The Company further explained how, on September 12, 2017,

Prince William County's Board of Supervisors unanimously passed a resolution to deny the Company's Carver Road easement request.

Accordingly, the proposed routes in the record for this proceeding are the Proposed I-66 Overhead Route; the Madison Alternative Route; and the I-66 Hybrid Alternative Route.

I-66 Overhead Route

Q. Has the Company, in conjunction with ERM, undertaken detailed design and surveying to evaluate known impediments to the I-66 Overhead Route?

A. Yes. The Company is not aware of any impediments to the construction of the I-66 Overhead Route that would require authorization from Prince William County for the line itself. However, the Company now proposes certain minor variations to that route.

Q. Please describe the Company's proposed variations to the I-66 Overhead Route.

A. First, in its Application the Company included the Jordan Lane Variation to the I-66 Overhead Route:

Jordan Lane Variation:

In contrast to the rest of I-66 that the Proposed Route parallels, approximately 675 feet of existing roadway along Jordan Lane within Haymarket Township was not established as [Virginia Department of Transportation ("VDOT")] right-of-way. This stretch of Jordan Lane near the eastern end currently remains a county road dedicated to the Town of Haymarket and Prince William County via Piedmont Mews, LLC subdivision. Dominion Virginia Power will work with these localities to negotiate an overhang easement within the dedicated road easement. However, in the event that these negotiations are unsuccessful, the Jordan Lane Variation would eliminate the need for the Company to obtain an easement from the Town of Haymarket or Prince William County. The Jordan Lane Variation would involve the location of one structure inside the proposed sound wall along I-66. The Company does not anticipate that this single structure will unnecessarily burden construction or operation of the transmission

1 line or impede construction or vehicle operations within the
2 existing I-66 right-of-way. This variation does not materially affect
3 the length or impacts of the Proposed Route except to the extent it
4 eliminates a crossing of the Jordan Lane dedicated road parcel.

5 (Appendix at 48.)

6 Through further survey and property title research, the Company also discovered a
7 Department of Environmental Quality/Army Corps of Engineers conservation easement
8 in this area at Jordan Lane at milepost 3.59 of the route. In order to avoid this
9 conservation easement, the Company proposes to cross inside of the VDOT sound wall
10 approximately 650 feet east of the original crossing location (at approximate milepost
11 3.44 rather than 3.56) and place a total of three structures (rather than one as described
12 above) inside of (*i.e.*, on the I-66 side of) the sound wall. The three structures inside the
13 sound wall are not contiguous. There is one inside the wall at milepost 3.53, then one
14 outside the wall and then two more inside the wall at mileposts 3.75 and 3.82,
15 respectively. In total, this engineering change results in approximately 1,050 feet of the
16 proposed transmission line being located on the I-66 side of the sound wall whereas the
17 original design contemplated 886 feet. All structures within the VDOT right-of-way
18 would be located by VDOT permit rather than easement. Therefore, the complete Jordan
19 Lane Variation now begins at milepost 3.44 and extends to milepost 3.92 of the I-66
20 Overhead Route. This area of the I-66 Overhead Route is depicted on my Remand Direct
21 Schedule 1, Pages 5-6.

22 Second, as part of this proceeding, Respondent FST Properties, LLC ("FST") requested
23 that the I-66 Overhead Route and I-66 Hybrid Route be adjusted to avoid FST's 4.6 acre
24 parcel by turning sharply south on the eastern side of the parcel and continuing until the

property line, and then turning sharply west past the southern border of FST's property until making a final sharp turn north and terminating at the proposed Haymarket Substation ("FST Variation"). To eliminate the additional heavy angles in the FST Variation, the Company offered the FST Optimization Variation. From the southwest intersection of Route 55 and Route 15, the FST Optimization Variation runs southwest and parallel to FST's southern property line until making a final sharp turn north and terminating at the proposed Haymarket Substation. The FST Optimization Variation can be seen on my Remand Direct Schedule 1, Page 7, shown as "Dominion FST Optimization."

As shown, the Company's conceptual design for the FST Optimization Variation requires a minor adjustment as a result of further engineering analysis and detailed survey work. Specifically, at the intersection of Route 55 and Route 15, it was necessary to shift the angle structure location approximately 55 feet southwest in order to avoid an existing 20-foot wide Washington Gas and Light Company gas line easement. In addition, it also was necessary to shift a portion of the filed route north of Route 55 beginning at milepost 4.53 slightly to the west to accommodate the change in the location of the angle structure noted above. The hard angle structure location just south of the proposed Haymarket Substation was also moved approximately 75 feet south in order to avoid existing electrical duct banks. The combination of these two adjustments caused the entire alignment of the original FST Optimization Variation to shift approximately 50 feet to the south (*i.e.*, the change between the dashed orange and white and red lines depicted in Remand Direct Schedule 1, Page 7.)

Although the Company supported the Walmart Variation for the I-66 Overhead Route in

its post-hearing submissions, detailed survey and engineering has found the existence of a strip of property on the south side of Route 55 (north of the proposed Haymarket Substation), which is dedicated to Prince William County for future use as a public roadway. Prince William County's authorization would be required in order for the transmission line to cross this strip of property if the Walmart Variation was chosen by the Commission. The location of this dedicated road easement can be seen on my Remand Direct Schedule 1, Page 7. Thus, the Company now supports the Route Variation (in red) as its preferred route segment within the Route 55 corridor of the I-66 Overhead Route.

On November 28, 2017, the Company personnel met with representatives from VDOT regarding the Project and proposed routes. VDOT expressed concerns with certain towers that are conceptually located within VDOT parking lots and the potential loss of parking their construction would cause. These conceptual tower locations and VDOT parking areas can be seen on Remand Direct Schedule 1, Pages 1 and 2 (denoted as "Proposed Park & Ride"). If the Commission ultimately approves the I-66 Overhead Route, the Company will conduct final engineering and coordinate with VDOT on the final tower locations, and minor shifts in the tower locations could be necessary. These shifts could, depending on the locations and resulting span lengths, result in minor variations in tower heights.

Finally, the Company made a slight change to I-66 Overhead Route at the crossing of I-66 just west of Jefferson Street between mileposts 4.09 and 4.31 for constructability reasons. The Company reduced the angle of the highway crossing in order to avoid the need to place a structure inside the VDOT sound wall on the south side of I-66 at

milepost 4.20 of the filed route. This change is depicted in my Remand Direct Schedule 1, Page 6.

Q. Do you have a schedule depicting the I-66 Overhead Route with the noted variations?

A. Yes. The entirety of the I-66 Overhead Route, including the variations at Jordan Lane, the area of the FST property and others discussed herein, is depicted in my Remand Direct Schedule 1. The Company requests approval of the I-66 Overhead Route with the Route Variations shown therein in red if an overhead route is chosen by the Commission.

Madison Alternative Route

Q. Have there been any developments since the close of this proceeding that impact the constructability of the Project along the Madison Route?

A. Yes. As a result of surveying efforts, the Company has learned that a new residence has been constructed within the proposed right-of-way for the Madison Route at 15308 Thoroughfare Road, as seen in the below Google Earth image. The red line represents the noticed right-of-way for the Madison Route:



This location is approximately at milepost 5.4 of the Madison Route.

In addition, the Company recently became aware of the dedication of two new road easements on the property of Southview 66, LLC at 14300 John Marshall Highway that both cross the Madison Route. These road easements consist of a planned extension of Daves Store Lane and the development of a new road to be named Grove Hill Boulevard. The Company would need to obtain permission from Prince William County to cross these two dedicated road easements.

It also is important to note that the Madison Route crosses a number of planned developments in various states of approval, which collectively span over 2.0 miles of the route. Thus, it is possible that other new developments could be impacted by the Madison Alternative Route at these locations.

Finally, following approval of the Carver Road Route, a number of public comments were submitted to the Commission's docket that focused on additional cultural and potentially historic resources along that route that were not included in publicly available datasets or public comments, and not otherwise raised during the case. Because the Carver Road and Madison Routes follow the same path for the first approximately 4.7 miles of each route, many of the same cultural and potentially historic resources will also exist on the Madison Route.

In particular, concerns were raised by residents about the potential impacts of the Carver Route to an historic African-American neighborhood along Carver Road. The Company has previously submitted a Pre-Application Analysis for review by the Virginia Department of Historic Resources ("VDHR") that included a review of the known

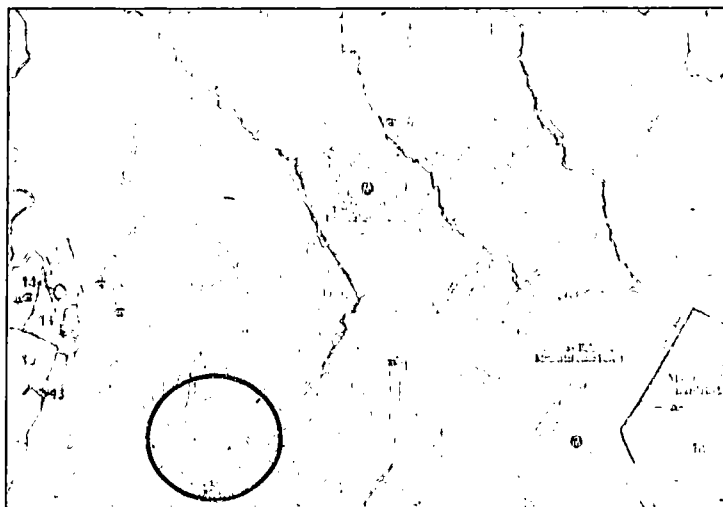
cultural resources along each of the routes for the Project, including the Carver Route, as a part of its application. The Pre-Application Analyses for transmission line projects require the identification of the following resource types:

- All National Historic Landmarks within 1.5 mile;
- All resources listed in the National Register of Historic Places (“NRHP”), all battlefields, and all historic landscapes within 1.0 mile;
- All resources previously determined eligible for listing in the NRHP within 0.5 mile; and
- All previously recorded archaeological sites within the right-of-way.

The Company’s cultural resources consultant for the project, Dutton + Associates, rechecked the VDHR’s records to determine whether any new resources had been reported in the area of concern along Carver Road subsequent to the submission of the Pre-Application Analysis. This review revealed that there had been no changes reported in this area in the VDHR’s records.

Dutton + Associates also expanded its records review to look outside of the sources required by the VDHR for the Pre-Application Analysis and were able to locate some additional information regarding the area of concern. According to Prince William County’s 2008 *Comprehensive Plan Maps: High Sensitivity Areas and County Registered Historic Sites*, the area of concern is located between “Historic High Sensitivity Areas” at Haymarket, between I-66 and Route 29, and at Route 15 and Route 29 and northeast of the “County Registered Historic Sites” of Cerro Gordo (#14), Buckland Historic District

(#13), and Buckland Hall (#15). This area is depicted on the map below.¹



This area of concern was known as The Settlement and is also depicted on the historic map below.² According to historian Eugene Scheel:³

THE SETTLEMENT: There were two Negro communities with this name: one, south of Catharpin; the other, west of Gainesville. These were forsaken areas, allotted [sic] to ex-slaves who first rented, then bought. Remembered at the former site were midwife Frances Beale, Nelson and Martha Elliott, and Robert Allen and Thornton Allen.

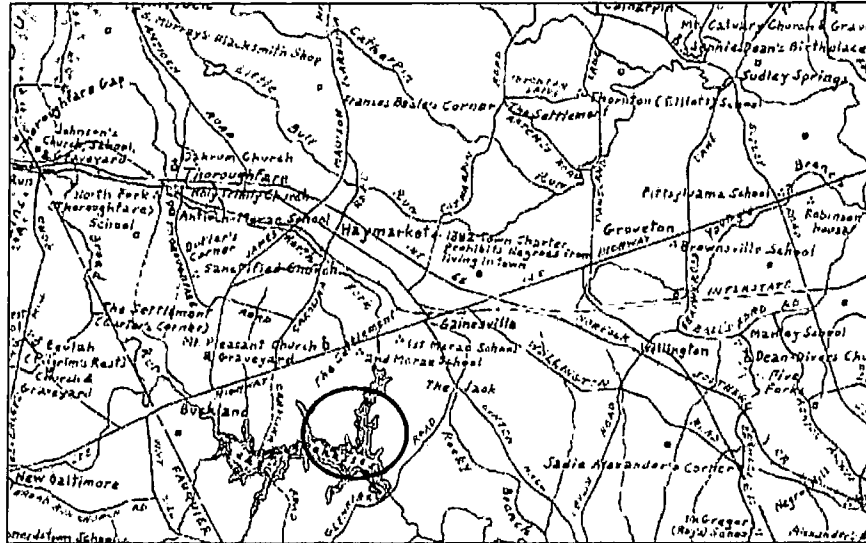
The larger Settlement had about fifteen houses at the century's turn. Some old marked stones in the Mt. Pleasant Church graveyard honor Anna Churchill, Estella Crawford, John Perry, and Charles Randall. Other

¹ Detail of *Prince William County 2008 Comprehensive Plan High Sensitivity Areas and County Registered Historic Sites*, published 2009, depicting the area of concern. Source: http://eservice.pwcgov.org/planning/documents/MAP_10W8_2008CP_HiSens_and_CRHS3000.pdf.

² Detail of *African-American Heritage Prince William County*, by Eugene Scheel in 2000, depicting the area of concern.

³ Scheel, Eugene M. *African-American Heritage Prince William County*. October 2000. Available online at http://www.pwcgov.org/government/dept/planning/Documents/PWC_AfricanAmerican_Heritage_Map.pdf.

prominent surnames: Berry, Berryman, Gaskins, Johnson, McPherson, Thomas, Tibbs, Tyler, Peterson, and Strother.



The Company is providing this information for the record, but does not currently propose any route variations associated with the Madison Alternative Route. As the Company noted in both its Comments to the Hearing Examiner's Report (filed December 6, 2016) and its September 22, 2017 Update to the Commission, other routes are superior to Madison in terms of cost and impact. Thus, the Company does not advocate selection of the Madison Alternative Route.

I-66 Hybrid Alternative Route

Q. Finally Mr. Berkin, are there any updates related to the I-66 Hybrid Route that you wish to address?

A. Yes. A map of the I-66 Hybrid Route as filed and with the variations discussed herein is included as my Remand Direct Schedule 2.

To begin, I would direct you to Remand Direct Schedule 2, Page 6, which depicts the I-

66 Hybrid Route crossing over I-66 in the area of Jefferson Road between mileposts 4.1 and 4.5. In his rebuttal testimony beginning on page 13, Company Witness Donald R. Koonce addressed the difficulty of 90 degree bored crossings of I-66 and recommended switching to diagonal horizontal directional drilling crossings, to the extent permitted by VDOT. The Company has incorporated this change into the I-66 Hybrid Route, and it is shown as a Route Variation in my Remand Direct Schedule 2, Page 6. The alignment of the crossing of I-66 has been further refined to avoid directly impacting two proposed VDOT storm water ponds on the east side of Jefferson Road and to also shift the route further away from the VDOT sound wall on the southern side of I-66. In addition, this change will improve the placement at the drill rig near milepost 4.50, which will be required for drilling under I-66. This Route Variation, however, will be subject to approval by VDOT. The Company respectfully requests that at this location, as well as other locations in which VDOT right-of-way is impacted, the Company be permitted the discretion to use its engineering judgment during final design to make minor adjustments as may be necessary to obtain VDOT's authorization and to construct the route.

Second, in his rebuttal testimony Mr. Koonce also recommended using the Walmart Variation for the I-66 Hybrid Route because it would eliminate some of the heavy angles present in the area near the proposed Haymarket Substation. As discussed above with respect to the I-66 Overhead Route, the area on the south side of I-66 near the FST property is encumbered with multiple existing underground utility easements (gas and power). Using the Walmart Variation for the I-66 Hybrid Route eliminates this issue. Thus, my Remand Direct Schedule 2, Page 7 shows the I-66 Hybrid Route using the Walmart Variation as a Route Variation (in red).

However, the Company is aware of two planned developments to the west of the Walmart that will require modification of the route as it traverses the area west of Walmart and crosses VA-55 to enter into the Haymarket Substation. These planned developments consist of an expansion of the Market Center at Haymarket, which is located adjacent to the Walmart, and the James Madison Marketplace, which will include the construction of a Home Depot.

The Company currently is investigating two possible route variations through this area, as shown on Remand Direct Schedule 2, Page 7. Variation 1 (yellow dotted line) would turn south and extend along the parcel boundary between the proposed expansion of the Market Center at Haymarket and the James Madison Marketplace. This variation would then turn southwest at different points to cross VA-55 to enter into Haymarket Substation. Alternatively, Variation 2 (pink dotted line) would turn south and extend along the property line between the Walmart and the adjacent parcel that would contain the proposed expansion of the Market Center at Haymarket and then turn southwest to cross VA-55 to enter into Haymarket Substation. The Company will work with the developers of these properties to find an optimal route that will minimize impacts to both planned developments and also will consult with VDOT to determine the best crossing of VA-55. Should the Commission approve the I-66 Hybrid Route, the Company requests discretion to implement either Variation 1 or 2, or another suitable variation, as a result of those discussions with developers and VDOT.

Next, in working with the Company's structural engineering group to undertake detailed engineering of the I-66 Hybrid Route, the proposed alignment was slightly modified in some locations to accommodate the reality of underground construction wherein large

drilling equipment must navigate the chosen route. Although this route, if chosen by the Commission, would still be subject to final engineering, the changes to the I-66 Hybrid Route alignment are shown in red in my Remand Direct Schedule 2, while the light blue line shows the originally proposed route.

Specifically, a slight modification was made to the route between mileposts 2.36 and 2.41 just west of the transition station for constructability reasons. The route was straightened to remove two sharp angles. This change is shown on Remand Direct Schedule 2, Page 3 in red.

A similar modification was made to the alignment of the I-66 Hybrid Route between mileposts 3.27 and 3.3. Specifically, the route was straightened in this location to remove a sharp angle for constructability reasons. This change is shown on Remand Direct Schedule 2, Page 5 in red.

Finally, I note that the VDOT parking issue discussed above with respect to the I-66 Overhead Route also exists on the I-66 Hybrid Route, because the implicated parking areas occur during the segment of the I-66 Hybrid Route that would be overhead. These can be seen on Remand Direct Schedule 2, Pages 1 and 2 (denoted as "Proposed Park & Ride").

For all route variations subject to future coordination with VDOT and/or private developers, the Company will attempt to obtain further information in advance of the remand hearing.

Should the Commission approve the I-66 Hybrid Route, the Company requests approval

of the route (with Route Variations) as shown in my Remand Direct Schedule 2.

Q. Does the I-66 Hybrid Route cross any County-owned or -controlled property?

A. Yes. As can be seen on Remand Direct Schedule 2, Pages 5 and 6, the I-66 Hybrid Route crosses a county road dedicated to the Town of Haymarket and Prince William County via Piedmont Mews, LLC subdivision in the area of Jordan Lane. Additionally, as can be seen on Remand Direct Schedule 2, Page 7, the I-66 Hybrid Route crosses an area of County-dedicated land on the south side of VA-55 to the north of the proposed Haymarket Substation. If the Project is approved by the Commission for construction and operation along the I-66 Hybrid Route, the Company will request the necessary authority from Prince William County and the Town of Haymarket to acquire the necessary easements. Although the Company cannot be certain that the County and Town will grant the requisite authority, the Company believes, based on the many public statements and resolutions, that these entities will grant authority to acquire the necessary easements if underground construction is approved by the Commission.

Q. Do you have any further comments regarding the I-66 Hybrid Route?

A. The I-66 Hybrid Route also requires the construction of a new transition station at the point along the route where the line would transition from overhead to underground – milepost 2.2, as shown on Remand Direct Schedule 2, Page 3. As presented during the case, the Company conceptually planned for this transition station to be located on a property currently owned by Southview 66, LLC. To the Company's knowledge, no development has taken place on this piece of property that would prevent construction of the transition station.

The Company has also undertaken additional review of potential sites along this route for staging and laydown of equipment, and has identified certain parcels that may be suitable in various locations along the route, including the area of Jefferson Street and Jordan Lane. For completeness of the record, these areas are also depicted within Remand Direct Schedule 2, Pages 4-7 (denoted as “Additional Workspace”).

A. Yes, it does.



Remand Direct Schedule 1
I-66 Overhead Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project

Parcel Boundary
Proposed VDOT Stormwater Basin
Proposed Park & Ride

Existing Dominion Transmission Line

Legend:
○ Milepost
— I-66 Overhead Alternative - Filed
— Route Variation

Scale:
0 150 300 Feet
13,600

North Arrow

ERIM

Aerial Imagery Date: July 10, 2016

Domination Energy

Page 1 of 7

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Remand Direct Schedule 1
I-66 Overhead Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
 Page 2 of 7

Dominion Energy

Legend

- Parcel Boundary
- Proposed VDOT Stormwater Basin
- Proposed Park & Ride
- I-66 Overhead Alternative - Filled
- Route Variation

Scale
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 0 150 300 Feet
 Aerial Imagery Date: July 10, 2016

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○ Milepost
 — I-68 Overhead Alternative - Filed
 — Route Variation
 Parcel Boundary
 Proposed VDOT
 Stormwater Basin
 Proposed Park & Ride

1:3,600

1:3,600

0 150 300 Feet

Aerial Imagery Date: July 10, 2016



Remand Direct Schedule 1
I-66 Overhead Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
 Page 3 of 7





Remand Direct Schedule 1
I-86 Overhead Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project

Page 4 of 7

0 Milepost

— I-86 Overhead Alternative - Filed

— Route Variation

Parcel Boundary

Proposed VDOT

Stormwater Basin

1:3,600

0 150 300 Feet

Aerial Imagery Date: July 10, 2016

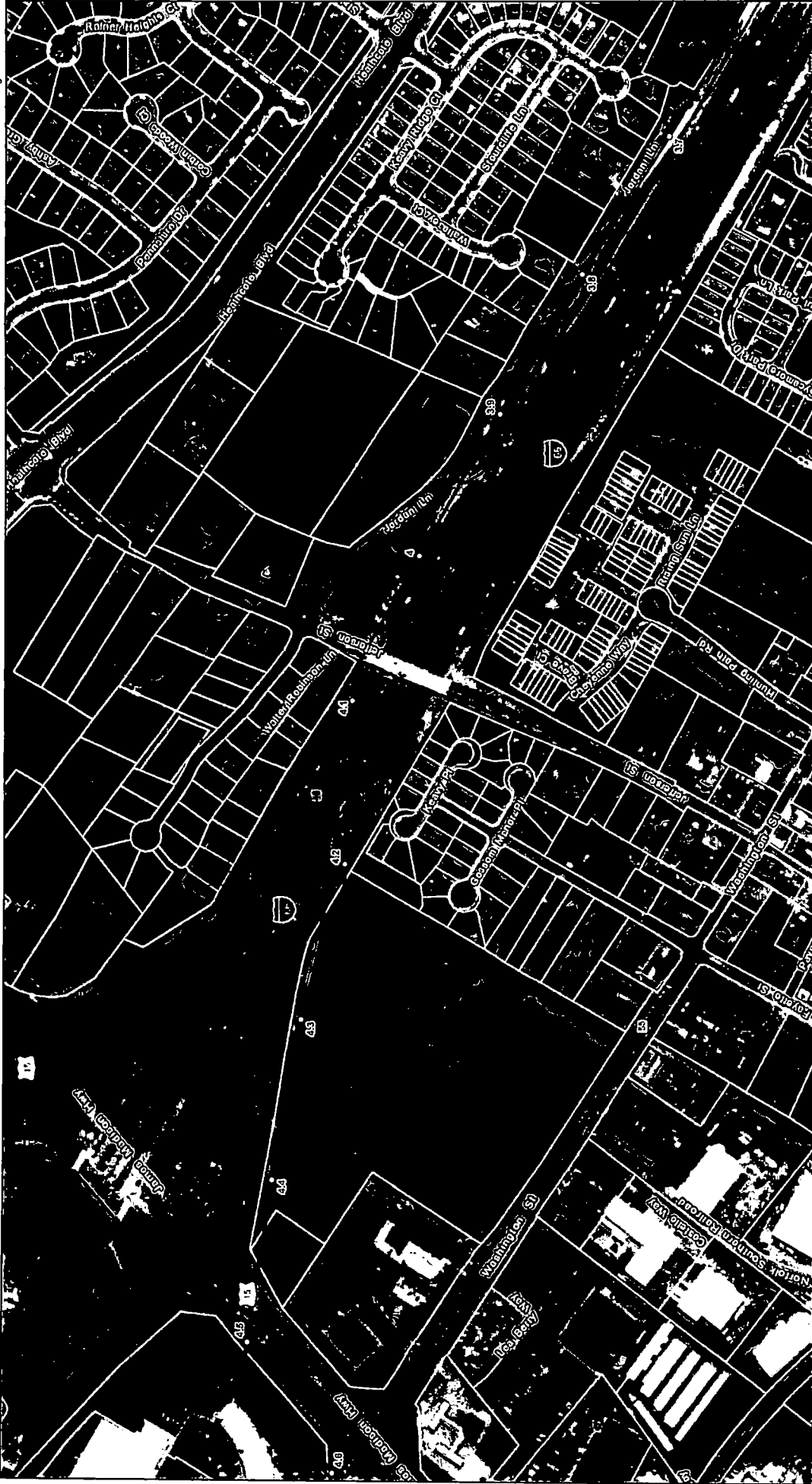
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Dominion Energy


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 Milepost
 I-66 Overhead Alternative - Filed
 Route Variation

Parcel Boundary
 Proposed VDOT
 Stormwater Basin
 Jordan Lane Road Easement
 (Prince William County)

1:3,600

0 150 300 Feet

Aerial Imagery Date: July 10, 2016

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Remand Direct Schedule 1
I-66 Overhead Variations Map Set
Gainesville to Haymarket 230KV Transmission Line and Substation Project
 Page 6 of 7



**Dominion
Energy.**

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0 Milepost

I-66 Overhead Alternative - Filed

Route Variation

Dominion FST Optimization

Parcel Boundary

Proposed VDOT Stormwater Basin

Washington Gas and Light Company Easement

Proposed Haymarket Substation

Road Easement (Prince William County)

VEPCO Electric Easement

1:3,600

0 150 300 Feet

Aerial Imagery Date: July 10, 2016

Domination Energy

Remand Direct Schedule 1

I-66 Overhead Variations Map Set

Gainesville to Haymarket 230kV Transmission Line and Substation Project

Page 7 of 7

Domination Energy

Domination Energy

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0 Milepost

45' I-66 Hybrid Alternative - Filled

— Route Variation

Parcel Boundary

Proposed VDOT Stormwater Basin

Proposed Park & Ride

Existing Dominion Transmission Line

1:3,600

0 150 300 Feet

N

Remand Direct Schedule 2
I-66 Hybrid Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
Page 1 of 7

ERM

Aerial Imagery Date: July 10, 2016

Denition Energy

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Legend

- Milepost
- I-66 Hybrid Alternative - Filed
- Route Variation
- Parcel Boundary
- Proposed VDOT
- Stormwater Basin
- Proposed Park & Ride

Scale

1:3,600

0 150 300 Feet

North Arrow

N

ERM

Remand Direct Schedule 2
I-66 Hybrid Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
Page 2 of 7

Domination Energy







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20200108



0 Milepost
 13.600
 Transition Station
 Parcel Boundary
 Proposed VDOT
 Stormwater Basin
 Route Variation
 Proposed Park & Ride
 Aerial Imagery Date: July 10, 2016
 Remand Direct Schedule 2
 I-66 Hybrid Variations Map Set
 Gainesville to Haymarket 230kV Transmission Line and Substation Project
 Page 3 of 7
 Dominion Energy
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 PLOT NAME: RV-07200



 Milepost
  Parcel Boundary
  Proposed VDOT
  Filed
  Stormwater Basin
  Additional Workspace

1:3,600

0 150 300 Feet

Aerial Imagery Date: July 10, 2016

DERBY

Remand Direct Schedule 2
I-56 Hybrid Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
 Page 4 of 7

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Aerial Imagery

 Domination Energy®

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0 Milepost

1:3,600

0 150 300 Feet

ERM

Remand Direct Schedule 2
I-66 Hybrid Variations Map Set
Galnesville to Haymarket 230kV Transmission Line and Substation Project
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Domino Energy

Parcel Boundary

Proposed VDOT

Stormwater Basin

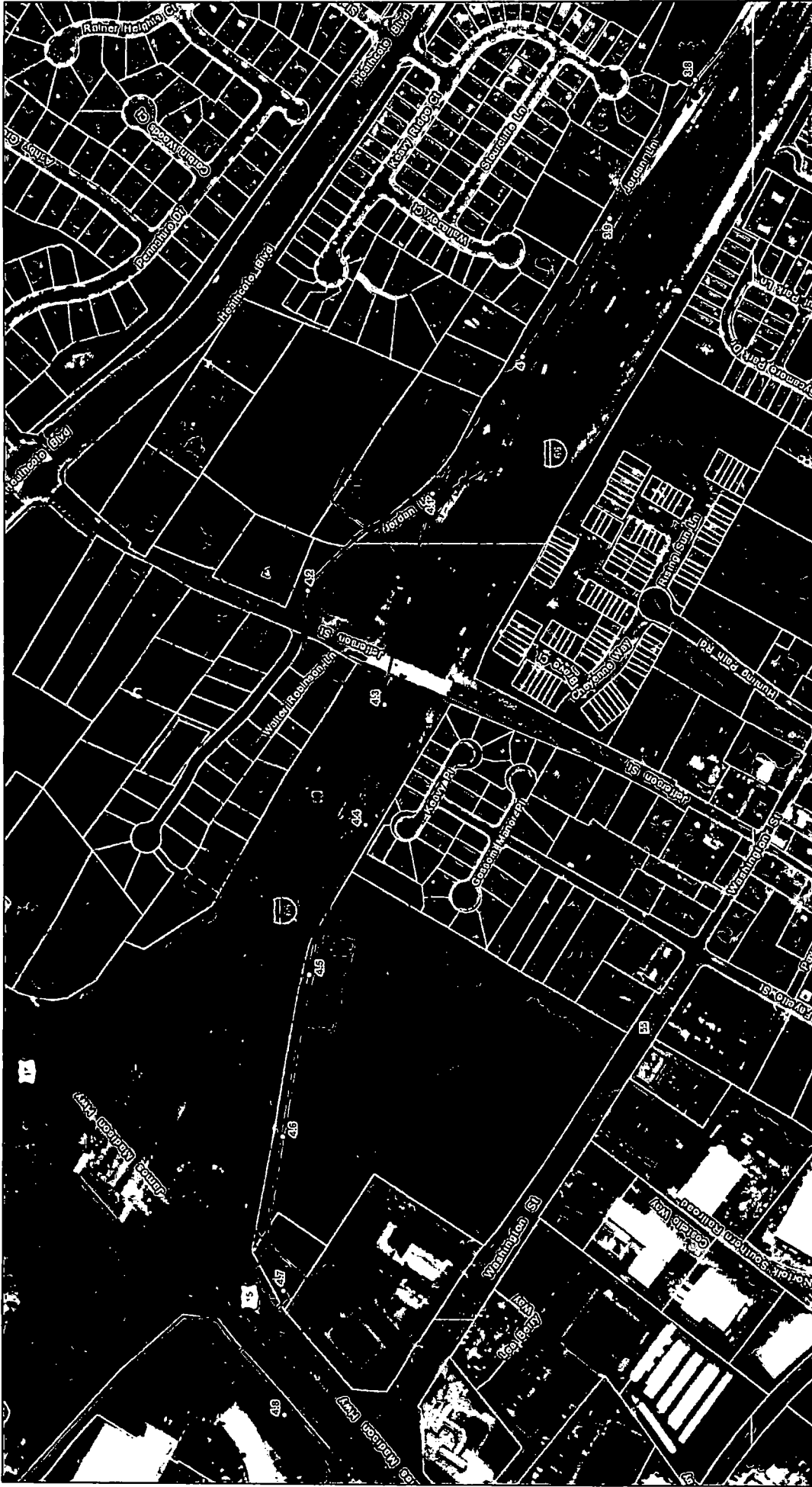
Additional Workspace

VADEQ/USACE Easement

Jordan Lane Road Easement
(Prince William County and Town of Haymarket)

Aerial Imagery Date: July 10, 2016

FILE: M:\GIS\GISD-FU00W\Haymarket\MapSet\MapSet_02.mxd | REVISED: 01/02/2016 | SCALE: 1:3,600 was printed at 11:47



Remand Direct Schedule 2
I-66 Hybrid Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
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Casement
 City and Town of Haymarket
 1:3,600
 0 150 300 Feet
 Aerial Imagery Date: July 10, 2016

○ Milepost
 --- L&S Hybrid Alternative - Filed
 --- Route Variation
 Parcel Boundary
 Proposed VDOT Stormwater Basin
 Additional Workspace
 Market Center at Hawthorne

<p>FILE: MCKENZIE-ROOM-Haymarket_Arcadis 20171127-Enroll_DOM_HAY_198197-bnd_Vaultsden_V2.mxd</p> <p>REVIEWED: 01/03/2018</p> <p>SCALE: 1:3,000 when printed at 11x17</p> <p>REVIEWED DATE: JULY 10, 2010</p>	<p>DRAWN BY: 0235</p>
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1:3,500

0 150 300 Feet

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	Milepost		Parcel Boundary		Proposed Haymarket Substation
	L68 Hybrid Alternative - Filed		Proposed VDOT Stormwater Basin		
	Route Variation		Additional Workspace		
	Road Easement (Prince William County)				Aerial

Remand Direct Schedule 2
I-66 Hybrid Variations Map Set
Gainesville to Haymarket 230kV Transmission Line and Substation Project
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**Dominion
Energy**

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