



Background

Virginia counties have significant legal authority to regulate, and potentially refuse, electrical substations through their zoning powers, though this authority is distinct from, and more limited than, their role in approving high-voltage transmission lines.

Under the Code of Virginia (Title 15.2, Chapter 22, Article 7, particularly § 15.2-2280), localities (including counties) may enact zoning ordinances to classify land uses, regulate or prohibit specific developments, and impose conditions such as setbacks, screening, noise mitigation, and special exceptions or conditional use permits. Electrical substations are typically classified as “public facilities” or “public utilities” and are subject to local review processes, including § 15.2-2232 (consistency with the comprehensive plan) and site plan or special exception approvals by the planning commission and board of supervisors.

In contrast, the Virginia State Corporation Commission (SCC) has primary authority over the *need* for and routing of transmission lines (generally 138 kV or higher) under Va. Code §§ 56-46.1 and 56-265.2. A SCC certificate of public convenience and necessity for such lines (and certain associated facilities) generally preempts local zoning for the *lines themselves*. However, substations and switching stations are treated as distinct facilities and are **not** automatically exempt from local zoning. Counties can therefore require permits, impose design standards, and deny proposals that fail to meet local criteria (e.g., visual impacts, proximity to residences, or incompatibility with zoning districts).

This framework has become especially relevant amid Northern Virginia’s data center boom, which has driven massive new substation proposals by Dominion Energy and cooperatives like NOVEC to handle increased electricity demand. Many counties have responded by updating zoning ordinances to tighten controls (e.g., larger setbacks, mandatory noise studies, screening, or limiting “by-right” locations in industrial zones).

Key Court Example: County Authority Upheld (2015 Virginia Supreme Court)

The clearest judicial affirmation of county authority over substations is **BASF Corp. v. State Corp. Commission** (Va. Sup. Ct. 2015).

In this case, Dominion Virginia Power (now Dominion Energy) sought SCC approval for the Surry-Skiffes Creek transmission project, which included a new 500 kV line and the Skiffes Creek Switching Station (a substation-like facility) in James City County. The SCC approved the overall project and ruled that the switching station qualified as part of a “transmission line” under Va. Code § 56-46.1(F), exempting it from local zoning.

James City County, the James River Association, and Save the James Alliance appealed, arguing the station was a separate facility subject to county zoning. The Virginia Supreme Court **agreed with the county**: The plain language of the statute exempts only “transmission lines” (wires and supporting structures), not switching stations, which are more intrusive fixed facilities. The SCC



committed a legal error by broadly interpreting the exemption to cover the station. The Court **affirmed the SCC’s approval of the transmission line itself but reversed and remanded on** the switching station, requiring James City County zoning approval. This ruling established a strong precedent: substations/switching stations are **not** automatically preempted by SCC transmission approvals and remain subject to local zoning review and potential denial. James City County had opposed the project on scenic and environmental grounds, the legal victory reinforced county leverage.

Recent Examples of Counties Rejecting or Restricting Substations

Virginia counties have actively exercised this authority in recent years, particularly in response to data-center-driven proposals:

Prince William County (March 2026): The Planning Commission voted 5-3 to *deny* the public facilities review (effectively rejecting) NOVEC’s proposed 300-megawatt Diamond Hill substation and adjacent Dominion switching station on ~9.6 acres in Bristow (Casey Lane). The facility was intended to power a new data center campus. Residents opposed it due to noise, visual impacts, and proximity to neighborhoods. This is a direct recent example of a county-level rejection tied to local zoning/public facility standards.

Fauquier County (October 2025): The Fauquier County Planning Commission reviewed Dominion Energy’s application for a Category 20 special exception to expand its existing Morrisville Substation. The expansion was tied to the broader Morrisville–Wishing Star transmission project, a new 500 kV and 230 kV line serving regional grid needs, including data-center-driven demand in Northern Virginia. After a public hearing, the commission voted 4-1 to recommend *denial* of the special exception. Key reasons cited included:

- Incompatibility with the county’s comprehensive plan and rural character/identity.
- Public health and safety concerns, particularly the substation’s proximity to Mary Walter Elementary School, along with nearby homes, a church, and other sensitive uses.
- Broader worries from residents and advocacy groups about the project serving as a gateway for additional high-voltage infrastructure and lack of transparency on data-center-driven demand.

Vice Chair Matthew stated: “The application fails to meet the basic standards. The project is incompatible with the county’s comprehensive plan and rural identity, and there are public health and safety concerns due to the location near the school.” This recommendation was forwarded to the Fauquier Board of Supervisors for final action. However, Dominion subsequently requested a postponement and ultimately *withdrew the application* before the Board could vote, demonstrating how the Planning Commission’s stance, enabled by the county’s special-exception zoning requirements for substations, effectively halted the expansion at the local level.

Fairfax County (December 2025): The Board of Supervisors adopted a zoning ordinance amendment imposing stricter standards for electrical substations (effective December 10, 2025).



Key changes include larger setbacks (e.g., 100 feet from residential property lines), stronger screening, required noise studies near homes, and limits on “by-right” construction in many industrial zones (now often requiring special exceptions and public hearings).

Rappahannock County (February 2026): The Planning Commission unanimously recommended a zoning amendment requiring a *special exception permit* for any new or expanded electrical substations. This brings Rappahannock in line with neighboring Fauquier and Culpeper counties, giving the board greater leverage to impose conditions (e.g., screening, height limits, or zoning district restrictions) or deny proposals. The move was explicitly aimed at managing transmission growth linked to Northern Virginia data centers.

Other counties (e.g., Loudoun, Culpeper) have similarly increased scrutiny, required negotiations with utilities, or used local permitting to push for less impactful designs.

In summary, Virginia counties cannot unilaterally override SCC-approved transmission lines, but they retain robust authority over substations via zoning. They can, and do, impose conditions or deny proposals that fail local standards. The 2015 Supreme Court precedent and recent local actions demonstrate this power in practice. Utilities can appeal denials, but courts have upheld local zoning primacy for substations.