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To: Commission To Study the Economic, Environmental and Energy Benefits of Energy Storage to the Maine Electricity Industry

Contact Information and Presenter

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SunRaise solar and storage project in Massachusetts

Location: Winchendon, MA

Technology type: Stand-alone lithium-ion battery, AC coupled with a 7.1MW DC solar array

Capacity: 3.2 MW/6.4 MWh

Project status: Operational as of October 2019

About SunRaise and summary of comments to provide to the Energy Storage Commission SunRaise is a New England based commercial solar and storage developer and financier with operations in Maine, Massachusetts, New Hampshire, Vermont and California.

In 2018, SunRaise financed a 6.4 megawatt-hour ("MWh") AC coupled battery energy storage system ("BESS") in Winchendon, MA. The BESS commenced operations in October 2019 and is coupled with a 7.1 MW DC solar array. This project will participate in the Solar Massachusetts Renewable Target ("SMART") program and receive an energy storage adder on each solar kilowatt-hour ("kWh") produced as compensation for installing, financing and operating the BESS in connection with the solar array.

Without the energy storage adder, SunRaise would not have financed the BESS portion of the project due to the cost of battery storage systems relative to the lack of storage incentive programs at the time. To finance the BESS, and ultimately dispatch it in a manner that will provide value to Massachusetts ratepayers, SunRaise required a reasonably predictable and sufficient revenue stream. The energy storage adder provided this and allowed SunRaise to close on the significant funds necessary to invest in the BESS and make the project a reality. The certainty and predictability of the SMART program and its energy storage adder also enabled SunRaise to close financing in 2018 despite the project not coming online until October of 2019.

To maintain the adder, SunRaise must fulfill the operational requirements of SMART, which means fully cycling the BESS at least 52 times per year and either 1) dispatching the BESS during summer and winter peak hours, or 2) participating in ISO-NE wholesale markets or a program aimed at reducing ratepayer cost. SunRaise has elected to register and participate in ISO-NE wholesale markets. The forward capacity market ("FCM"), energy reserves, and frequency regulation are a few of the markets in which the BESS may participate. Focusing on the FCM, the BESS recently qualified for Forward Capacity Auction 14 ("FCA 14") for the Capacity Commitment Period ("CCP") beginning June 1, 2023. The BESS will submit an offer for FCA 14, which occurs in February 2020, and if the BESS clears the auction it will provide capacity services for the CCP at a competitive rate, reducing the capacity prices in ISO-NE. This is just one of the benefits the BESS is able to provide, which is due in large part to the SMART energy storage adder incentivizing the installation of energy storage and its participation in ISO-NE wholesale markets.

Thank you for the opportunity to provide this information to the Energy Storage Commission.