



April 27, 2017

Doreen Friis  
Regulatory Affairs Officer/Clerk of the Board  
Nova Scotia Utility and Review Board  
3rd Floor  
1601 Lower Water Street Halifax, Nova Scotia B3J 3S3

RE: M07544: EfficiencyOne—Incentive Setting Methodology (E-ENS-R-16)

Dear Ms. Friis:

As expert consultant to Board Counsel of the Nova Scotia Utility and Review Board, Synapse Energy Economics (Synapse) respectfully submits the following comments on the March 31, 2017 revised EfficiencyOne and CLEAResult Incentive Setting Methodology Review and Recommendations report (revised report). These comments reference and build on our August 2016 comments and October 2016 reply comments on CLEAResult's initial incentive setting report, our conference call with EfficiencyOne and CLEAResult, and the report author's subsequent presentation to the Demand Side Management Advisory Group (DSMAG). Our comments on the revised report focus on the following areas: (1) Financing, (2) Education and Awareness, (3) Use of Participant Cost Test, (4) Theoretical Limits and Incentive Thresholds, (5) TRC Benefits, (6) Incremental Equipment Costs, and (7) TRM Update Process.

## **Financing**

In our reply comments on the incentive setting report, we recommended that the report be modified to (1) clearly indicate which types of incentives are covered in the report, specifically whether financing is included or not, (2) include discussion of how to determine financing incentives, and (3) include discussion of how the presence of financing should influence complementary incentives (e.g., rebates) for the same measures or programs. In a discussion subsequent to our reply comments, CLEAResult clarified that the second recommendation, discussion of how to determine financing incentives, is beyond the scope of report but agreed to include additional content to address our comments.

Regarding our first recommendation, the revised report still does not clearly indicate that developing financing incentives are excluded from its scope. This should be stated upfront, e.g. in the discussion of project methodology.

With respect to the third recommendation, the threshold section (p. 28) of the revised report mentions financing but doesn't answer how the threshold for rebates would be impacted by financing offered by the program administrator. At a minimum, the report should include language such as: "EfficiencyOne should consider adjusting direct financing incentives (rebates) if it is offering financing for the same

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measures.” In addition, Table 6 (p. 30) should include financing as another component that could influence the level of direct financial incentives.

### **Education and Awareness**

The revised report discusses the importance of education and awareness initiatives as an approach to remove barriers to customer participation (p. 29). It also mentions that “[e]ducational initiatives can also assist with the goal of achieving reduction in incentive levels” (p. 29). However, education and awareness initiatives are not included in Table 6 as a factor to influence incentive rates. We recommend that education and awareness initiatives be included in Table 6.

### **Use of Participant Cost Test**

In our comments on the initial report, we indicated that “we consider the Participant Cost (PC) test an important metric that can be weighed against the results of the Program Administrator Cost (PAC) and Total Resource Cost (TRC) tests” (p. 2).

The revised incentive setting report now includes the PC test (p. 19) as a metric to evaluate a participant’s perceived value. The PC test is also mentioned on p. 26, where the revised report discusses customer cost thresholds. However, the PC test is not included in the list of customer value considerations in Table 5: Selection of Parameter for Customer Cost. To be consistent with the report’s new narratives on pages 19 and 26, the PC test should be included in Table 5 as another key factor to consider with regards to customer cost.

### **Theoretical Limits and Incentive Thresholds**

In our comments on the initial report, we requested explanation or definition of the terms theoretical limits and absolute limits. On a conference call with EfficiencyOne and CLEAResult following the submission of our reply comments, CLEAResult provided more clarity on its use of these terms: theoretical limits provided the upper value of the range of where incentives should generally lie, while absolute limits indicated a firm limit for incentive levels. We requested that the report authors remove the term and values for “Absolute Limit” incentives.<sup>1</sup> The revised report responds to this request by removing absolute limit incentive values.

In our initial and reply comments on the initial report, we also requested that the incentive setting report provide evidence to support the specific incentive boundaries/ceilings recommended therein. However, CLEAResult did not provide evidence to support the specific incentive boundaries/ceilings recommended within Table 18 (p. 57).

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<sup>1</sup> Our reasons for requesting that the absolute limit be removed are as follows: (1) The absolute limit did not provide useful information (absolute limits were all 100 percent) and distracted readers from the core message; and (2) while the boundary/ceiling shows suggested upper-range values, presenting absolute limits may provide readers with the false impressions that it is common to set incentives higher than the boundary/ceiling and that it is uncommon to set incentives lower than the boundary/ceiling.

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In addition, the meaning of the specific values on Table 18 is unclear, e.g., whether they are recommended values or simply illustrative values. The report explains “[r]ecommendations for a Suggested Boundary/Ceiling should be based on the forecasted program expenditure net of any expected program administration costs” (p. 56). This implies that the values presented in Table 18 are not recommended values, because CLEAResult did not conduct an analysis of forecasted program expenditures net of any expected program administration costs. However, without any explanation of the meaning of Table 18, it runs the risk of being viewed as recommended values.

We also have the following concerns:

- CLEAResult still uses four terms for incentive threshold/boundary/ceiling/limits (p. 55).
- The text still doesn’t describe how the suggested boundaries provided in Tables 17 and 18 were developed.
- Tables 17 and 18 frequently list more than one suggested boundary/ceiling without clearly identifying what the boundary is, or explaining when each value holds (p. 56–7). Regarding identifying the boundary, does the first value listed in the Suggested Boundary/Ceiling column apply to the first Suggested Basis? For example, does the “Residential Customer, Small Purchase at Retailer” decision include a retail price boundary of 50 percent and an incremental equipment cost boundary of 100 percent? Regarding when each value holds, is it the lesser of the two criteria that holds? These points should be clarified in the report.
- While the report indicates that in some cases it may be required to exceed the suggested boundary/ceiling, it does not mention anywhere that the right incentive levels are often at or below the suggested boundaries/ceiling values.
- The suggested boundary/ceiling costs for the following three program types have been changed from 50 percent of the incremental costs in the initial report to 100 percent in the revised report. It would be helpful to know why this was changed.
  - Residential Customer, Large Capital Equipment Purchase
  - Commercial and Industrial Customer, Large Capital Equipment Purchase
  - Commercial and Industrial Customer, Large Purchase

### **TRC Benefits**

While the section for the TRC mentions the term “non-energy benefit” (NEB) once (p. 24), it does not provide any details on specific NEBs to include. Nor does it mention participant or utility NEBs. The NEBs that are included in the TRC should be consistent with the guidance of the DSMAG. Currently EfficiencyOne is hiring a contractor to help quantify NEBs for inclusion in the TRC.

As with the TRC, the definition of the PC test (p. 19) should include participant benefits consistent with the guidance of the DSMAG.



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## Incremental Equipment Costs

In the appendices (as elsewhere in the revised report), “incremental costs” was universally changed to “Incremental Equipment Costs.” If the program administrators in these case studies use a different definition of incremental costs, then these changes may not be accurate. CLEAResult should verify that these changes are in fact appropriate.

## TRM Update Process

On page 60, the report recommends that EfficiencyOne introduce a formal measures assumption validation process and summary manual, known as a Technical Reference Manual (TRM). CLEAResult goes on to recommend that “[TRM] updates should be reviewed by a committee, which consists of technical experts from EfficiencyOne’s staff, and one external member. All members on the committee should have a technical background, and specifically understand and have experience with quantifying measure energy savings, penetrations and costs.”

We are concerned that limiting external review (outside of EfficiencyOne) to one person is unduly restrictive. Such a process is likely to miss opportunities to ensure that the TRM reflects the needs of stakeholders, to benefit from experience from a variety of perspectives, and to correct errors. We recommend that EfficiencyOne provide a short opportunity for comment (e.g., two weeks) by interested parties. Such a review would not unreasonably bog down the process and is in place in other jurisdictions.<sup>2</sup>

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<sup>2</sup> See, Hamilton, Bret, Sam Dent, and Matt Socks, 2012. Mid-Atlantic Technical Reference Manual (TRM) Updating Process Guidelines. Prepared for the NEEP Regional EM&V subcommittee. Available at <http://www.neep.org/sites/default/files/resources/Recommendations%20and%20draft%20update%20process%20for%20the%20Mid%20Atlantic%20TR.pdf>.

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These comments represent our expert opinion on this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Alice Napoleon". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Alice Napoleon, Senior Associate

A handwritten signature in black ink, appearing to read "Kenji Takahashi". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Kenji Takahashi, Senior Associate