

Sec. 32-403.33. – Special uses

3. Data Center outside the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

ARTICLE V. – OVERLAY DISTRICTS

PART 500. – SPECIAL PUBLIC INTEREST OVERLAY DISTRICTS, GENERALLY

Sec. 32-500.01. – Purpose and intent

The purpose of the Special Public Interest Overlay Districts established in the following sections is to protect and enhance certain specific lands and structures which, by virtue of their type or location, have characteristics which are distinct from lands and structures outside such overlay districts. It is the intent of the Board of County Supervisors to permit, insofar as possible, those uses and structures which would otherwise be permitted, provided that reasonable and necessary conditions are met which insure the protection and enhancement of said lands and structures. It is the further intent of the Board of County Supervisors to specifically protect and enhance the following:

1. Flood hazard areas.
2. Historic areas.
3. Designated highway corridors.
4. Chesapeake Bay preservation areas.
5. Airport safety.
6. Institutes of higher education.
7. Redevelopment.
8. Keeping of domestic fowl.
9. Data center opportunity zone

Part 509. – Data Center Opportunity Zone Overlay District

Sec. 32-509.01. - Purpose and intent

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately support the proposed use. This District continues the County's efforts to attract and advance high-tech industrial development while limiting negative impacts to communities.

Sec. 32-509.02. – Establishment of Data Center Opportunity Zone Overlay District

1. A Data Center Opportunity Zone Overlay District may be established by the Board of County Supervisors on lands in proximity to high voltage transmission lines of 115kv or more and planned or zoned for office or industrial uses.
2. A Data Center Opportunity Zone Overlay District shall be created and amended by ordinance upon resolution of the Board of County Supervisors. The boundaries shall be set using a map.
3. Said District shall overlay the existing zoning district. The regulations and requirements of the underlying zoning district and the Data Center Opportunity Zone Overlay District shall both apply, provided however, that when the regulations applicable to the Data Center Opportunity Zone Overlay District conflict with the regulations of an underlying zoning district, the Data Center Opportunity Zone Overlay District regulations shall apply.

Sec. 32-509.03 - Uses permitted by right.

All uses permitted by right in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District. Data centers shall be permitted by right in the Data Center Opportunity Zone Overlay District in the O(L), O(H), O(M), O(F), M-1, M-2, and M/T zoning districts and in designated office or industrial land bays in the PBD and PMD district.

Sec. 32-509.04. - Secondary uses.

All permitted secondary uses in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District.

Sec. 32-509.05. - Uses permitted by Special Use Permit.

All permitted special uses in the underlying zoning district shall be permitted by special use permit in the Data Center Opportunity Zone Overlay District.

Sec. 32-509.06. - Prohibited Districts

Data centers shall be prohibited in agricultural, residential, PMR, B-2, B-3, and V districts.



Christopher E. Martino  
Acting County Executive

## COUNTY OF PRINCE WILLIAM

OFFICE OF EXECUTIVE MANAGEMENT

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170610142

April 29, 2016

**TO:** Board of County Supervisors

**FROM:** Christopher M. Price, AICP  
Director of Planning *Cmm*

**THRU:** Christopher E. Martino  
Acting County Executive

**RE:** Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone  
Countywide

**I. Background is as follows:**

- A. Purpose of the Zoning Ordinance – Section 15.2-2283 of the Code of Virginia states that zoning ordinances shall be for the general purpose of promoting the health, safety, or general welfare of the public.
- B. Purpose of Amendment – On August 4, 2015, the Board of County Supervisors adopted Resolution 15-508 to support protection of private property, historical resources and commercial interests from potential negative impacts of new high voltage overhead transmission lines. As part of that resolution, the Board of County Supervisors declared its intent to initiate a zoning text amendment to incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties. The resolution also noted that this amendment should continue the County's efforts to advance commercial and industrial development.

**II. Current Situation is as follows:**

- A. Zoning Text Amendment Initiated – On September 8, 2015, the Board of County Supervisors approved Resolution 15-527 initiating a zoning text amendment to incorporate appropriate zoning requirements for data centers, which would address the infrastructure necessary to support such uses and the potential impacts to other properties. As part of that resolution, staff was directed to seek input from stakeholders representing community and business perspectives.
- B. Stakeholder Input – The proposed text amendment and overlay district were developed in consultation with stakeholders representing community and business perspectives. Staff met with citizens as well as representatives from NAIOP, Northern Virginia Technology Council, and the Prince William Chamber of Commerce to discuss ideas and to solicit input.

- C. Proposed Overlay District – Working with the stakeholder groups, staff drafted a zoning text amendment to define data centers, computer and network services, and electric substations, develop an overlay district, maintain data centers as a by right use within the overlay district on most parcels planned or zoned for office or industrial uses (including office or industrially designated landbays in planned districts) in proximity to existing high voltage electric transmission lines, maintain data centers as a permitted use by special use permit (SUP) in office and industrial districts outside of the overlay district, remove data centers from the B-1 General Business and B-2 Neighborhood Commercial districts, permit electric substations by public facility review in the overlay district (electric substations are currently permitted by public facility review throughout the entire County), and permit electric substations by special use permit outside of the overlay district.
- D. Planning Commission Worksession – On March 16, 2016, staff presented an overview of the proposed Overlay District to the Planning Commission.
- E. DCSM/Zoning Ordinance Advisory Committee – The Committee reviewed the proposed amendment on April 1, 2016. In general, while expressing concern about regulating a targeted industry, the committee supported the proposal as the best alternative to address the Board's stated goals. However, they recommended consideration of two changes:
  - 1. Special Use in B-1 – The Committee recommended that data centers be permitted by special use permit in the B-1, General Commercial zoning district (the original proposal excluded data centers from the B-1 district).
  - 2. No SUP for Electric Substations – The Committee recommended that electric substations remain permitted with a public facilities review in all districts and that the proposed requirement for a special use permit outside the overlay district be removed. This recommendation has not been incorporated into the proposed text, but is presented as Alternative B for the Board's consideration.
- F. Proposed Revisions to Overlay District – Staff concurs with the recommendation to make data centers a permitted use by special use permit within the B-1, General Commercial (including retail designated landbays in planned districts) and has revised the draft ordinance accordingly.
- G. Planning Commission Recommendation – A public hearing before the Planning Commission was held on April 20, 2016, where they recommended adoption of Zoning Text Amendment, #DPA2016-00003, Data Center Opportunity Zone.
- H. Planning Office Recommendation – The Planning Office recommends adoption of Zoning Text Amendment, #DPA2016-00003, Data Center Opportunity Zone.
- I. Board of County Supervisors Public Hearing – A public hearing has been advertised for May 17, 2016, before the Board of County Supervisors.
- J. Board Action Requested – Board of County Supervisors' action is requested to adopt Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone, to the Prince William County Zoning Ordinance.

III. Issues in order of importance are as follows:

- A. Policy – Does the amendment further the purposes of the Zoning Ordinance?
- B. Community Input – Have members of the community raised any concerns?
- C. Legal – Are there any legal implications associated with this zoning text amendment?
- D. Timing – What are the timing considerations of the zoning text amendment?

IV. Alternatives beginning with the staff recommendation are as follows:

- A. Adopt Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone (including provisions which would define electric substations and permit such uses by special use permit outside of the Overlay District).
  - 1. Policy – The amendment furthers the purposes of the Zoning Ordinance and meets the Board of County Supervisors initiation goal through the following:
    - a) Definitions – The proposed zoning text amendment removes the definition for “Data and Computer Services” and replaces it with two new definitions: “Computer and Network Services” and “Data Center”. This allows uses that are not data centers but that were classified under the “Data and Computer Services” definition to remain as by right uses in the zones in which they are currently permitted. A definition for “Electric Substation” has also been added as this use is regulated by the new overlay district.
    - b) By Right and Special Uses – The proposed new definitions prompted a series of changes to the by right and special uses in the commercial, office and industrial districts as well as modification of some of the mixed-use districts. In the public use section, text has been added to note that an electric substation would require a special use permit unless it is within the overlay district.
    - c) Overlay District – The overlay district was developed to include office and industrial long-range land use designations and zoning districts that are adjacent to or nearby transmission lines.
    - d) Special Use for Electric Substation – Currently, electric substations are subject to a Public Facility Review. The proposed changes to Sec. 32-201.11 (public uses) would require a special use permit for an electric substation outside of the overlay district. Such uses would remain as permitted uses subject to a Public Facility Review within the overlay district.
  - 2. Community Input – The Planning Office worked with stakeholders from the business and citizen groups to develop and refine the text and overlay district boundaries. In general, comments have been supportive of the proposal as the

best alternative to address the Board's stated goals. However, the Northern Virginia Technology Council and the Prince William Chamber of Commerce have expressed some concern about adding new regulations to one of the County's primary targeted industries. In addition, subsequent to the Planning Commission public hearing, staff has been contacted by representatives from the data center industry who have expressed concern about the business climate for data centers in Prince William County.

3. Legal – The zoning text amendment will allow the County an opportunity to minimize potential adverse impacts of data center and electric substation development outside of the overlay district while still promoting the development of data centers within a large area of Prince William County. Legal issues will be addressed by the County Attorney's Office.
  4. Timing – There is no time requirement for the Board of County Supervisors to take action on zoning text amendments.
- B. Adopt Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone (excluding provisions which would define electric substation and permit such uses by special use permit outside of the Overlay District).
1. Policy – This alternative is similar to Alternative A with the following exceptions:
    - a) Definitions – The proposed definition for "Electric Substation" would be removed.
    - b) Special Use for Electric Substation – The proposed changes to Sec. 32-201.11 (public uses) to require special use permit for an electric substation outside the overlay district would be removed. As such, electric substations would remain a permitted use subject to a Public Facility Review throughout the County.
  2. Community Input – The Planning Office worked with stakeholders from the business and citizen groups to develop and refine the text and overlay district boundaries. In general, comments have been supportive of the proposal as the best alternative to address the Board's stated goals. However, the Northern Virginia Technology Council and the Prince William Chamber of Commerce have expressed some concern about adding new regulations to one of the County's primary targeted industries. In addition, subsequent to the Planning Commission public hearing, staff has been contacted by representatives from the data center industry who have expressed concern about the business climate for data centers in Prince William County.
  3. Legal – The zoning text amendment will allow the County an opportunity to minimize potential adverse impacts of data center development outside of the overlay district while still promoting the development of data centers within a large area of Prince William County. Legal issues will be addressed by the County Attorney's Office.

4. Timing – There is no time requirement for the Board of County Supervisors to take action on zoning text amendments.

C. Do Not Adopt Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone.

1. Policy – Data centers will remain a by right use in most non-residential zoning districts throughout the County regardless of whether or not such areas are adequately served by existing high voltage electric transmission lines. Electric substations will remain a use permitted by Public Facility Review throughout the County.
2. Community Input – The Planning Office worked with stakeholders from the business and citizen groups to develop and refine the text and overlay district boundaries. In general, comments have been supportive of the proposal as the best alternative to address the Board's stated goals. However, the Northern Virginia Technology Council and the Prince William Chamber of Commerce have expressed some concern about adding new regulations to one of the County's primary targeted industries. In addition, subsequent to the Planning Commission public hearing, staff has been contacted by representatives from the data center industry who have expressed concern about the business climate for data centers in Prince William County.
3. Legal – Legal issues will be addressed by the County Attorney's Office.
4. Timing – There is no time requirement for the Board of County Supervisors to take action on zoning text amendments.

V. Recommendation is that the Board of County Supervisors concurs with Alternative A and adopt the attached Ordinance.

Staff: Chris Price, AICP x7615  
David McGettigan, AICP x7189

**Attachments**

- A. Proposed Text Amendment
- B. Board Resolutions
- C. Board Initiation
- D. PC Resolution



**Attachment A – Proposed Text Amendment****ARTICLE I. – TERMS DEFINED****PART 100. – DEFINITIONS**

~~Data and Computer Services shall mean a use involving a building and premises in which the majority of the space is occupied by computers and/or telecommunications and related equipment and where information is processed, transferred and/or stored. May include data centers, data technology centers, internet service providers, network operations centers, web hosting facilities and other similar establishments primarily engaged in providing direct access through telecommunications networks to computer-held information.~~

Computer and Network Services shall mean a use involving a building/premise in which a majority of the use is occupied by people and staff engaged in activities related to work that is focused on supporting computers and/or telecommunications and related equipment where information is processed, transferred and/or stored. This includes satellite dish facilities, internet service providers, network operations centers and web teleconferencing facilities, but shall not include a Data Center.

Data Center shall mean a use involving a building/premise in which the majority of the use is occupied by computers and/or telecommunications and related equipment, including supporting equipment, where information is processed, transferred and/or stored.

Electric Substation shall mean an electrical installation which contains generation or power-conversion equipment and associated electric equipment and parts, such as switchboards, switches, wiring, fuses, circuit breakers, compensators and transformers.

**ARTICLE II. – ADMINISTRATION, PUBLIC USES AND USES OF A PUBLIC NATURE, GENERAL STANDARDS FOR PLANNED DEVELOPMENT DISTRICTS****PART 201. – PUBLIC USES AND USES OF A PUBLIC NATURE**

**Sec. 32-201.11. – Public facilities permitted in all zoning districts, subject to review in accordance with Code of Virginia, § 15.2-2232.**

1. Public facilities, except electric substations, may be located within any zoning district in Prince William County, subject to Code of Virginia, § 15.2-2232 and this chapter.
2. Electric Substations may be located in any zoning district within the Data Center Opportunity Zone Overlay District, subject to the public facility review requirements of the Code of Virginia, § 15.2-2232 and this chapter. Electric substations may be permitted by Special Use Permit within any zoning district outside of the Data Center Opportunity Zone Overlay District.

**ARTICLE III. – AGRICULTURAL AND RESIDENTIAL DISTRICTS****PART 306. – PLANNED DEVELOPMENT – PMR, PLANNED MIXED RESIDENTIAL DISTRICT**

**Sec. 32-306.11. – Secondary uses in residential areas.**

1. Neighborhood commercial and office uses shall be permitted as secondary uses at locations designated on the PMR Master Zoning Plan.
2. Secondary office uses except a data center use shall be permitted, by right, as provided in section 32-402.11, as permitted by section 32-402.12 as secondary uses, and as provided by section 32-402.13 by Special Use Permit.

**Attachment A – Proposed Text Amendment****PART 351. – VILLAGE (V) DISTRICT****Sec. 32-351.03. – Uses permitted by right.**

9. Computer and network services

10 9. Cultural arts center.

~~10. Data and computer services~~

[Subsequent uses renumbered]

**ARTICLE IV. – COMMERCIAL, OFFICE AND INDUSTRIAL DISTRICTS****PART 401. – COMMERCIAL DISTRICTS****B-1, General Business District****Sec. 32-401.11. – Uses permitted by right**

15. Computer and network services

16 15. Craft brewery (not to exceed production of 10,000 barrels per year. May or may not be associated with a restaurant).

17 16. Cultural arts center.

~~17. Data and computer services~~

[Subsequent uses renumbered]

**Sec. 32 – 401.13. – Special Uses**

10. Data Center

11 10. Donated materials collection center.

[Subsequent uses renumbered]

**B-2, Neighborhood Business District****Sec. 32-401.21. – Uses permitted by right**

10. Computer and network services

11 10. Craft brewery (not to exceed production of 10,000 barrels per year. May or may not be associated with a restaurant).

12 11. Cultural arts center.

~~12. Data and computer services~~

[Subsequent uses renumbered]

**PART 402. – OFFICE DISTRICTS****O(L), Office Low-Rise District****Sec. 32-402.11. – Uses permitted by right**

4. Computer and network services

5 4. Cultural arts center.

~~5. Data and computer services~~

6. Data Center within the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**Sec. 32-402.13. – Special uses**

4. Data Center outside the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**Attachment A – Proposed Text Amendment****O(H), Office High-Rise District****Sec. 32-402.21. – Uses permitted by right**

- 4. Computer and network services
- 5. Cultural arts center.
- ~~5. Data and computer services~~
- 6. Data Center within the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**Sec. 32-402.23. – Special uses**

- 3. Data Center outside the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**O(M), Office Mid-Rise District****Sec. 32-402.31. – Uses permitted by right**

- 4. Computer and network services
- 5. Cultural arts center.
- ~~5. Data and computer services~~
- 6. Data Center within the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**Sec. 32-402.33. – Special uses**

- 3. Data Center outside the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**O(F), Office/Flex District****Sec. 32-402.41. – Uses permitted by right**

- 6. Computer and network services
- 7. Cultural arts center.
- ~~7. Data and computer services~~
- 8. Data Center within the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**Sec. 32-402.43. – Special uses**

- 3. Data Center outside the Data Center Opportunity Zone Overlay District.  
[Subsequent uses renumbered]

**PART 403. – INDUSTRIAL DISTRICTS****M-1, Heavy Industrial District****Sec. 32-403.11. – Uses permitted by right**

- 16. Computer and network services.
- 17. Contractor or tradesman's shop (limited), no trash or refuse removal service.
- 18. Contractor or tradesman's shop, no trash or refuse removal service.
- ~~18. Data and computer services.~~
- 19. Data Center within the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**Sec. 32-403.13. – Special uses**

- 3. Data Center outside the Data Center Opportunity Zone Overlay District  
[Subsequent uses renumbered]

**Attachment A – Proposed Text Amendment****M-2, Light Industrial District****Sec. 32-403.21. – Uses permitted by right**

11. Computer and network services.

12 ~~44.~~ Contractor or tradesman's shop (limited), no trash or refuse removal service.

~~42. Data and computer services~~

13. Data Center within the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**Sec. 32-403.23. – Special uses**

3. Data Center outside the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**M/T, Industrial/Transportation District****Sec. 32-403.31. – Uses permitted by right**

18. Computer and network services.

19 ~~48.~~ Contractor or tradesman's shop (limited); no trash or refuse removal service.

20 ~~49.~~ Contractor or tradesman's shop (unlimited); no trash or refuse removal service.

~~20. Data and computer services.~~

21. Data Center within the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**Sec. 32-403.33. – Special uses**

3. Data Center outside the Data Center Opportunity Zone Overlay District

[Subsequent uses renumbered]

**ARTICLE V. – OVERLAY DISTRICTS****PART 500. – SPECIAL PUBLIC INTEREST OVERLAY DISTRICTS, GENERALLY****Sec. 32-500.01. – Purpose and intent**

The purpose of the Special Public Interest Overlay Districts established in the following sections is to protect and enhance certain specific lands and structures which, by virtue of their type or location, have characteristics which are distinct from lands and structures outside such overlay districts. It is the intent of the Board of County Supervisors to permit, insofar as possible, those uses and structures which would otherwise be permitted, provided that reasonable and necessary conditions are met which insure the protection and enhancement of said lands and structures. It is the further intent of the Board of County Supervisors to specifically protect and enhance the following:

1. Flood hazard areas.
2. Historic areas.
3. Designated highway corridors.
4. Chesapeake Bay preservation areas.
5. Airport safety.
6. Institutes of higher education.
7. Redevelopment.
8. Keeping of domestic fowl.
9. Data center opportunity zone

**Attachment A – Proposed Text Amendment**

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**Part 509. – Data Center Opportunity Zone Overlay District****Sec. 32-509.01. – Purpose and intent**

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately support the proposed use. This District continues the County's efforts to attract and advance high-tech industrial development while limiting negative impacts to communities.

**Sec. 32-509.02. – Establishment of Data Center Opportunity Zone Overlay District**

1. A Data Center Opportunity Zone Overlay District may be established by the Board of County Supervisors on lands in proximity to high voltage transmission lines of 115kv or more and planned or zoned for office or industrial uses.
2. A Data Center Opportunity Zone Overlay District shall be created and amended by ordinance upon resolution of the Board of County Supervisors. The boundaries shall be set using a map.
3. Said District shall overlay the existing zoning district. The regulations and requirements of the underlying zoning district and the Data Center Opportunity Zone Overlay District shall both apply, provided however, that when the regulations applicable to the Data Center Opportunity Zone Overlay District conflict with the regulations of an underlying zoning district, the Data Center Opportunity Zone Overlay District regulations shall apply.

**Sec. 32-509.03 – Uses permitted by right.**

All uses permitted by right in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District. Data centers shall be permitted by right in the Data Center Opportunity Zone Overlay District in the O(L), O(H), O(M), O(F), M-1, M-2, and M/T zoning districts and in designated office or industrial land bays in the PBD and PMD district.

**Sec. 32-509.04. – Secondary uses.**

All permitted secondary uses in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District.

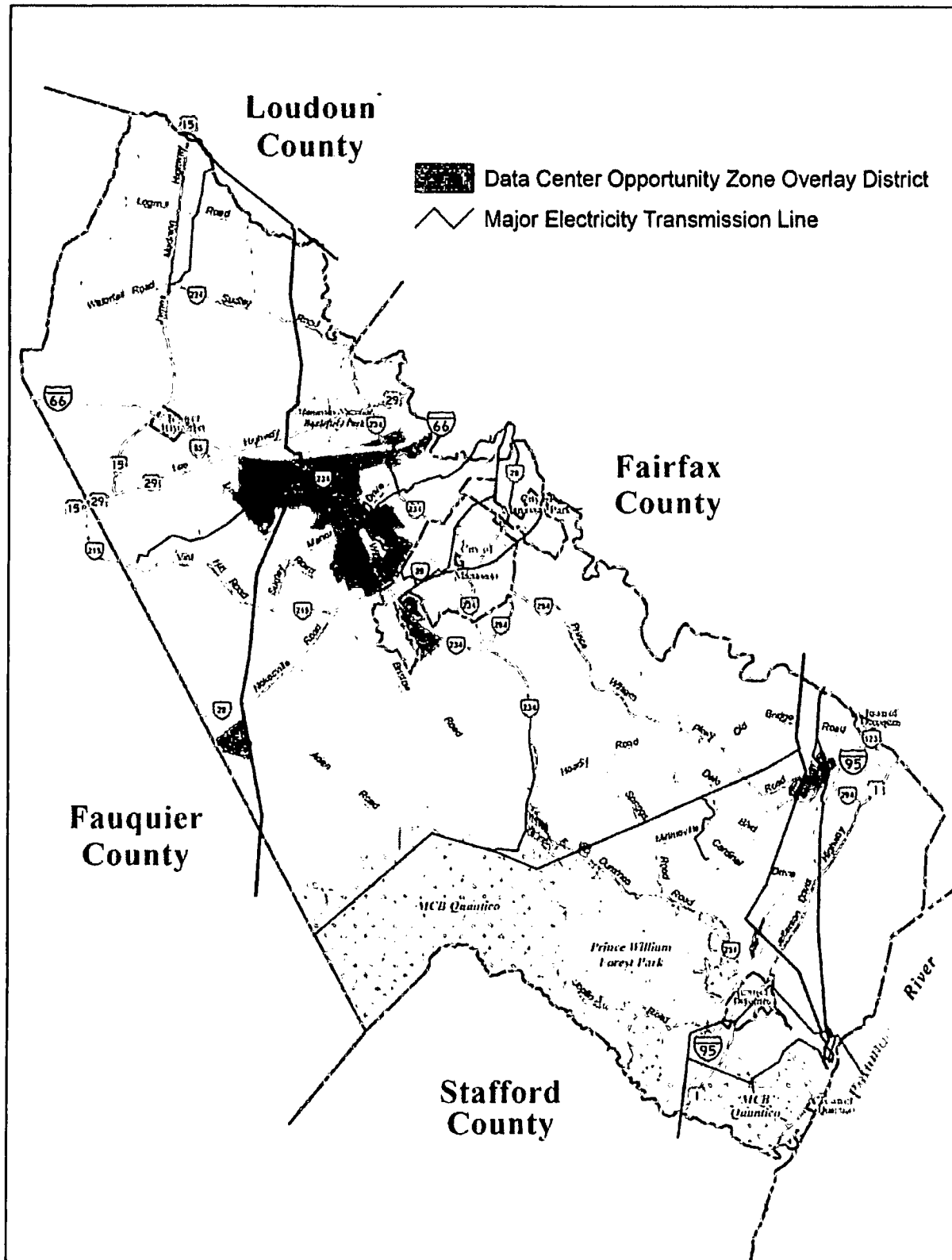
**Sec. 32-509.05. – Uses permitted by Special Use Permit.**

All permitted special uses in the underlying zoning district shall be permitted by special use permit in the Data Center Opportunity Zone Overlay District.

**Sec. 32-509.06. – Prohibited Districts**

Data centers shall be prohibited in agricultural, residential, PMR, B-2, B-3, and V districts.

## Attachment A – Proposed Text Amendment



**Attachment B – Board Resolutions**

**MOTION:   LAWSON**

**August 4, 2015  
Regular Meeting  
Res. No. 15-508**

**SECOND:   CANDLAND**

**RE:           SUPPORT PROTECTION OF PRIVATE PROPERTY, HISTORICAL  
RESOURCES AND COMMERCIAL INTERESTS FROM POTENTIAL  
NEGATIVE IMPACTS OF NEW HIGH VOLTAGE OVERHEAD  
TRANSMISSION LINES**

**ACTION:   APPROVED**

**WHEREAS**, Dominion Virginia Power (Dominion) has proposed placing additional high-voltage overhead and/or buried transmission lines through portions of Western Prince William County; and

**WHEREAS**, Section 56-46.1 of the Code of Virginia requires the State Corporation Commission (SCC) to consider, prior to approving any overhead transmission line, whether the line is consistent with the locality's comprehensive plan; and

**WHEREAS**, the Prince William Board of County Supervisors has directed the County Transportation Department to work with Virginia Department of Transportation (VDOT) to more efficiently utilize infrastructure in the public right-of-way, specifically Interstate 66 right-of-way, consistent with the Community Design Chapter of the Prince William County Comprehensive Plan calling for the "location of utility easements within public rights-of-way, and the collocation of utilities within easements, through County coordination with VDOT and local utility companies";

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors does hereby:

1.       Declare that Dominion and its regulator -- the State Corporation Commission -- in proposing and reviewing the application for the installation of high-voltage transmission lines in Prince William County, shall give full consideration and respect to the County's Comprehensive Plan and Zoning Ordinances in order to minimize the impact on its residents, businesses, environment, and historical importance;

2.       Declare its intent that any proposal to install new, or to re-fit, high-voltage transmission lines for Dominion's Haymarket 230kV Line and Substation Project shall be supported only if the lines are buried in the right-of-way of Interstate 66 as they pass from its intersection with US-29 through Haymarket and beyond;

**Attachment B – Board Resolutions**

August 4, 2015  
Regular Meeting  
Res. No. 15-508  
Page Two

3. Direct County staff to evaluate the Interstate 66 buried alternative, and to coordinate with VDOT, in furtherance of the County's express goal of supporting the installation of buried transmission lines. As required by Section 56-46.1B of the Code of Virginia, the State Corporation Commission must "consider (a) the costs and economic benefits likely to result from requiring the underground placement of the Line and (b) any potential impediments to timely construction of the Line," at the request of the local government, Prince William County;

4. Recommend that all costs, both direct and incidental, of burying the line be borne by Dominion and not by private property owners who through no fault or choice of their own reside or do business within close proximity to the buried line;

5. Give notice that it will not enter into agreement with Dominion to assess the costs of line burial under the provisions of Section 15.2-2404F of the Code of Virginia;

6. Require that any proposal by Dominion to construct a new electric substation shall first be submitted to the Prince William County Planning Commission for consideration and public hearings, as required by Section 15.2-2232 of the Code of Virginia;

7. Reaffirm and renew its commitment to LU3.14 of the Long-Range Land Use Plan, which designates the corridors that all future electric utility lines of 150 kilovolts or more should follow, and to contain high-voltage transmission lines to designated corridors as detailed in LU3.14 of the Long-Range Land Use Plan, in order to protect private property and preserve the County's distinctive cultural and historic inheritance, including, but not limited to, the 52 county-registered historic sites; Historic and Prehistoric High-Sensitivity Areas identified in the 2008 Comprehensive Plan and updated subsequently, including those in residential areas; high quality open space, such as existing and planned off-road trails, open space easements, conservation easements, public school open space, and resource protection areas; and both the county's designated Rural Crescent urban growth boundary and unique Historic Overlay District;

8. Declare its intent to immediately initiate a zoning text amendment to incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties. This amendment will continue the County's efforts to advance commercial and industrial development;



**Attachment B – Board Resolutions**

**August 4, 2015**  
**Regular Meeting**  
**Res. No. 15-508**  
**Page Three**

9. Direct that this Resolution be forwarded to Dominion Virginia Power, the Virginia State Corporation Commission, State Delegate Robert "Bob" G. Marshall, State Delegate Timothy D. Hugo, State Delegate David I. Ramadan, State Senator Richard H. Black, State Senator Richard H. Stuart, Virginia State Attorney General Mark Herring, Virginia State Governor Terry McAuliffe, US Senator Timothy M. Kaine, US Congresswoman Barbara Comstock, US Senator Mark Warner, US Congressman Rob Wittman, and Haymarket town council representatives: Mayor David Leake, Vice-Mayor Steve Aitken, Matt Caudle, Chris Morris, Joe Pasanello, Pam Swinford and Kurtis Woods.

DISCLOSURE PRIOR TO VOTE: John D. Jenkins

**Votes:**

**Ayes:** Caddigan, Candland, Jenkins, Lawson, May, Nohe, Principi, Stewart

**Nays:** None

**Absent from Vote:** None

**Absent from Meeting:** None

ATTEST: \_\_\_\_\_

  
Clerk to the Board

**MOTION: JENKINS**

**September 8, 2015**

**SECOND: CANDLAND**

**Regular Meeting**

**Res. No. 15-527**

**RE: INITIATE A ZONING TEXT AMENDMENT TO INCORPORATE APPROPRIATE ZONING REQUIREMENTS FOR DATA CENTERS, WHICH WOULD ADDRESS THE INFRASTRUCTURE NECESSARY TO SUPPORT SUCH USES AND THE POTENTIAL IMPACTS TO OTHER PROPERTIES – COUNTYWIDE**

**ACTION: APPROVED**

**WHEREAS**, in accordance with Title 15.2-2285 of the Code of Virginia, Ann., the Board of County Supervisors may amend the Zoning Ordinance whenever it determines that public necessity, health, safety, convenience, general welfare and good zoning practice necessitate such change; and

**WHEREAS**, this Zoning Text Amendment is intended to incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties; and

**WHEREAS**, this proposed Zoning Text Amendment will continue the County's efforts to advance commercial and industrial development; and

**WHEREAS**, amending the Zoning Ordinance for the above-referenced issue is required by public necessity, convenience, general welfare and good zoning practice, and is consistent with the intent of Title 15.2-2283 of the Code of Virginia, Ann.; and

**WHEREAS**, on August 4, 2015, Supervisor Lawson, in a resolution to support protection of private property, historical resources and commercial interests from potential negative impacts of new high voltage overhead transmission lines, requested that staff prepare for the Board of County Supervisors' consideration an initiation for a zoning text amendment that would incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties; and

**WHEREAS**, staff was directed to seek input from stakeholders representing community and business perspectives; and

**WHEREAS**, this will authorize staff time and resources necessary for research, analysis and to conduct public hearings with the Planning Commission and the Board of County Supervisors; and

September 8, 2015  
Regular Meeting  
Res. No. 15-527  
Page Two

WHEREAS, the Prince William Board of County Supervisors believes that public general welfare, as well as good zoning practices are served by the initiation of this Zoning Text Amendment;

NOW, THEREFORE, BE IT RESOLVED that the Prince William Board of County Supervisors does hereby initiate a Zoning Text Amendment to the Prince William County Zoning Ordinance to incorporate appropriate zoning requirements for data centers, which would address the infrastructure necessary to support such uses and the potential impacts to other properties.

Votes:

Ayes: Caddigan, Candland, Jenkins, Lawson, May, Nohe, Principi, Stewart

Nays: None

Absent from Vote: None

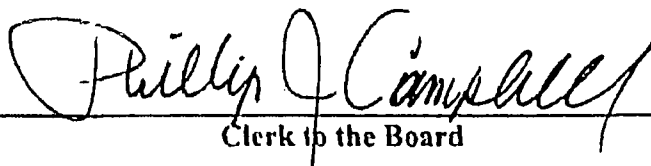
Absent from Meeting: None

**For Information:**

Planning Director

County Attorney

ATTEST: \_\_\_\_\_

  
Clerk to the Board

**Attachment D – Planning Commission Resolution****PLANNING COMMISSION RESOLUTION****MOTION: TAYLOR****April 20, 2016  
Regular Meeting  
Res. No. 16-028****SECOND: MCKAY****RE: ADOPT ZONING TEXT AMENDMENT DPA #2016-00003, DATA  
CENTER OPPORTUNITY ZONE – COUNTYWIDE****ACTION: RECOMMEND ADOPTION**

**WHEREAS**, in accordance with Title 15.2-2285 of the Code of Virginia, Ann., the Board of County Supervisors may amend the Zoning Ordinance whenever it determines that public necessity, health, safety, convenience, general welfare and good zoning practice necessitate such change; and

**WHEREAS**, this zoning text amendment is intended to incorporate appropriate zoning requirements for data centers, which would address the infrastructure necessary to support such uses and the potential impacts to other properties; and

**WHEREAS**, this proposed Zoning Text Amendment will continue the County's efforts to advance commercial and industrial development; and

**WHEREAS**, amending the Zoning Ordinance for the above-referenced issue is required by public necessity, convenience, general welfare and good zoning practice, and is consistent with the intent of Title 15.2-2283 of the Code of Virginia, Ann; and

**WHEREAS**, on August 4, 2015 Supervisor Lawson, in a resolution to support protection of private property, historical resources and commercial interests from potential negative impacts of new high voltage overhead transmission lines requested that staff prepare for Board of County Supervisors' consideration an initiation for a zoning text amendment that would incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties; and

**WHEREAS**, on September 8, 2016 the Board of County Supervisors initiated a zoning text amendment to incorporate appropriate zoning requirements for data centers through Res. No. 15-527; and

**WHEREAS**, the Prince William County Planning Commission duly ordered, advertised, and held a public hearing on April 20, 2016 at which time public testimony was received and the merits of the above-reference zoning text amendment were considered; and

**WHEREAS**, the Prince William County Planning Commission believes that public general welfare, as well as, good zoning practices are served by the adoption of this Zoning Text Amendment;

**Attachment D – Planning Commission Resolution**

April 20, 2016  
Regular Meeting  
Res. No. 16-028  
Page Two

170510142

**NOW, THEREFORE, BE IT RESOLVED**, that the Prince William County Planning Commission does hereby recommend adoption of Alternative A - Zoning Text Amendment #DPA2016-00003, Data Center Opportunity Zone to the Prince William County Zoning Ordinance, subject to the following change:

**Sec. 32-509.01 – Purpose and Intent:**

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately ~~necessary to~~ support the proposed use.

**Votes:**

**Ayes:** Berry, Bryant, Fry, Holley, McKay, Milne, Taylor, Vanegas

**Nays:** None

**Absent from Vote:** None

**Absent from Meeting:** None

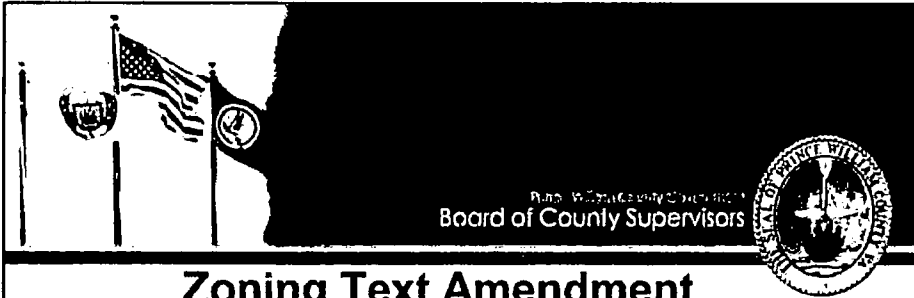
**MOTION CARRIED**

Attest:

  
\_\_\_\_\_  
Frances Bridges  
Clerk to the Planning Commission

5/3/2016

170610142



**Zoning Text Amendment**  
**#DPA2016-00003**  
**Data Center Opportunity Zone**

**Countywide**  
*Chris Price, AICP*  
*Planning Office*

## History

- Data Center proposed in western part of County
- Requires more power than can be provided through existing distribution lines
- Dominion Power has proposed a new transmission line to western PWC
- Significant community opposition to the power line
- BOCS resolution

## BOCS Resolution

- Provides BOCS position with regards to the proposed transmission line
- Reaffirms that any new substation shall be submitted to the PC for consideration
- Declared intent to initiate a zoning text amendment

## Zoning Text Amendment Initiation

- Incorporate appropriate zoning requirements for data centers which would address the infrastructure necessary to support such uses and the potential impacts to other properties
- Continue the County's efforts to advance commercial and industrial development
- Seek input from stakeholders representing community and business perspectives

## Areas to be addressed

- Land Use compatibility
- Economic Development goals
- Infrastructure needs

## Identified Solution

- Definitions
- Overlay District
- Substations



## Proposed Language - Definitions

- Computer and Network Services shall mean a use involving a building/premise in which a majority of the use is occupied by people and staff engaged in activities related to work that is focused on supporting computers and/or telecommunications and related equipment where information is processed, transferred and/or stored. This includes satellite dish facilities, internet service providers, network operations centers and web teleconferencing facilities, but shall not include a Data Center.
- Data Center shall mean a use involving a building/premise in which the majority of the use is occupied by computers and/or telecommunications and related equipment, including supporting equipment, where information is processed, transferred and/or stored.
- Electric Substation shall mean an electrical installation which contains generation or power-conversion equipment and associated electric equipment and parts, such as switchboards, switches, wiring, fuses, circuit breakers, compensators and transformers.

## Proposed Language – Overlay Districts

### Part 509. – Data Center Opportunity Zone Overlay District

#### Sec. 32-509.01. – Purpose and Intent

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately support the proposed use. This District continues the County's efforts to attract and advance high-tech industrial development while limiting negative impacts to communities.

#### Sec. 32-509.02. – Establishment of Data Center Opportunity Zone Overlay District

1. A Data Center Opportunity Zone Overlay District may be established by the Board of County Supervisors on lands in proximity to high voltage transmission lines of 115kv or more and planned or zoned for office or industrial uses.
2. A Data Center Opportunity Zone Overlay District shall be created and amended by ordinance upon resolution of the Board of County Supervisors. The boundaries shall be set using a map.
3. Said District shall overlay the existing zoning district. The regulations and requirements of the underlying zoning district and the Data Center Opportunity Zone Overlay District shall both apply, provided however, that when the regulations applicable to the Data Center Opportunity Zone Overlay District conflict with the regulations of an underlying zoning district, the Data Center Opportunity Zone Overlay District regulations shall apply.

## Proposed Language – Overlay District

### Sec. 32-509.03 - Uses permitted by right.

All uses permitted by right in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District. Data centers shall be permitted by right in the Data Center Opportunity Zone Overlay District in the O(L), O(H), O(M), O(F), M-1, M-2, and M/T zoning districts and in designated office or industrial land bays in the PBD and PMD district.

### Sec. 32-509.04. - Secondary uses.

All permitted secondary uses in the underlying zoning district shall be permitted in the Data Center Opportunity Zone Overlay District.

### Sec. 32-509.05. - Uses permitted by Special Use Permit.

All permitted special uses in the underlying zoning district shall be permitted by special use permit in the Data Center Opportunity Zone Overlay District.

### Sec. 32-509.06. – Prohibited Districts

Data centers shall be prohibited in agricultural, residential, PMR, B-2, B-3, and V districts.

Ord. 17-015

19

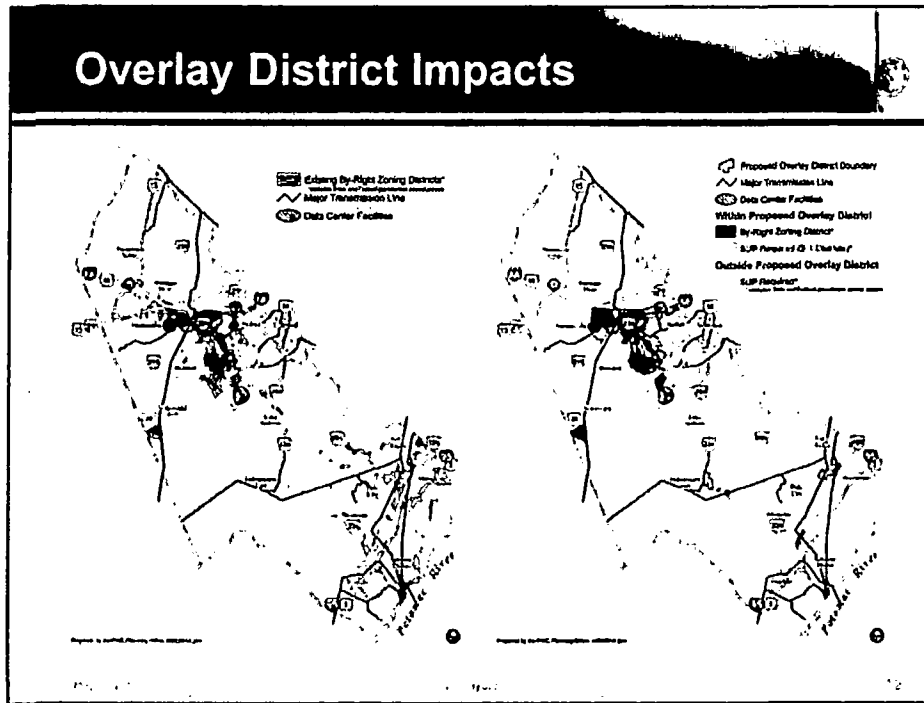
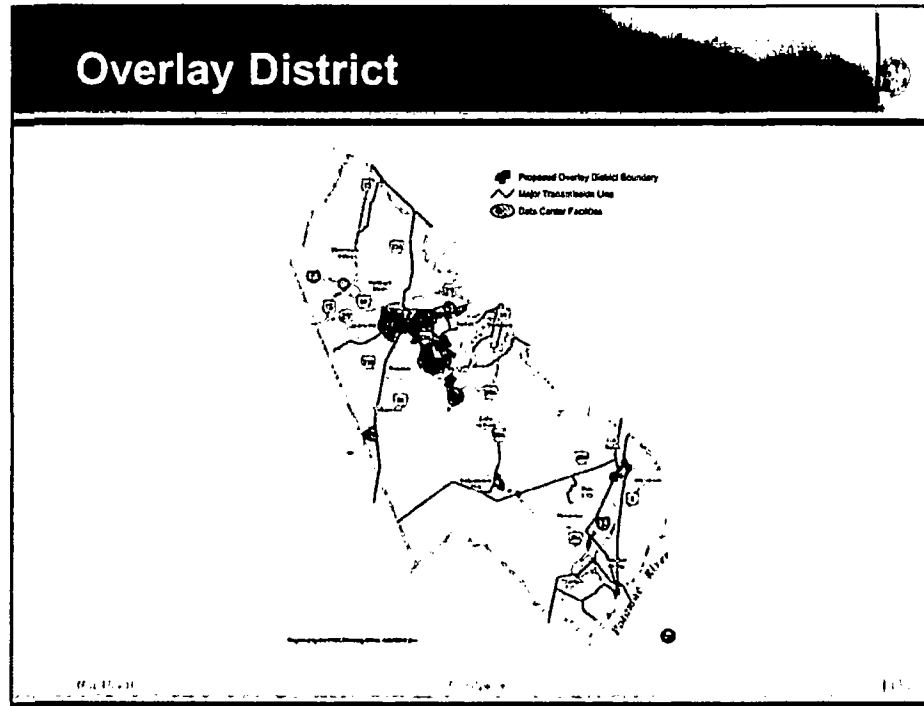
## Proposed Language - Substations

**Sec. 32-201.11. - Public facilities permitted in all zoning districts, subject to review in accordance with Code of Virginia, § 15.2-2232.**

1. Public facilities, except electric substations, may be located within any zoning district in Prince William County, subject to Code of Virginia, § 15.2-2232 and this chapter.
2. Electric Substations may be located in any zoning district within the Data Center Opportunity Zone Overlay District, subject to the public facility review requirements of the Code of Virginia, § 15.2-2232 and this chapter. Electric substations may be permitted by Special Use Permit within any zoning district outside of the Data Center Opportunity Zone Overlay District.

Ord. 17-015

110



## Considerations

- Data centers remain a key targeted industry
- Does not mean that new transmission lines will not be necessary to serve future clients
- Existing and permitted facilities are vested per state code
- Vast majority of land which would now require SUP is zoned for commercial uses along commercial corridors

May 10, 2016

13

## DORAC Recommendation

- DCSM/Zoning Ordinance Review Committee
  - ◆ Add Data Center to B-1 as a Special Use
  - ◆ Remove the Electric Substation SUP requirement (Alternative B)

May 10, 2016

14

5/3/2016

170610142

## Planning Commission Recommendation

- Recommend adoption of the amendment with the following change:

- ◆ **Sec. 32-509.01. - Purpose and intent**

The Data Center Opportunity Zone Overlay District was created for the purpose of promoting development of data centers within areas of the County where there is existing infrastructure that could adequately ~~necessary to support the~~ proposed use.

Staff concurs.

## Historical Loads (in MW)

ZONE	8/3/2006	8/8/2007	6/10/2008	8/10/2009	7/23/2010	7/22/2011	6/29/2012	7/18/2013	7/02/2014	6/23/2015	7/25/2016	% Annual Growth between 2006-2016
Arl/Alex (181)	1842	1849	1787	1720	1788	1912	1835	1785	1771	1717	1800	-0.23
Fairfax (182)	2922	2989	3015	2864	3062	3283	3237	3165	3131	3143	3411	1.56
Woodbridge (183)	1603	1661	1596	1521	1663	1830	1857	1761	1773	1773	1857	1.48
TOTAL (MW)	6367	6500	6398	6105	6513	7025	6928	6712	6675	6633	7067	1.05
% Change Year-to-Year	n/a	2.09	-1.56	-4.58	6.68	7.87	-1.39	-3.12	0.54	-0.63	6.55	

## Projected Loads (in MW)\*

ZONE	7/25/2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	% Annual Growth between 2006-2016
Arl/Alex (181)	1800	1762	1760	1752	1727	1711	1704	1697	1699	1693	1690	-0.63
Fairfax (182)	3411	3468	3639	3739	3858	4015	3988	3993	4030	4087	4050	1.73
Woodbridge (183)	1857	1894	1974	2059	2025	2042	2108	2144	2177	2170	2263	2.00
TOTAL (MW)	7067	7124	7373	7550	7610	7768	7800	7834	7906	7950	8003	1.25
% Change Year-to-Year	n/a	0.80	3.50	2.40	0.79	2.08	0.41	0.44	0.92	0.56	0.67	

\* Includes block load adjustments to peak load

## I. NECESSITY FOR THE PROPOSED PROJECT

- C. **Describe the feasible alternatives, if any, for meeting the identified need without constructing the proposed project. Explain why these alternatives were rejected.**

Response: The existing 115 kV Lines #18 and #145 play an important role in the reliable operation of the Company's electric transmission system, providing service to three NOVEC DPs, which in turn serve approximately 11,360 NOVEC customers. As detailed in Section I.A, the Company has recognized that the Rebuild Project is necessary to replace aging infrastructure at the end of its service life with infrastructure consistent with current NESC standards. Further, replacing that aging 115 kV infrastructure with 230 kV design will enable the Company to maintain the overall long-term reliability of its transmission system while also allowing for flexibility to operate at 230 kV in the future consistent with prudent utility practice. Because the existing corridor is adequate to construct the proposed Rebuild Project, no new real estate rights are needed; therefore, any alternative to this Rebuild Project requiring the addition of new facilities in new rights-of-way at significant expense was not considered. In addition, undergrounding the Rebuild Project has been rejected by the Company due to the need for additional right-of-way to accommodate transition stations, as well as greater costs, environmental impacts, reduced reliability and added construction time inconsistent with the immediate need to replace the existing infrastructure. Further, there is already an existing overhead transmission line corridor that also contains 230 kV Lines #2022 and #237 for all but 0.8 mile of the Proposed Route of the Rebuild Project, which will remain in place after completion of the Rebuild Project.

Because the electrical alternatives to the proposed Rebuild Project follow the same Proposed Route as the Rebuild Project, these alternatives will not be individually addressed in Sections II-V.

### **(1) Construct a 115 kV Overhead Alternative along the Proposed Route ("115 kV Alternative"):**

The 115 kV Alternative would rebuild the same 8.5-mile segment of Lines #18 and #145 along the same route as the Proposed Route. The same number of structures removed under the Rebuild Project would be removed under the 115 kV Alternative. However, unlike the Rebuild Project, this alternative would utilize 115 kV design. Specifically, the 115 kV Alternative would remove 125 structures, including three-pole double circuit H-frames and individual single circuit H-frames, and replace those structures primarily with 115 kV monopole structures, built to current NESC standards. The right-of-way configuration would be similar to that described for the Rebuild Project and no new right-of-way would be needed for this alternative. Additionally, the structures would be approximately 10 feet

shorter on average (96 feet versus the 106 feet) than the existing 230 kV towers in the right-of-way.

If rebuilt under the 115 kV Alternative, this segment of Lines #18 and #145 would not be capable of being operated at 230 kV when the future need arises without an entire wreck and rebuild of this segment of the rebuilt lines, at a cost in excess of the proposed Rebuild Project, unless another alternative satisfying the need could be identified. Further, at 230 kV, the Rebuild Project would provide incrementally-improved reliability and operational benefits compared to the 115 kV Alternative and would replace the same aging infrastructure. This alternative is estimated to cost approximately \$15.5 million, which is approximately \$3.3 million less than the proposed Rebuild Project utilizing 230 kV design. At 15 months, it would take the same amount of time to construct the 115 kV Alternative as the Rebuild Project.

The 115 kV Alternative was not selected by the Company as the proposed project because prudent utility practice requires the Company to plan for the foreseeable need for 230 kV operations in the northern Virginia area in the future. While the 115 kV Alternative is less expensive than the Rebuild Project and would offer slightly reduced structure heights, it would also result in similar incremental impacts as the Rebuild Project, and would not allow for flexibility to operate at 230 kV in the future.

**(2) Construct a 115 kV alternative along the Proposed Route utilizing primarily 115 kV H-frame structures (“115 kV H-Frame Design Option”)**

The 115 kV H-Frame Design Option would replace the existing structures with two separate, parallel 115 kV weathering steel H-frames for the 8.5-mile Rebuild Project length of Lines #18 and #145. The structure heights would be on average 10 feet taller than the existing wooden pole structures, due to the required planning ampacity,<sup>11</sup> but generally would be shorter than the proposed Rebuild Project. This design option was rejected because it would require new right-of-way to accommodate the layout of the two separate 115 kV circuits.

**(3) Construct a 230 kV alternative along the Proposed Route utilizing primarily 230 kV H-frame structures (“230 kV H-Frame Design Option”)**

The 230 kV H-Frame Design Option would replace the existing structures with two separate, parallel 230 kV weathering steel H-frames for the 8.5-

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<sup>11</sup> The “planning ampacity” relates to the MVA rating requested by the Company’s Planning group. The conductor and maximum design temperature rating control what ampacity can be supplied, which is tied to the MVA. In other words, the required planning ampacity is the conductor rating for the requested line loading (or ampacity).



mile Rebuild Project length of Lines #18 and #145. This design would be taller than the existing wood structures, but shorter than the existing 230 kV towers in the transmission corridor, and generally shorter than the proposed Rebuild Project. This design option was rejected because it would require new right-of-way to accommodate the layout of the two separate 230 kV circuits.

## I. NECESSITY FOR THE PROPOSED PROJECT

### D. Describe any lines or facilities which will be removed, replaced, or taken out of service upon completion of the proposed project.

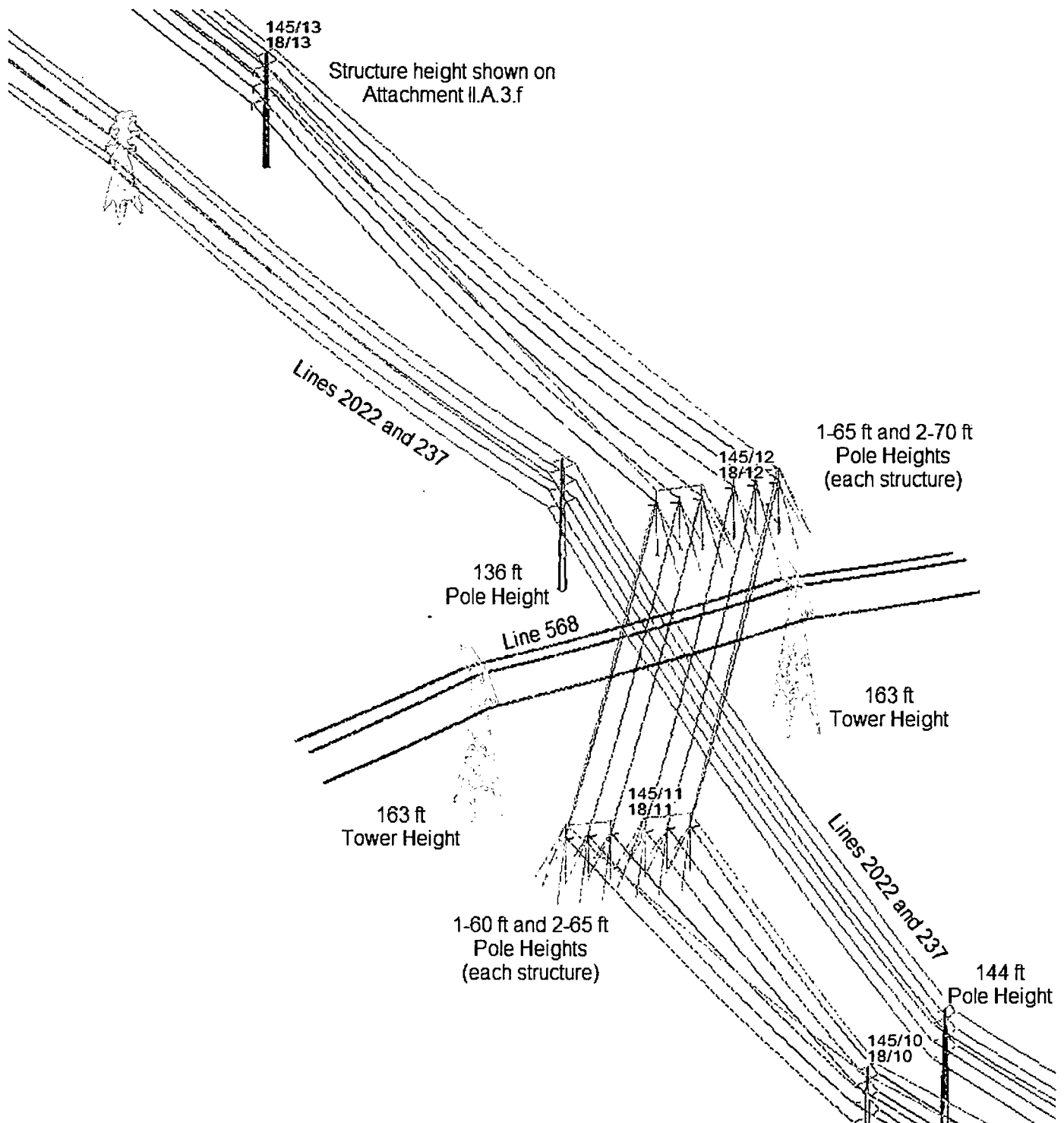
Response: The Rebuild Project will remove one double circuit galvanized steel lattice H-frame, 28 double circuit three-pole wood and weathering steel H-frames, 66 single circuit two-pole wood and weathering steel H-frames, two single circuit two-pole weathering steel structures, 22 single circuit three-pole wood structures, and six two-column galvanized switch structures from existing Lines #18 and #145. Refer to Attachments II.A.3.a, c, d, e, g, and i for typical structure arrangements. The backbone structure and next lattice structure, both inside the Possum Point Station fence, will remain in place and be reused for this Rebuild Project, as will three 230 kV weathering steel structures adjacent to the coal ash pond area on the Company's Possum Point Power Station site. Attachments II.A.3.c and d show the existing double circuit poles on Lines #18 and #145 that will remain in place and be reconducted. The remaining 125 existing structures will be replaced with one double circuit galvanized steel H-frame structure, 44 double circuit single galvanized steel pole structures, seven single circuit galvanized poles, two galvanized H-frame structures, six galvanized switch structures, and 28 single circuit weathering steel direct embed structures. Refer to Attachments II.A.3.b, f, h, and j. The section directly after the ash ponds (Attachment II.A.3.f) transitions from the existing double circuit weathering steel poles to parallel single circuit three-pole weathering steel structures to cross under two 230 kV lines and a 500 kV line while still on the Company's Possum Point Power Station site. This area is detailed in a 3D view in Attachment I.D.1. In total, 125 existing structures will be removed, and 88 new structures will be installed within the scope of the Rebuild Project. A list of the proposed structures is provided in Attachment I.D.2.

The first 0.7-mile segment of Lines #18 and #145 leaving the Possum Point Station will be rebuilt to 115 kV standards (Attachment II.A.3.b). This segment of the transmission lines heads towards the 115 kV switch yard at the Possum Point Power Station site. At such time as the line is required to convert to 230 kV, a new section of line will be built to head into a 230 kV termination point determined at that time at the Possum Point Power Station site. This segment of the line will also have a different conductor, as described below.

The existing 3-phase single 636 ACSR (24/7) and twin-bundled 721 ACAR conductor will be replaced with twin-bundled 795 ACSR (26/7) for 7.7 miles of double circuit three-phase transmission lines (Attachments II.A.3.c, d, f, h, and j). On the initial 0.7-mile segment leaving the Possum Point Station (the existing 115 kV switch yard at the Possum Point Power Station site), new single 636 ACSR (24/7) three-phase conductor will be installed on both Lines #18 and #145 (Attachment II.A.3.b). The existing 3/8 steel static wire

and 3#6 Alumoweld shield wire will be replaced with fiber optic shield wires throughout the entire length of the lines and 3#6 Alumoweld where additional shielding is needed. For the remaining approximately 0.1 mile of individual lines tapping into the three NOVEC DPs, existing 636 ACSR (24/7), 336 ACSR (26/7), and 246.9 AAAC will all be replaced with twin-bundled 636 ACSR (24/7). See Attachment II.A.4.a for a 3D view of the tap arrangements for NOVEC's DPs.

3D VIEW OF LINES CROSSING OVER LINES #18 AND #145  
ON THE COMPANY'S POSSUM POINT POWER STATION SITE



Note: Structure heights approximate, subject to final engineering.

Structure Number*	Proposed Structure Type*	Notes
18/1A, 145/1A	Galvanized Lattice DC BB**	On Dominion Property
18/1, 145/1	Galvanized DC Lattice H-frame**	On Dominion Property
18/2, 145/2	Galvanized DC H-frame	On Dominion Property
18/2A	Weathering Steel SC 3-pole	On Dominion Property
145/2A	Weathering Steel SC 3-pole	On Dominion Property
18/3	Weathering Steel SC H-frame	On Dominion Property
145/3	Weathering Steel SC H-frame	On Dominion Property
18/4	Weathering Steel SC 3-pole	On Dominion Property
145/4	Weathering Steel SC 3-pole	On Dominion Property
18/5	Weathering Steel SC H-frame	On Dominion Property
145/5	Weathering Steel SC H-frame	On Dominion Property
18/6	Weathering Steel SC 3-pole	On Dominion Property
145/6	Weathering Steel SC 3-pole	On Dominion Property
18/7	Weathering Steel SC 3-pole	On Dominion Property
145/7	Weathering Steel SC 3-pole	On Dominion Property
18/8, 145/8	Weathering Steel DC pole**	On Dominion Property
18/9, 145/9	Weathering Steel DC pole**	On Dominion Property
18/10, 145/10	Weathering Steel DC pole**	On Dominion Property
18/11	Weathering Steel SC 3-pole	On Dominion Property
145/11	Weathering Steel SC 3-pole	On Dominion Property
18/12	Weathering Steel SC 3-pole	On Dominion Property
145/12	Weathering Steel SC 3-pole	On Dominion Property
18/13, 145/13	Galvanized DC pole	On Dominion Property
18/14, 145/14	Galvanized DC pole	On existing ROW
18/15, 145/15	Galvanized DC pole	On existing ROW
18/16, 145/16	Galvanized DC pole	On existing ROW
18/17, 145/17	Galvanized DC pole	On existing ROW
18/18, 145/18	Galvanized DC pole	On existing ROW
18/19, 145/19	Galvanized DC pole	On existing ROW
18/20, 145/20	Galvanized DC pole	On existing ROW
18/21, 145/21	Galvanized DC pole	On existing ROW
18/22, 145/22	Galvanized DC pole	On existing ROW
18/23, 145/23	Galvanized DC pole	On existing ROW
18/24, 145/24	Galvanized DC pole	On existing ROW
18/25, 145/25	Galvanized DC pole	On existing ROW
18/26, 145/26	Galvanized DC pole	On existing ROW
18/27, 145/27	Galvanized DC pole	On existing ROW
18/28, 145/28	Galvanized DC pole	On existing ROW
18/29, 145/29	Galvanized DC pole	On existing ROW
18/30, 145/30	Galvanized DC pole	On existing ROW
18/31, 145/31	Galvanized DC pole	On existing ROW
18/32, 145/32	Galvanized DC pole	On existing ROW
18/33, 145/33	Galvanized DC pole	On existing ROW
18/34, 145/34	Galvanized DC pole	On existing ROW
18/35, 145/35	Galvanized DC pole	On existing ROW
18/36, 145/36	Galvanized DC pole	On existing ROW
18/37, 145/37	Galvanized DC pole	On existing ROW
18/38, 145/38	Galvanized DC pole	On existing ROW
18/39, 145/39	Galvanized DC pole	On existing ROW
18/40, 145/40	Galvanized DC pole	On existing ROW

**LEGEND**

DC = Double Circuit  
 SC = Single Circuit

\* Subject to change pending final engineering.  
 \*\* Existing structures to remain in place.

Structure Number*	Proposed Structure Type*	Notes
18/41	Galvanized SC pole	On existing ROW
145/41	Galvanized SC pole	On existing ROW
18/42, 145/42	Galvanized DC pole	On existing ROW
18/43, 145/43	Galvanized DC pole	On existing ROW
18/44, 145/44	Galvanized DC pole	On existing ROW
145/44A	Galvanized SC Switch Structure	On existing ROW
145/45	Weathering Steel SC H-frame	On existing ROW
18/45	Galvanized SC pole	On existing ROW
145/46	Weathering Steel SC H-frame	On existing ROW
145/46A	Galvanized SC Switch Structure	On existing ROW
18/47, 145/47	Galvanized DC pole	On existing ROW
18/48, 145/48	Galvanized DC pole	On existing ROW
18/49, 145/49	Galvanized DC pole	On existing ROW
18/50, 145/50	Galvanized DC pole	On existing ROW
18/51, 145/51	Galvanized DC pole	On existing ROW
18/52, 145/52	Galvanized DC pole	On existing ROW
18/53, 145/53	Galvanized DC pole	On existing ROW
18/54	Galvanized H-frame	On existing ROW
145/54	Galvanized SC pole	On existing ROW
18/54A	Galvanized SC Switch Structure	On existing ROW
18/55, 145/55	Galvanized DC pole	On existing ROW
145/56	Galvanized SC pole	On existing ROW
18/56	Weathering Steel SC H-frame	On existing ROW
18/56A	Galv. SC Switch Structure	On existing ROW
18/57, 145/57	Galvanized DC pole	On existing ROW
18/58, 145/58	Galvanized DC pole	On existing ROW
18/59, 145/59	Galvanized DC pole	On existing ROW
18/60, 145/60	Galvanized DC pole	On existing ROW
18/61, 145/61	Galvanized DC pole	On existing ROW
145/62	Galvanized SC pole	On existing ROW
18/62	Weathering Steel SC H-frame	On existing ROW
18/62A	Galvanized SC Switch Structure	On existing ROW
18/63	Weathering Steel SC H-frame	On existing ROW
145/63	Galvanized SC pole	On existing ROW
145/64	Weathering Steel SC H-frame	On existing ROW
18/63A	Galvanized SC Switch Structure	On existing ROW
18/64	Weathering Steel SC H-frame	On existing ROW
145/301	Weathering Steel SC 3-pole	On existing ROW (Country Club DP Tap)
145/302	Weathering Steel SC 3-pole	On existing ROW (Country Club DP Tap)
18/201	Weathering Steel SC 3-pole	On existing ROW (Garber DP Tap)
18/202	Weathering Steel SC 3-pole	On existing ROW (Garber DP Tap)
18/101	Weathering Steel SC 3-pole	On existing ROW (Smoketown DP Tap)
18/102	Weathering Steel SC 3-pole	On existing ROW (Smoketown DP Tap)

**LEGEND**

DC = Double Circuit

SC = Single Circuit

\* Subject to change pending final engineering.

**I. NECESSITY FOR THE PROPOSED PROJECT**

- E. Provide a system map of suitable scale showing the location and voltage of the Company's transmission lines, substations, generating facilities, etc., which would affect or be affected by the new transmission line and are relevant to the necessity for the proposed line. Clearly, label on this map all points referenced in the necessity statement.**

Response: See Attachment I.E.1 and Attachment I.E.2.







**I. NECESSITY FOR THE PROPOSED PROJECT**

**F. Provide the desired in-service date of the proposed project and the estimated construction time.**

Response: There is an immediate and current need for the Rebuild Project. If the Company can obtain Commission authorization by March 2018 and the necessary outages, then the Company anticipates that the Rebuild Project could be in service by December 2019.

The estimated construction time for this Rebuild Project is 15 months. The Company anticipates that all engineering, material procurement, and construction permitting will be completed by June 2018, with construction completed by December 2019.

**I. NECESSITY FOR THE PROPOSED PROJECT****G. Provide the estimated cost of the project.**

Response: The estimated cost of the Rebuild Project is approximately \$18.8 million for transmission line work. These costs are in 2017 dollars. There are minimal station costs associated with the Company's Rebuild Project totaling approximately \$124,000.

**I. NECESSITY FOR THE PROPOSED PROJECT**

**H. In addition to all other information required by these guidelines, applications for approval to construct facilities and transmission lines inter-connecting a Non Utility Generator (NUG) and a utility shall include the following information.**

- 1. The full name of the NUG as it appears in its contract with the utility and the dates of the initial contract and any amendments;**
- 2. A description of the arrangements for financing the facilities, including information on the allocation of costs between the utility and the NUG:**
- 3. a. For Qualifying Facilities (QFs) certificated by Federal Energy Regulatory Commission (FERC) order, provide the QF or docket number, the dates of all certification or recertification orders, and the citation to FERC Reports, if available;**
  - b. For self-certificated QFs, provide a copy of the notice filed with the FERC;**
- 4. In addition to the information required in 3a or 3b, provide the project number and project name used by the FERC in licensing hydroelectric projects, also provide the dates of all orders and citations to FERC Reports, if available; and**
- 5. If the name provided in 1 above differs from the name provided in 3 above, give a full explanation.**

Response: Not applicable.

**I. NECESSITY FOR THE PROPOSED PROJECT**

- I. Describe the new and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations and other ground facilities associated with the proposed project.**

Response: The Company's Possum Point Station where Lines #18 and #145 originate is located on the Company's Possum Point Power Station site. Otherwise, there are no new or existing generating facilities associated with the Rebuild Project, and no new substations, switching stations or distribution facilities associated with the Rebuild Project.

For a description of load centers to be served, see Sections I.A and I.B.

## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (ROW)

1. Provide the length of the proposed corridor and viable alternatives;

Response: The Proposed Route for the Rebuild Project is approximately 8.5 miles of existing transmission line corridor currently occupied by the existing 115 kV transmission Lines #18 and #145 within the existing right-of-way, including 0.1 mile of existing right-of-way for individual lines tapping three NOVEC DPs, and existing Company-owned power station property. The route is entirely within Prince William County and originates at the Possum Point Station located on the Company's Possum Point Power Station site at the terminus of Possum Point Road. From the Possum Point Station, the route heads north from the station property and continues north on Company-owned property for 1.5 miles, then continues in a northwesterly direction for approximately 3.8 miles within existing right-of-way, before turning northeasterly for approximately 3.1 miles, terminating approximately 400 feet north of the Smoketown DP, just south of Smoketown Road.

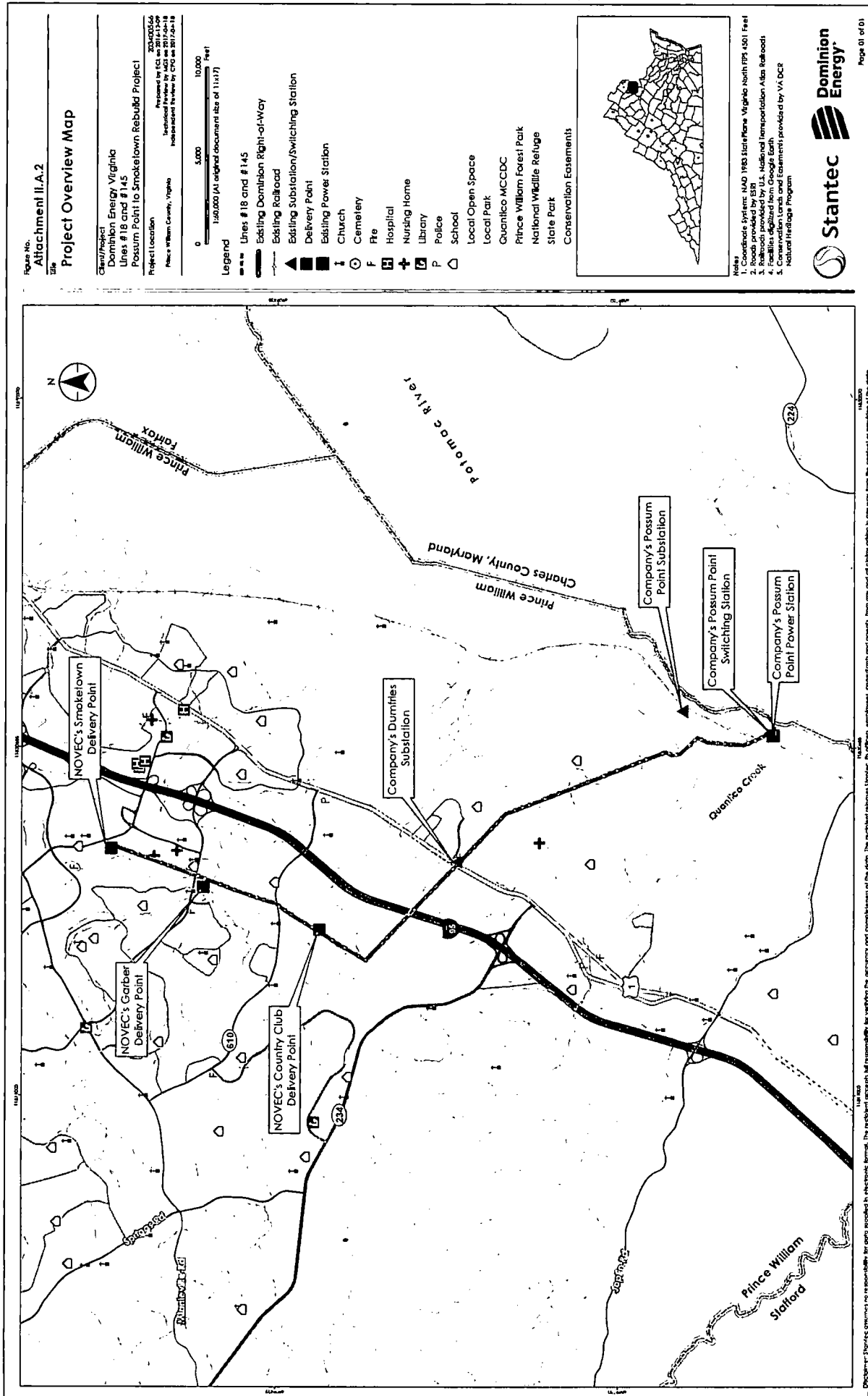
The 115 kV Alternative would rebuild the same 8.5-mile segment of Lines #18 and #145 along the same route as the Proposed Route.

## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (ROW)

2. Provide a map of suitable scale showing the route of the proposed line and its relation to: the facilities of other public utilities which could influence the route selection, highways, streets, parks and recreational areas, scenic and historic areas, schools, convalescent centers, hospitals, airports and other notable structures close to the proposed project. Indicate the existing facilities which the line is proposed to follow, such as existing ROW, railroad tracks, etc.;

Response: See Attachment II.A.2.





## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (ROW)

3. Provide a drawing(s) of the ROW cross section showing typical transmission line structure placements referenced to the edge of the right-of-way. This drawing should include:
  - a. ROW width for each cross section drawing;
  - b. Lateral distance between the conductors and edge of ROW; and
  - c. Existing utility facilities on the ROW;

Response: See Attachments II.A.3.a through j. For an overview map of the area with these attachments marked at their corresponding sections of the right-of-way, see Attachment II.A.3.k.

The existing transmission corridor contains Lines #2001 and #215 for approximately one span, as well as Lines #2022 and #237 on shared steel lattice structures and steel poles in all but 0.8 mile of the Rebuild Project. Note that on Attachment II.A.3.f, Lines #18 and #145 cross under existing 230 kV Lines #2022 and #237, as well as existing 500 kV Line #568. See Attachment I.D.1 for a 3D view of this area.