



August 4, 2020

Village of Warwick Planning Board
77 Main Street
Warwick, NY 10990

Att: James Patterson, Chairman

Re: Convergent Energy and Power – Battery Energy Storage Facility
28 Church Street
Section 28, Block 2, Lot 10
L&G # 1802.58

Dear Mr. Patterson and Planning Board Members:

We have reviewed the following documents submitted for the Convergent Energy and Power application:

- Letter from ERS Engineering Consultants, PC, dated 7/14/20
- Site Plans prepared by ERS (2 sheets), revised 7/16/20
- Letter from ERS to Chief Brasier of the Raymond Hose Company, dated 7/23/20
- Visual simulation of the proposed facility, submitted by ERS on 7/24/20
- Email message from David Griggs of ERS to Building Inspector Boris Rudzinski, dated 7/29/20, regarding the proposed use.

We provide the following review comments:

1. In the attached correspondence to the Planning Board, Fire Department, and Building Inspector, ERS has addressed some of the Board's questions regarding the proposed equipment and safety issues. It is my understanding that a representative of Convergent Energy will be attending the upcoming Planning Board meeting to provide further information.
2. The applicant has requested a determination from the Building Inspector as to whether the use is permitted in the LI zone.
3. A site visit was held on August 1, 2020. The facility is proposed within a densely wooded area. We asked the applicant's representative if there are similar battery facilities that have been installed nearby, and he responded that there are not any.
4. The site plans should be updated to show the existing paved parking areas behind the building.

5. The proposed fence height (7 feet) exceeds the 6.5-foot maximum specified in Section 145-52.C. of the code. A variance is needed.
6. Sheet 2 of the site plan set now includes an elevation view showing the proposed concrete pads, gravel surface, and fencing.
7. Once additional information on the project has been discussed, the site plan checklist and the EAF can be reviewed in detail.

Sincerely,



Lehman & Getz, P.C.
David A. Getz, P.E.

ERS ENGINEERING CONSULTANTS, P.C.
11 Forester Avenue * Warwick, NY 10990
Tel # (845) 987-1775 * Fax # (845) 987-1788

July 14, 2020

James Patterson, Chairman
Village of Warwick Planning Board
77 Main Street
Warwick, NY 10990

Re: Convergent Energy and Power – Battery Energy Storage Facility
28 Church Street
Section 28, Block 2, Lot 10
L&G # 1802.58

Dear James Patterson, and Members of the Board:

In response to Lehman & Getz's Engineering comments, please refer to the following:

1a. The facility will not service the onsite building. It will serve the Orange & Rockland utilities as energy storage for times when it is needed such as storm events, excess energy use or when the local substation is offline. Proposed points of electrical connection will be added to the site plan.

1b. The batteries will be lithium-ion with self-containment and fire-containment. Lithium-ion batteries are used in a variety of products from electronics to vehicles and are considered safe unless damaged.

1c. The height of the battery storage facility would be 8 feet 6 inches, the approximate same height as self-storage containers.

1d. The fire department will be sent plans with details to review.

1e. Battery life is 10 years with the ability to switch out batteries two times for a total of 30 years. Afterwards, the facility would be decommissioned, removed and the site restored to its previous condition.

2. The energy storage facility would be a public utility facility utilized by Orange & Rockland only, no private entities. Orange & Rockland serves the Village of Warwick.

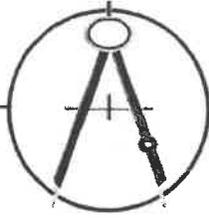
3. Once the determination has been made, we will prepare the plans per the new set-back requirement.
4. The proposed fence height of 7 feet is a requirement by New York State Public Services for electrical facilities.
5. No disturbance is proposed to flood plain areas.
6. The proposed compressive strength of the concrete slab will be 28 days at 4,000 psi.

Thank you for your attention in this matter.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "David Griggs".

David Griggs



ERS ENGINEERING CONSULTANTS, P.C.
ENGINEERING RESOURCE SERVICES

July 23, 2020

Mr. Jason Brasier
Chief
Raymond Hose Company
25 Church Street
Warwick, NY 10990

Dear Mr. Brasier:

Convergent Energy & Power is looking to lease a portion of the property located at 28 Church Street, Warwick, New York and proposes to construct a battery energy storage system area on the existing commercial property located in the LI Zone.

The BESS safety design considerations include mitigation of identified electrical and operational hazards. All safety-critical system responses are executed in fail-safe hardware, without software intervention.

With any battery energy storage system, fire protection is of highest priority. Each energy storage unit is housed in a NEMA 3 outdoor rated steel container and contains both automated gas and fire detection and suppression systems designed to meet NYS requirements. The thermal management system utilizes air cooled water glycol and conditioned air, ensuring the module temperatures remain well within system specifications. Should the system sensors indicate module temperatures exceed specified thresholds, the system will trip offline and report the fault to Convergent Energy & Power.

Convergent Energy & Power has worked closely with FM Global, one of the world's leading commercial and industrial property insurance providers, to evaluate the safety and fire risk associated with the Lithium-Ion energy storage systems. The combination of system architecture, sensors, protection devices, suppression system and thermal management satisfied FM Global's risk management team, which approved the installation of the 4MW system adjacent (within 6') to a plastics manufacturing facility in Bolton, Ontario.

In addition to the safety design features listed above, electrical hazards associated with high voltages, both AC and DC, are mitigated with design features such as system protection devices, code compliant clearances, and physical barriers.

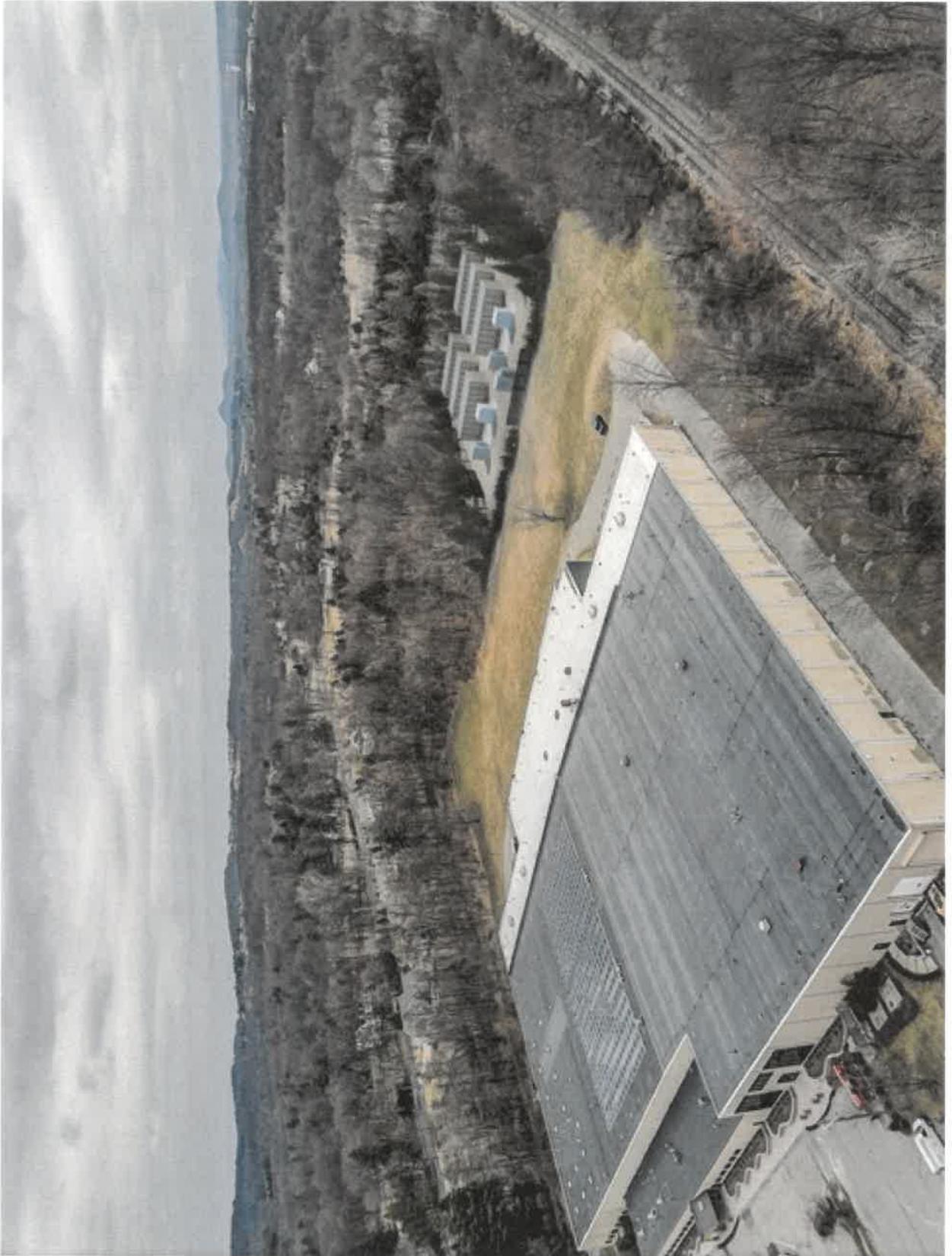
At this time, the application is in front of the Village of Warwick Planning Board for site plan approval.

Please provide our office or the Village of Warwick Planning Board with any written comments at your earliest convenience. We have included a copy of the Site Plan for your review.

Sincerely,

A handwritten signature in cursive script, appearing to read "David Griggs".

David Griggs



Dave Getz

From: David Griggs <david@ersconsultants.com>
Sent: Wednesday, July 29, 2020 11:02 AM
To: Boris Rudzinski
Cc: Dave Getz; Becky Koze; Planning@VillageofWarwick.org
Subject: 28 Church Street -Energy Facility

Hi Boris,

We respectfully request a determination as to whether the proposed energy storage system would be permitted within the LI zone. The project being proposed at 28 Church Street is intended to serve the local distribution grid needs. Stored energy will only be utilized by Orange & Rockland Utilities (ORU). More specifically, this project shall interconnect to circuit 80-5-13 and provide injections of power to support contingency events that result from overloading on adjacent circuits or at transformer banks at the Wisner substation. This project is intended to defer the construction of a new substation which would otherwise be needed as early as 2022 to support the reliable operation of the distribution grid in Warwick.

The system will not store energy from solar facilities, nor will it supply energy directly to private entities. As stated above, it is a necessary system that ORU needs in times of brownouts, blackouts, service disruptions including storm events and maintenance on a substation. The energy stored and supplied will be utilized by the Village of Warwick.