

STATE OF MAINE

—  
IN THE YEAR OF OUR LORD  
TWO THOUSAND TWENTY-ONE

—  
S.P. 213 - L.D. 528

**An Act To Advance Energy Storage in Maine**

**Be it enacted by the People of the State of Maine as follows:**

**Sec. 1. 35-A MRSA §3145** is enacted to read:

**§3145. State energy storage policy goals**

The state goal for energy storage system development is 300 megawatts of installed capacity located within the State by December 31, 2025 and 400 megawatts of installed capacity located within the State by December 31, 2030. Beginning January 1, 2031, and every 2 years thereafter, the Governor's Energy Office established in Title 2, subsection 9 shall set the state goal for energy storage system development and report that goal to the joint standing committee of the Legislature having jurisdiction over energy and utilities matters. For the purposes of this section, "energy storage system" has the same meaning as in section 3481, subsection 6.

**Sec. 2. 35-A MRSA §10102, sub-§5-A** is enacted to read:

**5-A. Energy storage system.** "Energy storage system" has the same meaning as in section 3481, subsection 6.

**Sec. 3. 35-A MRSA §10109, sub-§4, ¶A,** as amended by PL 2019, c. 69, §1, is further amended to read:

A. Trust funds must be allocated for measures, investments, loans, technical assistance and arrangements that reduce electricity consumption, increase energy efficiency or reduce greenhouse gas emissions and lower energy costs at commercial or industrial facilities and for investment in measures that lower residential heating energy demand and reduce greenhouse gas emissions. The measures that lower residential heating demand must be fuel-neutral and may include, but are not limited to, energy efficiency improvements to residential buildings, energy storage systems and upgrades to efficient heating systems that will reduce residential energy costs and greenhouse gas emissions, as determined by the board. The trust shall ensure that measures to reduce the cost of residential heating are available for low-income households as defined by the trust. When promoting electricity cost and consumption reduction, the trust may consider measures at commercial and industrial facilities that also lower peak capacity

demand, including energy storage systems. Subject to the apportionment pursuant to this subsection, the trust shall fund conservation programs that give priority to measures with the highest benefit-to-cost ratio, as long as cost-effective collateral efficiency opportunities are not lost, and that:

- (1) Reliably reduce greenhouse gas production and heating energy costs by fossil fuel combustion in the State at the lowest cost in funds from the trust fund per unit of emissions; or
- (2) Reliably increase the efficiency with which energy in the State is consumed at the lowest cost in funds from the trust fund per unit of energy saved.

**Sec. 4. 35-A MRSA §10110, sub-§2, ¶A**, as amended by PL 2019, c. 365, §3, is further amended by amending subparagraph (4) to read:

- (4) Reduce the price of electricity over time for all consumers by ~~achieving reductions in reducing or shifting~~ demand for electricity ~~during peak use periods or balancing load~~, including by the implementation of beneficial electrification and energy storage systems; and

**Sec. 5. Efficiency Maine Trust; energy storage measures.** The Efficiency Maine Trust shall explore and evaluate options to expand existing opportunities and develop new opportunities to support energy storage measures that cost-effectively reduce or shift demand or balance load, through its electric efficiency and conservation programs established pursuant to the Maine Revised Statutes, Title 35-A, section 10110 and its programs funded by the Regional Greenhouse Gas Initiative Trust Fund established in Title 35-A, section 10109. In evaluating the cost-effectiveness of energy storage measures, the trust shall explore various methods and tests to measure cost-effectiveness. In fulfilling the duties of this section, the trust shall consider:

1. Expanding energy storage pilot projects within the trust's innovation pilot program and implementing any cost-effective pilot projects as statewide programs;
2. Bring-your-own-device programs in which customer-owned and customer-sited battery storage is aggregated and performance incentives are provided for reducing load at times of system peak;
3. Rebate or funding programs for energy storage paired with renewable energy for residential, commercial and industrial electricity customers; and
4. Customer education initiatives regarding demand management and energy storage, including education targeted to low-income and rural populations in the State.

The trust shall report on its activities under this section, including its efforts with respect to bring-your-own-device programs, in the trust's annual report due December 1, 2021 pursuant to the Maine Revised Statutes, Title 35-A, section 10104, subsection 5.

**Sec. 6. Energy storage pilot program.** The Efficiency Maine Trust shall conduct a pilot program beginning January 1, 2022 to provide energy storage systems to critical care facilities, including but not limited to, hospitals, health care facilities, fire departments, emergency medical service departments, police departments, public safety buildings, emergency shelters and other facilities providing critical services. The total energy storage capacity deployed under the pilot program may not exceed 15 megawatts. Under this program, the trust may consider the installation of energy storage systems to support the

operations of a critical care facility during outages or emergencies. The trust shall select for the program the most cost-effective proposals that provide direct or indirect benefits through transmission or distribution deferral or other uses or through the participation in energy markets, capacity markets or ancillary service markets. The trust may also consider the deployment of mobile energy storage technologies that serve multiple critical care facilities.

The trust shall report on its activities under this section in the trust's annual report pursuant to the Maine Revised Statutes, Title 35-A, section 10104, subsection 5.

**Sec. 7. Public Utilities Commission; rate design and energy storage.** The Public Utilities Commission shall investigate and, where appropriate, implement transmission and distribution utility rate designs that account for variation in the cost components of electricity as the load or demand on the electricity system fluctuates. By December 31, 2022, the commission, in coordination with other related proceedings, shall take the following specific steps to address rate design and energy storage:

1. Open a docket to investigate opportunities to modernize transmission and distribution utility rate designs through time-of-use or other time-differentiated rates that send appropriate price signals and incentives to consumers to reduce demand during peak periods and develop and implement a pilot program to test and evaluate time-of-use rates in conjunction with energy storage; and

2. Develop and implement a schedule for regular review and update of transmission and distribution utility rate designs, including consideration of fixed charges, and ensure that the review includes consideration of time-differentiated rates.

**Sec. 8. Public Utilities Commission; consideration of power-to-fuel pilot program.** The Public Utilities Commission shall consider the feasibility of a power-to-fuel pilot program that would result in the development of power-to-fuel projects utilizing renewable energy and would provide the developer with exemptions, for a period of at least 15 years, from distribution charges, including volumetric, demand and standby charges, charges associated with the procurement of energy efficiency resources by transmission and distribution utilities ordered under the Maine Revised Statutes, Title 35-A, section 10110, subsection 4-A and renewable portfolio standards requirements under Title 35-A, section 3210, subsections 3-A, 3-B and 3-C. The commission shall also:

1. Evaluate whether a power-to-fuel project would benefit the electric grid;
2. Provide estimates of the ratepayer impact of a pilot program and how that compares with other types of energy storage technologies; and

3. Review what measures other states have taken to facilitate the development of energy storage and whether those measures were successful in promoting energy storage, minimized ratepayer impacts and promoted a diversification of energy storage technologies.

By February 1, 2022, the commission shall submit a report to the Joint Standing Committee on Energy, Utilities and Technology and the committee may report out a bill related to the report to the Second Regular Session of the 130th Legislature.

For the purposes of this section, "power-to-fuel project" means a facility that converts renewable energy to hydrogen gas, methane or other fuel.

**Sec. 9. Governor's Energy Office; energy storage market assessment study.**

The Governor's Energy Office shall conduct an energy storage market assessment study, including an in-depth analysis and review of the opportunities and potential presented to and challenges facing the State in reaching the goals established pursuant to the Maine Revised Statutes, Title 35-A, section 3145, and shall submit a report on the market assessment study, along with any recommendations on adjustments or changes to the energy storage requirements in Title 35-A, section 3145, to the Joint Standing Committee on Energy, Utilities and Technology no later than March 1, 2022. The committee may report out a bill related to the report to the Second Regular Session of the 130th Legislature.

1. The market assessment study must include, but is not limited to, examination of:

A. The availability of commercially viable energy storage technologies, including emerging technologies, in the State and New England region between 2021 and 2030;

B. The policy and regulatory options that may influence the speed, predictability and cost to ratepayers associated with the development of energy storage technologies in this State and the amount of energy storage installed;

C. The estimated electricity costs and benefits for ratepayers of commercially viable energy storage technologies during the 10-year period between 2020 and 2030;

D. Policies and regulations in other states and the New England region and how energy storage can assist in achieving the greenhouse gas emissions reduction levels in Title 38, chapter 3-A in a cost-effective manner; and

E. The potential implications for the achievement of the state goals established in Title 35-A, section 3210 associated with achievement of the energy storage goal established in Title 35-A, section 3145.

2. Upon written request of the Governor's Energy Office, the Public Utilities Commission shall provide for the study:

A. Reasonable technical, legal and other assistance, including the provision of requested information; and

B. Funding for staff and consultants in an amount not to exceed \$100,000. Any such costs must be recovered through assessments on transmission and distribution utilities in accordance with Title 35-A, section 116.

The Governor's Energy Office shall encourage interested parties to submit relevant information, including data, to inform the energy storage market assessment study.

**Sec. 10. Appropriations and allocations.** The following appropriations and allocations are made.

**PUBLIC UTILITIES COMMISSION**

**Public Utilities - Administrative Division 0184**

Initiative: Provides funding to assist the Governor's Energy Office with a market assessment study regarding energy storage.

<b>OTHER SPECIAL REVENUE FUNDS</b>	<b>2021-22</b>	<b>2022-23</b>
All Other	\$100,000	\$0
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OTHER SPECIAL REVENUE FUNDS TOTAL	\$100,000	\$0
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**Public Utilities - Administrative Division 0184**

Initiative: Provides funding for one Staff Attorney position and one Utility Analyst position and related All Other costs.

<b>OTHER SPECIAL REVENUE FUNDS</b>	<b>2021-22</b>	<b>2022-23</b>
POSITIONS - LEGISLATIVE COUNT	2,000	2,000
Personal Services	\$209,122	\$290,624
All Other	\$15,031	\$17,760

OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$224,153</u>	<u>\$308,384</u>
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**PUBLIC UTILITIES COMMISSION  
DEPARTMENT TOTALS**

	<b>2021-22</b>	<b>2022-23</b>
<b>OTHER SPECIAL REVENUE FUNDS</b>	<b>\$324,153</b>	<b>\$308,384</b>
<b>DEPARTMENT TOTAL - ALL FUNDS</b>	<u><b>\$324,153</b></u>	<u><b>\$308,384</b></u>