



Maria Fields
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2 Depot Plaza
Bedford Hills, NY 10507

Village of Croton-on-Hudson Board of Trustees
1 Van Wyck Street
Croton-on-Hudson, NY 10520

Dear Board of Trustees,

This letter accompanies an application for an integrated energy system to be installed at Croton Auto Park at 1 Municipal Place in Croton-on-Hudson. The system, called a Managed Microgrid, encompasses several components including the following:

1. Electrical Vehicle charging – one DC Fast Charger (DCFC) with 180 kW capacity, two L2 wall-mount chargers. 19.2 kW capacity
2. New utility transformer – one 480V 500 kVA, plus one 208 V 150 kVA step down transformer
3. Solar canopy: 40 x 40 ft, 20kW DC output
4. Battery Energy Storage System (BESS) – 125 kW capacity, 280 kWh energy output
5. Associated Electrical Combiner Panel

Note – it is the battery capacity of 280 kWh, which is above the 200 kWh limit, which necessitates the Special Use Permit and Board of Trustees review. The other components of the project require only a building permit.

The project was initiated as a result of the corporate requirements of Stellantis (owner of Chrysler Jeep in US) as they fully electrify their vehicle fleets by 2035. Stellantis has required franchise dealers like Croton Auto Park to install EV Charging equipment specified by Stellantis (#1 above). This installation includes one powerful DCFC capable of charging a car from empty in under 30 minutes. The power requirements of this charger necessitate an upgrade to the current Con Edison utility service feeding the building from 208V to 480V (#2 above). The total cost of this required upgrade and associated electrical work is roughly \$400,000.

As NY State works to install charging infrastructure statewide, the power requirements of DCFCs are an issue as they strain the capacity of the local grid. Unmanaged additions of DCFC could create large



capacity upgrade requirements for Con Edison, which cause delays in transportation electrification due to the buildout of this infrastructure, are costly for rate payers and work against NYS climate goals. NY State is looking to create smarter approaches to these EV infrastructure issues. The proposed project at Croton Auto Park is a model for such an approach and goes beyond the minimum requirements of Stellantis to create a microgrid system. This system generates solar energy to 1) offset building energy uses and 2) store energy in a BESS. This stored energy is used to supply the EV chargers and to offset peak usage. The result is a project that reduces grid strain, serves as a resource of the local grid, and reduces GHG emissions at the site. The site will be a case study for Con Edison of smart approaches to EV infrastructure additions.

Sprocket Power is the project developer and system integrator and has deep experience in engineering, constructing and operating energy systems at small and mid-sized businesses. The project integrates the work of solar, electrical, and structural contractors as shown in the site plans. We have five microgrid projects in the NY Metro area. One has been commissioned; the others are in construction.

We look forward to discussing the project further at the upcoming meeting and answering any questions you may have.

Sincerely,

Maria Fields
CEO and Co-founder
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