

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

- and -

**IN THE MATTER OF: AN APPLICATION by EFFICIENCYONE for approval of a New
Benefit-Cost Analysis Test for Evaluating Demand Side
Management Plans**

NON-CONFIDENTIAL INFORMATION REQUESTS

To: **EfficiencyOne**
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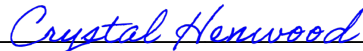
From: Synapse Energy Economics, Inc.
Board Counsel Consultant

Responses Due: **Friday, July 4, 2025**

Copies: 1 electronic copy (PDF searchable)

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Crystal Henwood, Clerk of the Board

Request IR-1:

Refer to EfficiencyOne's (E1) Evidence at page 28, which includes the list of distribution impacts included in the new benefit-cost analysis (BCA) test.

- a. Did the Demand Side Management Advisory Group (DSMAG) consider including Distribution Voltage in the proposed Nova Scotia Jurisdictional Benefit Cost Test ("Nova Scotia Test" or "BCA Test") but valuing the impact at zero? Please explain why or why not.
- b. Did Energy Futures Group (EFG) consider including Distribution Voltage in the proposed Nova Scotia Jurisdictional Benefit Cost Test ("Nova Scotia Test" or "BCA Test") but valuing the impact at zero? Please explain why or why not.

Request IR-2:

Refer to E1's Evidence at page 33, which states "EFG is proposing to apply the Federal social cost of carbon to the savings (after accounting for the avoided cost of carbon portion included in the current avoided cost of energy provided by NS Power in August 2024 – thus avoiding potential double counting)." Please provide an example of this calculation in Excel format with all formulas intact.

Request IR-3:

Refer to E1's Evidence at page 35, Table 11: Test Case Application of BCA Test (Heat Pumps).

- a. Please provide all supporting analysis and workpapers in Microsoft Excel format with all cells unlocked, and formulas intact.
- b. Did E1 conduct a BCA using the current Total Resource Cost (TRC) Test for the heat pump example? If yes, please provide all supporting analysis and workpapers in Microsoft Excel format with all cells unlocked, and formulas intact. If not, please explain why not.

Request IR-4:

Refer to pages 8 and 9 of the Evidence of David Hill, regarding the statements "The numbers in the cells of this table indicate how many of the DSMAG organizations indicated each policy (in the rows) was relevant to each impact category (in columns) for consideration in the new BCA test" and "The EFG team's interpretation of the results, represented in the final row in Table 2 above, indicates policy and legislative support for inclusion of electric utility system impacts, other fuels, resilience, GHG emissions, other environmental, public health, economic development/job, host customer – both for low/moderate income (LMI) households and for non-LMI customers, and

diversity, equity, and inclusion (DEI) impacts in the BCA test.” Please explain why policy *relevance* indicates *support for inclusion* of an impact within a BCA test.

Request IR-5:

Refer to Table 3 on pages 10 and 11 of the Evidence of David Hill.

- a. Please describe the basis for allocating 50% of transmission and distribution capacity to transmission and 50% to distribution.
- b. What specific assumptions did EFG make regarding program administration and direct incentive costs?
- c. What specific assumptions did EFG make regarding measure costs?

Request IR-6:

Refer to Figure 1 and Figure 2 on pages 15 and 16 of the Evidence of David Hill. Please provide Figure 1 and Figure 2 and all supporting analysis and workpapers in Microsoft Excel format with all cells unlocked, and formulas intact.

Request IR-7:

Refer to lines 22-23 on page 15 of the evidence of David Hill and pages 30-33 of Appendix B.

- a. What specific instructions did EFG give to the DSMAG for completing the assignment for reviewing Nova Scotia energy policies?
- b. How many DSMAG participants submitted responses for this assignment?

Request IR-8:

Refer to Appendix B, *Development of a Jurisdictional Benefit Cost Analysis Framework for Nova Scotia* report prepared by EFG (hereinafter, the “EFG Report”) on pages 12-14. Table 1 indicates that all Electric Utility System Impacts are included in the Nova Scotia Test while Tables 2 and 3 indicate that some Utility System Impacts are not applicable and not material.

- a. Please confirm that all Electric Utility System Impacts, even those that are considered not applicable and/or not material, are included in the proposed Nova Scotia Test. If not confirmed, please explain.

Request IR-9:

Refer generally to the proposed Nova Scotia Test as included in the EFG Report. If an impact is deemed not to be material, is it still included in the Nova Scotia Test but will have a value of zero? If not, please explain why not.

Request IR-10:

Refer to the EFG Report on page 17, which states “The gas utility system non-commodity impacts are not recommended for quantification for the new jurisdictional test. Additional data on gas system costs would be required to quantify the non-commodity gas system impacts.”

- a. Please provide a definition of non-commodity impacts.
- b. Are non-commodity impacts considered applicable to distributed energy resources (DER) in Nova Scotia? Please explain why or why not.
- c. What gas system cost data is required to enable quantification of gas utility system non-commodity impacts?
- d. Will non-commodity impacts be discussed qualitatively within E1’s future DSM plan filings? Please explain why or why not.
- e. Did EFG consider use of a proxy adder for gas utility system non-commodity impacts? Please explain why or why not.

Request IR-11:

Refer to the EFG Report on page 17, which states “For host customer impacts the new jurisdictional test should include both measure costs and non-energy benefits. EFG recommends a proxy adder approach to estimate the combined impact of the harder to measure non-energy benefits. The recommended proxy adders vary by DER type and customer segment. The rationale for applying proxy adders to harder to quantify non-energy benefits is discussed further in Section V. (See Tables 12-15 in Section V, and Appendix F).”

- a. Did the DSMAG or EFG discuss the merits of a jurisdiction-specific study to estimate non-energy benefits (NEB) for host customers? Please explain.
- b. Does EFG recommend proxy adders in place of a jurisdiction-specific study? Please explain why or why not.

Request IR-12:

Please provide Table 5 on page 19 of the EFG Report in Microsoft Excel format with all supporting analysis and workpapers with formulas intact.

Request IR-13:

Refer to page 32 and Table 7 in the EFG Report.

- a. Please list the “Other” Non-Utility System Impacts that the stakeholder organizations recommended.

- 1 b. EFG states that “the checks are aligned with cases where 3 or more stakeholders and 3
2 or more policies indicated support for including an impact.” Please explain why Energy
3 Security is not included in the proposed Nova Scotia Test when 3 or more stakeholders
4 indicated support for including the impacts in Table 7.

5
6 **Request IR-14:**

7 Page 35 of the EFG Report states that the “best option may be to consider ancillary services as
8 embedded within the generation and capacity avoided costs.”

- 9 a. Please explain how the avoided costs for generation and capacity account for the impact
10 of ancillary services.

11
12 **Request IR-15:**

13 Refer to page 36 of the EFG Report, which states that “Program administration and financial
14 incentives – In Nova Scotia these refer to E1 costs as the DSM program administrator.” Please
15 clarify whether Nova Scotia Power costs for developing and implementing demand response
16 programs are included. If not, why not?

17
18 **Request IR-16:**

19 Refer to the NEB proxy adder recommendations included in Table 14 on page 45 of the EFG
20 Report.

- 21 a. Please provide all workpapers, analysis, and sources used to develop each Non-Income
22 Qualified proxy adder for each Measure Category and Customer Segment. Please provide
23 all workpapers and supporting analysis in Microsoft Excel with all cells unlocked and
24 formulas intact.
- 25 b. Please explain the rationale for the difference between the non-income qualified and
26 income-qualified proxy adders. As part of your response please cite all sources relied on
27 to inform the difference.

28
29 **Request IR-17:**

30 Page 46 of the EFG report cites the use of non-energy impacts adopted in Vermont, Colorado,
31 and Nevada.

- 32 a. To what extent did EFG use the adders adopted in these jurisdictions to inform its
33 recommended proxy adders for the Nova Scotia Test?
- 34 b. Does Vermont, Colorado, or Nevada use adders for non-energy impacts associated with
35 on site solar, on site battery, solar plus storage, or beneficial electrification? If yes, please

provide the adder for each instance. If not, please explain how EFG developed the NEB proxy adder recommendations for those DERs.

c. EFG does not cite Massachusetts on page 46. To what extent did EFG model the recommended NEB proxy adders after Massachusetts?

d. Did EFG consider using NEB data and values from evaluations and studies conducted in similar jurisdictions? If yes, please explain why that data wasn't used. If not, please explain why not.

Request IR-18:

Refer to Table 14 on page 45 of the EFG Report.

a. Please identify which Measure Categories will be applied to both the residential customer segment and the business, non-profit, and institutional (BNI) customer segment. For example, will the same proxy adder for distributed storage be applied to both residential and BNI host customers?

b. Please confirm that the percentage adders in the non-income qualified column would be applied to both Residential and BNI host customers, except for the measure category of BNI Customer Measures. If not confirmed, please explain.

c. Please explain how the Measure Categories of Building Shell Measures, BNI Custom Measures, and Other Equipment Energy Efficiency align with E1's existing measures and programs. As part of your response, please list E1's existing measures and programs that would be included in those Measure Categories.

Request IR-19:

Refer to the statement on page 44 of the EFG Report, which states that the recommended proxy values are "calculated as a percent adder of the estimated energy benefits for efficiency measures and as a percent of non-incentivized measure costs for beneficial electrification measures." Please also refer to page 4 of the Application of E1, which states that "host customer non energy benefits will be quantified using proxy adders applied as a percentage of net energy benefits."

a. Please confirm whether E1's proposal is to apply proxy adders to energy benefits or net energy benefits.

b. Does "energy benefits" have the same meaning as Electric Utility System Impacts as included in the proposed Nova Scotia Test? If not, please explain.

c. Please explain the rationale for applying a proxy adder to non-incentivized measure costs for beneficial electrification instead of applying the adder to net-other fuel savings or other resulting impacts.

- d. If E1 reduces incentive levels for beneficial electrification measures, will that result in a higher resulting NEB value?

Request IR-20:

EFG states that the “consultant team developed two quantitative examples to translate proxy values into impacts per kWh and per MMBtu NEI values” on page 47 of the EFG report. Please provide all associated workpapers in Microsoft Excel with all cells unlocked and all formulas intact.

Request IR-21:

Refer to Table 17 on page 49 of the EFG report.

- a. Table 17 indicates that electric vehicles (EV) do not provide resilience benefits. Did the DSMAG or EFG consider vehicle-to-building applications, such as using EV batteries to power critical customers? If yes, please explain how EVs would not have an impact on resilience. If not, please explain why not.
- b. Please explain why the impact of Public Health is not material for EVs but is material for building electrification (BE).

Request IR-22:

Table 14 on page 45 of the EFG Report indicates that Host Customer Non-Energy Benefit Impacts from Building Shell Measures and Beneficial Electrification measures have impacts on indoor air quality and health. Page 51 of the EFG Report identifies Other Air Pollutants, recommending the inclusion of a benefits-per-kilowatt-hour (BPK) of air quality-related public health benefits of investments in energy efficiency.

- a. Please explain how health benefits are not being double counted between host customer NEBs and Other Air Pollutants.
- b. Should host customer NEBs related to health be subtracted from the air pollution emission impacts?

Request IR-23:

Provide Table 18, Table 19, Table 20, Table 21, Table 22, and Table 23 in the EFG Report in Excel format with all formulas intact.

Request IR-24:

Refer generally to the EFG Report and the DSMAG stakeholder process for developing the proposed Nova Scotia Test. Please provide a summary of all non-consensus issues. For each

- 1 non-consensus issue, please identify which organizations did not support the consensus position.
- 2 For each non-consensus issue, please identify any alternative positions that were proposed by
- 3 any organizations.