## **BATTERY ENERGY STORAGE IN WENDELL?**



## SOME FACTS TO CONSIDER

**THE PROPOSAL:** Shown above is an artist's rendering of the Wendell Battery Energy Storage System (BESS) proposed by New Leaf Energy Inc. for a 50 acre site off Wendell Depot Rd. This is a stand-alone project that generates profit by 'buying low and selling high.' Electrical energy from the grid is stored in rechargeable lithium batteries and later returned to the grid, typically on a daily basis. The project is designed to store 100 MW of power to be returned to the grid over a four hour period to yield 400 MWh per cycle, or roughly enough power to supply all of Wendell for a full month.

The project calls for 780 lithium battery modules, each about the size of a small car, grouped into 30 "centipedes" with 26 segments each on separate concrete pads with supporting equipment for each centipede on another 30 pads, and all of this surrounded by a 25-foot plastic wall to reduce noise. The plan also calls for an asphalt access road, massive transformers and other heavy electrical equipment to connect the facility to neighboring transmission lines. Altogether, more than 11 forested acres would be cleared of all trees and stumps and about 2.7 of these covered with impervious surfaces.

**HOW WE GOT HERE:** The project was first proposed in May of 2020 by Borrego Energy, LLC, headquartered in California, and a public meeting was held to introduce the project in July of 2021. It was clear early on that the project could not satisfy Wendell's Zoning Bylaw because of the amount of impervious surface (if nothing else,) and Borrego announced plans to seek zoning exemptions from the Department of Public Utilities (DPU) rather than a variance from the Wendell Planning Board.

In July 2022, Borrego spun off its development business as New Leaf Energy, Inc. headquartered in Lowell, Mass. and owned by Energy Capital Partners out of New Jersey. In August 2022, New Leaf submitted a Notice of Intent to the Wendell Conservation Commission (ConCom) pursuant

to the Wetlands Protection Act and the Town of Wendell Wetlands Bylaw. In December 2022, the Commission voted to deny the New Leaf petition based on the town's Wetlands Bylaw because of harmful impact of noise on wildlife.

In January 2023, Wendell Energy Storage 1, LLC, solely owned by New Leaf Energy, Inc. filed petitions with both DPU and the Energy Facility Siting Board (EFSB) seeking zoning exemptions and approval to proceed with construction. Since then, the EFSB decided it does not have jurisdiction over BESS installations because they are not "generating facilities" as required by law. Since the EFSB is the only state agency empowered to override a ConCom decision, the denial based on the Wendell Wetlands Bylaw is still in force but could be challenged in court.

**WHAT'S NEXT?** The DPU is required by law to hold a public meeting to hear any concerns regarding the project before proceeding with a hearing on the petition. So far, there has been no Environmental Impact Review under the Massachusetts Environmental Policy Act, but Wendell has argued that there should be such a review because of the size and impact of the project.

**PROJECT JUSTIFICATION:** The State of Massachusetts has determined that electrical energy storage is critical for the transition from fossil fuels to renewable energy in order to reach netzero emissions by 2050 as required by law. Solar and wind generation are inevitably intermittent, and energy storage is needed to better manage variable supply and demand. Storage developers argue that BESS facilities serve the general welfare, displacing fossil energy by storing relatively clean energy and dispatching it when fossil fuels would otherwise be used. The State foresees massive increases in demand requiring massive increases in supply in order to maintain economic growth far into the future.

## SOME KEY CONCERNS

**ECOLOGICAL DISRUPTION:** Much of the project site and the surrounding area has been designated as "Critical Natural Landscape" or "Core Habitat" by BioMap, and the Department of Energy Resources (DOER) ranks it as only marginally suitable for solar installations. Located in the headwaters of a pristine wetland of unique importance, the site lies over an aquifer that has been identified as "the most promising municipal groundwater supply for the town." The area has been a conservation priority in successive Wendell Open Space and Recreation Plans spanning decades. Such ecological bounty deserves protection; its loss would harm not only Wendell residents but all of Massachusetts and beyond.

**THREATS TO PUBLIC SAFETY:** Failure to provide adequate manpower, training, and equipment needed to respond effectively to potential emergencies, including the risk of thermal-runaway events involving fire, explosion, and release of harmful chemicals, leaves all of us more vulnerable to avoidable risk.

**EROSION OF LOCAL CONTROL:** The time-honored tradition of local rule over local issues based on free elections and democratic town meetings is under threat from increasingly centralized

command and control. Critical decisions about our energy future are being made by tiny groups of people in corporate offices and state agencies empowered to decide what's best for us by a system that views towns as pawns not partners.

**IMPACTS ON INFRASTRUCTURE:** Heavy truck traffic during construction would cause further costly damage to roads and bridges already impacted by torrential rain and resulting erosion.

**PROFIT OVER WELFARE:** There's no such thing as a free lunch. It takes energy to store energy and transmit it from place to place. Energy efficiency favors locating energy storage close to where it's generated. Protection from supply outages, on the other hand, favors locating storage close to where energy is used. As a small rural town, Wendell serves neither goal well, but its relatively low land prices offer financial profit at the expense of energy efficiency and ecosystem integrity.

**UNSUSTAINABLE GROWTH:** Endless growth on a finite planet is foolish and dangerous. Global resource extraction and waste already exceed multiple planetary limits. We must reduce the flow of energy and materials through the human system if we are to enjoy a livable future. The transition to renewable energy must include significant demand reduction as well as clean supply expansion. Hard choices are necessary and cannot be avoided: better to plan now than suffer later.

## Join us as we seek a sustainable future for ourselves, our home and life itself.

No Assault & Batteries, Wendell, MA. January 2024

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Osgood Brook BioMap Core Habitat, threatened by the New Leaf energy storage project. Photo: Dan Leahy, Chair, Wendell Open Space Committee