

Via Electronic Filing

April 9, 2021

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

Re: Efficiency Maine Trust 2023-2025 Triennial Plan - Request for Information

Dear Ms. Turner,

The Northeast Clean Energy Council (“Council”) appreciates the opportunity to provide information in response to the Request for Information (“RFI”) regarding the Efficiency Maine Trust’s (“Trust”) 2023-2025 Triennial Plan. These comments are specific to Question #5 with regard to updating cost-effectiveness testing of the energy efficiency programs. We commend the Trust for inviting comment on changes needed to its current cost-effectiveness testing practices as provided in proceeding [95-648 Efficiency Maine Trust Rules Chapter 3, Section 4](#).

The Council is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy and environmental solutions. The Council is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. The Council’s members span the broad spectrum of the clean energy industry, including clean transportation, energy efficiency, wind, solar, energy storage, microgrids, fuel cells, and advanced and “smart” technologies.

The Council recommends the Trust align its cost-effectiveness testing framework with the National Standard Practice Manual for Distributed Energy Resources (“NSPM for DERs”).¹ As the Trust looks to evolve the energy efficiency beyond passive efficiency, a refreshed look at the cost-effectiveness framework is warranted. Herein we describe how the NSPM for DERs can help refine Maine’s benefit-cost analysis (“BCA”) practice not only for energy efficiency but more broadly for other DERs to ensure that relevant DER impacts (i.e., value streams and input assumptions) are accounted for consistently across all DER valuations. We also suggest how the NSPM BCA framework can help to ensure alignment of the Trust’s cost-effectiveness practices with applicable policy goals set forth in Chapter 97 of Title 35-A, as well as ensuring sound economic practice to avoid bias in the valuation of any one program or resource.

¹ The NSPM is part of the [National Energy Screening Project](#) to improve cost-effectiveness screening practices for distributed energy resources (DERs). NESP joins organizations and individuals with a common interest in improving cost-effectiveness assessment — also referred to as benefit-cost analysis (BCA) — of distributed energy resources (DERs).

The NSPM for DERs provides a comprehensive framework for cost-effectiveness assessment for DERs, including energy efficiency, demand response, distributed storage, distributed solar, and electrification (of both transportation and buildings). Published in 2020, the NSPM for DERs² provides a common BCA framework that jurisdictions can apply to a single DER cost-effectiveness analysis or multiple DER analysis, including in the context of grid interactive efficient buildings and Non-Wires Solutions (“NWS”) projects. The NSPM concepts apply to a range of regulatory mechanisms including programs, procurement, pricing mechanisms, distribution system planning and grid modernization investments.³

The NSPM BCA framework includes a set of foundational principles, as provided in the table below. These comments address in particular the first three NSPM principles in the context of Chapter 97 of Title 35-A §10103, and the Trust’s Rules on cost-effectiveness testing particularly as they relate to accounting for non-resource impacts.

² The NSPM for DERs fully incorporates the first edition of the NSPM for Energy Efficiency (2017), and addresses energy efficiency (Chapter 6) as well as its integration with other DERs.

³ See Lawrence Berkeley National Laboratory report: Benefit-cost analysis for utility facing grid, [Benefit-Cost Analysis for Utility-Facing Grid Modernization Investments: Trends, Challenges, and Considerations | Energy Technologies Area \(lbl.gov\)](#) February 2021

NSPM for DERs - Principles

Principle 1 **Treat DERs as a Utility System Resource**

DERs are one of many energy resources that can be deployed to meet utility/power system needs. DERs should therefore be compared with other energy resources, including other DERs, using consistent methods and assumptions to avoid bias across resource investment decisions.

Principle 2 **Align with Policy Goals**

Jurisdictions invest in or support energy resources to meet a variety of goals and objectives. The primary cost-effectiveness test should therefore reflect this intent by accounting for the jurisdiction's applicable policy goals and objectives.

Principle 3 **Ensure Symmetry**

Asymmetrical treatment of benefits and costs associated with a resource can lead to a biased assessment of the resource. To avoid such bias, benefits and costs should be treated symmetrically for any given type of impact.

Principle 4 **Account for Relevant, Material Impacts**

Cost-effectiveness tests should include all relevant (according to applicable policy goals), material impacts including those that are difficult to quantify or monetize.

Principle 5 **Conduct Forward-Looking, Long-term, Incremental Analyses**

Cost-effectiveness analyses should be forward-looking, long-term, and incremental to what would have occurred absent the DER. This helps ensure that the resource in question is properly compared with alternatives.

Principle 6 **Avoid Double-Counting Impacts**

Cost-effectiveness analyses present a risk of double-counting benefits and/or costs. All impacts should therefore be clearly defined and valued to avoid double-counting.

Principle 7 **Ensure Transparency**

Transparency helps to ensure engagement and trust in the BCA process and decisions. BCA practices should therefore be transparent, where all relevant assumptions, methodologies, and results are clearly documented and available for stakeholder review and input.

Principle 8 **Conduct BCAs Separately from Rate Impact Analyses**

Cost-effectiveness analyses answer fundamentally different questions than rate impact analyses, and therefore should be conducted separately from rate impact analyses.

Principle #1 – Using a Consistent BCA Framework Across all DERs

Principle #1 sets forth that DERs should be treated as a resource and compared consistently with other resources, including with other DERs. This entails using consistent methods and assumptions when analyzing the value of different resources to avoid bias across resource investment decisions. Given the Trust's plans to expand efficiency programs to include other DERs, such as demand response, as well as other state efforts to value resources (e.g., in the context of non-wires alternatives), there is value in developing a common BCA framework that can apply beyond efficiency and provide flexibility to the state for expanding its application. Ultimately, a consistent assessment of DERs in Maine will streamline the evaluation process for the Trust and ensure consistent evaluation across all technology types — allowing for a simpler portfolio expansion in the future.

Principle #2 – Consistency with State’s Applicable Policies

The application of the NSPM Principle #2 gives Maine the opportunity to ensure that the state’s unique policy goals align with its investment in energy efficiency and other alternative resources by ensuring relevant impacts are accounted for to ensure that those policies can be met. The choice of investments in DERs and other utility resources can materially affect the costs, timeframe, and ability to achieve policy goals.

[Chapter 97 of Title 35 §10103](#) sets forth clear and ambitious goals that define the purpose of Efficiency Maine Trust, to “ensure that all expenditures of the trust are cost-effective in terms of avoided energy costs and reduce overall costs of energy to residents” as well as to:

1. Improve security of the state and local economies.
2. Reduce economic insecurity from the inefficient use of fossil fuels.
3. Increase new jobs and business development.
4. Improve indoor air quality, increase comfort, and reduce energy costs for households.
5. Merge and coordinate dispersed programs under a single administrative unit to increase customer access to technical assistance and financial incentives.
6. Reduce greenhouse gas emissions⁴.

The full range of above benefits are articulated in Chapter 97 are largely identified in the Trust’s rules (at §4.A.1.e):

“Non-resource benefits, including customer benefits such as reduced operation and maintenance costs, deferred replacement costs, productivity improvements, economic development benefits and environmental benefits, to the extent such benefits can be reasonably quantified and valued.”

Some of these impacts are related to participant impacts (reduced O&M, deferred replacement costs, and productivity improvements) while others are related to societal benefits (economic development and environmental benefits). Further §4.B sets forth a provision for use of a ‘non-quantifiable cost-effectiveness test’ whereby the Trust may implement a program without satisfying the cost-effectiveness test if:

1. Program benefits are known to exist but cannot be quantified with sufficient accuracy to conclude that the program benefits exceed the program costs;
2. The program satisfies some other statutory criterion, or a goal or objective established in Maine statute in implementing the Efficiency Maine Trust Act; and
3. The entire portfolio of conservation programs produces quantifiable benefits that substantially exceed total portfolio program costs.

⁴ Maine Legislature. [Title 35-A, Chapter 97 “Efficiency Maine Trust Act”](#). §10103. 25 November 2020.

However, it does not appear many of the non-resource impacts articulated in Chapter 97 and in the Trust Agency rules are accounted for in current cost-effectiveness testing of the efficiency program, per Efficiency Maine's 2020 Annual Report, or are not sufficiently transparent or clear.

Principle #3 – Symmetry in Treatment of Costs and Benefits

Principle #3 sets forth that costs and benefits in BCA should be symmetrically accounted for to ensure a resource is neither under- nor over-valued. For example, when participant costs are included and benefits are omitted, the valuation of the resource is biased towards undervaluing the resource and could lead to underinvestment in an efficiency program (or alternative resource). As noted above, the Trust Agency Rules require the inclusion of various participant benefits (Avoided O&M Costs, Deferred Replacement Costs, Productivity Improvements in its cost-effectiveness test so long as these impacts can be quantified. However, in the [FY 2020 Efficiency Maine Annual Report](#), the "Primary Benefit-Cost Test" is assessing "program administrator and customer costs" as they compare to "utility resource savings", excluding participant benefits. *This leads to asymmetry in the treatment of costs and benefits and can undervalue the resource.* The Council recommends the Trust apply the NSPM principles to either a) quantify and consider participant benefits in cost-effectiveness testing, as they are described in the jurisdiction's policy goals, or b) to exclude both participant costs and benefits.

The NSPM provides several quantification methods for participant benefits in Appendix C, which may be useful to the Trust in considering approaches to quantifying the full range of participant benefits, including deferred replacement costs, productivity improvements and other benefits – recognizing that the value is not zero.

While symmetry can be achieved by ensuring both participant costs and benefits are accounted for, symmetry can also be achieved by *excluding* both participant costs and benefits. For example, New Hampshire applied the NSPM BCA framework to [develop a state specific Granite State Test](#) where the multi-step NSPM process included addressing issues of asymmetry. Since New Hampshire's original, modified, Total Resource Cost test accounted for participant costs but omitted benefits, the stakeholder process, which included Commission staff, ultimately decided to exclude participant impacts in the primary test, and to consider them as part of a secondary test. The new Granite State test aligns with the state's policy goals, accounts for the full range of utility system impacts, and ensures symmetry in the treatment of participant impacts.

These examples of misalignment between statute, rules, and practice, and asymmetry in the treatment of costs and benefits, are where the NSPM BCA framework and its multi-step process can be useful to the Trust and its stakeholders as it takes steps to review its cost-effectiveness testing practice vis a vis prevailing statute and an evolving industry where efficiency will increasingly be integrated with other DERs.

The Council appreciates the opportunity to provide these comments to the Trust in order to provide additional information on cost-effectiveness testing. Using the NSPM for DERs to evolve the efficiency programs beyond passive efficiency will support the state's policy goals and

achieve greater cost-effective savings. The Council looks forward to continuing to engage with stakeholders during the Triennial Plan development process, and we are happy to provide additional information regarding the NSPM.

Sincerely,



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Vice President, Policy & Government Affairs



Sean Burke
Policy Associate