EfficiencyOne

2023 DSM Annual Progress Report, 2023 DSM Evaluation Reports, 2023 Savings Verification Report

Summary Report

M11630

November 20, 2024

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ATTACHMENTS

1. INTRODUCTION AND BACKGROUND

EfficiencyOne ("E1") filed its 2023 Annual Progress Report ("APR") and 2023 DSM Evaluation Reports with the Nova Scotia Utility and Review Board ("NSUARB") on April 1, 2024.[1] On July 29, 2024, the NSUARB's Verification Consultant filed the 2023 Savings Verification Report.[2]

In a letter dated August 1, 2024, the NSUARB stated:

> *"In prior years, the Board referred these reports to the DSM Advisory Group (DSMAG) for consideration. This has been an efficient way to address the reports. The Board directs EOne to include the reports as an agenda item at its next session with the DSMAG, where Mr. Gil Peach will be available to respond to questions by participants. EOne is also directed to file a summary report of the outcomes with the Board within three weeks following that session."*[3]

To ensure a thorough discussion of these reports, E1 invited stakeholders to provide written comments on the 2023 APR, 2023 DSM Evaluation Reports, and 2023 Savings Verification Report by September 5, 2024. E1 received stakeholder comments from the Small Business Advocate ("SBA"), and the Consumer Advocate (CA), in consultation with their consultants Green Energy Economics Group and Resource Insight Inc.

On October 24, 2024, E1 circulated its reply to stakeholder comments in advance of the October 31, 2024 DSMAG meeting. E1's reply comments are provided as Attachment A. The reply addressed the following overall topics as noted in the stakeholder's comments:

- Small business programs
- Affordable housing programs
- Underspent funds from 2023

[1] M11630, Exhibit 1, EfficiencyOne 2023 DSM Annual Progress Report and Exhibit 2, EfficiencyOne 2023 DSM Evaluation Reports [April 1, 2024].
[2] M11630, Exhibit 3, Savings Verification Review of Efficiency Nova Scotia Program Year 2023 Evaluation Results, Report for the Nova Scotia Utility and Review Board. H. Gil Peach & Associates LLC., [July 29, 2024].
[3] M11630, NSUARB letter regarding DSMAG session on 2023 DSM Annual Progress Report and 2023 DSM Evaluation Reports [August 1, 2024].

2. OUTCOMES

E1 presented an overview of its reply comments at the DSMAG session.[4] E1 invited further comments and questions from stakeholders and responded to them during the session. The NSUARB's Verification Consultant Gil Peach, along with his associate John Mitchell, were in attendance and available to add comments and respond to questions, as directed by the NSUARB in its August 1, 2024 letter.

At the conclusion of the session, E1 noted that it would be filing its final Summary Report on November 20, 2024 and that it would include a copy of E1's reply to stakeholder comments circulated to the DSMAG on October 24, 2024.

3. CLOSING

E1 thanks the DSMAG members for their comments and engagement on these reports.

[4] The October 31, 2024 DSMAG meeting was conducted via Microsoft Teams.

EfficiencyOne

2023 DSM Annual Progress Report, 2023 DSM Evaluation Reports, 2023 Savings Verification Report

Reply to Stakeholder Comments

M11630

October 24, 2024

REPLY TO STAKEHOLDER COMMENTS

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[1] M11630, Exhibit 1, EfficiencyOne 2023 DSM Annual Progress Report and Exhibit 2, EfficiencyOne 2023 DSM Evaluation Reports [April 1, 2024].
[2] M11630, Exhibit 3, Savings Verification Review of Efficiency Nova Scotia Program Year 2023 Evaluation Results, Report for the Nova Scotia Utility and Review Board. H. Gil Peach & Associates LLC., [July 29, 2024].
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Table 1: DSMAG Member Comments and E1 Response

DSMAG Member Comments	**E1 Response**
Small Business Advocate (SBA)	
The SBA notes that the Savings Verification Report includes several recommendations that are pertinent to the SBA customer classes. The recommendations are consistent with SBA's past comments to E1 requesting more attention be paid to programs that would benefit small businesses. **Key finding include:** **<u>BNI Strategic Energy Management (SEM):</u>** **SVR-5:** SEM program administrators must strengthen reporting to show incorporation of Pre/Post metering or some comparable form of submetering or EMIS system reporting as a robust form of energy data collection to validate savings verifications in future SEM program cycles. **SVR-6:** An in-depth participant survey of all prior SEM and Custom Retrofit program participants should be conducted to better quantify past program participation persistent spillover savings.	• E1 appreciates the SBA's comments that E1 pursue programs and improve the program offerings directed towards small businesses. E1 continues to make improvements to increase participation and its program offerings for small business. As noted in E1's Q2 2024 DSM Report[4] (page 18), Small Business Energy Solutions increased the eligibility cap for businesses from 350,000 kWh of electrical energy consumption annually to 600,000 kWh, extended the pre-approval window from 120 days to 180 days, and increased unitary incentives across the measure catalogue. Additionally, planning has begun to expand the Commercial Direct Install pilot, which began in 2021, to include electrician and refrigeration and air conditioning mechanic-installed measures (lighting and heating), in addition to existing direct install measures like screw-in light bulbs and wraps for pipes and electric hot water tanks. The additional measures are expected to be launched in 2025. • E1 provides ongoing updates on the implementation of its Evaluation and Savings Verification Recommendations (SVRs) in its quarterly reports filed with the NSUARB. In its Q2 2024 DSM Report (Attachment 2), E1 provided an update on its progress towards the implementation of 2023 Verification Recommendations, including SVR-5, SVR-6, SVR-7, and SVR-8. E1 has included those Q2 2024 updates below: <u>Strategic Energy Management (SEM)</u> • SVR-5: *Footnote to Recommendation: The Efficiency Nova Scotia Evaluation Manager notes that SEM does have pre and post measurements for all projects. Recommendation SVR-5 is for the Evaluator to clearly show incorporation of pre and post measurements in the evaluation writeups*. E1 agrees with this recommendation as explained in the footnote (E1 notes that all measures for which savings were claimed in 2023 had a measurement and verification report which included pre and post retrofit measurements whenever applicable.) E1 will ensure that the Evaluation Reports clearly show incorporation of pre and post measurements in the evaluation writeups. o Status: In-Progress o Expected period of Completion: Q1 2025 • SVR-6: E1 is in the process of considering this recommendation. The SEM Program uses a net-to-gross ratio (NTGR) of 1.00. The Evaluator does not recommend reassessing this NTGR assumption in the next five years unless program component design or results change significantly. The Custom Retrofit service is measured

[4] M11863, EfficiencyOne, Q2 2024 DSM Report [August 26, 2024]

<table>
<tr><th>DSMAG Member Comments</th><th>E1 Response</th></tr>
<tr><td><u>Small Business Energy Solutions (SBES):</u>
SVR-7: Shifts in program delivery and promotion away from account manager interactions and the subsequent decline in Audit-path project numbers are negatively impacting program performance and should be reversed. Additional focus should also be placed toward canvasing potential SBES audit-path participants through the employment of regional contractors with assigned territories and performance-based reimbursements for business audit recruitment activities (application and participation)

SVR-8: A non-participant and partial-participant spillover survey should be conducted. This activity should also inform rebate programs of additional measures that may be included in future program offerings.</td><td>annually using a sampling approach and a review of projects in which E1 highlights with the Evaluator for consideration of spillover savings. The Custom team will continue to work with the Evaluator to ensure program spillover is accurately captured as part of the 2024 Program Evaluation. The Evaluator is performing a net to gross ratio review in 2024, where spillover will be reviewed for all programs and results will be presented in the Evaluation Report. As part of that review, this recommendation will be considered for Custom Retrofit.
o Status: In-Progress
o Expected Period of Completion: Q4 2024

<u>Small Business Energy Solutions (SBES)</u>
• SVR-7: E1 does not agree with this recommendation. As per the 2023 Program Evaluation, the number of Audit projects increased by 150% in 2023 compared to 2022. In 2023, E1 redesigned the audit path and brought the SBES Energy Auditor role in-house. The positive results seen in 2023 include more effective screening for energy savings potential, increased project close rate and higher energy savings per project. The SBES program has recently launched increased incentives, and a strong promotional push is being placed on the program in Q3 and Q4 of 2024.
o Status: Not Recommended for Action.
o Expected Period of Completion: N/A

• SVR-8: E1 agrees with this recommendation. E1 notes that partial participant spillover was measured as part of the 2023 evaluation and included interviews with dropped-out participants and a verification of rejected measures in the spillover questionnaire. The Evaluator will perform a non-participant spillover survey in SBES in 2024. Results from the spillover survey will be presented in the 2024 Evaluation Report to be filed with the NSUARB on March 31, 2025.
o Status: In-Progress.
o Expected Period of Completion: Q1 2025</td></tr>
<tr><td>The SBA appreciates the focus that the Peach Report places on the need to improve the program offerings directed towards small businesses and the need for greater follow up and streamlining of applications to encourage greater participation in the future. We look forward to reviewing E1's 2026-2030 Plan that we hope will reflect these recommendations.</td><td>• The Small Business Energy Solutions team has reduced the amount of time it takes to pre-approve applications once they are submitted from 10 weeks to consistently maintaining a four-week turnaround time over the last year. The team has also improved communication with pre-approved applicants. Emails are now being sent to Small Business Energy Solutions participants at 90 and 150 days post-application approval as a check-in on upgrades and to encourage program completion.
• E1 looks forward to working with the SBA throughout the 2026-2030 Plan development process to ensure the SBA's feedback is reflected to encourage greater participation and programs that benefit the SBA customer classes.</td></tr>
</table>

<table>
<tr><th>DSMAG Member Comments</th><th>E1 Response</th></tr>
<tr><td colspan="2">Green Energy Economics Group and Resource Insight, Inc. (Consultant to the Consumer Advocate)</td></tr>
<tr><td colspan="2">1. Reference: 2023 DSM Annual Progress Report, p. 4, lines 17-24; p. 38, lines 7-15
The report suggests that single family low-income programs missed their targets largely because higher than anticipated customer demand led to longer lead times. Two new contractors are being added to reduce project lead times.</td></tr>
<tr><td>1. Does E1 agree that higher demand should make it easier to meet program goals?</td><td>• E1 does not agree. Higher demand for the program does not necessarily make it easier to meet targets. While Affordable Single-family Homes was launched in 2023 and is available to homes heated primarily with electricity, HomeWarming has provided the same services to homes heated primarily with sources other than electricity since 2012 through government funding. In 2023, government funding announcements resulted in a significant surge in applications from both electric and non-electric heated homes, though the government funding was tailored primarily to non-electrically heated homes. In the 2023 Evaluation Report (Existing Residential Evaluation Report, page 139), Econoler stated: “Although this report is focused on projects that generated electrical savings, it should be noted that when considering Affordable Single-family Homes (electrically heated) and government-funded (non-electrically heated) homes, most participants are non-electrically heated.”
• Other factors that made it challenging to meet program goals, even as there was high demand, were:
o The surge in applications happened as the program component was in the process of introducing heat pumps to its offering, and it took time to establish scopes of work and installation guidelines, and for delivery agents and heat pump contractors to ramp up and add staff.
o The inclusion of heat pump measures expanded the scope of many projects, which extended project completion timelines.
o A large portion of electric homes and customer applications showed less potential for energy savings and upgrades (historically, electric homes are newer with less opportunity for upgrades).</td></tr>
<tr><td>2. Can E1 confirm that the real issue is that there wasn’t sufficient contractor capacity to meet the demand?</td><td>• Affordable Single-family Homes fell short of its 2023 mid-course targets. A mix of factors contributed to this savings shortfall, as noted in E1’s Annual Progress Report (page 24):
o capacity challenges being experienced by delivery agents as a result of the surge in applications;
o a large portion of electric homes and customer applications showed less potential for energy savings and upgrades (historically, electric homes are newer with less opportunity for upgrades); and
o heat pump installations, where applicable, increased timelines for project completions as more contractors are involved in the project, including electrical inspections by NS Power.
• To address these challenges, E1 added two additional delivery agents in Q3 2023, for a total of six, and added several new program staff to increase processing capacity. To date in 2024, E1 has added another delivery agent, for a total of seven, and has significantly increased the number of heat pump-only contractors (from 28 in 2023 to 44 to date in 2024).</td></tr>
</table>

DSMAG Member Comments	E1 Response
3. Is the existing project pipeline based on the higher than anticipated demand projecting to meet or exceed program goals?	• E1 expects to meet its mid-course adjusted targets for Affordable Single-family Homes for 2024.
4. Can E1 share the data that show adding only two new contractors will meet the demand increases stated?	• E1 has taken a number of steps to meet the increased demand in the Affordable Single-family Homes program component. In addition to adding two new delivery agents in 2023, a third new delivery agent has been added in 2024, for a total of seven; and the number of heat pump contractors has increased to 44 in 2024 from 28 in 2023. Internally, E1 has added several new staff members to increase processing capacity. While it will take time to work through the waitlist that resulted from the significant surge in applications in 2023, E1 is continually monitoring the capacity of its agents and contractors and working with them to move participants through the program as quickly as possible.
5. Will the two new contractors be assigned pending pipeline projects to decrease customer wait times or will existing contractors continue to work through the queue while the new contractors will work through new projects?	• The two new delivery agents and the third that was added in 2024 were assigned customers that had been on the waitlist. Existing delivery agents continued to service the customers that had been assigned to them as they were in varying stages of their projects, with some having received their initial assessment and having work quoted and approved by those delivery agents.
2. Reference: 2023 DSM Annual Progress Report, p. 12, lines 10-20 **The report states that underspent funds from program year one will be invested in 2024 and 2025 activities, which may include increased marketing support and increased incentives in commercial and green heat programs where increased costs have impacted projects. Examples were for green heat and efficient products marketing where targets were exceeded.**	
1. Can E1 confirm if any other investment activities for underspent funds are being considered at this time, other than those listed, and if so, provide details?	• E1's assumptions on the 2023 underspend in the Annual Progress Report were based on the updated three-year forecast established at that time. Since then, E1 set its mid-course adjustment (as reported in the Q1 2024 DSM Report[5]), and updated its 2024 forecast to reflect current program spending and performance (as reported in the Q2 2024 DSM Report). Based on the most recent Q2 forecast, \$7.3 million of the \$7.8 million underspend in 2023 is expected to be spent in 2024 in the following programs: Residential and BNI Efficient Product Rebates, Direct Installation, Custom Incentives, and Enabling Strategies. Residential and BNI Efficient Product Rebates account for the biggest increase in spending with an additional \$5.7 million forecast to be spent on those two programs in 2024 (compared to 2024 Plan expenditures). o In Residential Efficient Product Rebates, the Instant Savings spring campaign was highly successful (the number of products rebated were more than double historical trends for the campaign), and subsequently, adjustments were made to expectations for the fall campaign. With the campaigns

[5] M11727, EfficiencyOne, Q1 2024 DSM Report [May 27, 2024]

DSMAG Member Comments	E1 Response
	delivering higher energy and demand savings than expected, 2024 expenditures have increased accordingly. o In BNI Efficient Product Rebates, higher energy savings expected from an increase in rebates on key lighting measures and the piloting of solar PV measures have driven 2024 expenditures higher.
2. Can E1 confirm how these underspent funds will be allocated, on a percentage or dollar basis, between the different proposed activities?	• As of its forecast in the Q2 2024 DSM Report, additional funds (above 2024 Plan levels) are going to the following programs in 2024: o $3.8 million to Residential Efficient Product Rebates o $1.9 million to BNI Efficient Product Rebates o $1.1 million to Direct Installation o $0.7 million to Custom Incentives o $2.1 million to Enabling Strategies Two programs (Existing Residential and Demand Response) are forecast to spend less than 2024 Plan expenditure levels.
3. Can E1 provide data or decision making on why increased marketing budgets for programs that already hit targets is a best use of funds?	• E1 makes mid-course adjustments each year and updates its year-end forecast on a quarterly basis in order to reflect what is happening in the market and to optimize program performance. Marketing was one example given in the Annual Progress Report of where the 2023 underspend may be allocated, but the underspend from 2023 is being used in a number of ways at the program level to maximize energy savings, demand savings, and available capacity achieved across the portfolio.
4. Did E1 consider spending the increased marketing on recruiting more contractors to assist with achieving targets in the affordable single family programs?	• While overall Existing Residential expenditures are forecast to be slightly lower than 2024 Plan levels, the forecasted 2024 spend for the Affordable Single-family Homes program component has increased from $5.6 million in the mid-course adjustment to $7.1 million in the Q2 year-end forecast, as part of E1 efforts to achieve target. To date in 2024, those efforts have included recruiting additional delivery agents and heat pump-only contractors. Affordable Single-family Homes is on track to achieve its targets from both the 2024 Plan and the mid-course adjustment.
3. Reference: 2023 DSM Evaluation Report, pp. 126-137 (concerning multi-family homes) and 138-149 (concerning single family homes). The Affordable Single-Family Homes program missed both energy and demand savings targets by a significant margin. The Affordable Multi-Family Homes program exceeded targets due to increased prescriptive project participation and decreasing comprehensive project participation.	
1. Affordable Single-Family Homes missed GWh target by 59% and MW target by 30%. What was the main reasoning for this?	• The main reasons the Affordable Single-family Homes program component missed its targets in 2023 are: o The surge in applications caused capacity challenges for delivery agents and heat pump contractors, as they struggled to find and retain enough qualified heating, ventilation, and air conditioning (HVAC) technicians to meet demand. o The ramp-up time to introduce heat pumps to the program component took longer than expected. Once introduced, heat pump installations also increased timelines for project completions as more contractors were involved and some projects required multiple visits and/or electrical panel upgrades and inspections.

DSMAG Member Comments	E1 Response
	o A large portion of electric homes and customer applications showed less potential for energy savings and upgrades (historically, electric homes are newer with less opportunity for upgrades).
2. Affordable Multi-Family Homes exceeded targets and saw an increase of projects driven by prescriptive projects. Is the intent to shift more focus to prescriptive projects moving forward as a result of this evaluation or will E1 continue to try to get more comprehensive projects?	• Affordable Multi-family Housing savings are generated by two types of projects – comprehensive and prescriptive. The 2023 DSM Evaluation Report provides an overview of Affordable Multi-family Housing participation and the evolution of gross savings from 2018 to 2023. In 2023, E1 saw the number of prescriptive projects increase considerably going from 37 projects in 2022 to 68 in 2023 while the number of comprehensive projects decreased from 12 to 11. At the same time, energy savings per project vary considerably from year to year mostly due to the various building sizes participating in Affordable Multi-family Housing. • Informed by these trends, E1 has been strategically targeting prescriptive projects (which have shorter cycle times) to contribute a significant portion of the program's annual savings targets; however it also continues to actively pursue comprehensive projects. • In E1's Q2 2024 DSM Report (page 12), E1 noted that while participation levels were consistent with the same period last year, energy savings decreased as the average savings per project has declined. This is primarily the result of smaller 1-3 multi-unit residential buildings making up a larger percentage of applications through the prescriptive stream in 2024. A marketing campaign is currently underway to drive participation.
3. There are no recommendations provided to improve performance in Affordable Single-Family Homes. Can E1 explain why a program missing targets by such a wide margin has no recommendation for improvements following the evaluation?	• In its 2023 Evaluation Report (Existing Residential Evaluation Report, page 139), the Evaluator noted that there were no formal improvement recommendations to be followed up on as it had not evaluated Affordable Single-family Homes previously. The main objectives of the Affordable Single-family Homes evaluation were to calculate gross and net results, namely electrical first-year and lifetime energy savings, peak demand savings, as well as avoided GHG emissions. In 2024, a process evaluation will be performed for Affordable Single-family Homes. Process evaluations are designed to identify and recommend improvements to increase a program's efficiency or effectiveness. • E1 also notes that savings verification recommendation SVR-9, provided by the Savings Verification consultant, applies to E1's Affordable Single-Family Homes program, and other E1 programs. The recommendation suggests that specific focus must be made to ensure that heat pump treated participants are made fully aware of differences in operational characteristics and recommended system management. In its Q2 2024 DSM Report (Attachment 2), E1 noted that it agreed with this recommendation. E1 will consider how best to ensure participants are made aware of heat pump operational characteristics and recommended system management while balancing practical considerations and resource constraints. E1 is currently updating heat pump information handouts and online resources and will ensure the new resources are readily available on E1's website and are dispersed to participants when heat pumps are recommended.

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CLOSING

E1 wishes to thank the DSMAG members for providing written comments on the 2023 DSM APR, 2023 DSM Evaluation Reports, and 2023 Savings Verification Report and for the opportunity to respond to these comments.