



TOWN OF CARVER

Permitting Departments

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BOOK 51033 PAGE 171

Recorded On:

Apr 25, 2019 at 01:07P

PLYMOUTH COUNTY REGISTRY OF DEEDS

John R. Buckley Jr., Register

TOWN CLERK
MAR 28 AM 9 31
CARVER MA

March 26, 2019

Lynn Doyle
Town Clerk
108 Main Street
Carver, MA 02330

**RE: Applicant—Cranberry Point Energy Storage/Sovereign Energy Storage
Site Plan Review and Special Permit – Battery Energy Storage System (BESS)
31R Main Street (Map 61 Lots 7-0, 10-0)**

Dear Ms. Doyle:

At its meeting of March 26, 2019, the Planning Board voted to approve the Site Plan Review application and Special Permit submitted by Cranberry Point Energy Storage/Sovereign Energy Storage to construct a Lithium-ion Battery Energy Storage System (BESS) with a storage capacity of 150 MW, located at 31R Main Street, as shown on the plan entitled: "Cranberry Point Energy Storage System Project" prepared by AECOM based in Chelmsford, MA, dated January 17, 2019 and revised March 7, 2019 with the following findings:

Findings:

The Commonwealth of Massachusetts Energy Storage Initiative (ESI) aims to make the Commonwealth a national leader in the emerging energy storage market. The Baker Administration launched ESI in May 2015 with the goal of advancing the energy storage segment of the Massachusetts clean energy industry by: 1) Attracting, supporting and promoting storage companies in Massachusetts. 2) Accelerating the development of early commercial storage technologies. 3) Expanding markets for storage technologies, and valuing storage benefits to clean energy integration, grid reliability, system wide efficiency, and peak demand reduction. 4) Recommending the developing policies, regulations and programs that help achieve those objectives.

An Act Relative to Energy Diversity, Chapter 188 of the Acts of 2016 states that the Department of Energy Resources (DOER) shall adopt targets to achieve the state's energy storage goals. DOER conducted extensive research, hosted public hearings, solicited comments from stakeholders and industry leaders. DOER has determined that the appropriate next step for the Commonwealth is the adoption of an aspirational 200 Megawatt hour (MWh) energy storage target for electric distribution companies to procure viable and cost-effective energy storage systems to be achieved by January 1, 2020.

The DOER's *State of Charge* report released in September 2016 identified over \$800 million in system benefits to Massachusetts ratepayers by 2050. Since its release, DOER has implemented many of the report's recommendations to promote energy storage in the Commonwealth; including incentivizing pairing energy storage with solar, authorizing the pairing of energy storage technologies with the largest procurement of clean and offshore wind energy generation, continued energy storage grant opportunities through the Community

Clean Energy Resiliency Initiative, and funding energy storage projects through the Peak Demand Reduction Grant Program.

Enel is a multinational energy company and one of the world's leading integrated electricity and gas operators. Enel has a presence in 35 countries across 5 continents and generates energy with a capacity in excess of 89 Gigawatts (GW). Approximately 43 GW is provided by wind farms, hydroelectric, geothermal, solar and biomass power plants. Enel distributes energy to 73 million customers around the world.

Enel Green Power North America, Inc. (EGP-NA) inaugurated their North American headquarters in March 2017 in Andover, Massachusetts. EGP-NA is a leading owner and operator of renewable energy plants in North America with projects operating and under development in 23 U.S. states. EGP-NA first entered the U.S. market in 2000 with the acquisition of approximately 300 MW of hydropower, including two hydropower plants in Lowell, MA and Lawrence, MA. Since then, the company has increased its capacity to more than 3,000 MW nationwide.

According to *State of Charge*, the electricity market currently has only a storage capacity of 1% of daily electricity consumption in Massachusetts. Other commodities, such as food, water, gasoline, oil and natural gas have an average storage capacity of 10% of daily consumption.

Without storage, electricity needs to be produced, delivered and consumed nearly instantaneously for the grid to maintain balance. According to ISO-NE Hourly Load Data, over the past 3 years, the top 1% most expensive hours accounted for 8% (\$680 million) of Massachusetts ratepayers' annual spend on electricity. The top 10% of hours accounted for 40% of annual electricity spend, over \$3 billion. Energy storage is the only technology that can use energy generated during low cost off-peak periods to serve load during expensive peak periods.

According to ISO-NE, the New England region is losing traditional energy generators. More than 5,200 MW of oil, coal and nuclear power plants will retire by 2022. An additional 5,000 MW of coal and oil-fired generation is anticipated to be retired shortly thereafter.

The Battery Energy Storage System will contain Lithium-ion batteries. The contents of the batteries include nickel, manganese and cobalt.

The underlying zoning is Residential/Agricultural. In 2018, the Annual Town Meeting approved battery energy storage systems as an allowed use in all zoning districts throughout the community.

The applicant, Cranberry Point Energy Storage/Sovereign Energy Storage is proposing 186,436 square feet of new development located adjacent to the Eversource substation. 46,294 square feet will be rendered impermeable.

On January 16, 2019 the Planning Board visited the site to observe current conditions and understand the site layout. The property is undeveloped and contains unimproved roads to access a cell tower and cranberry bogs to the south. The project area is primarily located in a wooded portion of the property and is bounded to the north by transmission and distribution lines and the Eversource substation, to the west by transmission and distribution lines, to the south and east by wetlands. AECOM delineated wetlands boundaries on July 25, 2018.

The Planning Board is in receipt of the WPA Form 5 – Order of Conditions dated February 6, 2019 provided by the Carver Conservation Agent identifying areas where work is proposed within 100' of a wetland, but in no instance does work appear to be conducted within 65' of a wetland.

The Planning Board is in receipt of a memo from the Carver Fire Department dated December 10, 2018 in which the CFD attests the site access is adequate. CFD memo requests training and an Emergency Response Plan to be developed, with CFD input and approval.

The Planning Board is in receipt of a memo from Fuss and O'Neill, acting as the Board's peer review engineers. Fuss & O'Neill review engineers cite several areas where the applicant is seeking waivers and relief from zoning by-law requirements. In all instances, Fuss & O'Neill recommends approval of waivers.

The applicant has pledged to donate funds to be retained in the administrative control of the town to assist with reforestation efforts and landscaping intended to beautify public rights of way located in the immediate vicinity of the project. Additional funds will be donated by the applicant to assist abutters with a landscaping plan to be implemented on the abutting property for the purpose of screening the project site from the abutting property.

The applicant received and responded to written questions presented to the applicant by the Planning Board members in a memo dated February 11, 2019. The Planning Board discussed the questions and answers presented during a regular meeting of the Board on March 12, 2019.

The Planning Board's public hearing for the above referenced plan was held pursuant to Sections 2230 (Use Regulations), 3100 (Site Plan Review), and 5300 (Special Permits) of the Carver Zoning By-Laws. The Board finds that the benefits of the proposed use outweighs any detrimental impacts of the town and the neighborhood, in view of the particular characteristics of the site, pursuant to Sections 3100 and 5300 and the specific criteria found therein.

The Board voted 4-1 to approve the Site Plan and Special Permit with following conditions:

Conditions:

1. Prior to the issuance of an Electrical Permit, the applicant shall develop an Emergency Response Plan (ERP), with input and approval from the Carver Fire Department. The ERP will include best practices for fire suppression, professional development and training for Carver Fire Department personnel, specialized equipment and/or any apparatus that may be necessary to mitigate fire hazard on site. The ERP will include the methods for collection, testing and disposal of water used to suppress a fire that comes into contact with the lithium-ion cells.
2. The ERP will include the contact information for two (2) responsible site managers.
3. Prior to the facility going on-line, funding shall be provided by the applicant, directed towards emergency equipment and training, to help mitigate any potential hazards. These funds will be directed towards the purchase of emergency fire vehicles/necessary fire equipment, specifically to assist the town in mitigating fire hazards, accessing, rescuing, and removing people in danger in the remote areas of the site, that do not meet access standards. The funding amount and mechanism for needed emergency equipment, utilized by the Fire Department, will be finalized by the Town Administrator and approved by the Planning Board.
4. The BESS shall be installed in accordance with MA 527 CMR 1.00, Chapter 52, Stationary Storage Battery Systems. This includes, but is not limited to: 52.3.10, an approved, supervised smoke detection/fire alarm system; 52.3.2, a Thermal runaway system; and 52.3.7, a temperature maintained operating environment.
5. A local electrical disconnect shall be installed.
6. All access roads shall be constructed of an all-weather surface 12' wide, and be cleared of obstructions on both sides by at least 2'. The vertical clearance shall be a minimum of 16'. All gated access points should have the ability to accommodate a CFD supplied padlock or a "Supra" key safe, which must be installed at the expense of the developer. Specifications and ordering information for order the "Supra" box will be provided by CFD upon request.
7. The applicant shall submit and maintain ground fuels manicuring and maintenance schedule. Manicuring of ground fuels should occur twice per year, at a minimum, during the "growing season."
8. Prior to the issuance of a Building Permit, the applicant shall inform the Planning Administrator and Carver Fire Department which manufacturer has been selected to provide the technology for the development.
9. Components of the Carver public safety radio system is located adjacent to the project site. The applicant shall provide to CFD evidence that the BESS will not create radio interference with this mission critical infrastructure.
10. The design of the fire suppression system shall be in accordance with all applicable codes and requirements, including NFPA 70, NFPA 72, NFPA 855, MA 527 CMR 1.00 and UL 9540. These systems shall be approved by the Carver Fire Department.

11. Applicant shall hire a fire protection engineer (FPE) to act as the Assistant Deputy Fire chief's assistant in review of the project for applicable code compliance and related fire safety conditions. The FPE shall recommend the approval/disapproval of the design and installation of both passive and active fire protection systems.
12. Site shall be screened with a vegetative barrier or fencing on all sides of the project site in order to adequately prevent abutters from reasonably being visibly impacted by the development site.
13. Prior to the issuance of a Building Permit, a true copy of the recorded decision, as registered at the Plymouth Co. Registry of Deeds shall be submitted to the Board.
14. The project must be constructed as approved in the Site Plan. Any other revisions will require approval from the Board as a Modification of this decision.
15. Prior to the issuance of a Building Permit, the applicant shall submit site signage information, including details and locations.
16. Applicant must submit updated Operation and Maintenance plan, including revisions outlined in memo provided by Fuss & O'Neill dated March 8, 2019.
17. Applicant must submit updated SWPPP, including revisions outlined in Fuss & O'Neill's memo dated March 8, 2019.
18. Applicant shall submit estimate of construction costs to the Planning Administrator.
19. Prior to the issuance of an Electrical Permit, the applicant shall provide the Board with a decommissioning bond in an amount to be negotiated by Town Administrator and Planning Board to run with the life of the project.
20. Prior to the issuance of an Electrical Permit, applicant will submit a cut-sheet to be approved by the Planning Board showing locations, height, orientation, color and type of lighting.
21. The applicant is responsible for the proper operation and maintenance of the site. During construction sedimentation and soil erosion controls shall be installed, repaired and supplemented as needed. Dust control is required during construction and the roadway apron is to be kept swept and clear of any dust, dirt or debris.
22. Any outstanding balance of the Review and Inspections Deposit Account shall be paid prior to the issuance of a Certificate of Use and Occupancy.

Waivers:

1. Applicant requests a waiver for providing open space.
2. Applicant requests a waiver for designating permanent parking, loading areas, and walkways.
3. Applicant requests a waiver for providing on-site landscaping.
4. Applicant requests a waiver for providing traffic plan. A waiver does not apply to the trip generation during construction.

Any appeal of this decision must be filed pursuant to MGL Ch. 40A, Section 117, and shall be filed within 20 days of the filing of this decision with the Town Clerk.

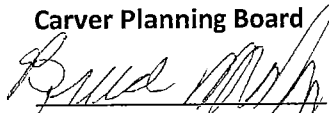
Vote of the Board


Mr. Maki – Yes
Mr. Hoffman – N/A

Ms. Bogart - No
Ms. Dahill - Yes

Mr. Sinclair - Yes
Mr. Robinson - Yes


Carver Planning Board

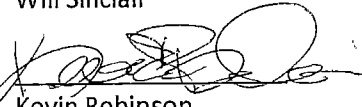

Bruce Maki, Chair


Cara Dahill, Alternate

Jen Bogart, Secretary

Jim Hoffman, Vice Chairman


Will Sinclair


Kevin Robinson

cc: Applicant
Town Clerk
Conservation Commission
Carver Fire Department
Board of Health



Cranberry Land U.S.A.

Town Clerk

Lynn A. Doyle

Notary Public

Lynn.doyle@carverma.org

108 Main Street

Carver, Massachusetts 02330

Tel: 508-866-3403 • Fax: 508-866-3408

Marignal Reference:

Book 17970, Page 155

Book 17970, Page 157

**CERTIFICATE OF TOWN CLERK AS
TO PLANNING BOARD DECISION**

Petition of: Cranberry Point Energy Storage/Sovereign Energy Storage

Location: 31R Main Street
Map: 61; Lots 7-0, and 10-0

Re: (P-629-19 SP/SPR)
Special Permit/Site Plan Review

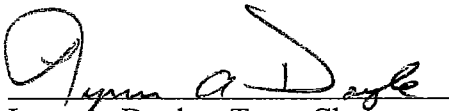
I, hereby certify that the decision of the Town of Carver Planning Board was filed in the office of the Town Clerk, March 28, 2019.

I further certify that twenty (20) days have elapsed after the decision has been filed in said office and that no appeal has been filed.

Date of Certification: April 17, 2019

Case: # 633

Issue Date: April 18, 2019


Lynn A. Doyle – Town Clerk

cc: Planning Board

MLP