

November 2019

Presentation for Maine Energy Storage Commission



LS Power

Founded in 1990, LS Power is a Power Generation and Transmission Company with over 230 employees across its principal and affiliate offices in New York, New Jersey, Missouri, Texas and California





LS Power National Project Portfolio

Extensive development and operating experience across multiple regions, markets and technologies





Kibby Wind Farm, Franklin County, Maine



Capacity:

- 132 Megawatts (MW)
- 44 wind turbines; 3 MW each

In-service dates:

• 2009 and 2010

Project Highlights:

- 11 full-time positions
- 315 construction jobs at peak
- \$654,000/year in taxes paid to Maine
- \$132,000/year in taxes paid to Town of Eustis
- Community Support has included
 - $\,\circ\,$ \$20,000 for Blanchard Park in 2018/19
 - \$14,000 to Eustis Fire Department
- Other contributions in 2019 to:
 - o Greater Franklin Development Corp
 - $\,\circ\,$ Maine Dept of Inland Fisheries
 - Stratton/Eustis after school program
 - Flagstaff Area Business Association
 - $\,\circ\,$ Kingfield Pops Music Festival
- Conservation Agreement to protect high elevation ridgelines



LS Power - Energy Storage Portfolio

Vista Energy Storage

- Vista, CA San Diego County
- 40 MW, operating since 2018
- Most powerful battery operating in CA

Diablo Energy Storage

- Pittsburg, CA Contra Costa County
- 200 MW, anticipated operation 2021
- Contracted to provide resource adequacy

Bath Pumped Storage

- Bath County, Virginia
- 3000 MW, operating since 1985
- LS Power holds a 25% ownership stake
- Can provide 8 to 10 hours of power

Gateway Energy Storage

- Otay Mesa, CA San Diego County
- 250 MW, under construction with anticipated operation 2020
- Improves deliverability of renewable energy to San Diego

LeConte Energy Storage

- Calexico, CA Imperial County
- 125 MW, anticipated operation 2023
- Co-located with Centinela Solar Energy Station

Seneca Pumped Storage

- · Warren County, Pennsylvania
- 435 MW, operating since 70
- Can provide 8 to 10 hours of power









Additional Energy Storage Development Projects

Ravenswood Battery Storage

- New York City
- 316 MW battery project at LS Power's Ravenswood Generating Station
- CPCN granted October 2019
- Planned 2022 in-service date
- Supports NY's renewables goals
- Represents more than 10 percent of NY's storage goal of 3000 MW

Kibby Battery Storage

- Franklin County, Maine
- Co-located with Kibby Wind Farm
- Potential 60 MW battery project
- Would help lower peak energy prices by storing excess wind energy for delivery during higherpriced, peak periods
- Supportive of climate goals

Energy Storage Procurement Considerations

- Off-peak/on-peak price differential
- As with many emerging technologies, predictable revenue streams can be meaningful to a project's economic viability
- If the state decides to require battery storage procurements, RFPs should be technology agnostic
 - The state should determine how much storage it wants and let the market provide the most cost-effective options
- Procurements should not favor utility built, rate-based projects
 - History has shown that tax payers are better served by competitive processes
 - Including Non-utility storage developers to put their capital at risk helps to ensure the best pricing and lowest risk for ratepayers
- Markets need to ensure that distribution interconnection rules do not act as barriers to entry for behind the meter generation
- Work with ISO-NE to ensure wholesale market rules appropriately compensate behind the meter generation

