SUBMITTED ELECTRONICALLY

April 20, 2026

CESA comments re: Maine DOER Draft Request for Proposals for Energy Storage Projects

The staff of the Clean Energy States Alliance[1] is pleased to submit the following comments in response to Maine Department of Energy Resources' request for comments on its draft energy storage RFP. The Clean Energy States Alliance (CESA) is a leading US coalition of state energy agencies working together to advance the rapid expansion of clean energy technologies and bring the benefits of clean energy to all. Established in 2002, CESA is a national, member-supported nonprofit that works with its members to develop and implement effective clean energy policies and programs. CESA's members include many of the nation's most innovative, successful, and influential implementers of clean energy policies. CESA facilitates the expansion of state clean energy policies, programs, and innovation, with an emphasis on renewable energy, energy storage, energy equity, and resiliency. CESA and its members perform an essential role in moving the nation from fossil fuels to affordable clean energy. Learn more at www.cesa.org.

CESA applauds Maine DOER for its thoughtful and thorough draft energy storage RFP. However, we encourage DOER to include fossil fuel peaker plant replacement among the potential benefits of energy storage to be included in the RFP and to be considered when evaluating proposals.

In 2024, CESA issued a report titled *Battery Storage for Fossil-Fueled Peaker Plant Replacement: A Maine Case Study.* In this report, we demonstrated that new battery storage in Maine could not only provide peaking capacity but could do so more cost-effectively than a new natural gas-fired peaker plant, if the environmental and human health costs of local emissions from the gas peaker were taken into account. This report can be downloaded here: https://www.cesa.org/resource-library/resource/battery-storage-peaker-plant-replacement-maine/.

This analysis is important because fossil-fueled peaker plants are highly polluting and expensive. Peakers and their associated air emissions—carbon dioxide (CO_2), nitrogen oxides (NOx), sulfur oxides (SOx), and fine particulates—create negative environmental and human health impacts, the latter including heightened rates of asthma, heart disease, chronic kidney disease, premature death, and increased COVID-19 mortality. Peakers are also disproportionately sited in low-income communities, communities of color, and areas already overburdened by pollution.[2]

[1] These comments have been prepared by CESA staff and have not been vetted by the CESA board or by individual CESA member organizations.

[2] For more information about peaker plants, see Clean Energy Group's Phase Out Peakers project: https://www.cleanegroup.org/initiatives/phase-out-peakers/

In our report, CESA identified several fossil fueled peaker plants in Maine that were nearing retirement. Maine has an opportunity to replace these aging plants with new energy storage instead of new gas peakers. DOER's energy storage RFP could be the mechanism to achieve this.

One of the takeaways from our analysis is the counter-intuitive fact that if the most inefficient and aging fossil-fueled peakers in Maine were retired and replaced with new, more efficient gas plants, Maine would see an *increase* in total emissions of about 104,000 tons of CO_2, 12 tons of NOx, and 0.5 tons of SO_2 annually. This would occur because new gas plants would be able to economically run for more hours per year than the older, less efficient fossil-fueled plants; and more run-time results in higher emissions, despite higher efficiencies.

Replacing retiring fossil-fueled peaker plants with battery storage would avoid this increase in emissions, resulting in environmental and human health benefits including lower risks of respiratory illness, cancer, disease, and premature mortality associated with the emission of greenhouse gases and local pollutants. In addition to ethical considerations, improved human health outcomes also confer economic benefits; in this case, Maine would save an estimated $7.1 million annually by 2030 based on reduced morbidity and mortality.

It is also important for DOER to consider possible changes in ISO-New England capacity market accreditation rules. Our report shows that when local and global emissions impacts are taken into account, 4-hour battery storage (BESS) is more cost-effective than new gas peakers under both current (Qualifying Capacity) and prospective [Effective Load Carrying Capability (ELCC)] ISO-New England capacity market accreditation rules. Four-hour BESS is significantly more cost-effective than its 2-hour counterpart under the ELCC approach, making 4-hour BESS a more durable, future-proof investment.

CESA applauds Maine Department of Energy Resources for considering in its procurement not only the economic benefits of battery storage, but also the environmental benefits; and CESA urges DOER to further take into account human health benefits. To achieve this, DOER should consider fossil fuel peaker replacement as a potential benefit when evaluating proposals under its energy storage RFP and inform potential respondents of this by explicitly identifying peaker replacement as a benefit in the RFP.

We would be happy to answer any questions or to discuss this in more detail with DOER.

Sincerely,

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