



Michelle Turner, Administrative Secretary
Efficiency Maine Trust
168 Capitol Street, Suite 1
Augusta, ME 04330-6856

July 27, 2021

Dear Ms. Turner:

Energy Solutions appreciates the invitation from the Efficiency Maine Trust (“the Trust”) to submit comments on the June 9th Triennial Plan V draft.

Energy Solutions is a nationwide demand-side management program implementation firm specializing in market scale supply chain market development and market transformation programs with over twenty-five years of experience. The following comments are based on our experience in program implementation and cite best practices from corroborating references where possible.

As Maine enters a new phase of effort in pursuit of the obligations laid out in the Efficiency Maine Trust Act, Title 35-A, Chapter 97, optimal design of the programs in place over the three years of Triennial Plan V will greatly influence savings achievement on an annual and lifetime basis as well as GHG reduction attainment for the benefit of Maine’s residents and businesses. Our comments focus on codes and standards advocacy programs, distributed energy resources advances, and midstream program implementation.

Codes and Standards Advocacy Programs

Appliance standards and building code updates have been one of the most cost-effective and significant energy savings initiatives since the 1970s. Codes and standards advocacy at the state and national level can have a dramatic impact on energy efficiency portfolios; in California, these savings represent over half of current of total claimed energy savings and were projected to achieve two-thirds of portfolio savings in 2020 while constituting less than five percent of statewide portfolio costs.¹ Traditional efficiency programs target measures with low market adoption rates, and thus higher net-to-gross savings. Codes and standards programs capture additional cost-effective energy savings that complement traditional program designs. Codes and standards programs can be effectively run as demand side management resource savings programs, and can include implementation support, compliance improvement, technical support for the origination of new codes and standards, and advocacy for the origination of new codes and standards at the local, state, and federal level.

As states nationwide realize the highly cost-effective potential savings available through the market transformation that codes and standards programs can provide, there is a groundswell of interest in multiple states – including MA, CT, RI, MI, CO, AZ, VT, MD, NY and others – in pursuing mechanisms for claiming attribution for savings originating from these types of programs. Codes and standards programs also have the added benefit of serving all ratepayers, including hard to reach and disadvantaged communities. In the wake of bill LD 940 passing into law on July 12th, we encourage the Trust to consider the full range of codes and standards program opportunities, including the technical

¹ California Energy Commission, Demand Analysis Office, 2019

support for and advocacy of origination of new building codes and appliance standards at the local, state, and federal level.

Furthermore, adoption of a “program-to-code” framework – wherein traditional incentive programs gather information in support of an anticipated code and receive partial savings attribution for that future code – is another promising program design to explore.

Distributed Energy Resources

Our comments related to distributed energy resources concentrate on three points.

First, we note that the Trust is pursuing demand response and load shifting initiatives within Triennial Plan V. We are supportive of this development and eager to follow the Trust’s progress in establishing these initiatives. While understanding that only two measures (EV chargers and battery storage systems) passed a cost-effectiveness screen for full inclusion into the load shifting initiative, we recommend further exploration of measures pertinent to specific sectors. The Pacific Gas and Electric Automated Demand Response program (“PG&E ADR”) can serve as a useful template if insights are adapted to the Maine context. For example, all non-residential sectors are eligible for the PG&E ADR technology incentive including the vast agricultural sector in California with each receiving sector-specific support.² This has enabled growers to participate in demand response while addressing concerns of interference with crop yield. We recommend pursuing evaluation of measures and a program design suited to serve the custodians of Maine’s 1.3 million acres of farmland.³

Second, we noted with enthusiasm that upon passage of LD 528 on June 21st, the Trust has received a mandated responsibility to aid the state in achieving 300MW of installed storage capacity by the end of 2025 and 400MW by the end of 2030. As the Trust forms up an approach to its new duties and undertakes the mandated pilot beginning January 1, 2022, we encourage the Trust to seek relevant examples of successful programs from across the country. One such program is the Self-Generation Incentive Program (“SGIP”) in California.⁴ SGIP is a ratepayer-funded program providing financial incentives for the installation of clean and efficient distributed generation technologies to retail electric and gas customers of the four California investor-owned utilities: PG&E, SCE, Southern California Gas Company (SCG) and SDG&E. The program features a unified, statewide, enterprise-scale online data system for management of all program activities including incentive application, program management, performance monitoring, and payment. Unlike with a utility-run program, the Trust is reliant upon static data pulls from Maine’s utilities for meter-level insights. Given the reliance on near-real-time data for successful implementation of a program like SGIP, we encourage the Trust to explore the model employed through SGIP whereby performance data providers act as the source of verified data pulled directly from installed equipment.⁵

Finally, we have been encouraged by the progress of the ongoing thermal storage-based pilot using advanced phase change materials and note that refrigeration in Maine represents a cohort of large loads that could benefit from efficiency and load management through the term of Triennial Plan V. We encourage the Trust to consider an integrated demand-side management approach to management

² <https://pge-adr.com/agriculture/>

³ https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MAINE

⁴ <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/self-generation-incentive-program/participating-in-self-generation-incentive-program-sgip>

⁵ Described on page 111 of the 2021 Handbook: <https://www.selfgenca.com/documents/handbook/2021>



of passive load shifting projects that come through the custom program and consider the potential for more active demand response participation.

Midstream Program Implementation

For Triennial Plan V, we encourage the Trust to consider moving commercial kitchen equipment⁶ into a midstream model. Several energy efficiency administrators in the region, including those in CT, MA, NH, NY, and RI successfully administer point-of-sale commercial foodservice initiatives that garner significant savings. We note that under the current program instructions, customers are prompted to find a qualified partner for kitchen equipment purchase and installation, but the online search⁷ does not yield any results for Commercial Kitchen Solutions. Moving to a point-of-sale model would enable distributors (both brick-and-mortar and online) to offer instant incentives to businesses in Maine with commercial kitchens. The model has proven successful across the country⁸.

Maine has a relatively low proportion of natural gas service compared to some New England states, but commercial foodservice establishments are likely to be clustered in population-dense geographic areas overlaid with natural gas service along the I-95 corridor.⁹ As such, savings achievement may be predictably forecasted on both the electric and natural gas sides.

Similar to the Trust's reliance on the Connected Solutions outcomes to guide demand management plans for Triennial Plan V, we encourage the Trust to seek out information from energy efficiency administrators in Massachusetts, New York, and Rhode Island to ascertain suitability and potential for a similar initiative in Maine.¹⁰

In conclusion, Energy Solutions appreciates the opportunity to provide comments on these topics. We welcome the opportunity to provide further information and share our experiences implementing Codes and Standards, Distributed Energy Resources, and Midstream Market Development programs with the objective of assisting the Trust in designing the best possible plan to reach Maine's ambitious and visionary energy goals.

Finally, should there be an opportunity to communicate additional comments upon the release of remaining resources such as Appendix F, we look forward to doing so.

Sincerely,



Erin Kempster
Regional Manager, Northeast

⁶ <https://www.energymaine.com/at-work/restaurant/>

⁷ <https://www.energymaine.com/at-work/qualified-partners>

⁸ <https://energy-solution.com/foodservice-programs/>

⁹ <https://www.maine.gov/meopa/natural-gas#Territories>

¹⁰ A Commercial Gas Kitchens Evaluation was completed for National Grid New York in November 2017 and may be available upon request.