2018 Clean Energy Legislation in Massachusetts

An Act to Advance Clean Energy: Chapter 227 of the Acts of 2018
August 15, 2018

Introduction
On July 31, 2018, the Massachusetts House and Senate passed H.4857, An Act to Advance Clean Energy. On August 9, 2018, Governor Baker signed this bill into law, now Chapter 227 of the Acts of 2018. The legislation came out of a conference committee tasked with reconciling the Senate’s ambitious and comprehensive bill with several more narrowly tailored bills passed by the House. The final compromise legislation generally reflects the House bills, and leaves out important policies passed by the Senate, including carbon pricing, measures to ensure equitable distribution of the benefits of solar incentive programs, and optional on-peak/off-peak electricity rates. However, the compromise legislation still represents significant progress for clean energy and further action should be expected in upcoming legislative sessions.

Summary of An Act to Advance Clean Energy
Increase in Class I Renewable Portfolio Standard: Section 12
Previously, the Class I Renewable Portfolio Standard (RPS) increased by 1% per year in perpetuity. Section 12 of An Act to Advance Clean Energy raises the annual increase to 2% per year from 2020 to 2029, and then returns to 1% per year starting in 2030. As shown in Figure 1, this translates into increases from 15% to 16% in 2020, 20% to 25% in 2025, 25% to 35% in 2030, 35% to 45% in 2040; and 45% to 55% in 2050. This increase should drive a significant amount of additional new renewables in Massachusetts and across New England.

Figure 1: Comparison of New Massachusetts Class I RPS Requirement with Previous Law

Although this is a substantial increase in the amount of renewable energy required, a 35% Class I level by 2030 is lower than the 42% Class I level by 2030 Acadia Center estimates to be necessary regionally to meet long-term GHG emissions reduction requirements in EnergyVision 2030. This section also includes a “grandfathering” provision which exempts retail supply contracts executed or extended by Dec. 31, 2018, from compliance with the incremental requirements of the increased Class I RPS.
Creation of Clean Peak Standard: Sections 7-11 and 13

An Act to Advance Clean Energy also creates a new portfolio standard for retail electricity suppliers. Called the Clean Peak Standard, the stated purpose from its proponents is to encourage additional clean resources during periods of peak demand or to help meet other energy system needs. This concept has been proposed in other states but never implemented. As a result, the legislative drafters had the difficult task of defining a completely new policy. First, the bill defines eligible resources as: Class I and II RPS resources, energy storage systems charged by renewables, and demand response resources. To be eligible, RPS resources must either begin operation on or after January 1, 2019, or have installed a storage system on or after January 1, 2019. Second, the statutory language for a Clean Peak Standard will require the Department of Energy Resources (DOER) to define “seasonal peak periods,” between one and four hours long, based on net demand of electricity. Third, for the defined seasonal peak periods, DOER must calculate a baseline percentage for existing clean peak resources and then set an annual requirement that must escalate by at least 0.25% per year. Section 13 also provides for (1) a minimum percentage of the requirement to be met by demand response resources and (2) competitive procurements and long-term contracting, subject to the approval of the Department of Public Utilities (DPU).

While New England must continue to clean its electricity system and enact more policies to focus on peak demand, Acadia Center has the following concerns about whether the Clean Peak Standard will provide substantial benefits:

- Class II RPS resources include “waste-to-energy” facilities that burn trash, a significant source of air pollution. It is unlikely that this policy will lead to new waste-to-energy facilities, but additional revenue could extend the life of existing plants;
- The statutory definition of “seasonal peak periods” may be suboptimal and there is not a well-defined mechanism to adjust peak periods as system needs change over time;
- The definition of “clean peak resources” requires a relationship to the “electric distribution system” so it is not clear whether transmission-level resources, such as offshore wind, can qualify.
- Small retail-level resources, including residential solar and storage, may not have the proper metering to participate in the Clean Peak Standard; and
- The impacts of a Clean Peak Standard have not been subject to any analysis to date and the interaction with other policies and wholesale markets in New England poses several uncertainties.

Acadia Center will participate constructively in any DOER proceedings to improve the implementation process and determine whether additional reforms may be necessary.

Expansion of the Scope of Energy Efficiency Programs: Sections 1-6

The first six sections of An Act to Advance Clean Energy adopt in full an energy efficiency bill passed earlier by the House. These sections expand the technologies and measures eligible for inclusion in the utilities’ 3-year efficiency plans. Going forward, the efficiency plans can include energy storage, renewable energy sources, and strategic electrification that results in cost-effective reductions in GHG emissions, even if these measures increase overall electricity consumption. The bill also renames the electric utilities’ efficiency plan as a broader “energy” efficiency plan to reflect the expanded scope of these new provisions. Although the energy efficiency plans must still be cost-effective, the legislation likely makes the cost-effectiveness standard easier to meet. It does this by broadening the definition of benefits that are counted and applying cost-effectiveness screening at the sector level, instead of the level of individual programs, as has been the practice in the past.
Reforms to Demand Charges for New Solar Customers: Sections 15-17 and 24

The 2016 Solar Energy Act authorized a new monthly minimum reliability contribution ("MMRC") for net metering customers. The stated goal of the MMRC is to recover additional revenue from net metering customers, but this concept has no generally accepted definition. Proponents of the MMRC believe that net metering customers do not pay for an equitable share of the electric system costs, but this claim has not been established empirically. In January 2017, the DPU approved an Eversource proposal for mandatory demand charges for residential customers who install solar or other distributed generation starting December 31, 2018, under the 2016 MMRC statutory provision. Unlike traditional per-kWh rates, demand charges based on peak kW demand during a short time window are not easily understood by residential customers and do not provide clear signals to manage electricity usage. In addition, the Eversource demand charges are based on individual peak demand over the course of the month, with no link to system peaks that drive electricity costs.

Sections 15 through 17 of An Act to Advance Clean Energy provide a new set of requirements for demand charges applied as a part of an MMRC for customers with small solar installations. First, any demand charges must be based on peak hours of system demand, which likely requires time-based interval metering. Second, the utility must regularly inform the affected customers of how to manage and reduce demand. In addition, Section 24 requires utilities to refile any previously approved demand charges that do not meet these requirements. Section 17 provides more flexibility for the DPU and utilities by eliminating the previous requirement to establish an MMRC by December 31, 2018. This means that Eversource will need to refile a new proposal to meet these requirements, and National Grid will have to follow them as well if its MMRC proposal includes demand charges.

Distribution System Resiliency Reports and Local Clean Energy Alternatives: Section 18

Section 18 creates a new requirement for electric utilities to file annual resiliency reports for their local distribution systems with the DPU, including maps that show (i) electric load, particularly during peak time periods, (ii) the most congested and constrained areas of the distribution grid, and (iii) areas vulnerable to outages.

In addition, Section 18 authorizes but does not require competitive solicitations for local clean energy resources as "non-wires alternatives" to distribution and transmission infrastructure upgrades. This is an important innovation that can save ratepayers money while lowering GHG emissions and improving resiliency. In the future, competitive solicitations for non-wires alternatives should be required for many types of potential infrastructure upgrades, and additional process improvements may be necessary.

Accounting Improvements for Natural Gas (Methane) Leaks: Section 19

Section 19 requires the DPU to issue regulations that require gas companies to better account for “lost and unaccounted for” natural gas in the local distribution system every year, with additional provisions to encourage innovative projects to reduce leaks. Although this provision does not require additional action, better data should allow for improved management and regulatory treatment of natural gas leaks in the future. This is the third in a series of statutes passed to address natural gas leaks, which impose higher costs on consumers, constitute serious global warming emissions since methane is a powerful GHG, and cause significant harm as a local pollutant.
Energy Storage Target for 2025: Section 20

Advanced energy storage is poised to play a key role in the energy system of the future by reducing peak demand, integrating variable renewable generation, improving system reliability, and helping customers manage their own usage. Section 20 replaces the previous energy storage statutory provision from the 2016 Energy Diversity Act, which the Department of Energy Resources determined only provided for non-binding storage targets, although numerous parties disputed this conclusion. Under this previous 2016 law, DOER put into place a non-binding 200 MWh storage target for 2020. In its place, Section 20 institutes a 1,000 MWh storage target for 2025. This new target also appears to be non-binding and may not provide much additional independent authority for DOER to incentivize storage, since it references other policies and statutory sections as potential means for achieving this target.

Authorization for Additional 1,600 MW of Offshore Wind by 2035: Section 21

Section 21 requires DOER to investigate “the necessity, benefits, and costs” of an additional 1,600 MW of offshore wind solicitations and procurements, above and beyond the 1,600 MW of offshore wind procurements authorized by legislation in 2016. DOER may require these additional solicitations and procurements by Dec. 31, 2035. These additional solicitations will use the same processes as defined by Section 83C of the 2016 Energy Diversity Act. Section 21 also requires DOER to submit a report to the legislature on potential improvements to those processes by July 31, 2019. In addition, this section puts in place a new provision allowing independent transmission projects that would serve more than one offshore wind project to participate in the solicitations.

Study of Mobile Battery Storage Systems for Emergency Relief: Section 22

Section 22 requires that DOER perform, by February 1, 2020, a study of mobile battery storage systems for emergency relief during extreme weather events or other power outages. This section provides little substantive guidance to DOER, but Acadia Center recommends that the study pay particular attention to the needs of low-income and environmental justice communities, as well as coastal communities that will be disproportionately impacted by the effects of climate change.

For more information:

Mark LeBel, Staff Attorney, mlebel@acadiacenter.org
617.742.0054 ext.104

Deborah Donovan, Massachusetts Director & Senior Policy Advocate, ddonovan@acadiacenter.org
617.742.0054 ext.103