



August 11, 2025

Mr. Neil Magenheim, Chair

Town of Andover Planning

Board 36 Bartlet Street

Andover, MA 01810

**Re: Special Permit and Site Plan Review Modification
Request 259 Lancaster Street Battery Energy Storage
Project**

Dear Members of the Planning Board:

On February 14, 2023, the Andover Planning Board voted to approve a Special Permit and Site Plan Review for a battery energy storage system (BESS) proposed to be located at 1320 South Street. Recently, the project has been redesigned to utilize a newer battery product available on the market. Therefore, New Leaf Energy would like to respectfully request a modification to the Site Plan Approval and Special Permit. We feel confident the changes proposed will result in an improved project, with respect to both safety as well as aesthetics. Please see below for more information on the change.

Over the last two years, two factors have necessitated a modification to the proposed facility design. First, battery storage technology has continued to improve. During that time, alternative manufacturers have come onto the market that offer improved features, safety and flexibility. Second, we have received preliminary information from National Grid on charging and discharging restrictions that will be applied to the project. Therefore, the project design has been modified to utilize a different battery system manufacturer, and the system size has been reduced. The result of both of these changes is an improved system design that will result in a smaller project footprint, increased aesthetics, and increased safety for first responders in a potential emergency situation.

Specifically, the project has been reduced in size from 12MW/48MWh down to 5MW/20MWh. This reduction in system size results in the project footprint and associated impacts reducing as well. The change in battery system manufacturers allows the use of quieter enclosures, eliminating the need for a sound barrier wall. Attached to this request is an updated Sound Report including ambient noise readings, and which shows compliance with the MADEP Noise regulations.



Eliminating the 18-foot tall sound barrier

wall will result in a lower-profile project that will blend into the surrounding better. The sound barrier wall has been replaced by a 7-foot tall chain link fence with privacy slats.

Please see the following table for a comparison summary of the project changes:

Project Component	Original	Modification
DC System Size	12 MW	5 MW
Energy Storage Capacity	48 MWh	20 MWh
Total facility area	22,060 SF	17,040 SF
Number of battery enclosures	96	8
Perimeter Enclosure	14ft wall	7ft fence w/slats
Landscaping	Up to 10 plantings	No Change
Number of utility poles	9	8
Vegetation Removal	1.5 acres	No Change

The new project design replaces the Powin battery enclosures with Hithium battery containers. These new units provide the same safety features as the originally proposed Powin units, and comply with all the requirements identified by the Andover and Tewksbury Fire Department, including:

- Compliance with NFPA 855 and 527 CMR 1.00
- UL9540A Certification
- Internal fire suppression
- Integrated sprinkler system w/Fire Department Connection

All other components of the site remain unchanged since the Planning Board approval in February 2023.

Meeting with Fire Department on June 4, 2025

On June 4, 2025 New Leaf Energy held a virtual meeting with Andover and Tewksbury Fire Departments, Building Commissioners, and the Andover Town Planner. From that meeting numerous action items were assigned to New Leaf Energy and have been compiled below. Please see the responses and additional information provided based on what was discussed at that meeting:

- 1.) Tewksbury and Andover Fire Department requested that NLE move the location of the Dry Pipe Fire Department Connections (FDCs) alongside the

access road entrance off Moonlight Drive.

NLE RESPONSE: The location of the FDCs has been updated. Please see sheet C-3.0 Layout and Materials Plan under Attachment 2.

2.) NLE to address if an indicating light on each Fire Department connection is possible to alert which battery segment is on fire in case of an emergency.

NLE RESPONSE: New Leaf is continuing to look into this. Typically, battery manufacturers are hesitant to allow non-standard equipment to be connected to the battery control and monitoring system, but we will work with them to see what options are available.

If an indicator light cannot be installed, there are other verification options to confirm which container is experiencing thermal runaway. Prior to operation, the system owner will designate an Emergency Response Coordinator. This person/group will be notified of any emergency response conditions from the 24/7 monitoring system and will be responsible for relaying this information to emergency services.

3.) NLE to address further information about the Deflagration panels being sufficient with New England weather (heavy snow).

NLE RESPONSE: As requested, additional information regarding the fire protection system has been included in this application, please see Attachment 6. Regarding deflagration panels – the proposed Lithium battery containers utilize NFPA69 certified exhaust fans instead. If gas is detected, the fans vent the container with the goal of keeping concentrations below 25%, which is the lower flammability limit per NFPA855. These fans are backed up with an uninterruptible power supply (UPS) that provides standby power for 24 hours, or 2 hours of operational power.

4.) NLE to check with Tewksbury City Engineer about the use of 6" water main along Moonlight Drive or 8" to be consistent with South Street.

NLE RESPONSE: The City Engineer confirmed the use of 8" will be required. NLE to comply with this. Please see the updated callout on sheet C-3.0.

5.) NLE to provide annual training for both Tewksbury and Andover Fire Departments.

NLE RESPONSE: NLE agrees with this condition. In addition to annual training, training will be provided prior to operation of the facility. This is typically scheduled during construction to help familiarize emergency services with the site.

We appreciate your consideration of this request. Please do not hesitate to reach out for additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Brandon Smith".

Brandon Smith
Civil Engineer,
P.E.

Attachments:

1. Modification Comparison Plan
2. Engineering Plan Set dated November 25, 2024
3. Hithium BESS Datasheet
4. Decommissioning Estimate dated November 25, 2024
5. Sound Report Dated November 19, 2024
6. Hithium Container Fire Protection System document