CITIZENS FOR FAUQUIER COUNTY

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June 29, 2026

Fauquier County Board of Supervisors
10 Hotel Street, Third Floor
Warrenton, Virginia 20186
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Attachments: Behind-the-Meter Power Generation for Data Centers: Emerging Regulatory Considerations for Fauquier County, Virginia

Re: Remington Technology Park Amendment — REZN-25-025515

Dear Honorable Board Members:

Citizens for Fauquier County (CFFC) has reviewed the latest amendment, Concept Development Plan, and proffers submitted for the Remington Technology Park. We appreciate the time devoted by the Board, Planning Commission, County staff, and applicants to this difficult application. We also recognize that the proposal has changed materially in response to concerns raised during the review process.

Most importantly, the applicant has replaced its proposed simple-cycle natural gas turbines with natural gas fuel cells. This is a constructive change. Fuel cells are generally more efficient, quieter, and substantially lower in nitrogen oxides, particulate matter, and other criteria air pollutants than the turbines previously proposed. However, there are significant C02 emissions.

The revised proposal nevertheless presents the County with a consequential and largely unprecedented land-use decision. There are few, if any, directly comparable installations in the Commonwealth, particularly at the scale and operating profile proposed here. The issue is, therefore, no longer whether the applicant has selected the most harmful available generation technology. The issue is whether the proffers provide enough information, enforceable safeguards, and long-term accountability for a large, continuously operating, natural-gas-fueled generation facility serving a private data center campus.

Fauquier County does not currently have a zoning category or a comprehensive set of performance standards that specifically address large-scale, behind-the-meter power generation. Nor does any Virginia locality appear to have adopted a mature ordinance tailored specifically to a private fuel-cell plant of this scale serving a data center. However, to afford Fauquier citizens the assurance that the Comprehensive Plan is properly implemented and the protection of human health and the environment is protected, the county should promulgate a zoning ordinance dealing with utility scale private power plants. Otherwise, a potentially harmful precedent could be set.

CFFC recommends that applicant add the following to its proffers:

Applicant and its successors, contractors, and assigns, agree to comply voluntarily or as required with any current and future ordinances, state, and federal laws applicable to private, industrial scale power plants.

At the same time, the absence of a dedicated ordinance places greater importance on the amendment, Concept Development Plan, and proffers now before the Board. These documents must perform much of the work that a future ordinance would otherwise perform. Because this approval may establish an important precedent, ambiguities that might be tolerable for ordinary accessory equipment are not acceptable for a private generation facility of this scale.

Some of the matters raised below may already have been discussed in presentations or meetings with County staff or individual Supervisors. If so, that information should now be consolidated into a clear public record and, where necessary, incorporated into the proffers or approved plans. The applicant should not assume that County staff, the Board, or the public are already adequately familiar with fuel-cell technology, its infrastructure requirements, or the specific configuration proposed for RTP.

1. Define and publicly explain what is being approved

The present proffer language is not sufficiently detailed. Authorizing “fuel cells utilizing natural gas” does not adequately define a generating facility approaching utility scale.

The final submission should clearly describe, in terms understandable to both technical reviewers and the public:

- the fuel-cell technology proposed and how it generates electricity;
- the maximum generating capacity and physical area of the installation;
- the proposed or maximum number of fuel-cell units;
- the anticipated electrical output and natural-gas consumption;
- the data center buildings and loads the system is intended to serve;
- whether the units will operate continuously, intermittently or in parallel with Dominion service;
- the expected operating life and replacement cycle of the fuel-cell stacks;
- the natural gas gate station, pipeline connection, pressure-management equipment and other supporting infrastructure; and
- the nearly 200 emergency generators and associated fuel-storage facilities that remain part of the campus.
- The mitigation of C02 emissions

This information need not lock the applicant into a single model number if reasonable equipment substitutions may be necessary. It should, however, establish enforceable limits and ensure that the Board and public understand the essential technology, scale, operating profile, and infrastructure being authorized.

Where these matters have already been explained privately or through presentations, the applicant should consolidate them into a publicly available technical description that corresponds directly with the proffer and Concept Development Plan.

2. Clarify the relationship to Dominion power

The earlier turbine proposal was presented primarily in response to the timing of Dominion Energy's service. The revised fuel-cell installation now appears likely to serve as a permanent power source for at least the first two data center buildings.

The applicant should clarify publicly whether the fuel cells will provide temporary bridge power, permanent primary or supplemental power, or some combination of these functions. It should also explain how future Dominion service would affect continued fuel-cell operation and whether the power-purchase agreement limits the applicant's ability to reduce, modify or ultimately retire the installation.

The existing commitment to provide the County with periodic information on Dominion capacity, onsite generation, and future development is useful. That reporting should be retained and revised to refer expressly to the fuel-cell facility.

A permanent fuel-cell installation is not necessarily unacceptable. It should not, however, be approved through language that leaves its purpose and duration unclear.

3. Assign clear responsibility for decommissioning and final disposition

The decommissioning provisions should apply expressly to the fuel-cell installation and all infrastructure installed principally to support it, including equipment yards, screening structures, the natural gas gate station, and on-site gas distribution facilities.

The current reference to the "Applicant and/or the owner or operator" does not clearly establish who remains ultimately responsible if the property, data center, fuel-cell equipment or power-purchase agreement changes hands. The proffers should make the property owner and the applicant or facility owner/operator jointly responsible for decommissioning, with those obligations binding upon successors and assigns and surviving any transfer, lease or change in operator.

The decommissioning plan should identify who owns the fuel-cell equipment and who is responsible for its final removal, return to the manufacturer, reuse, recycling, or lawful disposal. It should also address spent fuel cell stacks, reforming equipment, catalysts, batteries, electrical equipment, contaminated materials, and other components requiring controlled disposition. Completion should be documented to the County through manifests, recycling certificates, or other appropriate records.

Financial assurance should be sufficient to allow the County to complete the work if the responsible parties fail to do so. The amount should be updated periodically to reflect the full cost of equipment removal, waste management, and site restoration.

The decommissioning trigger should not depend solely upon occupancy of the sixth data center building. Alternative triggers should address cessation of fuel-cell operation, abandonment, prolonged suspension of development, or a defined period following initial operation.

4. Clarify emissions oversight and evaluate waste-heat recovery

The transition from turbines to fuel cells should substantially reduce nitrogen oxides, particulate matter C02 emissions must be addressed. The proffers nevertheless establish aggregate emissions limits for the fuel cells and emergency generators, and the basis for demonstrating compliance with those limits should be clear.

Air permitting and regulatory compliance will principally fall under the Virginia Department of Environmental Quality. The applicant should identify the DEQ permit or permit determination that will apply, the pollutants and equipment covered, and the monitoring, testing, calculation, and reporting methods that will be used. County reporting should rely on the same verified information submitted to DEQ rather than create a duplicative local emissions-monitoring system. It should distinguish fuel-cell emissions from those of the emergency generators and confirm compliance with the separate limits established by the proffers.

The applicant should also provide a concise public explanation of whether combined heat and power or another waste-heat recovery option was considered. Several SOFC suppliers offer heat-recovery additions that can increase total system efficiency. The relevant question is whether such an option was evaluated as part of PointOne's power-purchase agreement and, if rejected, whether the constraint was technical, contractual or economic.

CFFC is not asking the County to mandate an unsuitable system. A permanent installation of this scale, however, warrants a documented evaluation of a commercially available measure that could increase overall efficiency and reduce the quantity of heat discharged to the surrounding environment.

5. Clarify the cooling system and make noise protection preventive

Fuel cells are generally much quieter than combustion turbines. The applicant's change in technology should, therefore, reduce one major source of mechanical noise.

That improvement does not resolve the broader issue of continuous noise from data centers. The application continues to refer to chillers without clearly describing the cooling technology, equipment configuration, location, or acoustic controls. Chillers, cooling fans, pumps, transformers, and related mechanical systems may operate continuously and can become the dominant noise sources once the turbines are removed.

The applicant should publicly clarify:

- whether the data halls will use air-cooled, closed-loop liquid-cooled, evaporative, hybrid, or another cooling technology;
- the type, number, size, and location of the chillers;
- whether chillers and associated pumps and fans will be located indoors, on rooftops or in exterior equipment yards;
- their anticipated operating schedule and sound-power levels;
- whether variable-speed equipment will be used;
- the proposed walls, enclosures, louvers, silencers or other acoustic controls; and
- How the cooling equipment will be assessed cumulatively with fuel cells, transformers, substations and emergency generators.

The revised noise provisions respond to several concerns previously raised by County staff. They provide for third-party sound studies selected by the County, establish measurement procedures, require background conditions to be documented, and contemplate corrective action. These are meaningful improvements.

Remaining weaknesses should nevertheless be corrected. The acoustical analysis should expressly include all significant sources operating individually and cumulatively under realistic worst-case conditions. It should evaluate tonal and low-frequency sound in addition to overall A-weighted decibel levels.

Pre-occupancy testing should be required to the extent technically practicable, followed by testing after each building becomes operational. When a violation occurs, immediate interim controls should be required where necessary, followed by permanent corrective action within a defined period. Any extension should be written, supported by specific findings, and limited to the minimum time reasonably necessary.

The County should also retain authority to require additional measurements in response to credible complaints or material operational changes. A fixed annual limit should not prevent the investigation of separate, potentially significant noise events.

6. Quantify water use and wastewater discharge

Fuel-cell systems generally do not require the large evaporative cooling-water demands associated with conventional thermal power plants. Many SOFC systems are described as effectively dry during normal operation because they do not rely on cooling towers and may recycle process water internally.

That does not mean that total water consumption or wastewater generation is necessarily zero. Water may be required for initial commissioning, startup, equipment cleaning, maintenance, humidification, or other balance-of-plant functions. The electrochemical and fuel-reforming processes may also produce water vapor or condensate, depending upon the system design. The quantity and disposition of these flows have not been adequately explained.

The applicant should provide a project-wide water balance identifying:

- initial fuel-cell commissioning and startup water;
- routine fuel-cell operational water demand;
- water produced as vapor or condensate;
- whether any condensate will be captured, reused or discharged;
- the source and quantity of makeup water;
- water required by chillers and the data center cooling system;
- water required for fire protection and storage;
- equipment-washing and maintenance water;
- sanitary water demand;
- anticipated wastewater volumes and characteristics;
- proposed discharge, treatment or disposal methods; and
- maximum daily and annual water demand under normal and emergency conditions.

The reports state both that the principal data center will use recycled water for cooling and that the initial filling of closed-loop systems may use off-site water from a private source. These provisions should be reconciled.

All water used for initial filling, cooling, and routine replenishment should be recycled water unless the Board expressly approves a narrowly defined exception necessary for emergency or public safety purposes. “Offsite water provided from a private source” does not establish that the water will be recycled and could allow withdrawal from groundwater or another potable source.

Closed-loop systems and fuel cells may greatly reduce water use, but “low-water” or “effectively dry” is not a substitute for a quantified water and wastewater balance.

7. Protect the County’s anticipated tax base

The proffer requiring either a local tax-paying end user or participation in a payment-in-lieu-of-taxes arrangement is a useful recognition that the County should receive the fiscal benefits presented in support of the project.

The provision should be clarified to ensure that a tax-exempt end user provides payments equivalent to all material County revenues that would otherwise be generated by the project, including applicable real estate and business personal property taxes. The language should also identify who is responsible for entering and maintaining the agreement and what occurs if a taxable end user is replaced by an exempt entity, such as a bank, after occupancy.

The Board should not approve a project based upon projected fiscal benefits that the proffers do not adequately preserve.

8. Confirm emergency-response capacity

Before operation, the applicant should provide a final emergency-response plan developed in consultation with County fire, rescue, and emergency-management

personnel. It should address fuel-cell hazards, natural-gas isolation, electrical isolation, battery systems, diesel storage, firewater and runoff, hazardous materials, access, incident notification, and coordination with neighboring facilities.

The plan should also explain the emergency shutdown characteristics of the proposed fuel-cell system, the isolation of individual modules, the response to gas leaks, the management of high-temperature equipment, and any risks associated with the replacement or maintenance of fuel-cell components.

Training and joint drills should occur before occupancy and periodically thereafter, with records supplied to the County. The applicant should fund specialized training or equipment reasonably required because of the facility.

A careful path forward

The lack of directly comparable Virginia projects, together with the scale and potential permanence of this installation, means that the remaining questions cannot be left to later site-plan interpretation, private presentations or operational decisions. Information that may already have been provided to individual officials should be assembled into a transparent public record, and essential commitments should be incorporated into the proffers and approved plans.

The Board should defer final action long enough for the applicant and staff to provide these clarifications, resolve the defined issues, and convert the necessary assurances into enforceable commitments.

It is requested that the County and the public know precisely what is being approved, understand how the facility will operate, establish safeguards before operation, preserve the promised fiscal benefits, and avoid creating a precedent built on unresolved ambiguity.

The applicant has taken an important step toward a less harmful design. The County should now take the equally important step of ensuring that the final approval is specific, transparent, technically understandable, enforceable, and worthy of the precedent it will establish.

Respectfully submitted,

Ali Zarabi
President, Citizens for Fauquier County