M12780

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: **Martha Casey, Interim President and Chief Executive Officer**
EfficiencyOne
c/o McInnes Cooper
James Gogan, Counsel
1300-1969 Upper Water St.
Purdy's Wharf, Tower II
Halifax, NS B3J 2V1
Email: MCasey@efficiencyone.com
james.gogan@mcinnescooper.com

From: The Consumer Advocate

Responses Due: **May 28, 20226**

Copies: 1 electronic copy (PDF searchable)

Contact Person: **David J. Roberts**
Consumer Advocate
Pink Larkin
1463 South Park Street
Halifax, NS B3J 3S9
Tel: (902) 423-7777
Email: droberts@pinklarkin.com

Request IR-1:

Reference: 2027-2031 DSM Plan Application, Exhibit E-1, Evidence ("Evidence"), p. 1.

> "The Preferred Plan is one which will provide the benefits of DSM at an affordable cost, appropriate to the economic challenges being faced by Nova Scotians today. Consistent with the NSEB's determination that the statutory purpose of DSM is to reduce electricity costs for customers and recognizing the significant cost-of-living pressures currently facing Nova Scotia households and businesses, the Preferred Plan prioritizes short-term affordability and ratepayer value by ensuring electricity costs are reduced in both the near-term and long-term."

a. What economic circumstances would need to be in place to allow for more DSM investment?
b. Does E1 agree that more DSM spending reduces bills even more and make energy costs more affordable? Why or why not.

Request IR-2:

Reference: Evidence, page 27, line 19-20.

Please provide, in MS Excel format, the inputs and results for E1's IRP scenario modeling efforts.

Request IR-3:

Reference: Evidence, page 27.

> "… For the period of 2027–2031 the level of energy savings in the IRP is 683.1 GWh, 123.9 MW of demand savings, and 44.3 MW from demand response (excluding rates – CPP & TVP).
>
> […]
>
> The energy savings levels modelled in E1's early modelling scenarios (Round 1-2, 2026-2030 DSM) aligned with these levels, reflecting a balance of energy savings that would continue to move toward optimal levels of DSM while also being deliverable and in the best interest of ratepayers.
>
> However, feedback received from DSMAG members following these initial modelling rounds highlighted concerns primarily focused on short-term affordability. E1 modelled in Round 2 two energy efficiency scenarios that were responsive and addressed DSMAG member concerns with lower investment levels. For informational purposes, E1 also modelled a third scenario that reflected energy savings levels consistent with the IRP. The IRP scenario was purposely designed with the goal of achievability. The IRP scenario as

modelled was cost effective, demonstrating energy efficiency continues to remain a lower cost than supply side options. E1's Preferred Plan has prioritized short-term affordability considerations as compared to longer-term considerations as represented in the IRP scenario. The proposed energy savings of 435.4 GWh represents 64 percent of the IRP target. This approach is not inconsistent with IRP direction. The IRP identifies optimal levels of DSM over a long-term planning horizon (i.e. 25 years). E1's Preferred Plan maintains a trajectory toward the IRP's long-term savings levels while prioritizing short-term affordability consideration for the period of 2027–2031 given the current economic context."

a. Please identify which DSMAG members provided feedback that highlighted concerns primarily focused on short-term affordability, and specifically identify the feedback that was provided.
b. Please explain how only achieving 64 percent of the IRP target is "not inconsistent with IRP direction" and "maintains a trajectory toward the IRP's long-term savings levels."
c. Does E1 expect that future program years will capture the gap in savings between the IRP scenario and the proposed scenario?
d. How much additional supply will need to be acquired or not retired by failing to achieve IRP level of savings?
e. Does E1 anticipate that the gap in savings between the IRP scenario and proposed scenario could increase the risk of customers paying higher rates under future DSM plans to close the gap?
f. How much additional lifetime GHG emissions reductions would result from the IRP savings levels compared to E1's Preferred Plan?

Request IR-4:

Reference: Evidence, p. 30 and Table 3

"The 2023–2025 DSM Plan positioned demand response as a development and learning phase, with a focus on identifying effective program pathways and refining operational delivery for initiatives such as Eco Shift. This approach reflects the typical evolution of residential demand response programs across North America."

a. E1 provides information pertaining to three jurisdictions. Please confirm whether E1 considered evolution of residential demand response programs in any other jurisdictions, and if so, provide comparable details for each such jurisdictions as is provided in Table 3.

Request IR-5:

Reference: Evidence, page 38.

> "E1 has heard from several members of the DSMAG over the past several DSM Plans that consideration of short-term affordability via rate increases should be prioritized over long-term affordability."

a. Please identify which members of the DSMAG have expressed a preference for prioritization of short-term affordability over long-term affordability, and which have not.
b. Does E1 acknowledge that prioritization of short-term affordability over long-term affordability remains in any event a question of degree?

Request IR-6:

Reference: Evidence, p. 31

> "Through direct discussions with the IESO Demand Side Management team, the program is expected to reach cost-effectiveness under the Program Administrator Cost (PAC) test within the next year, approximately four years after its launch. IESO attributes this progression to several factors commonly observed as residential demand response programs scale, including: (1) growth in installed demand response capacity relative to fixed program costs, (2) improving customer participation during demand response events, (3) coordinated marketing and recruitment with smart thermostat manufacturers that reduce customer acquisition costs, and (4) increased adoption of bring-your-own thermostat participation models."

a. What evidence has IESO's Demand Side Management team provided to E1 to support the expectation that E1's demand response program will reach cost-effectiveness within the next year?

Request IR-7:

Reference: Evidence, page 38.

> "The level of DSM considered optimal in NS Power's IRP is in the best interest of ratepayers for the long term, offering significant economic benefits, but E1 must also consider the unique current economic landscape that is influenced by the rising costs of housing, food, and energy. In response, E1 has held the annual investment in the Preferred Plan at the 2026 DSM Plan level of $63.75 million with no annual inflationary increases."

a. How did E1 determine that the Preferred Plan was the optimal level of spending?

b. Does E1 agree that maintaining spending without accounting for inflation results in an erosion of purchasing power and hence less GWh savings per dollar in subsequent years? If not, why not?

Request IR-8:

Reference: Evidence, p. 38

"Affordability continues to be a critical factor in determining the level of investment in a DSM Plan. E1 has heard from several members of the DSMAG over the past several DSM Plans that consideration of short-term affordability via rate increases should be prioritized over long-term affordability. The level of DSM considered optimal in NS Power's IRP is in the best interest of ratepayers for the long term, offering significant economic benefits, but E1 must also consider the unique current economic landscape that is influenced by the rising costs of housing, food, and energy. In response, E1 has held the annual investment in the Preferred Plan at the 2026 DSM Plan level of $63.75 million with no annual inflationary increases."

a. On what basis does E1 assert that a period of 5 years represents a "short-term" outlook as opposed to a "medium-term" or "long-term" outlook?
b. Does E1 agree that affordability will always be a critical factor, both for this DSM Plan and for future plans?
c. Does E1 agree that the affordability issues identified above as part of the "unique economic landscape" are not, in fact, unique only to the present time, and have been relevant factors in the past, and may remain relevant factors in the future?

Request IR-9:

Reference: Evidence, page 41, Figure 4 Payback Analysis – Preferred Plan.

Please provide a comparable graph for the IRP DSM scenario.

Request IR-10:

Reference: Evidence, page 42, Table 6: – Preferred Plan – Average Rate Impacts by Resource over 2027-2046.

a. Please provide a comparable table showing the Average Rate Impacts by Resource between 2011-2026.
b. Please provide a comparable table for the Alternate Scenario
c. Please provide a comparable table for the IRP DSM scenario.

Request IR-11:

Reference: Evidence, page 44, Figure 6 Average Rate and Total Customer Bill Impacts as a Result of DSM Activities in 2027-2031 (Preferred Plan).

Please provide a comparable graph for the IRP DSM scenario.

Request IR-12:

Reference: Evidence, page 45, Figure 8 Average Bill Impact (2027-2046) as a Result of DSM Activities in 2027-2031 (Preferred Plan).

Please provide a comparable graph for the IRP DSM scenario.

Request IR-13:

Reference: Evidence, p. 45-46

> "The Preferred Plan gives due consideration to program delivery costs. E1 has heard some concerns from stakeholders that program delivery costs have increased unreasonably since the last plan. However, E1 submits that the observed changes in unit costs are attributable to identifiable structural (e.g., reduced government funding, evaluation results) and market factors (e.g., further evolution of the lighting market, particularly in the BNI sector, increased costs of equipment, technology and labour) that are largely beyond E1's control, and that E1 has taken active steps to demonstrate the management and containment of costs within this environment …"

a. Please identify all program delivery costs that have increased, and provide an explanation for each increased cost.

Request IR-14:

Reference: Evidence, p. 54

> "In designing the Preferred Plan portfolio, E1 explicitly balanced near-term rate impacts with the long-term value delivered to ratepayers. The portfolio reflects a measured approach to investment, limiting it to the same investment level as 2026 for each of the five years. This approach paces savings acquisition in a manner that moderates annual revenue requirements while preserving the durable system benefits of demand-side resources. Program design and funding allocations prioritize cost-effective measures with long measure lives, ensuring that near-term expenditures deliver sustained bill and system cost reductions over time."

a. Did E1 rely upon any industry standards or best practices in determining how best to balance near-term rate impacts with long-term value delivered to ratepayers? If so, please provide details regarding those standards and/or practices.
b. With respect to rate and bill impacts, has E1 compared its plan to recent and/or current DSM plans in other jurisdictions that cover the same or a similar period? If not, why not. If so, please provide the results of that review, and in particular any results that would show others have followed a similar approach as E1 to prioritize short-term affordability over long-term savings.

Request IR-15:

Reference: Evidence, pages 63-64

"E1 is also proposing further enhancements including:
- Reducing the threshold from 25 percent to 20 percent for program changes both spending and savings that require explanations.
- Introducing a spending threshold of 15 percent for rate class spending changes that require explanations."

a. Regarding the 15% spending threshold, what does E1 propose for the handling of any under- or over-spending of annual budgets to make sure that the overall five-year investment is maintained?
b. Based on historical expenditures by rate class for 2016–2024, in how many years did actual rate-class spending fall outside a ±15% band relative to the approved plan projections? Please provide a table showing planned vs. actual spending by rate class for each year.
c. The BNI sector's savings are heavily dependent on custom projects that can take up to two years to realize and carry timeline risk. Given this volatility, does E1 agree that an annual rate-class threshold will in practice require MCA filings nearly every year? If not, please explain why.
d. E1's proposed MCA process does not include any spending collar at the sector level (residential vs. BNI). Please explain E1's rationale for not proposing a cumulative sector-level collar over the plan term.
e. Please explain how an annual rate-class MCA collar, requiring frequent filings, serves the Legislature's stated purpose of extending DSM plans from three to five years to "save time, money, and resources by reducing the frequency of full regulatory proceedings." (Evidence, page 65)

Request IR-16:

Reference: Evidence, page 18 and page 58

"E1 has also altered its approach to the application of the 'balanced plan' principles in DSM plan design, in particular by moving away from its previous approach of applying a

50%/50% split in residential and business, non-profit and institutional ('BNI') investment, a 40%/60% split in residential and BNI energy savings and a total investment in low-income and equity support that aligns with current Census data on low-income prevalence in Nova Scotia as design inputs, in response to DSMAG feedback." (page 18)

[…]

"The Preferred Plan also focuses on maintaining support for low-income and equity customers. Dedicated low-income and equity savings representing 11 percent of the total residential savings, is aligned with 2023-2026 at 10.5 percent." (page 58)

a. E1's Preferred Plan targets dedicated low-income and equity savings representing 11% of total residential savings, stating this is "aligned with 2023–2026 at 10.5 percent." Please confirm what the basis is for 11% — is it derived from census data, historical program performance, program capacity, or another metric?
b. Would E1 support the position that equity for residential low-income customers should be defined as achieving **savings** (not spending) commensurate with their share of residential load? Why or why not?

Request IR-17:

Reference: Evidence, page 56, Table 7 and page 48, which states:

"Benchmarking – E1 ensures its costs are aligned with those of other similar industries, organizations, and DSM administrators, where appropriate, through market research and market comparisons prepared by independent third parties."

a. Please identify the specific utilities and jurisdictions used in E1's benchmarking exercise referenced, and provide the first-year $/kWh acquisition costs for each comparator.

Request IR-18:

Reference: 2027-2031 DSM Plan Application, Exhibit E-1, Appendix A ("Appendix A"), page 79.

"E1 notes that interruptible customers have not been eligible to participate in the past. The potential for them to be eligible in the 2027–2031 DSM Plan period was raised through DSMAG discussions and E1 is committed to further discussions to fully assess incremental value and appropriateness with the members."

a. Does E1 agree that interruptible customers should be allowed to participate in Smart Synergy? Why or why not?
b. If yes, please explain how E1 would determine the "incremental value" of a Smart Synergy demand response event for a Large Industrial Interruptible (LII) customer,

given that the customer is already contractually obligated to reduce load to their firm service level upon a curtailment call under the interruptible tariff.

c. The interruptible tariff already provides LII customers a demand charge reduction of $7.486/kVA for any billing demand above their contracted firm demand level. If an LII customer also participates in Smart Synergy and receives an incentive for a demand reduction during a DR event, please explain 1.) how the overall system benefits from this arrangement and 2.) how E1 would ensure the customer is not compensated twice for the same demand reduction.

Request IR-19:

Reference: Appendix A, Attachment 3.

For each of the measures listed in Appendix A, Attachment 3, please provide

a. The units for each line, and capacity of any HVAC systems
b. The assumptions for the baseline and efficient measure equipment efficiencies.
c. Incremental cost assumptions
d. The sources and calculations for energy savings (kWh, kW and other fuels if applicable).