MAINE STATE LEGISLATURE

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Mark A. Vannoy
CHAIRMAN

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COMMISSIONER

Harry Lanphear
ADMINISTRATIVE DIRECTOR

August 1, 2017

Honorable David C. Woodsome, Senate Chair
Honorable Seth A. Berry, House Chair
Energy, Utilities and Technology Committee
100 State House Station
Augusta, Maine 04333

Re: Report on Energy Efficiency Projects for Transmission and Sub-Transmission-Level Customers – Stakeholder Group Findings

Dear Senator Woodsome and Representative Berry:

During its 2013 session, the Legislature enacted An Act to Reduce Energy Costs, Increase Energy Efficiency, Promote Electric System Reliability and Protect the Environment (Act), P.L. 2013, ch. 369. Section A-29 of the Act states:

> **Sec. A-29. Other long-term contracts**. The Public Utilities Commission shall convene a stakeholder group to examine, and make policy recommendations to the Legislature regarding, financing and implementing energy efficiency and combined heat and power projects for transmission and subtransmission-level customers in an effective and fair manner. Except for the long-term contracts described in the order issued by the commission on February 13, 2013 under Docket No. 2012-00408, the commission may not approve long-term contracts under the Maine Revised Statutes, Title 35-A, section 3210-C for energy efficiency and demand capacity resources affecting transmission and subtransmission customers prior to the commission's providing a report to the Legislature on the stakeholder group findings.

On September 24, 2013, the Commission opened an Inquiry[1] as a vehicle to conduct the legislatively required stakeholder group process and to provide a report to the Legislature on the findings of the stakeholder group. The following entities participated in the stakeholder group process:

- Efficiency Maine Trust (Trust)
- Office of the Public Advocate
- Industrial Energy Consumer Group
- Natural Resources Council of Maine
- Central Maine Power Company
- Emera Maine

[1] *Inquiry Regarding Stakeholder Group On Energy Efficiency for Transmission and Sub-transmission Level Customers,* Docket No. 2013-00452.

The stakeholder group met on several occasions and identified the following five general topics for discussion:

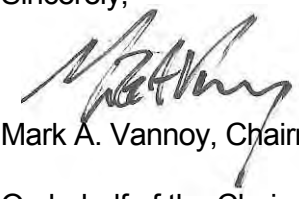
- What are the benefits of investments in energy efficiency measures at the level of transmission and sub-transmission (T&ST) customers?
- What is the opportunity for further cost-effective energy efficiency at T&ST customers in Maine?
- What are the barriers to achieving this opportunity?
- How much has the Trust invested in programs to benefit T&ST level customers? How does this amount compare to the Trust's investments in other electricity customer segments and to the amount that T&ST customers have paid in to the Trust's funds?
- What are the issues around funding future T&ST level efficiency projects through the long-term contract mechanism of 35-A, §3210-C?

On June 22, 2017, the Trust filed its Final Report on the stakeholder process. This Report addresses the issues identified for discussion by the stakeholder group. The Trust's Final Report on the stakeholder process is attached. The Report concludes that the consensus from the stakeholder group discussions was that the Trust's current practices with respect to program spending and funding contributions is fair, but should continue to be monitored. The group also agreed that the flexibility of the long-term contract funding mechanism is well-suited to projects involving transmission and sub-transmission customers. Other than affirming the Trust's current practices, the Report stated that the participants did not offer any specific policy recommendation that should be made to the Legislature. While the Commission staff attended most of the meetings, the Commission staff is not part of the stakeholder group, nor does the Commission take a position with respect to the content or the conclusions contained in the Trust's Final Report on the stakeholder process.

As stated above, the Act placed a moratorium on Commission approval of long-term energy efficiency contracts under Title 35-A, section 3210-C for transmission and sub-transmission projects until the report on the stakeholder group findings is provided to the Legislature. The submission of this Report to the Legislature satisfies the requirements of the Act and allows for future Commission consideration of long-term efficiency contracts regarding transmission and sub-transmission level projects.

If you have any questions, please do not hesitate to contact us.

Sincerely,



Mark A. Vannoy, Chairman

On behalf of the Chairman and
R. Bruce Williamson, Commissioner
Maine Public Utilities Commission

Attachment
cc: Energy, Utilities and Technology Committee Members
Deirdre Schneider, Legislative Analyst

Report of the Efficiency Maine Trust on the Stakeholder Process Held in Connection with the Maine Public Utilities Commission Proceeding on Energy Conservation Programs for Transmission and Sub-Transmission (T&ST) Level Customers

1. Background

a. Omnibus Energy Bill

During its 2013 session, the Maine Legislature enacted LD 1559, "An Act to Reduce Energy Costs, Increase Energy Efficiency, Promote Electric System Reliability and Protect the Environment" (the Omnibus Energy Act or the Act).

Section A-29 of the Omnibus Energy Act states:

> **Sec. A-29. Other long-term contracts**. The Public Utilities Commission shall convene a stakeholder group to examine, and make policy recommendations to the Legislature regarding, financing and implementing energy efficiency and combined heat and power projects for transmission and subtransmission-level customers in an effective and fair manner. Except for the long-term contracts described in the order issued by the commission on February 13, 2013 under Docket No. 2012-00408, the commission may not approve long-term contracts under the Maine Revised Statutes, Title 35-A, section 3210-C for energy efficiency and demand capacity resources affecting transmission and subtransmission customers prior to the commission's providing a report to the Legislature on the stakeholder group findings.

b. Notice of Inquiry

Pursuant to the directive of Section A-29 of the Act, the Maine Public Utilities Commission (PUC) opened Docket 2013-00425 – "Inquiry Regarding Stakeholder Group on Energy Efficiency for Transmission and Sub-Transmission Level Customers" and issued its Notice of Inquiry (NOI) on September 24, 2013. The NOI called for interested stakeholders to notify the Commission of their wish to participate in the process, and set an initial meeting date. The NOI also requested that Efficiency Maine Trust (the Trust) provide a "straw proposal" for the specific issues and potential approaches to be addressed by the stakeholder group.

c. Straw Proposal

On October 25, 2013, the Efficiency Maine Trust (the Trust or EMT) submitted the "Efficiency Maine Trust Straw Proposal." The Trust identified three central issues for discussion and assessed alternative approaches. The outline of these issues and alternative approaches was as follows:

1. Issue 1 – Apportioning Contract Costs Among Utilities
    - Option A – Apportion costs to utilities in proportion to share of load.

- Option B – Apportion costs to utilities by project and location

2. Issue 2 – Apportioning Contract Costs Among Customer Classes
    - Option A – Apportion costs across all classes in proportion to their share of load
    - Option B – Apportion costs to the customer class served by the efficiency program
3. Issue 3 – Timing of Contract Payments

d. *Initial Phase of PUC Proceeding*

On October 24, 2014, PUC staff issued an initial Request for Comment regarding the parties' views on the appropriate scope, timing and next steps for this docket. The Trust and the Natural Resources Council of Maine (NRCM) submitted comments.

On December 5, 2014, the PUC indicated that it would keep the docket open as a means to explore the underlying issues in more depth, and issued a further request for comments from the parties regarding the options for funding and implementing efficiency and CHP projects for T&ST customers.

The Industrial Energy Consumers Group (IECG) submitted comments, summarizing its view about conservation programs as they relate to T&ST customers stating, "Properly designed industrial energy efficiency policies can provide significant benefits to the consumers who improve their efficiency as a result, the grid as a whole, and society at large, including the environment." IECG, Comments, Docket 2013-00452, January 2, 2015, at 1. IECG noted industrial customers' sensitivity to electricity prices and costs, and also listed the economic benefits of these industrial customers, including paying salaries for local jobs, purchasing local supplies, and providing a significant part of the local tax base. IECG also commented on the importance of policies and program designs that maintaining fairness as between the amount of funds that industrial energy users pay into a conservation program as compared to the amount of assistance they receive in return. IECG stressed that this principle of fairness should guide any future decisions around reinstituting a system benefit charge (SBC) on T&ST customers or designing the amount and type of assistance that industrial customers would receive from conservation programs. Finally, IECG discussed in its comments a variety of program implementation strategies, expressing satisfaction with the Trust's current approach of offering technical assistance and an "open season" for large custom projects, as well as its openness to other approaches.

The Trust also responded to the request for comments. The Trust discussed the types of barriers typically faced by T&ST customers, focusing special attention on the internal "hurdle rate" that facilities owned by out-of-state companies need to surpass before they can get corporate approval to put efficiency upgrades in their capital budgets. EMT, Comments, Docket 2013-00452, January 7, 2015, at 1. The Trust relayed analysis from its recently completed market study on the potential for cost-effective, achievable energy savings in the industrial sector, and offered comments on the variety of funding sources that it has available to make financial assistance available to T&ST customers pursuing such savings. The Trust offered its explanation for why it finds financial incentives (subsidies) to be more effective for this customer group than loans or leasing, and explained in some detail how it has modified

its implementation strategy to an "open season" approach to better serve the types of complex, slow developing efficiency and CHP projects typically associated with Maine's largest energy users.

2. Additional Stakeholder Process

In collaboration with the PUC, the Trust convened an additional stakeholder group meeting on March 18, 2015. The following is a list of those in attendance:

- Michael Stoddard, Efficiency Maine Trust
- Ian Burnes, Efficiency Maine Trust
- Faith Huntington, Maine Public Utilities Commission
- Amy Mills, Maine Public Utilities Commission
- Agnes Gormley, Office of the Public Advocate
- Dylan Voorhees, National Resources Council of Maine
- Nate Martel, Emera
- Todd Griset, Industrial Energy Consumer Group
- John Carroll, Central Maine Power (CMP)

The PUC and the Trust continued the discussion at a second stakeholder group meeting on April 9, 2015. The following is a list of those in attendance at the second meeting:

- Michael Stoddard, Efficiency Maine Trust
- Ian Burnes, Efficiency Maine Trust
- Faith Huntington, Maine Public Utilities Commission
- Agnes Gormley, Office of the Public Advocate
- Dylan Voorhees, National Resources Council of Maine
- Nate Martel, Emera
- Todd Griset, Industrial Energy Consumer Group
- Rich Hevey, Central Maine Power (CMP)

The stakeholder group identified five key issue areas to guide discussion in these meetings:

1. What are the benefits of investments in energy efficiency measures at T&ST-level customers?
2. What is the opportunity for further cost-effective energy efficiency at T&ST customers in Maine?
3. What are the barriers to achieving this opportunity?
4. How much has the Trust invested on programs to benefit T&ST level customers? How does this amount compare to the Trust's investments in other electricity customer segments and to the amount that T&ST customers have paid in to the Trust's funds?
5. What are the issues around funding future T&ST level efficiency projects through the Long-Term Contract mechanism of 35-A, §3210-C?

Section 3 of this report addresses each of these issues in greater detail.

3. Issue Areas per the Stakeholder Meeting Agenda

a. What are the benefits of investments in energy efficiency measures at T&ST-level customers?

The stakeholders discussed the current use of financial incentives by the Trust for T&ST customers, including how the incentives enable these customers to make important energy efficiency improvements to their facilities that they would not otherwise undertake. The Trust and other parties discussed multiple benefits that flow from these energy improvements. Higher efficiency equipment lowers the operating costs of T&ST customers, which improves their competitiveness. It was noted that this is particularly helpful for Maine's largest manufacturers who compete in global markets. In some situations, efficiency projects enable these companies to grow, expanding production while keeping their energy costs level. Certain efficiency upgrades have the effect of shaving demand during peak periods, which can also help improve grid reliability and defer or avoid altogether new transmission and distribution upgrades. Efficiency projects at T&ST customers also contribute to mitigating the cost of compliance with the Regional Greenhouse Gas Initiative carbon caps.

Finally, it was noted that there are significant multiplier effects that result from keeping large T&ST consumers in business. When large electricity customers perform efficiency projects in Maine, they often pay Maine vendors and contractors for the purchase and installation of the new equipment. They also lower their operating costs, preserving funds for the potential purchase of additional supplies and materials or to pay the salaries of additional labor. A portion of these preserved funds are then spent in the local economy.

b. What is the opportunity for further cost-effective energy efficiency at T&ST customers in Maine?

The Trust presented analysis to the stakeholder group showing that there is ample cost-effective potential for harvesting further energy efficiency among T&ST customers in the state. The Trust's Triennial Plan III for FY17-FY19 included a Market Potential Study that identified maximum achievable cost-effective (MACE) potential for all Maine customer classes and efficiency measures, including those served through the Commercial and Industrial (C&I) Custom Program. Although the T&ST customers are only a subset of the customers eligible for the C&I Custom Program, understanding the MACE potential savings for this program is a useful indicator of the potential that is available for T&ST customers.

The Trust described to the stakeholder group how the magnitude of the savings potential for the C&I Custom Program is a function of the sales forecasts, program design, and technical applicability of each measure included in the analysis of C&I energy efficiency potential. For this initial analysis,

the opportunity was modeled using avoided costs from the Avoided Energy Supply Costs (AESC) in New England 2015 study. Combined Heat and Power (CHP) potential was modeled separately (in the Distributed Generation Potential Study performed by GDS Associates), but used the same avoided cost assumptions.

Table 1 provides an overview of the annual estimated costs and savings associated with the MACE potential for the C&I Custom Program found by the Market Potential Study and the Distributed Generation Potential Study.

Table 1: C&I Custom Program – Achievable Potential Annual Costs & Savings (Market Potential Study)

Fiscal Year	Total EM Trust Costs	MWh Savings	MW Savings
FY2017	$5,675,930	59,611	9.5
FY2018	$6,249,605	70,460	11.1
FY2019	$7,219,254	82,950	12.7
FY2020	$6,437,808	80,744	12.7
FY2021	$6,477,939	81,844	12.9
FY2022	$6,557,541	83,099	13.0
FY2023	$6,183,597	82,604	13.1
FY2024	$6,266,971	83,907	13.3
FY2025	$6,349,286	85,234	13.5
FY2026	$6,434,009	86,585	13.7
10-Year Totals	**$63,851,938**	**797,038**	**125.6**
Annual Average	**$6,385,194**	**79,704**	**12.6**

The C&I Custom Program savings are being driven by distributed generation, machine drive, variable speed drive controls and chillers. Table 2 provides an overview of the Market Potential Study's estimated electric energy and demand savings associated with the programs most impactful measure types.

Table 2: C&I Custom Program – Top Measures

Description	MWh Savings	MW Savings	MWh Savings	MW Savings	MWh Savings	MW Savings
	2017		2018		2019	
Combined Heat and Power	42,868	6.1	53,585	7.6	64,302	9.2
Machine Drive	9,870	2.7	9,870	2.7	9,870	2.7
Variable Speed Drive Control, 40 HP	4,427	0.1	4,517	0.1	6,023	0.1
Process Cooling & Refrigeration	599	0.2	599	0.2	599	0.2
T5 Replacement with LEDs	469	0.1	507	0.1	676	0.1
Process Heating	349	0.1	349	0.1	349	0.1
Centrifugal Chiller, 0.51 kW/ton, 500 tons	287	0.1	287	0.1	287	0.1
Centrifugal Chiller, 0.51 kW/ton, 300 tons	287	0.1	287	0.1	287	0.1
Centrifugal Chiller, Optimal Design, 0.4 kW/ton, 500 tons	144	0.1	144	0.1	144	0.1
Totals	**59,300**	**9.5**	**70,146**	**11.0**	**82,538**	**12.7**
% of Program	**99%**	**100%**	**100%**	**100%**	**100%**	**100%**

In Docket No. 2015-00175 at the PUC, these opportunity estimates were adjusted using updated assumptions. The Trust re-ran the models incorporating new energy price forecasts from the London Economics Institute (LEI), and a reduced share of the industrial load represented by the paper industry. The revised potential for C&I Custom Program under the Plan for FY17-FY19 is summarized in Table 3 below.

Table 3: C&I Custom Program – Achievable Potential Annual Costs and Savings (Updated Analysis)

Fiscal Year	Total EMT Costs	MWh Savings	MW Savings
FY 2017	$ 5,240,378	59,109	9.4
FY 2018	$ 5,540,055	69,930	11
FY 2019	$ 6,116,935	82,250	12.5

c. What are the barriers to achieving this opportunity?

While each custom energy efficiency project faces market barriers unique to their type, industry, and location, the Trust reported to the stakeholder group that the most common barriers it encounters when promoting its programs are the upfront cost and the relatively long payback periods. Large businesses in Maine commonly require that investments achieve a 1.5- to 3-year payback; custom projects typically have a 4- to 7-year payback before accounting for incentives. Businesses and institutions have many competing demands for capital, and most energy efficiency and distributed generation projects are weighed against other capital investments in internal decision-making processes.

The stakeholders also discussed how Maine businesses and institutions often lack full-time staff dedicated to energy or facility management. Without in-house expertise, Maine businesses rely on outside contractors and vendors to identify energy efficiency opportunities. The atypical work schedule of industrial settings means that many industrial measures are custom projects, most of which require site-specific engineering. This site-specific engineering is capital-intensive and extends beyond what most energy contractors or vendors are willing to explore on speculation. As a result, the Trust reported that it has found that relying on market-based contractors and vendors alone leaves many potential custom efficiency projects untapped.

In other cases, the Trust noted how a custom energy efficiency or distributed generation project may involve technology or processes that are new to or uncommon in the marketplace. The Trust shared its experience that such measures are not well-suited to promotion through a prescriptive list of highly standardized measures. The unfamiliarity of contractors and customers with uncommon measures represents a hurdle for custom projects.

d. How much has EMT invested on programs to benefit T&ST level customers? How does this amount compare to EMT investments in other electricity customer segments and to the amount that T&ST customers have paid in to EMT funds?

i. EMT programs and funding sources

The Trust reported to the stakeholder group that it offers programs to all customer classes using a variety of different funding sources. T&ST customers participate in two of Efficiency Maine's programs: the C&I Prescriptive Program (formerly called the Business Incentive Program) and the C&I Custom Program (formerly called the Large Customer Program).

The Prescriptive Program provides education, technical assistance, quality control and financial incentives for energy upgrades to Maine businesses of all sizes. The Program incentivizes proven "off-the-shelf" equipment that is widely available, represents significant energy-savings opportunity, and has practical applications across the state and across sectors. This includes lighting, lighting controls, refrigeration, Heating, Ventilation and Air Conditioning (HVAC) units and variable-speed drives. The financial incentives fund a portion of the incremental cost of efficient models, enticing businesses to install more energy-efficient equipment than they would have otherwise.

The C&I Custom Program provides financial incentives that leverage private investment in large-scale energy savings projects. The program historically has targeted the largest energy consumers in the state. These customers have an average demand above 400 kW and include hospitals, paper mills, other large manufactures and organizations with multiple facilities (e.g. college campuses and grocery chains). As noted above, these large businesses and institutions face many competing priorities for their limited capital budgets, creating a significant barrier for investment in energy efficiency projects. Incentives paid by the C&I Custom Program help overcome the large upfront capital cost barrier for these projects. Additionally, the delivery team provides impartial technical support.

The Trust's funding sources for these and other programs fall into three general categories:

- *System Benefit Charge (SBC) or Procurement Order Funding*: This refers to EMT revenues from a usage-based assessment on customer utility bills. Only residential and non-T&ST customers contribute to this funding source; T&ST customers are exempt by state statute from paying the assessment.
- *All-Sector Funding*: These are Trust revenues to which all customer sectors have contributed, directly or indirectly, and for which Trust presumes that each customer sector has contributed its *pro rata* share based on its relative share of load. This includes proceeds from the Regional Greenhouse Gas Initiative (RGGI), revenues from the Forward Capacity Market (FCM), and funds received from the Maine Yankee Settlement and as payments for the Long Term Contracts approved in docket 2012-00408. For the purposes of this report, the Trust also has treated the Maine Power Reliability Program settlement as being paid for by all customer sectors, even though technically it is paid for by the utility's shareholders.
- *Dedicated Funding*: The Trust also occasionally receives funding that is dedicated toward certain sectors or initiatives and for which there may be no correlation to amounts paid in by various Maine customer sectors. The primary example of this is the federal grant funds previously received by the Trust through the American Recovery and Reinvestment Act (ARRA).

The following section illustrates the amounts received by the Trust, and amounts paid from Trust programs, by customer sector. It also shows how these contributions and payments compare to the hypothetical scenario in which each sector paid or received funds in perfect proportion to its share of load. In making the calculations contained in these figures, the Trust notes that it did not factor in any of the Dedicated Funding described above nor funding related to the Natural Gas Conservation Fund.

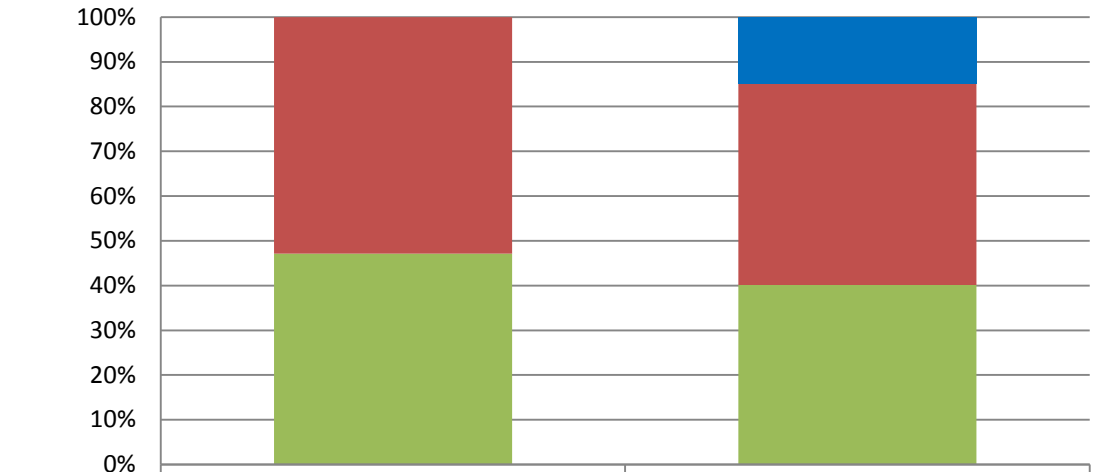
ii. Customer Sectors: Contributions vs. Incentives

For the purposes of this report we will group customer sectors into three categories:

- Residential
- T&ST (C&I customers with an average demand above 400 kW)
- Non-T&ST (C&I customers with an average demand below 400 kW)

Each customer sector's contribution to the two funding categories is reflected in Figure 1 below. This is based on each sector's load share.

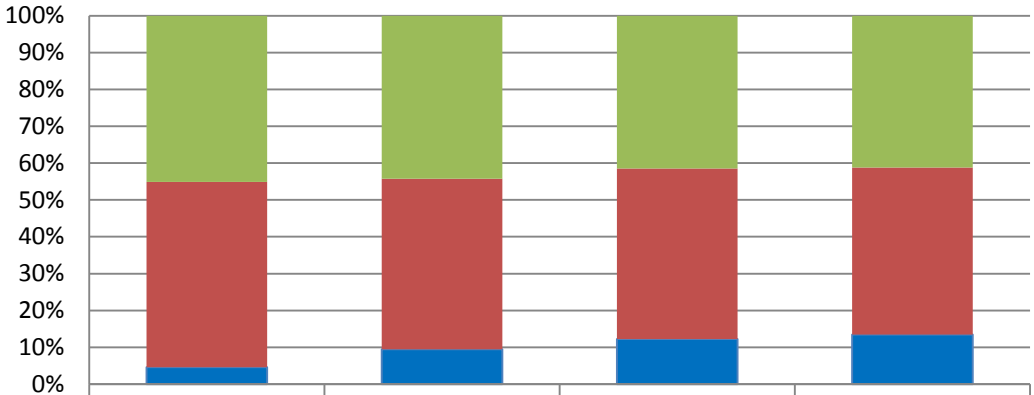
Figure 1: Distribution of customer sector contributions to the SBC and All-Sector funding categories



	SBC	All Sector
T&ST	0%	15%
NON-T&ST	53%	45%
Residential	47%	40%

As the Trust's blend of SBC and All-Sector Funding changes over time, so too does the weighted average of customer sector allocation. Figure 2 shows the weighted average of each sector's contribution to the overall funding pool over the last three years.

Figure 2: Distribution of customer sector contributions to total funding pool (FY13-FY16)



	FY 13	FY 14	FY 15	FY 16
Residential	45%	44%	42%	41%
NON T&ST	50%	46%	46%	45%
T&ST	5%	9%	12%	14%

The Trust's Board of Trustees has held primary responsibility for approving the allocating funds among programs and customer sectors. In doing so, the Board has considered and balanced three primary concerns:

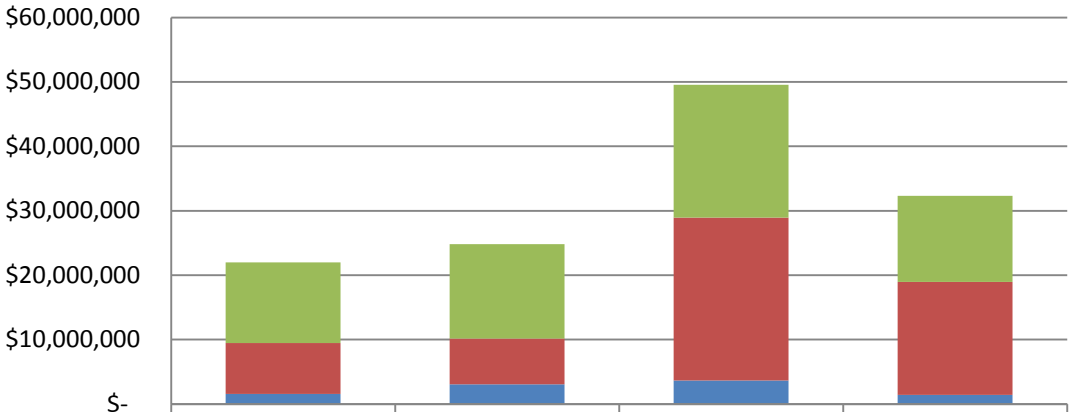
- *Fairness:* Perfect fairness in this case would mean that the Trust would allocate program funding for each customer sector in direct proportion to what that sector paid in to the conservation funds.
- *Cost Effectiveness:* The Trust could choose to allocate its budget based on the maximum achievable potential for procuring cost-effective efficiency resources in each sector (or through each program).
- *Customer Demand:* The Trust could prioritize the measures or programs exhibiting the highest customer demand, regardless of cost effectiveness and/or sector parity.

In the first and second Triennial Plans, the Trust's Board prioritized *fairness* in its funding allocation decisions. To that end, it used programs as a proxy for customer sectors and then allocated budgets to the programs that served each sector based on that sector's *pro rata* share of load and/or contributions to the Trust's funds. For example, Residential funds were allocated to programs that serve residential customers (e.g., Home Energy Savings Program, Retail Markdown Program, and Income Eligible Initiatives). Non-T&ST funds were allocated to programs that generally served smaller C&I customers (e.g., C&I Prescriptive Program, Commercial New Construction Program, Small Business Initiative). T&ST funds were allocated to the C&I Custom Program, which primarily serves large C&I customers.

There have been some notable departures from this allocation methodology. In FY 14, the Trust's Board shifted roughly $2 million in Forward Capacity Market funds from various C&I sector programs to the Home Energy Savings Program (HESP). In FY15, the Trust sought and received approval from the Commission to allocate roughly $2 million in C&I funds to the Retail Markdown Program. In both cases, the Trust's Board was responding to relatively high demand for residential programs and relatively low demand for C&I programs. This enabled the Trust to avoid suspending the programs that were experiencing high demand and to minimize the amount of time that funds are held by the Trust.

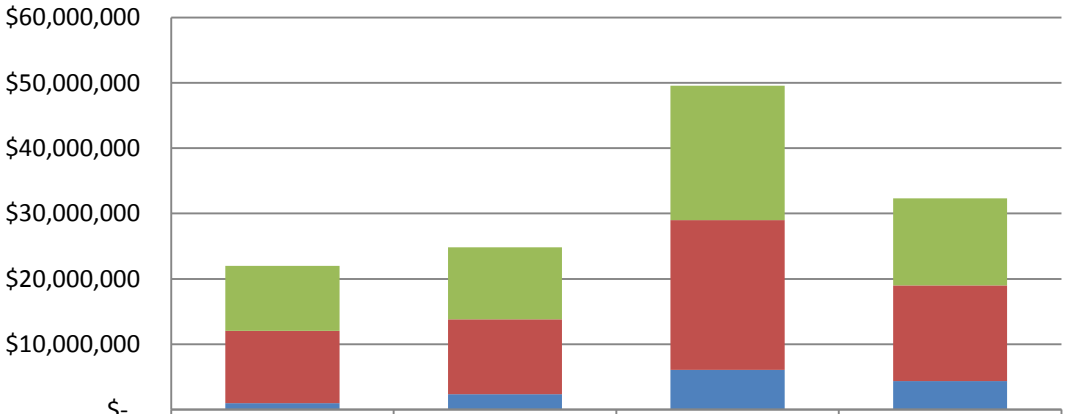
To analyze the extent to which the Trust has succeeded in achieving fairness in its investments, the Trust compared actual program investments to a hypothetical scenario with investments made according to perfect sector proportionality, the results of which are presented here in the figures below. The stakeholder group was able to discuss preliminary versions of these figures, using data from FY2013, FY2014, and FY2015 projections. The stakeholder group did not have the opportunity to discuss this updated analysis including full FY2015 and FY2016 data.

Figure 3: Actual program spending by customer sector (FY13-FY16)



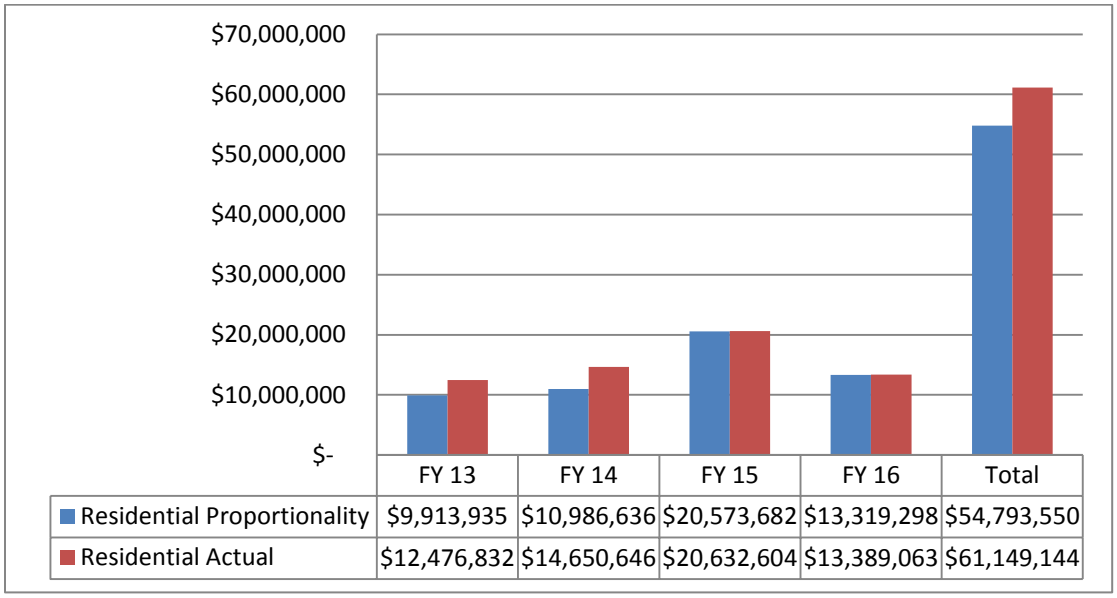
	FY 13	FY 14	FY 15	FY 16
Residential	$12,476,832	$14,650,646	$20,632,604	$13,389,063
Non-T&ST	$7,911,979	$7,121,452	$25,290,570	$17,537,375
T&ST	$1,581,742	$3,043,797	$3,637,800	$1,402,877

Figure 4: Hypothetical "perfect proportionality" program spending by customer sector (FY13-FY16)



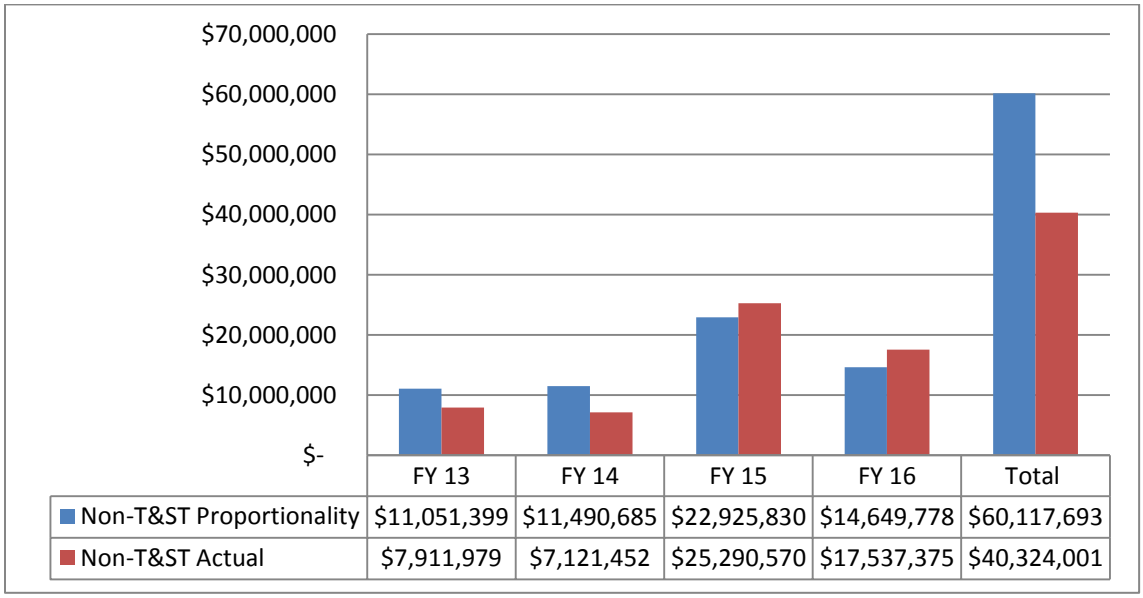
	FY 13	FY 14	FY 15	FY 16
Residential	$9,913,935	$10,986,636	$20,573,682	$13,319,298
NON T&ST	$11,051,399	$11,490,685	$22,925,830	$14,649,778
T&ST	$1,007,593	$2,342,220	$6,072,490	$4,366,045

Figure 5: Residential program spending – Actual vs. Proportionality Scenario (FY13-FY16)



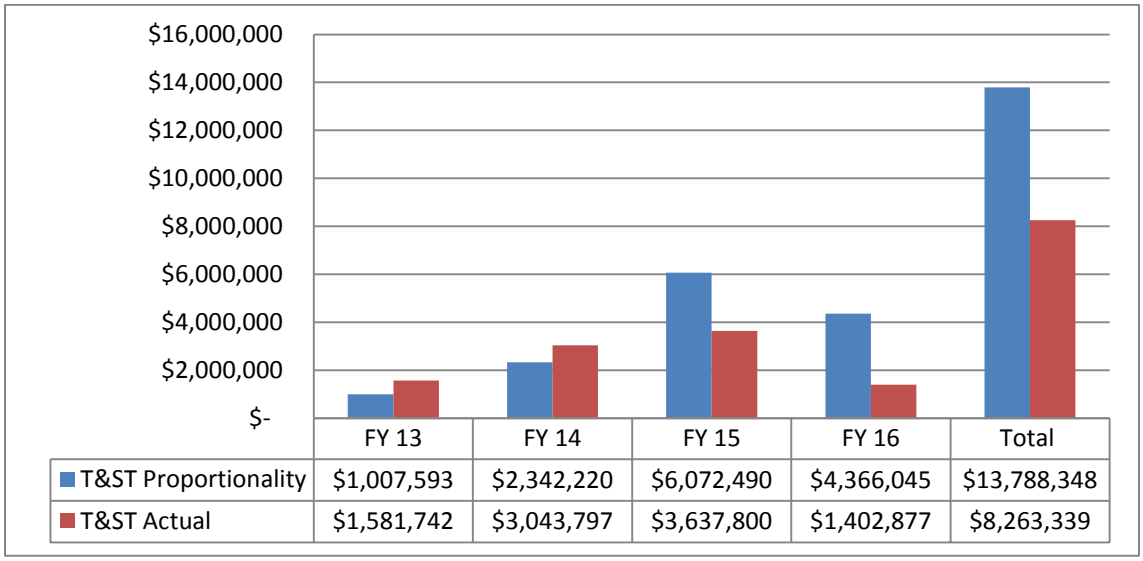
	FY 13	FY 14	FY 15	FY 16	Total
Residential Proportionality	$9,913,935	$10,986,636	$20,573,682	$13,319,298	$54,793,550
Residential Actual	$12,476,832	$14,650,646	$20,632,604	$13,389,063	$61,149,144

Figure 6: Non-T&ST program spending – Actual vs. Proportionality Scenario (FY13-FY16)



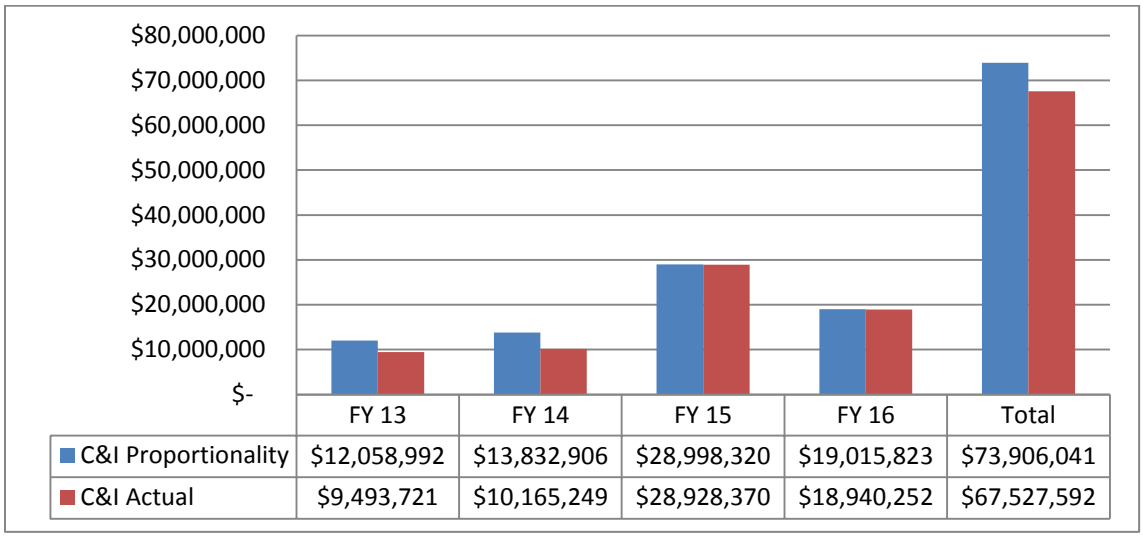
	FY 13	FY 14	FY 15	FY 16	Total
Non-T&ST Proportionality	$11,051,399	$11,490,685	$22,925,830	$14,649,778	$60,117,693
Non-T&ST Actual	$7,911,979	$7,121,452	$25,290,570	$17,537,375	$40,324,001

Figure 7: T&ST program spending – Actual vs. Proportionality Scenario (FY13-FY16)



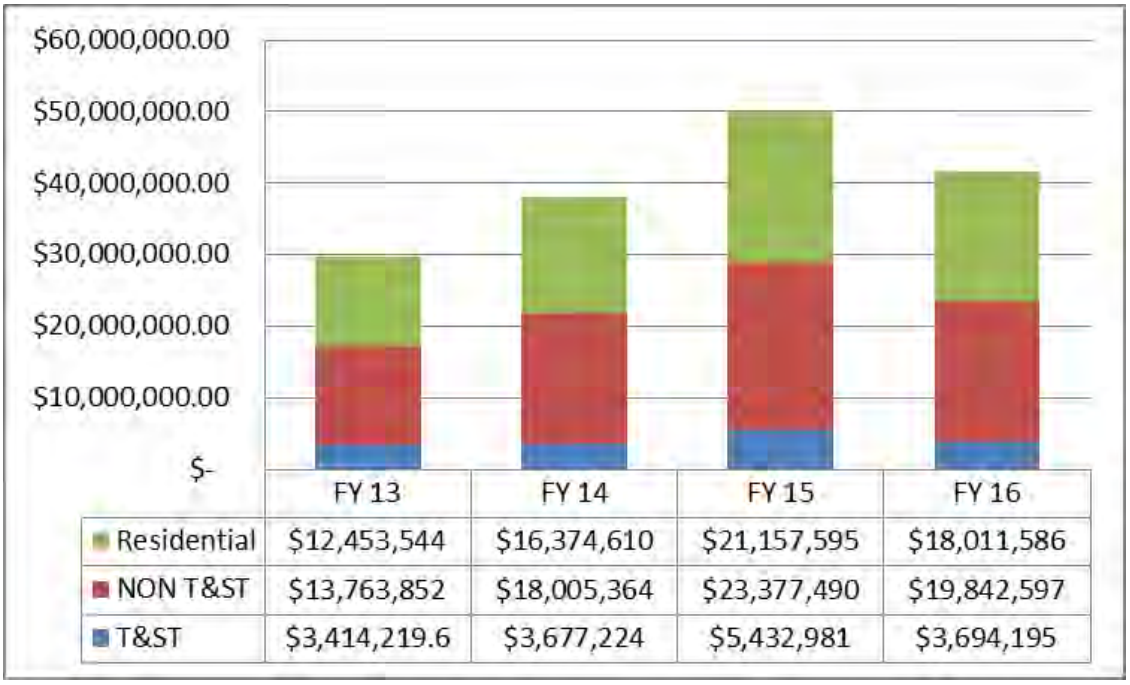
	FY 13	FY 14	FY 15	FY 16	Total
T&ST Proportionality	$1,007,593	$2,342,220	$6,072,490	$4,366,045	$13,788,348
T&ST Actual	$1,581,742	$3,043,797	$3,637,800	$1,402,877	$8,263,339

Figure 8: C&I program spending – Actual vs. Proportionality Scenario (FY13-FY16)



	FY 13	FY 14	FY 15	FY 16	Total
C&I Proportionality	$12,058,992	$13,832,906	$28,998,320	$19,015,823	$73,906,041
C&I Actual	$9,493,721	$10,165,249	$28,928,370	$18,940,252	$67,527,592

Figure 9: Total Trust revenues received, by customer sector (FY13-FY16)



	FY 13	FY 14	FY 15	FY 16
Residential	$12,453,544	$16,374,610	$21,157,595	$18,011,586
NON T&ST	$13,763,852	$18,005,364	$23,377,490	$19,842,597
T&ST	$3,414,219.6	$3,677,224	$5,432,981	$3,694,195

These figures suggest that overall, spending on programs to benefit the two general customer sectors – Residential and C&I – is fairly proportionate to the amounts this group of customers has paid into EMT funds (see Figure 5, Figure 8 and Figure 9). This is further illustrated by comparing Figures 3 and 4. However, as Figure 7 highlights, within the C&I sector the T&ST customers have received relatively less program funding from EMT than they have paid in over the prior four years[1]

e. What are the issues around funding future T&ST level efficiency projects through the Long-Term Contract mechanism of 35-A, §3210-C?

[1] Readers should also note that the discussions and analysis reported here predate, and therefore do not reflect, amendments to 35-A MRSA §10109 that were initiated in the 127th Legislature subsequent to this initiative's stakeholder meetings. The amendment was enacted by the passage of Public Law 2015, chapter 498: "An Act to Reduce Electric Rates for Maine Businesses." The amended law required that the Trust remit a fixed amount of $3 million in annual RGGI revenues to the Commission to then be paid out to a subset of T&ST customers, which customers are energy-intensive manufacturers (termed "Affected Customers"), in the form of a refund, or "disbursement." At the time the law was enacted, $3 million represented 18% of the forecasted $16.6 million in annual RGGI revenue that the Trust expected to receive for FY2017, 17% of the forecasted RGGI revenue for FY2018, and 14% of the forecasted RGGI revenue for FY2019. Actual results of RGGI auctions in FY2017 are significantly below the original forecasts. Because the disbursement to Affected Customers is a fixed amount, those customers have received a higher share of RGGI funds compared to their share of load.

While this topic was not much discussed in the stakeholder group, the Trust is able to provide relevant background on the question here by recounting some of the discussion and analysis that transpired when the Trust petitioned for approval of a long-term contract in 2012.

In a February 13, 2013 Order (February 13 Order) in Docket No. 2012-00408 – "Efficiency Maine Trust Petition for the Procurement and delivery of Energy Efficiency Capacity Resources" – the Commission conceptually approved Long-Term Contracts (LTCs) that had been proposed by the Trust. In the February 13 Order, the Commission directed Maine's two investor-owned transmission and distribution utilities, namely Central Maine Power (CMP) and Emera Maine (Emera), to enter into LTCs with the Trust for energy efficiency capacity resources (EECRs) related to the Trust's Large Customer Program, subject to legislative review and approval. While the Legislature in the Omnibus Energy Act repealed the statutory provision under which the Commission had approved the proposed LTCs, that Act simultaneously directed the Commission to instruct the utilities to enter LTCs as approved in the February 13 Order.

The February 13 Order approved funding for the Trust's Large Customer Program, which was designed to fund projects for electric customers larger than 400 kW through a competitive bid process. The approved funding source for 100% of the upfront disbursements was federal American Recovery and Reinvestment Act (ARRA) funds. The Order further provided that, upon completion of a project, the Trust would forgive up to 50% of the customer's repayment obligation in return for the Trust retaining the rights to any capacity and related energy that resulted from the project. The Trust would then bid the future capacity savings that resulted from each project into the ISO-NE forward capacity market (FCM). The remaining approximately 50% of the dispersed funds would be repaid by the electric customer over a payment period of up to 5 years.

The February 13 Order also provided that the Trust would sell the related EECRs (the avoided energy that resulted from each project) pursuant to 6-year-term long-term contracts with utilities at $.03 cents per kWh, up to a cap of $10 million. The projected total cost to ratepayers was calculated at approximately $6.1 million, but the Order initially set a $10 million cap to provide the Trust with sufficient flexibility to implement the program.

The February 13 Order directed that the contract costs resulting from the Large Customer Program be allocated among all classes of ratepayers, such allocation to occur in the context of a Commission proceeding in which a utility seeks to recover contract costs from its ratepayers. The Order reserved for later decision, however, the questions of how program costs should be apportioned among utilities and whether program availability in a utility's service territory should be limited to funds from that utility's ratepayers.

In September 2013, the Trust filed proposed, revised contract terms for consideration in the proceeding. The Commission convened a series of case conferences in 2013 and 2014 in which the parties discussed revisions to the proposed contract terms. Below is a summary of the proposed changes and concerns

raised in this process. Each of these issues is addressed in the Commission Order dated October 17, 2014.

- *Source of Funding* – The Trust stressed that ARRA funds would no longer be the source of funding for initial project capitalization. Instead, the Trust proposed that it draw upon RGGI, MPRP, and electric conservation funds for up-front project disbursements.
- *FCM Revenue and Measurement and Verification (M&V)* – In the February 13 Order, the Trust was to bid into the FCM the future capacity savings that resulted from each project and collect any resulting revenue. In its revised proposal, the Trust stated that it was not committing to bid future capacity savings into the FCM. The Commission raised concerns over the implications of this change with respect to M&V; it asked if the Trust did not intend to pursue capacity revenue through the FCM, whether ISO-NE's M&V standards for the FCM would be directly applicable to LTC-funded projects. To ensure that a comparable level of M&V rigor was applied to the LTC-funded projects, the Trust was directed to file annual reports with the Commission indicating the savings from each individual project. Further, the Commission indicated it would continue to require that the Trust substantively comply with ISO-NE's standards. The Commission stressed that this would enable the Trust to pursue monetizing FCM capacity at a later date.
- *Funding Cap and Timing of Utility Payment* – The February 13 Order approved the LTCs for a term of 6 years at a price of avoided energy at $0.03 cents per kWh. It also set a $10 million cap on the cost to ratepayers. The Trust proposed changing the payment schedule from monthly to once, upon project completion. CMP and Emera objected to the $10 million cap, stating that the Trust's more rapid repayment proposal would result in a higher net present value cost to utilities. The Commission adjusted the cap to $8 million.
- *Cost Allocation Between Utilities, Apportionment Between Service Territory, and Program Availability in Consumer-owned Utility Territories* – As stated above, the February 13 Order reserved for later decision the questions of how program costs should be apportioned among utilities and whether program availability in a utility's service territory should be limited to funds from that utility's ratepayers. The Trust proposed that contract costs be allocated between the investor-owned utilities in proportion to load share and that funding would not be limited to projects in each utility's service territory. CMP and Emera agreed. Referring to considerations of fairness and equity, CMP and Emera stated that projects located in a consumer-owned utility (COU) territory should not be invoiced to them. The Trust stated that this limitation would eliminate a number of potential large industrial projects from the program, but did not take a position on the issue. The Commission decided that Trust should not utilize LTC monies to fund projects served by COUs. LTC costs would be allocated on a per-project basis between CMP and Emera in the ratio of 82% to CMP and 18% to Emera.

Finally, it is important to note that in its preparation and filing of the Third Triennial Plan, covering the period of fiscal years 2017-2019, the Trust did not plan, budget for or request approval of any long-term contracts as a means to funding conservation projects for T&ST customers. Nonetheless, it should also be noted that while the Trust does not contemplate using the LTC authority for funding its programs,

other parties may wish to do so. Until a report on this topic is filed by the Commission with the Legislature, the requirements of Section A-29 will not be met and the Commission may not approve a request for a long-term contract for energy efficiency and demand capacity resources affecting transmission and subtransmission customers pursuant to the authority granted in Title 35-A MRS §3210-C.

4. Additional Comments and Recommendations of Stakeholders

The Trust circulated a draft of this report seeking comments from parties that had participated in the stakeholder meetings prior to the report being finalized and submitted to the Commission. No additional comments were received.

5. Conclusion

This report provides the Trust's memorialization of the background, issues and analysis that have been discussed, both in PUC docket 2013-00425 and in informal discussions between the PUC staff and the parties of the aforementioned docket. As directed by Section A-29 of the Omnibus Energy Act, the PUC convened a stakeholder group to examine the financing and implementation of energy efficiency and combined heat and power projects for transmission and subtransmission-level customers in an effective and fair manner.

The general consensus from these discussions was that the Trust's current practices are fair with respect to program spending and funding contributions by customer sector. The group recognized a need to monitor that distribution periodically to ensure continued fairness. The group also agreed that the flexibility of the long-term contract (LTC) funding mechanism is well-suited to projects involving T&ST customers.

Despite multiple opportunities to provide comments in the PUC proceeding and in the informal stakeholder collaboration, no stakeholder to date has offered any policy recommendations to be relayed to the Legislature, nor has there been any consensus among the stakeholders on such a policy recommendation. The Trust has provided analysis of the relative contributions of each customer class to funding conservation programs through the Trust and compared that to the relative funding each customer class has received from these programs in return. The analysis shows that within the C&I customer sector, T&ST customers have received proportionately less program funding than they have contributed toward conservation funds received through the variety of funding sources by the Trust. However, the analysis also shows that as between the Residential customer sector and the C&I customer sector as a whole, the amount of funds paid out from the Trust's programs to each sector is reasonably proportionate to the amount paid in.