

May 25, 2020

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

RE: Comments on EfficiencyOne Performance Alignment Study - M09096

Synapse Energy Economics, Inc. (Synapse) respectfully submits the following questions and comments in regard to the EfficiencyOne (E1) Performance Alignment Study (study) filed on April 21, 2020.

The Board Order in the 2020–2022 Demand Side Management (DSM) Resource Plan matter identified concerns with underspending of annual DSM budgets year over year and required E1 "to file terms of reference for the investigation of overestimation of costs by October 31, 2019, and to conclude the investigation and file a report with the Board by March 31, 2020" (Board Order, M09096, September 6, 2019, p. 2). The key concern with underspending of DSM budgets is that DSM funds are being collected from ratepayers but are not being used right away.

The scope of work for the Study is as follows:

- 1. A review of cost assumptions used in the development of DSM Resource Plans
- 2. A variance analysis of actual costs and energy savings compared to DSM Plan approved amounts for 2015, and 2016–2018
- 3. A review of factors driving the variance and the potential for continued existence of these factors
- 4. A jurisdictional scan of comparable organizations based on legislative, regulatory, and corporate considerations (Study, p. 2)

E1 hired KPMG to conduct the study of the underspending. KPMG's report is attached to E1's filing as Attachment A. The purpose of this memo is to provide a summary of the report findings, discuss any study shortcomings and provide comments and recommendations based on the study findings.

Summary of report findings

The KPMG study found that E1 consistently exceeded its savings targets at lower total cost than planned, as shown in Figures 1 and 2 below. According to the study, E1 underspent its overall program

budget for 2015 by about \$4.7 million (12 percent) (Attachment A, p. 2). For the 2016–2018 period, E1 underspent by about \$7 million (7 percent of budget). As E1 cannot adjust the overall amount of annual budgets within a three-year plan, E1 collected millions more from customers during these three years than it was able to spend.

The study also analyzed the extent of and reasons for underspending of the incentive portion of total costs³ by program. The study found that the underspending of incentive budgets was observed in most programs (eight of 11) in each year during the 2016 to 2018 period. The programs that saw the largest underspending were the Custom Incentives program (\$8.08 million), Home Energy Assessment (HEA) program (\$3.48 million), and Residential Direct Install (RDI) program (\$2.42 million) (Attachment A, p. 37). The Custom Incentives program and the HEA program both had substantially fewer participants than expected (Attachment A, p. 41). HEA acquired just 34 percent of planned participants (2,615 of 7,706 planned assessments) during the 2016–2018 period (Attachment A, p. 41). Likewise, E1 overestimated uptake in the Custom Incentives program (Attachment A, p. 8).⁴ The underspending of the budget for the Residential Direct Install program (along with the Rental Properties and Condos program) was due to the fact that participants in these programs favored lighting measures with lower per measure costs and savings than other measures (Attachment A, p. 38).

E1 can make mid-term modifications to mitigate disparities between Plan and actual performance. In fact, E1 made some adjustments during the 2016–2018 timeframe, as indicated on Table 18 on p. 45 of Attachment A.⁵ The mid-course adjustment does not allow E1 to reduce or increase the overall portfolio-level budget from the original annual budget amounts. The study indicates that "EfficiencyOne's Supply Agreement outlines that any underspend is addressed at the end of the three-year Plan period" while noting that Efficiency Vermont and Efficiency Maine can reconcile underspending above certain thresholds on an annual basis (Attachment A, p. 45). The mid-course adjustment process "allows EfficiencyOne to re-allocate investment and energy savings among programs and program components to account for any changes from the annual evaluation process... EfficiencyOne is required to provide explanation to the NSUARB of any instances where the mid-course adjustment results in a shift/re-allocation of +/- 25% of the original budget or energy savings targets amongst programs and program components" (Attachment A, p. 44). It appears that E1 achieved its

¹ According to the 2016 Annual Progress Report, total expenditures for 2015 were \$34.2 million, including \$2.2 million of HST Input Tax Credit (ITC) costs that were set aside, compared to the UARB-approved budget of \$39.0 million. This underspending amounts to \$4.8 million (ENS 2016 DSM Annual Progress Report, March 31, 2016, p. 5.).

² For 2019, E1 fully spent the budget according to its 2019 Annual Progress Report (Attachment A, p. 2).

³ The administrative cost portion of the total budget was more accurately projected (Attachment A, Table 10, p. 35).

⁴ The overestimation of program costs for the Custom Incentive program was present in 2015 (\$1.0 million or 17 percent of the \$5.8 million budget was not spent, despite higher savings achievements than planned (Attachment A, Table 10, p. 35)).

⁵ While the mid-term adjustment in 2018 was successful at reducing most of the variances, the adjustments in 2016 had a very little effect in 2016 and the adjustments in 2017 made the underspending situation worse (Attachment A, Table 18, p. 45).

savings targets by shifting spending to the Residential Instant Savings program and the C&I Efficient Product Rebates program, where budgets were overspent, from programs with underspent budgets.

Figure 1. 2016–2018 Incentive Cost Variance Analysis Actual to Plan by Program Component

				Three Year Plan Total
(\$ million)	2016	2017	2018	Variance
Residential DSM Programs				
Appliance Retirement	0.63	0.61	0.53	1.77
Instant Savings	2.32	0.94	0.99	4.25
RDI	(0.17)	(0.82)	(1.43)	(2.42)
Green Heat	(0.56)	(0.52)	(0.31)	(1.39)
Solar	(0.30)	(0.52)	(0.65)	(1.46)
Home Energy Assesment	(0.79)	(1.01)	(1.68)	(3.48)
Rental Properties and Cond.	(0.35)	(0.89)	(0.89)	(2.12)
New Residential	0.45	0.39	1.27	2.10
Business, Nonprofit and Institutional				
Programs				
Efficient Product Rebates	0.24	0.77	2.60	3.61
Custom Incentives	(3.01)	(2.55)	(2.51)	(8.08)
Direct Installation	(0.74)	0.03	0.56	(0.15)
Total (underspend)	(2.27)	(3.57)	(1.53)	(7.38)

Source: Study Attachment A, Table 13.

Figure 2. 2016–2018 First Year Energy Saving Variance Analysis Actual to Plan by Program Component

(CMI)	2016	2047	2049	Three Year Plan Total		
(GWh)		2017 Variance - Actua	2018 I to Plan	Variance		
	(underachievement)					
Residential DSM Programs						
Appliance Retirement	(1.57)	(1.19)	(1.50)	(4.26)		
Instant Savings	26.48	11.22	13.49	51.19		
RDI	(4.17)	(3.34)	(7.01)	(14.53)		
Green Heat	(2.35)	(4.29)	(3.00)	(9.64)		
Solar	(0.35)	(0.60)	(0.70)	(1.65)		
Home Energy Assesment	(4.12)	(4.10)	(6.61)	(14.83)		
Rental Properties and Cond.	(0.52)	(3.13)	(3.00)	(6.65)		
New Residential	0.12	(0.50)	0.50	0.11		
Business, Nonprofit and						
Institutional Programs						
Efficient Product Rebates	4.71	13.98	42.68	61.37		
Custom Incentives	(8.13)	(11.71)	(19.72)	(39.56)		
Direct Installation	(6.37)	(2.11)	(0.01)	(8.49)		
Total (underachievement)	3.72	(5.76)	15.11	13.08		

Source: Study Attachment A, Table 15.

The study also indicates that "[c]urrent reporting does not provide sufficient information to adequately address overestimation when it occurs" (Attachment A, p. 44). The current reporting includes mid-

course adjustments, quarterly progress reports, and annual progress reports. The report then indicates the following issues with quarterly reporting in particular:

- "[The quarterly reporting] does not appear to provide detailed forecast data on energy savings and spending for the year or for the Plan period as a whole in the case of a three-year Plan. Additionally, while the quarterly reports do provide the 'stop light' indication of expected energy savings compared to annual targets, there is limited additional insight shared by EfficiencyOne regarding where it expects actual results will be over the remainder of the year or over the Plan period as a whole" (Attachment A, p. 10).
- "Currently, the 'stop light' in the quarterly report does not provide insight on spending. There is an opportunity for enhancements within the current reporting to include additional information to support the expected results and how these results differ from Plan as a result of changes in market conditions and customer choice trends as the Plan is implemented. This more detailed information may provide the NSUARB with a common understanding with EfficiencyOne on trends and on the re-forecasting of the expected actual results against the Plan" (Attachment A, p. 10).
- "Enhancements to reporting would provide further robust information to address overestimation when it occurs including enabling EfficiencyOne to:
 - Address the quantum and degree of overestimation
 - o Provide an understanding and meaningful information to users of the reports regarding areas of estimation, trends to date, re-allocation of costs, and forecasted results within the Plan period" (Attachment A, p. 10).

Lastly, the study identified one area of improvement to increase the precision and accuracy of customer participation estimates. For the 2020–2022 plan, E1 employed an internal vetting process to develop customer participation estimates by measure. However, the study found no documented linkage between the vetting process and the rational and justification that informed the updates to customer participation estimates (p. 46). The study then notes that "[t]raceability of rationale and justification for updates made through the process for estimating customer participation can support the internal review process and provide staff with additional context to consider and discuss when refining estimates," and further notes that "these steps may contribute to increased precision and accuracy through the internal vetting process" (Attachment A, p. 46).

Study shortcomings

Synapse's primary concern with the study results is that the jurisdictional review is limited in several ways.

First, the review is based on just two case studies.

Second, the report does not provide sufficient justification for selecting these two cases. The only justification provided is in the following statement:

"The list of possible organizations for the jurisdictional scan was considered based on corporate, regulatory and legislative comparability with EfficiencyOne. As a result of these three factors, our jurisdictional interviews were limited to Efficiency Vermont and Efficiency Maine for comparability" (Attachment A, p. 5).

Yet, for identifying best practices for improving projections of program costs and savings, the study did not need to limit its review to just two organizations that have similar corporate, regulatory, and legislative backgrounds.

Third, the study did not investigate how the two jurisdictions improve program spending and savings performance when they encounter budget underspending issues.

Finally, the report does not provide implications or recommendations to E1 based on these two case studies.

Synapse's Comments and Recommendations

We make several comments and recommendations based on our review of the study and its findings.

- We agree that the mid-year modification process could be improved. For example, it appears that an annual budget reconciliation process would be helpful in Nova Scotia.
- We find the jurisdictional review in the study to be too constrained. We are aware of other
 jurisdictions that deal with underspending issues and can make mid-term budget modifications,
 including energy efficiency program administrators in Massachusetts and Rhode Island. We
 encourage E1 to examine practices in additional jurisdictions to inform the improvements.
- We support the study's recommendation to enhance the current reporting to better inform mid-year modifications, especially to include the latest spending status in the quarterly report.
- We concur that E1 should improve its current internal vetting process for developing customer participation estimates by providing clear rationale and justification.

We thank the Board for the opportunity to provide these comments.

Sincerely,

Kenji Takahashi, Senior Associate Alice Napoleon, Senior Associate