



Filed electronically

August 10, 2018

Michael Stoddard, Executive Director
Emily Cushman, Program Manager
Efficiency Maine Trust
168 Capitol Street
Augusta, ME 04330

Michael.Stoddard@efficiencymaine.com
Emily.Cushman@efficiencymaine.com

re: Comments of Conservation Law Foundation, Efficiency Maine Trust Rulemaking
95-648 C.M.R. ch. 380, Electric Energy Conservation Programs;
95-648 C.M.R. ch. 480, Natural Gas Conservation Program

Dear Mr. Stoddard:

Conservation Law Foundation (CLF)¹ has reviewed the Efficiency Maine Trust's (Trust) proposed amendments to 95-648 C.M.R. ch. 380, Electric Energy Conservation Programs, and 95-648 C.M.R. ch. 480, Natural Gas Energy Conservation Programs. According to the Trust's Brief Summary of the rulemaking, the proposed amendments are intended to reflect several changes made by the Legislature to 35-A M.R.S. §§ 10110 and 10111. Additionally, the proposed amendments are "to clarify the definition that will be used for low-income residential customers and small business customers seeking to participate in the programs, and the share of total program budgets that will be allocated to these customer classes" with respect to chapter 380, and to "clarify the definition that will be used for low-income residential customers seeking to participate in the programs governed by" chapter 480.

CLF submits these comments, tailored to respond only to the Trust's proposed amendments, and does not take this opportunity to suggest substantive revisions beyond the scope of those

¹ CLF is a public interest advocacy organization with offices and members throughout New England, including in Maine. On behalf of its members in Maine, CLF works to increase opportunities for the efficient use of energy, to harness renewable energy resources, and to ensure the region achieves its collective goal of reducing greenhouse gas emissions and avoiding or limiting the significant impacts of climate change. For years, CLF has been engaged in energy sector and energy efficiency work across New England, including proceedings related to the Trust at the Maine Public Utilities Commission (Commission). CLF played an active role in the Commission proceeding to approve the Trust's second triennial plan, was actively involved in the proceeding regarding approval of the Trust's third triennial plan and subsequent related Commission dockets, and litigated the third triennial plan before the Maine Supreme Judicial Court. CLF's advocacy emphasizes and recognizes the foundational role energy efficiency plays in any effective long-term energy strategy.

proposed by the Trust. Nevertheless, CLF urges the Trust to undertake a more comprehensive review of the rules pertaining to electric and natural gas conservation programs in the near future.

CLF appreciates the opportunity to comment on these proposed changes.

95-648 C.M.R. ch. 380, Electric Energy Conservation Programs

Discount Rate

Chapter 380 currently provides that the “discount rate used for present value calculations shall be the current yield of long-term (10 years or longer) U.S. Treasury securities, adjusted for inflation.” 95-648 C.M.R. ch. 380, § 4(A)(3). The Trust proposes introducing an exception that would apply to a significant portion² of administered funds and that would under-value efficiency measures, thus under-funding and under-pursuing energy efficiency in Maine. CLF urges the Trust not to adopt a fixed discount rate by rule, much less the inappropriately high value – 8.50% – proposed. The Trust should maintain the language now in the regulation, and reconsider the issue at a later date in the context of a more complete review of the rules that entails a thorough examination of the cost-effectiveness tests utilized.

The discount rate, a measure of the value of money over time, is a critical component of evaluating avoided energy costs, which are a key consideration that substantially impacts the assessment of the cost-effectiveness of energy efficiency measures and programs.³ Because costs of energy efficiency measures are typically incurred up front while benefits may accrue over many years, an appropriate discount rate is necessary to properly weigh costs against benefits. An overly high discount rate will skew cost-effectiveness tests, balancing under-valued long-term benefits against short-term costs, and a discount rate that is too low will have the opposite effect.⁴ Thus, the discount rate directly impacts which efficiency measures will be deemed cost-effective, which will be funded and pursued, and thus the breadth, comprehensiveness and rigor of the overall programs.

The Trust’s proposal is inconsistent with 35-A M.R.S. § 10110, with which the Trust purports to comport this rule. The statute provides that:

² See, e.g., *Efficiency Maine Trust*, Request for Approval of the Third Triennial Plan Pertaining to Efficiency Maine Trust, No. 2015-175, (hereafter, Third Triennial Plan PUC Docket), Corrected Exhibit EMT-1 – Appendix C (Me. P.U.C. Feb. 10, 2016), sheets 5-10 (summarizing program funding from various sources).

³ See, e.g., U.S. Environmental Protection Agency, *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers* (Nov. 2008) at ES-2, available at <https://www.epa.gov/sites/production/files/2015-08/documents/cost-effectiveness.pdf> (“A significant driver of overall cost-effectiveness of energy efficiency is the discount rate assumption used to calculate the net present value (NPV) of the annual costs and benefits.”).

⁴ See, e.g., National Efficiency Screening Project, *National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources* (May 2017) at 72, available at https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM_May-2017_final.pdf (“A higher discount rate gives more weight to short-term impacts, while a lower discount rate gives more weight to long-term impacts.”).

When determining the amount of cost-effective electric energy efficiency resources to be procured under this subsection, the commission shall . . . Ensure that calculations of avoided energy costs and the budget identified by the trust in its triennial plan as needed to capture all cost-effective electric energy efficiency resources are *reasonable*, based on *sound evidence* and make use of *best practices across the region*.⁵

As noted above, the discount rate is a key component of avoided costs, which are critical to assessing cost-effectiveness; the statute's mandates therefore apply to the choice of discount rate. That is, the Trusts' selection of a discount rate must be *reasonable*, based on *sound evidence*, and make use of *best practices across the region*.⁶

The Trust proposes to maintain the existing approach – the current yield of long-term (10 years or longer) U.S. Treasury securities, adjusted for inflation – for measures funded by certain monies, but to apply an 8.50% discount rate, adjusted for inflation, to those measures or programs that are funded by utility procurement order or revenues from a rate-based contract with the transmission and distribution utilities.⁷

The proposed 8.50% discount rate is problematic, first, because a predetermined, codified discount rate – of any value – cannot comply with the mandates of 35-A M.R.S. § 10110. To achieve the statute's standard of reasonableness, the discount rate must at a minimum be flexible enough to account for changing economic factors. Interest rates as well as other relevant circumstances are not static and can shift significantly from year to year. It is unreasonable to fix a rate into regulation, disallowing the Trust from considering these economic realities, limiting appropriate adjustments to accommodate the current fiscal situation and requiring an administrative rulemaking process to modify the rate in order to ensure such statutory compliance. Similarly, use of a fixed rate undermines the statute's directive that avoided energy costs be based on sound evidence and make use of best practices across the region. These mandatory considerations would be rendered trivial if the assumed discount rate were already established by rule. Thus, the use of an immovable rate not subject to meaningful review undermines the letter and intent of the statute.

Even if a fixed discount rate were permitted by law, the proposed discount rate of 8.50%, adjusted for inflation, is unreasonably high for evaluating low-risk energy efficiency measures. Under the cost-effectiveness test utilized by the Trust, costs considered include “costs to program participants as well as costs to the [electric] distribution company.”⁸ According to the Trust, energy efficiency is a “low-risk investment[] from the perspectives of both the distribution company and the ratepayers.”⁹ Distribution companies recover their costs through charges to their customers, while customers reap the long-term benefits of low-cost energy efficiency

⁵ 35-A M.R.S. § 10110(4-A)(B) (emphasis added).

⁶ *See id.*

⁷ *See* proposed 95-648 C.M.R. ch. 3, § 4(A)(3).

⁸ Third Triennial Plan PUC Docket, ODR-001-029 (Me. P.U.C. Jan. 25, 2015) (citing *Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines Consistent with An Act Relative to Green Communities*, D.P.U. 08-50-A, at 21 (Mar. 16, 2009)).

⁹ *Id.*

measures.¹⁰ Further, unlike with traditional utility spending, there are no costs to the utility of capital investments; the weighted average cost of capital is therefore an inappropriate measure of the time value of the benefits for the purposes of energy efficiency investments.¹¹

A low discount rate is both reasonable and best practice because “the goal of cost-effectiveness screening is to identify those resources that are in the best interest of customers . . . over the full time period with which regulators are concerned—often about 20 years.”¹² Using a high discount rate “would significantly undervalue the future benefits of energy efficiency, and result in customers paying higher electricity costs over the long-term.”¹³

The reasonableness of a low discount rate is corroborated by the regional studies that are periodically developed by collaboration of a large group of diverse New England stakeholders. These “AESC”¹⁴ studies, whose sponsors include transmission and distribution utilities, state energy efficiency agencies including the Trust, as well as some states and state utility regulators,¹⁵ utilize a discount rate far lower than that proposed by the Trust. In the three most recent iterations of the report, the real discount rates used were 2.43% (AESC 2015), 1.43% (AESC 2015 Update), and 1.34% (AESC 2018) (the nominal discount rate used in the 2018 AESC Report was 3.37%).¹⁶ These rates are informed by treasury bill rates.¹⁷ In previous draft triennial plans, the Trust has endorsed the discount rates used in the AESC studies, proposing to adopt them to assess avoided costs in Maine.¹⁸ The discount rate now proposed by the Trust is discordant with the heavily vetted input assumptions used by the AESC studies to model avoided

¹⁰ *See id.*

¹¹ Third Triennial Plan PUC Docket, Rebuttal Testimony of Tim Woolf on Behalf of Natural Resources Council of Maine and Conservation Law Foundation (Me. P.U.C. Mar. 16, 2016), 4:19–20; Third Triennial Plan PUC Docket, Direct Testimony of Tim Woolf on Behalf of Natural Resources Council of Maine and Conservation Law Foundation (Me. P.U.C. Feb. 17, 2016), 14:12–19.

¹² Third Triennial Plan PUC Docket, Rebuttal Testimony of Tim Woolf on Behalf of Natural Resources Council of Maine and Conservation Law Foundation (Me. P.U.C. Mar. 16, 2016), 4:15–18.

¹³ Third Triennial Plan PUC Docket, Direct Testimony of Tim Woolf on Behalf of Natural Resources Council of Maine and Conservation Law Foundation (Me. P.U.C. Feb. 17, 2016), 14:17–19.

¹⁴ Previously the Avoided Energy Supply Costs in New England, *see, e.g.*, Rick Hornby, et al., *Avoided Energy Supply Costs in New England: 2015 Report* (Rev. Mar. 31, 2015); most recently, Synapse Energy Economics, et al., *Avoided Energy Supply Components in New England: 2018 Report* (Amend. June 1, 2018).

¹⁵ Study sponsors for the 2018 AESC Study include: Berkshire Gas Company, Cape Light Compact, Liberty Utilities, National Grid USA, Eversource (Connecticut Light and Power, NSTAR Electric and Gas Company, Western Massachusetts Electric Company, Public Service Company of New Hampshire, and Yankee Gas), New Hampshire Electric Co-op, Columbia Gas of Massachusetts, Unitil (Fitchburg Gas and Electric Light Company, Unitil Energy Systems, Inc. and Northern Utilities), United Illuminating, Southern Connecticut Gas and Connecticut Natural Gas, Efficiency Maine, and the State of Vermont.

¹⁶ AESC 2018 Study at 17, n. 3, and 346.

¹⁷ *Id.* at 346.

¹⁸ *See, e.g.*, Third Triennial Plan PUC Docket, ODR-001-029 (Me. P.U.C. Jan. 25, 2015) (“The Trust uses the long term real discount rate developed by the 2015 AESC Study. The long term real rate in AESC 2015 is 2.43% . . . The Trust uses these values because it is consistent with the Trust’s *[sic]* rules, it is consistent with the approach used in other jurisdictions in the region, and it appropriately reflects the source, intended uses, and risks associated with the funds.”); *see also* Third Triennial Plan PUC Docket, Triennial Plan for Fiscal Years 2017-2019 (Me. P.U.C. Dec. 16, 2015), 23.

costs and the Trust's own prior positions on proper rate setting,¹⁹ suggesting that the number is unreasonable, out of line with regional best practice, and contrary to sound evidence.

Finally, CLF recognizes that the Trust's proposal appears to codify the agreement that resolved the Third Triennial Plan adjudicatory docket.²⁰ Despite the Public Utilities Commission's endorsement in that proceeding, the statute does not allow the Trust to arbitrarily track the course set by a prior stipulation which is not precedential nor binding. The Trust's statutory obligations are unfulfilled by codification of a stipulation that is, by its nature, a negotiated compromise by an assortment of parties with various interests.

Maintenance of – and adherence to – the current regulatory language would facilitate the Trust's compliance with its statutory duties under 35-A M.R.S. § 10110. A fixed discount rate is insufficiently flexible, and the proposed value is too high to properly value low-risk investments in energy efficiency. While a more thorough examination of the discount rate is perhaps in order, that assessment should occur in the context of a comprehensive review of the rule that also entails an evaluation of the tests used to determine cost-effectiveness. Until then, the Trust should maintain the current regulatory language.

Small business consumer definition

The Trust's proposed amendments to chapter 380 would tighten the category of businesses eligible for participation in programs tailored to small business consumers. CLF urges the Trust not to adopt utility rate class as a qualifying factor for these programs. First, codifying this restrictive definition limits the Trust's ability to modify design elements of the program. To maintain flexibility in implementation, the Trust should decline to narrow the class of eligible businesses by rulemaking, which would require a far more cumbersome adjustment process should the need arise in the future.

CLF is further concerned that restricting those eligible for small business consumer programs will result in less energy efficiency. The Trust's obligation is to ensure the capture of all cost-effective, reliable and achievable energy efficiency savings.²¹ It is not at all clear that cutting consumers off from programs for which they were formerly eligible, particularly programs

¹⁹ See, e.g., Third Triennial Plan PUC Docket, Rebuttal Testimony of Efficiency Maine Trust (Me. P.U.C. Mar. 16, 2016), 10:2-3, 9-11 (“Drawing on regional best practices, the Trust also applied the long-term real discount rate developed by the 2015 AESC Study;” “The Trust uses these values because it is consistent with 96-648 Code of Maine Rules Chapter 380, it is consistent with the practice in Massachusetts, Rhode Island and Vermont, and it appropriately reflects the source, intended uses, and risks associated with the funds.”).

²⁰ There, the parties agreed that real discount rates would be “determined using a 1.88% long-term inflation rate and the following nominal discount rates: a. 8.50% for funds collected by the utilities from electricity and natural gas ratepayers that are or will be remitted to EMT pursuant to an electricity procurement order or long-term contract, or through the natural gas assessment process, or any proceeds from Yankee settlements received by EMT; b. 4.36% for revenues EMT receives or will receive from (i) the Forward Capacity Market (FCM) operated by the Independent System Operator for New England (ISO-NE), (ii) the Maine Power Reliability Program (MPRP) settlement, (iii) the Regional Greenhouse Gas Initiative (RGGI)⁵, (iv) other utility shareholder funded settlements, or (v) grants received during the Plan period.” Third Triennial Plan PUC Docket, Stipulation (Me. P.U.C. May 25, 2016), 16.

²¹ See 35-A M.R.S. §§ 10110(4-A), 10104.

designed to facilitate easy uptake of energy efficiency measures, achieves the Trust's statutory mandate to procure MACE.

95-648 ch. 480, Natural Gas Energy Conservation Programs

Discount Rate

CLF acknowledges that the discount rate proposed for present value calculations of natural gas avoided costs is at least responsive to changing economic circumstances, unlike the fixed value proposed for evaluating electric energy efficiency. But it is also inappropriately high. CLF recognizes that the statutory framework pertaining to evaluation of avoided costs for natural gas conservation programs is not as robust as that applying to the Trust's electric energy conservation program.²² Nevertheless, for the practical reasons set forth above, CLF urges the Trust to adopt a lower discount rate than the combined average of all Maine gas distribution utilities' most recently established weighted costs of capital to evaluate the cost effectiveness of natural gas efficiency measures. A lower discount rate would better reflect the fact that utilities incur no capital costs in this context, and that energy efficiency is a low-risk investment that yields great benefits for ratepayers.

MACE

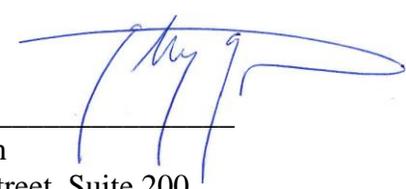
The Trust proposes defining Maximum Achievable Cost-Effective Energy Efficiency (MACE) in chapter 380, but not in chapter 480. This terminology is equally applicable to natural gas conservation programs under 35-A M.R.S. § 10111 as it is to electric efficiency programs under 35-A M.R.S. § 10110. The addition of this definition is very helpful in unifying the statutory and regulatory text with what has become common parlance in the energy efficiency context at both the Trust and the Public Utilities Commission. CLF suggests that the definition of MACE be added to chapter 480, as well.

CLF appreciates the Trust's consideration of these comments.

Respectfully submitted,

CONSERVATION LAW FOUNDATION

By its attorney,



Emily K. Green
53 Exchange Street, Suite 200
Portland, ME 04101
Egreen@clf.org
(207) 210-6439

²² Compare 35-A M.R.S. § 10111(2) with § 10110(4-A).