

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: *The Public Utilities Act*

– and –

IN THE MATTER OF: **AN APPLICATION** by **EFFICIENYONE** for approval of the 2027-2031 Demand-Side Management (DSM) Purchase Agreement between EfficiencyOne and Nova Scotia Power Incorporated, the establishment of a final agreement between the parties, and approval of a 2027-2031 Demand-Side Management (DSM) Resource Plan

INFORMATION REQUESTS

To: **Nova Scotia Energy Board**

From: **Green Energy Economics Group**
Consultant for The Consumer Advocate

Responses Due: **August 28, 2026**

Copies: 1 electronic copy (PDF searchable)

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1 **Undertaking U-12:**

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3 To review the information in Exhibits 59 through 61 and reconcile that with the evidence at PDF
4 page 22, line 5.

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6 **Green Energy Economics Response:**

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8 PDF page 22, line 5 of Mr. Love's Evidence states that "14.9% of Nova Scotians are Low-Income,"
9 with the following footnoted reference: "Prevalence of low income based on the Low-income
10 measure, after tax (LIM-AT) (%)" from the 2021 census available at:
11 <https://www12.statcan.gc.ca/>". This value can be specifically found at the following link:

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13 [https://www12.statcan.gc.ca/census-recensement/2021/dp-](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?LANG=E&GENDERlist=1&STATISTIClist=1&DGUIDlist=2021A000212&HEADERlist=11&SearchText=NovaScotia)
14 [pd/prof/details/page.cfm?LANG=E&GENDERlist=1&STATISTIClist=1&DGUIDlist=2021A00](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?LANG=E&GENDERlist=1&STATISTIClist=1&DGUIDlist=2021A000212&HEADERlist=11&SearchText=NovaScotia)
15 [0212&HEADERlist=11&SearchText=NovaScotia](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?LANG=E&GENDERlist=1&STATISTIClist=1&DGUIDlist=2021A000212&HEADERlist=11&SearchText=NovaScotia)

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17 Additionally, a screenshot from this link showing the 14.9% value has been included as
18 Attachment 1 to Undertaking U-12.

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20 The LIM-AT measurement definition can be found at the following link:

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22 [https://www12.statcan.gc.ca/census-recensement/2021/ref/dict/az/definition-](https://www12.statcan.gc.ca/census-recensement/2021/ref/dict/az/definition-eng.cfm?ID=fam021)
23 [eng.cfm?ID=fam021](https://www12.statcan.gc.ca/census-recensement/2021/ref/dict/az/definition-eng.cfm?ID=fam021)

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25 Additionally, a screenshot from this link showing the definition has been included as Attachment
26 2 to Undertaking U-12.

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28 Exhibit 59 provides the definition of Market Basket Measure (MBM), Exhibit 60 provides the
29 threshold dollar value for the MBM in Nova Scotia for 2023 through 2025, and Exhibit 61 provides
30 the percentage of all persons in Nova Scotia with income below the MBM threshold in 2024 to be
31 10.9%.

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33 LIM-AT and MBM are two of the five measurements published by Statistics Canada that can
34 define "Low-income Status".¹ LIM-AT was used by EfficiencyOne (E1) as the basis for the "Low-
35 Income and Equity investment as a % of total energy efficiency portfolio" metric in the
36 development of the Round 1 Model input Assumptions for the 2027 to 2031 DSM Plan.² E1 also

¹ <https://www12.statcan.gc.ca/census-recensement/2021/ref/dict/az/definition-eng.cfm?ID=pop191>

² See M12780. Synapse IR-02, Attachment 1, page 8.

1 referenced the specific 14.9% figure previously in its 2026 DSM Extension filing.³ Mr. Love
2 utilized the 14.9% LIM-AT based on E1's reliance on this metric.

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5 **Undertaking U-13:**

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7 To update Tables 2 and 3 of his evidence (Exhibit E-21) if in fact they don't really represent the
8 incremental investment of 195 million versus 145 million. If the tables have to be revised don't
9 revise the cost-of service split.

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11 **Green Energy Economics Response:**

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13 Tables 2 and 3 of Mr. Love's evidence refer to the difference between two rate and bill impact
14 analysis (RBIA) scenarios. Those scenarios are:

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16 **Scenario 1: The 2027 – 2031 Preferred Plan**, as provided in E1's Application Appendix B-
17 Attachment 1 and 9, and included an energy efficiency (EE), demand response (DR), and solar pv
18 component.

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20 **Scenario 2: The IRP Scenario**, as provided in the response to Synapse IR-02, Attachment 2 –
21 Appendix K excluding strategic electrification, making it also include an EE, DR and solar pv
22 component.

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24 For the EE components, Scenario 1 represented the "Preferred Plan", at a projected cost of \$286.8
25 million.⁴ Scenario 2's EE component was an "IRP Scenario" and was projected to cost \$464
26 million⁵, a difference of \$177.2 million.

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28 For the DR components, Scenario 1 represented the "Preferred Plan", at a projected cost of \$29.1
29 million.⁶ Scenarios 2's DR component was noted as a "High DR" scenario. The following table
30 compares the non-participant bill impacts projected for each of these scenarios.

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³ See M12249. E1 Evidence, Appendix A, page 10.

⁴ E1 Evidence. Appendix A - Preferred Plan. Table 8, page 28

⁵ E1 Response to Synapse IR-07(a)iii

⁶ E1 Evidence. Appendix A - Preferred Plan. Table 8, page 28

Table 1. Comparison of DR Component Scenario Impacts on Non-participant Bills (Avg 2027 to 2046)

Scenario	Residential	Small General	General	Large General	Small Industrial	Medium Industrial	Large Industrial	Municipal
High DR	-0.013%	-0.027%	-0.041%	-0.044%	-0.049%	-0.123%	0.011%	-0.043%
Preferred DR	-0.010%	-0.025%	-0.038%	-0.049%	-0.050%	-0.122%	0.009%	-0.038%

The impact on non-participant bills for the “High DR” scenario was very close to the “Preferred Plan” DR scenario that was ultimately presented by E1 but not exactly the same. E1 did not provide a corresponding cost estimate for the “High DR” scenario, however it is reasonable to assume that costs were similar, and so there would have been little to no cost difference between Scenario 1 and Scenario 2 for the DR component.

For the solar pv components, Scenario 1 represented the “Preferred Plan”, at a projected cost of \$2.8 million.⁷ Scenarios 2’s solar pv component was noted as just “solar pv”. Similar to the DR component, the solar pv component were not the same, but the difference was minimal, leading to a reasonable assumption of little to no cost difference between the two.

E1’s response to Synapse IR-07(a)iii indicated that they had also modeled a “demand response scenario that reflected available capacity levels that were more closely aligned with the IRP at 40 MW and had a total investment amount of \$47 million.” (p. 3). This “IRP DR” component would be \$17.9 million more than the preferred plan DR component, making the total cost difference of \$195.1 million, which is the total difference that the undertaking request is seeking. The following tables compare original evidence to the full EE and DR IRP scenarios requested in U-13. The backup workpaper for these tables has been provided as Attachment 1 to this undertaking.

Table 2. Change in Non-participant Bill Impacts (Average from ‘27-‘46), Original vs. U-13

Rate Class	U-13 Version	Original	Diff
Residential	0.41%	0.46%	-0.05%
Small General	0.59%	0.66%	-0.07%
General	0.58%	0.66%	-0.08%
Large General	0.27%	0.37%	-0.10%
Small Industrial	0.53%	0.62%	-0.09%
Medium Industrial	-0.05%	0.08%	-0.12%
Large Industrial	0.32%	0.44%	-0.12%
Municipal	0.20%	0.28%	-0.07%

⁷ E1 Evidence. Appendix A - Preferred Plan. Table 8, page 28

Table 3. Change in Non-participant Bill Impacts (Average from '27-'31), Original vs. U-13

Rate Class	U-13 Version	Original	Diff
Residential	1.76%	1.89%	-0.13%
Small General	2.23%	2.49%	-0.26%
General	2.78%	3.09%	-0.31%
Large General	1.83%	2.07%	-0.25%
Small Industrial	2.30%	2.61%	-0.30%
Medium Industrial	0.84%	1.17%	-0.33%
Large Industrial	2.51%	2.82%	-0.31%
Municipal	1.38%	1.58%	-0.20%

In all instances, the inclusion of the IRP DR scenario actual decreases bill impacts for non-participants. This is due to the RBIA analysis for the High DR component - and Preferred Plan DR component - showing a reduction to non-participant bills already, and increasing DR efforts only magnifies this effect.

A note on methodology: E1 did not provide any RBIA outputs for the IRP DR component. To estimate the effect of including the IRP DR component, the non-participant bill impacts for the High DR scenario were multiplied by the percentage difference between the \$29.1 million budget in the preferred plan and the \$47 million estimated by E1 for the IRP DR scenario, which gave a multiplier of 1.62. This projection approach does not capture the full complexity of the IRP DR scenario. It does not take into account that the mix of programs will be different with different impacts per dollar invested , that that there would be a different, smaller pool of non-participants with an expanded program, and that impacts would not be even across all rate classes and years.

Undertaking U-14:

To confirm whether any of the comparators used in the Apex Study are included in the list of utilities presented in Exhibit E-21(iv).

Green Energy Economics Response:

Confirmed that none of the utilities listed in exhibit E-21(iv) serve the seven jurisdictions listed in the "Review of EfficiencyOne First-Year Costs and Unit Cost Reasonableness" provided by APEX Analytics on May 22, 2026 and included in M12789 as Attachment 2 to E1 response to IG IR-10.

Undertaking U-15:

Following EOne's filing of Undertaking 4, to provide an update to Tables 2 and 3 of his evidence (Exhibit E-21) that outlines the average rate impact by customer class over the plan period in Exhibit E-21.

Green Energy Economics Response:

E1's U-4 only provided the average non-participant bill impact for the entire analysis period of 2027 to 2046, so Mr. Love is only able to provide an updated Table 2 (below). The corresponding workpaper used to calculate the table below has been provided as Attachment 1 to this undertaking.

Table 4. Change in Non-participant Bills for IRP (IRP EE + Preferred Plan DR + Preferred Plan Solar) compared to E1 Preferred Plan

Rate Class	27-46 Avg
Residential	0.30%
Small General	0.51%
General	0.66%
Large General	0.27%
Small Industrial	0.54%
Medium Industrial	0.02%
Large Industrial	0.31%
Municipal	-0.06%