



Staff Report

Planning Commission

March 11, 2026

Case #:	C-26-1
Applicant:	Virginia Power and Electric Co. C/O Dominion Energy, through its agent, Harold Timmons with TEP Group
CUP Request:	To construct and operate a 420-foot self-support wireless telecommunications tower with a four-foot lightning rod at the Carson Substation
Property Location:	28908 Ellington Rd. North Dinwiddie, VA
Tax Map Parcel #:	49-31A
Property Size:	22.20 +/- acres
Magisterial District:	Rowanty

CASE OVERVIEW

The applicant, Virginia Power and Electric Co. C/O Dominion Energy, through its agent, Harold Timmons with TEP Group, is seeking a conditional use permit to allow for the construction and operation of a 420-foot self-support wireless telecommunications tower with a four-foot lightning rod on the following described property containing approximately 22.20 +/- acres. The tower as designed will require a reduction in standard setback requirements by the Board of Supervisors. The property is located at 28908 Ellington Rd. North Dinwiddie, VA and is further designated as Tax Map Parcel No. 49-31A. The property is zoned A-2, Agricultural General, which may be changed to allow such use upon receiving a conditional use permit. The County's Comprehensive Land Use Plan places this property within the Rural Conservation Area which allows limited commercial, service development at the Ordinance defined density.

ATTACHMENTS

Conditional Use Permit Application and Supporting Documents including the FCC National Environmental Policy Act (NEPA) Compliance Checklist, Tower Site Location Map

LAND USE/ZONING ANALYSIS

The property under review is designated by the Comprehensive Land Use Plan as a part of the Rural Conservation Area. As such, the area is expected to accommodate future public service facility development for this general area as appropriate.

The subject property includes the existing Dominion Energy substation, transmission lines, and 200-foot guyed telecommunications tower within the fenced-substation compound and 400-foot guyed tower telecommunications tower on the adjoining Dominion Energy property to the rear of the substation. Dominion Energy will be the owner and operator of the proposed tower. The proposal is to remove the existing towers and construct the new 420-foot self-support tower adjacent to the substation compound. The new tower is to provide communication between Dominion Energy facilities and work crews. The proposed 420-foot tower is necessary to maintain the centerline and tip height of the existing LMR antennas; this allows for the lightning rod to be the highest appurtenance on the tower which is a Dominion Energy standard. To note: Dominion Energy owns the property to the rear of the substation. The properties around

this land parcel have agricultural, forestal, and low density residential uses. The adjoining properties to the west on the north side of Ellington Road are zoned A-2, Agricultural General, and include agricultural crop lands and the transmission line corridor. The adjoining property to the east is the CSX railroad right-of-way, and on the east side of the railroad is a single-family residence and power transmission lines. The properties to the south across Ellington Road are zoned A-2, Agricultural General, and contain single-family residences and surrounding agricultural uses. The existing substation and proposed tower are screened from view from Ellington Road with the existing heavily wooded vegetative 225-foot deep buffer area.

Section 22-71 (45) of the Dinwiddie County Zoning Code allows for the location of this proposed use, “communication tower with station”, within the A-2, Agricultural, General, Zoning District provided that a conditional use permit is approved.

Additionally, Article IX of Chapter 22 of the Code of Dinwiddie, Virginia sets forth guidelines for the siting of telecommunication antennae and towers. Section 22-269 outlines the purpose and intent of the article, and within this section the goals of the ordinance are set forth. The goals are as follows:

- a. encourage the location of antennae and towers in areas where the adverse impact on the community is minimal;
- b. to accommodate wireless telecommunication services to county residents, businesses, and travelers;
- c. strongly encourages the co-location of telecommunication equipment on existing towers;
- d. maximize the use of existing structures;
- e. make available public property to facilitate the deployment of wireless telecommunication facilities;
- f. minimize adverse visual effects of wireless telecommunication facilities through careful siting and design and;
- g. minimize adverse impacts on the natural, scenic, environmental, historic, cultural, and recreational resources of the county.

The applicant’s plan does comply with all federal, state, and local regulations regarding providing future co-location of equipment on the existing telecommunication tower and equipment site.

It is the applicant’s intent to develop their telecommunication network within the framework established by the above stated goals. The tower is designed with a zero-fall radius; the tower is engineered to collapse within its own footprint which will not impact adjacent properties. Additionally, there will be no impact on the subject and adjacent properties concerning by-right agricultural, forestal, and residential uses.

As per the Zoning Ordinance, Article IX, Section 22-274 (3) Setback requirements, “Towers must be setback a distance equal to 200% of the height of the antenna or tower to the nearest residential structure and in no case less than 400 feet” (200% of the height of the proposed tower is 840 feet), and the distance from the proposed tower to the nearest residential structures located across Ellington Rd. is approximately 577 feet and 675 feet for a difference of 263 feet and 165 feet respectively. In addition, Section 22-274 (4) requires that “All antenna support structures must be setback 110% of the height of the structure from all property lines (462 feet)”. The proposed location of the tower does not meet this setback requirement at the front property line and at the western property line; the setback from the proposed tower to the nearest property line, the western property line, is 195 feet, which is a difference of 267 feet and the abutting property is vacant cropland. The distance from the proposed tower to the front property line is 317 feet, which is a difference of 145 feet. The applicant and their agent are requesting that the Board of supervisors consider approving the reduced setbacks to allow for implementation of the tower removal and relocation project.

OVERVIEW OF IMPACTS

Public Utilities & Public Safety

The potential impacts on the subject property are minimal. Electricity and broadband fiber are the utilities needed to develop the site for a wireless telecommunication tower/facility. There is no impact on the public school system. The Section 106 filing as part of the National historic Preservation Act of 1966 (NHPA) has taken place, and final comments on the 106 filing and the Phase I Environmental Site Assessment and NEPA Review shall be received prior to issuance of a Building Permit. Due to the existing vegetative buffer visibility of the proposed tower from the surrounding properties will be limited and minimal. Finally, there is no hazard to air space navigation, and the tower will be designed to collapse upon itself once wind loads exceed the required limits, and there are required monthly site maintenance visits to the tower.

Transportation

Given that the proposed tower is accessed from Ellington Road by the existing gravel driveway, there are no impacts on the transportation network. The number of trips generated by the proposed use are minimal given that the tower compound area is visited infrequently.

In general, the road system in this particular area is adequate to handle the traffic generated by the subject use. If the proposed use is granted a conditional use permit, the applicant will be required to comply with all VDOT entrance requirements.

Dominion's Tower Replacement and Relocation Decisions

Below are the responses to the questions that arose during the Pre-Application Meeting discussion with Mr. Mark Bassett and held on February 13, 2025.

1. Why can't Dominion place the new tower at the same location as the existing guyed tower, given that the guyed tower is being removed?
 - i. Installing the new tower at the guyed tower location is an option, but we chose to be near the substation to lessen the cost of creating a physically diverse fiber connection from the substation to the new tower and to be closer to our power source (substation power) to increase the electrical service for the tower location.

2. Why is Dominion replacing both existing towers with a single new one?
 - i. The 400' guyed tower is being replaced due to age. We could not move the radio systems to the existing tower in the substation since it is only 220' and RF coverage would be impacted. We chose a new location near the substation for the reasons mentioned above and decided to consolidate the towers to lower ongoing maintenance costs and to return ground space to substation engineering for future use. In addition, the reduction in the number of towers in the area contributes to an overall reduction in the proliferation of towers within the county as well.

3. Why is collocation (sharing the tower with other users) not permitted?
 - i. The tower is intended to support Dominion's operational and telecommunication needs. Since the tower is critical for effective day-to-day operations, the security of the system is a major concern. Limiting access to the tower ensures system safety and functionality. However, Dominion is amenable to discussions regarding collocation by other parties in the future. Dominion utilizes a designated third-party company to manage collocation requests when permitted, for all its towers. Any entity interested in collocating equipment on the new structure must coordinate through the vendor and agree to adhere to established processes, procedures and guidelines.

4. What are the key reasons for selecting the proposed tower location?
- i. Several site-specific factors influenced the choice of the new tower's location:
- Ownership and Accessibility: The proposed location is within Dominion-owned property, eliminating lease-related costs.
 - Environmental and Safety Considerations:
The north side of the substation consists of wetlands, which are unsuitable for tower construction.
The west side is occupied by high-voltage power lines, posing safety and operational challenges.
The east side is adjacent to a railroad easement, where installing and maintaining a tower would be impractical and hazardous.
- ii. Infrastructure and Operational Efficiency:
- The selected location is adjacent to the substation, allowing easier integration with existing electrical infrastructure.
 - It provides access to existing Dominion Energy (DE) fiber optic lines.

By strategically selecting this location, Dominion ensures long-term reliability, cost-effectiveness, and compliance with safety and environmental regulations.

RECOMMENDATION

As set forth in the Zoning Ordinance Sec. 22-22. (Conditional use permits generally), *“Any provisions of this Chapter which allow a use with a conditional use permit shall not prohibit the Board of Supervisors from denying an application for a particular permit upon finding, after public hearing, that the issuance of such permit would not be in compliance with the intent, purpose and design of this Chapter and/or Section 22-2 of this Code”*. Section 22-2. (Purpose and design of chapter) states that *“For the purpose of promoting the health, safety and general welfare of the public and of further accomplishing the objectives of Va. Code Section 15.1-427 of the Code of Virginia, 1950, as amended, the provisions of this chapter are hereby adopted as the zoning regulations of the County, together with the accompanying map. This Chapter has been designed:*

- 1) *To provide for adequate light, air, convenience of access and safety from fires, floods and other dangers;*
- 2) *To reduce or prevent congestion in the public streets;*
- 3) *To facilitate the creation of a convenient, attractive and harmonious community;*
- 4) *To expedite the provision of adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, schools, parks, forests, playgrounds, recreational facilities, airports, and other public requirements;*
- 5) *To protect against destruction of or encroachment upon historic areas; and*
- 6) *To protect against one or more of the following: overcrowding of land, undue density of population in relation to the community facilities existing or available, obstruction of light and air, danger and congestion in travel and transportation or loss of life, health or property from fire, flood, panic, or other dangers.”*

The Planning staff reviewed the conditional use permit request and is satisfied that with appropriate conditions the impacts of the proposed wireless telecommunications tower are addressed. The issuance of the permit would be in compliance with the intent, purpose and design of this Chapter 22 and/or Section 22-2 of this Code.

The Staff has reviewed the conditional use permit request for a 424-foot tall tower (420-foot monopole plus a four-foot lightening rod) to be located on the existing Dominion Energy substation site and finds that the applicant has successfully addressed the impacts of the wireless telecommunication tower/facility:

1. The impact of the proposed tower will be minimal given that the proposed tower will not have direct effects on public utilities, the transportation network, public safety, schools, and water quality.
2. The subject property is of adequate acreage and the proposed location of the 420-foot self-supporting tower will not adversely impact the surrounding land uses.
3. The proposed location of the tower conforms with the goals of the Rural Conservation Area as set forth in the Comprehensive Land Use Plan, and to the requirements of the Zoning Ordinance.

Therefore, staff recommends APPROVAL of the request for a conditional use permit to construct the subject telecommunications tower based on the following conditions:

1. The applicant shall limit the height and type of wireless telecommunication tower to a 420-foot self-supporting tower (420-foot self-supporting plus a four-foot lightening rod) located on the existing Dominion Energy substation property as stated in the application.
2. The wireless telecommunication tower/facility owner shall negotiate in good faith with the County for paid, leased tower space if the County should desire to locate broadband or other communications equipment for commercial or like services to third parties.
3. The self-supporting tower will be constructed to meet or exceed the setbacks as shown on Site Plan sheet number C-1 of the tower overall site plan with revisions titled “Carson Substation 28908 Ellington Rd. Petersburg, VA 23805 (Dinwiddie County)”, Parcel Plan, as designed by Tower Engineering Professionals and dated 10/17/2024.
5. The conditional use permit shall be reviewed at least every two (2) years for compliance with the subject CUP conditions and all applicable Zoning Ordinance requirements for wireless telecommunication facilities.
6. The applicant shall maintain compliance with all federal, state, and county rules and regulations related to the wireless telecommunication tower/facility use.

PLANNING COMMISSION RECOMMENDATION

Since this is a zoning matter, the standard statement regarding the Planning Commission recommendation on this zoning matter must be read. In order to assist, staff prepared the following motions:

Motion to recommend approval to the Board of Supervisors with conditions:

BE IT RESOLVED, that in order to assure compliance with Virginia Code Section 15.2-2286(A) (7) it is stated that the public purpose for which this Resolution is initiated is to fulfill the requirements of public necessity, convenience, general welfare and good zoning practice, I move that conditional use permit request, C-26-1, as presented, be recommended for approval with conditions to the Board of Supervisors.

Motion to recommend disapproval to the Board of Supervisors:

BE IT RESOLVED, that in order to assure compliance with Virginia Code Section 15.2-2286(A) (3) & (7) and Zoning Ordinance Sections 22-22 and 22-2 it is stated that the public purpose for which this Resolution is initiated is to fulfill the requirements of public necessity, convenience, general welfare and good zoning practice, I move that conditional use permit request, C-26-1, as presented, be recommended for disapproval to the Board of Supervisors as the issuance of a conditional use permit would not be in compliance with the intent, purpose, and design of the Dinwiddie County Zoning Code.