

**Commission To Study the Economic, Environmental and Energy Benefits of Energy Storage to the Maine  
Electricity Industry – Member Suggested Recommendations  
November 19, 2019**

**Recommendation #1: Establish Procurement Targets for Storage**

- 1.1 Specific storage procurement targets for storage set by PUC through rulemaking that are cost effective for Maine. (Sen. Vitelli)
- 1.2 Enact a legislatively mandated storage procurement target (50 MWh by 2021; 150 MWh by 2023). (Mueller)
- 1.3 Establish a state procurement target based on the amount of storage projected to be needed to support Maine’s 80% by 2030 RPS requirement and 100% by 2050. Establish eligibility criteria for projects (newly built; located in ME; demonstrably reduce GHG emissions; reduce costs for all consumers or low to moderate income consumers; avoid/minimize wildlife habitat impacts; etc.) (Wood)
- 1.4 Establish 100 MW storage target by 2025. (Bishop)
- 1.5 Establish a procurement target similar to minimums established in other states similar to Maine or scaled to Maine’s market. (Klein)

**Notes/Decisions:**

**Recommendation #2: Incorporate Storage into Renewable Energy Policy and  
Procurements**

- 2.1 Include adders for storage along with existing procurements for renewable energy. (Klein)
- 2.2 Explicitly give adders for storage in state procurements for renewable resources if the storage alleviates congestion. (Bishop)
- 2.3 Adopt policies for storage in new renewable development. (Birney)
- 2.4 Require future RPS long-term procurements include bids paired with energy storage or a dispatchable renewable resource such as hydropower with reservoir storage. (Zuretti)
- 2.5 Utilize existing policy related to the State’s aggressive renewable energy goals to facilitate the construction of storage projects. (Pease)

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**Recommendation #3: Create Incentives Through Programs\* or Tax Initiatives**

- 3.1 Provide property tax abatement or sale tax exemptions for energy storage equipment. (Zuretti)
- 3.2 Incentivize the development of storage for large energy users. (Birney)
- 3.3 Develop a program similar to MA’s Advancing Commonwealth Energy Storage Program (ACES) which provides grants to energy storage projects that test various, multi-use business cases for storage. (Pease)
- 3.4 Offer storage rebates (like the MA STORM Bill) for outage affected customers and critical infrastructure/first responders. In ME this would incentivize storage in rural areas that are often subject to extended outages during storm events. (Mueller)
- 3.5 Implement a Bring-Your-Own-Device (BYOD) program like other NE states which uses customer sited, non-utility owned battery storage to meet peak demands thus reducing costs for all customers. (Mueller)

\*See more program-based suggestions under Recommendation #4

**Notes/Decisions:**

**Recommendation #4: Incorporate Storage into Energy Efficiency Programs**

- 4.1 Amend provisions of Title 35-A, chapter 97 to ensure definitions of “efficiency” affirmatively include energy storage so that the Efficiency Maine Trust has express authority to incentivize behind the meter storage options for Maine energy consumers. (Sen. Vitelli)
- 4.2 Ensure the EMT has the statutory authority necessary to advance energy storage as a measure to improve overall grid efficiency. (Wood)
- 4.3 Provide additional funding for the EMT to reduce the impact on peak demand and require more education to manage energy use in a manner that curtails use during peak times in order to reduce the need to add storage to the system. (Birney)
- 4.4 Investigate to determine if the EMT needs to offer additional incentives or perform targeted advertising/networking/etc. to advance pilots, especially those that could have a storage component. (Klein)
- 4.5 Residential batteries should be added to the list of things the EMT gives rebates for, especially in concert with distributed renewable energy systems. (Klein)

**Notes/Decisions:**

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**Recommendation #5: Direct Further Study of Energy Storage Policy**

- 5.1 Request that the Climate Council and its subcommittees study storage for the long-term and ensure that a clear cost-benefit analysis is performed before enacting any long-term goals. Direct the PUC and Climate Council to consider storage a part of any plans to enhance Maine’s grid stability. (Sen. Vitelli)
- 5.2 Perform quantitative modeling and Maine specific data analysis to develop a detailed and prioritized list of Maine specific needs and goals related to the potential benefits of storage then develop a coordinated set of policy actions to incentivize the amount and type of storage needed. (Klein)
- 5.3 Look further into the extent to which properly formulated and deployed time-of-use programs, based on innovative best practices could send the right price signals to consumers and which policies are friendlier to increasing energy storage. (Klein)
- 5.4 An additional study should be performed into the overall impact of energy storage on carbon emissions and study the long-range effects on Maine for each of the option reviewed (or recommended) by the commission. (Birney)

**Notes/Decisions:**

**Recommendation #6: Explore/Implement Rate Design Options to Encourage Storage**

- 6.1 Cost savings from peak shaving would create additional economic incentives to invest in behind the meter storage if there was time of use rates for both the transmission and distribution and supply portions of a customer’s bill. (Rep. Grohoski)
- 6.2 Offer some type of incentive or regulatory directive for utilities to deploy and consumers to adopt time-of-use rates based on existing best practices. (Klein)
- 6.3 Look into and enact regulations to improve utility rate design to account for the value to ratepayers of avoided transmission. (Rep. Grohoski)
- 6.4 Move towards modernized rate design. (Rep. Riley)

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**Recommendation #7: Ensure Proper Codes and Standards are in Place**

- 7.1 Improve/streamline interconnection requirements for storage and adopt safety and performance codes for storage. (Rep. Grohoski)
- 7.2 Amend interconnection tariff, and implement safety and performance codes/standards. (Bishop)

**Notes/Decisions:**

**Recommendation #8: Address Decommissioning and End-of-Life Remediation**

- 8.1 Require decommissioning plans for storage facilities. (Rep. Grohoski)
- 8.2 Adopt policy for remediation of equipment, especially hazardous waste when its life cycle is complete. (Birney)

**Notes/Decisions:**

**Recommendation #9: Encourage Utilities to Invest in Storage**

- 9.1 Create a regulatory structure to allow investor-owned T&D's to own and dispatch storage at or near utility substations that considers how the costs are recovered and the field is leveled with non-utility investors. (Rep. Grohoski)
- 9.2 Create mechanisms to incent T&D utilities to invest in storage infrastructure that enables renewable generation by allowing utilities to place those costs into customer rates outside of a general rate case. (Pease)

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**Recommendation #10: Encourage ISO-NE to Create Favorable Markets for Storage**

- 10.1** Direct the PUC to promote changes to ISO-NE wholesale markets that: (a) acknowledge the locational value of new grid-scale energy storage; and (b) ensure grid-scale energy storage, regardless of vintage or technology is adequately compensated for all energy and reliability service each resource provides. (Zuretti)
- 10.2** Create a coalition of state government officials from the member states of ISO-NE to work toward advancing ISO-NE thinking relating to storage and renewable. (Klein)

**Notes/Decisions:**

**Recommendation #11: Other Recommendations**

- 11.1** Include strategies in any policy recommendation to ensure low-income customers have access to benefits of storage. (Sen. Vitelli)
- 11.2** Support emerging technologies that create renewable natural gas and hydrogen. (Rep. Riley)
- 11.3** Streamline the permitting process to advance energy storage at all scales. (Zuretti)

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