

NOVA SCOTIA ENERGY BOARD**IN THE MATTER OF:** *The Public Utilities Act***IN THE MATTER OF:** An Application by EfficiencyOne 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:** Theodore M. Love, Green Energy Economics Group, Inc.
The Consumer Advocate ("CA")**From:** The Industrial Group**Responses Due:** July 17, 2026**Contact Person** Nancy G. Rubin, K.C.
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 Telephone: (902) 420-3200 / Fax (902) 420-1417Issued at Halifax, Nova Scotia, this 6th day of July, 2026.**Request IR-1:****Preamble:** At pages 3-9 regarding the Mid-Course Adjustment (MCA) Mr. Love recommends a) that the Board require explicit Board approval of any MCA, with a 30-day comment period for intervenors, b) that unspent funding in early plan years may be carried forward and used in later years, and c) that a material change in IRP-identified optimal savings levels should trigger an MCA.

(a) Please confirm whether, under your recommended framework, if E1 underspends in 2027 and 2028 and then seeks to spend those unspent funds in 2030 and 2031, the resulting total five-year expenditure would be permitted to exceed the Board-approved five-year budget of \$318.75 million. If so, please confirm whether that excess would require a separate MCA filing.

(b) Does Mr. Love's recommended MCA process apply to:

(i) spending reallocations;

(ii) savings target changes;

(iii) program design changes;

(iv) rate-class impacts;

(v) timing changes; or

(vi) any other contemplated scenario?

(c) Mr. Love recommends that E1 consolidate its dedicated low-income program components into a single "Low Income Program" subject to the 20% MCA explanation threshold. He also recommends that the Board approve the IRP-aligned scenario at \$464 million. If both recommendations were adopted, could E1 bring forward a mid-plan MCA to increase low-income program spending above the 20% threshold simply by providing an explanation, without full Board approval? Please clarify how the two recommendations interact.

Request IR-2:

Reference: E-21, Page 7, lines 2-6.

I recommend that E1 should file an MCA to address any material change to optimal DSM resource acquisition levels identified in the Evergreen IRP process. A material change would be cumulative DSM savings levels that are more than 20% away from currently approved levels over the current plan horizon.

(a) Please confirm:

(i) what "optimal DSM resource acquisition levels" means operationally — is this the IRP's Base profile or some other metric; and

(ii) whether Mr. Love's recommended trigger would also apply when IRP findings indicate that currently approved savings levels are more than 20% above optimal (i.e., a trigger in either direction).

(b) Please elaborate on why Mr. Love views the 20% threshold as the appropriate trigger for an MCA.

(c) Do you recommend that the Board's approval of an MCA that proposes a budget increase be contingent on a finding that the incremental costs are justified on a rate-class-specific basis — specifically, that the net benefit to each ratepayer class that will bear incremental DCRR costs is positive?

(d) Please explain what you consider the minimum evidentiary threshold for Board approval of a MCA.

(e) How, if at all, would this differ for a budget-increasing MCA?

Request IR-3:

Reference: E-21, Pages 12 – 14.

Preamble: Mr. Love provides an analysis that includes reference to NSPI's most recent 10-year System Outlook from 2025, under Matter M12386, and outlines the projected peak load growth over the next ten years. Mr. Love's testimony relies on NSPI's 2025 10-Year System Outlook to establish the 73 MW gap between E1's Preferred Plan DSM peak reduction trajectory and the 234 MW of DSM that NSPI projected would be required by 2035. More recently, however, the IESO-NS released its 2026 10-Year System Outlook, on June 26, 2026, which supersedes NSPI's report and is the first to incorporate updated ELCC values from the 2026 E3 ELCC Study.

(a) Has Mr. Love had an opportunity to review the IESO-NS's recent 10-Year System Outlook from 2026, as filed in M12916? If so, please provide an update on his testimony as referenced above, and whether the outcomes in that report change anything else throughout his testimony?

(b) Please provide revised calculations, if any.

(c) Has Mr. Love had an opportunity to review the ELCC study from 2026, accessible at: <https://ieso-ns.ca/wp-content/uploads/2026/06/2026-Nova-Scotia-ELCC-Study-Report.pdf>? If so, please provide an update on his testimony as referenced above, and whether the outcomes in that report change anything else throughout his testimony?

(d) Upon review of the updated 10-Year System Outlook, please confirm whether this changes Mr. Love's recommendation that the IRP Base level of 683 GWh should be the minimum target? Why or why not?

Request IR-4:

Reference: E-21, Page 25-26, lines 13-14 and 1-4.

As described previously in my testimony, peak capacity needs are projected to grow, and current forecasts require more investment in DSM than the E1 Preferred Plan provides, which means that NS Power will need to acquire alternative sources of capacity, which will inevitably cost more than the DSM investment and leave customers on the hook to pay for these higher cost sources of energy.

Preamble: The 2026 System Outlook identifies that Trenton 5 and Langan 2, previously scheduled for retirement in Winter 2027/2028, will now be required through Winter 2029/2030 pending the commissioning of fast-acting generation, and that 450 MW of fast-acting generation is required to meet the 20% Planning Reserve Margin target in 2029/2030.

(a) What assumptions did Mr. Love make in relation to the retirement of NSPI's generation assets, in reaching the conclusion that NSPI would need to acquire alternative sources of capacity?

- (b) Please confirm how, if at all, this revised retirement and fast-acting generation schedule affects Mr. Love's assertion that planning below the IRP-identified DSM level forces NS Power to acquire higher-cost supply-side resources to cover the gap.

Request IR-5:

Reference: E-21, Page 17, lines 4-9.

I respectfully recommend that the Board treat the IRP-identified Base level as the minimum planning target until an updated potential study is available, consistent with energy efficiency's status as a least-cost resource. Following this, I recommend that the Board direct E1 to utilize an overall savings target for the DSM portfolio that is aligned with the IRP-identified Base DSM level of approximately 683 GWh for 2027–2031 ("IRP-aligned scenario"), rather than the 435.4 GWh Preferred Plan; [sic]

Reference: E-21, Page 23, lines 20-22.

The IRP scenario, as modeled by E1, costs \$464M over five years vs. \$318.75M for the Preferred Plan, an incremental cost of \$145.25M, or approximately \$29M per year. This incremental cost would deliver an additional 247.7 GWh of energy savings annually.

- (a) Please confirm whether Mr. Love's recommendation that the Board direct E1 to utilize an IRP-aligned scenario assumes that:

- (i) the IRP-identified Base DSM level remains an appropriate planning target for the 2027–2031 Plan period;
- (ii) E1 can reasonably acquire the additional 247.7 GWh of energy savings during the 2027–2031 Plan period; and
- (iii) E1 has, or can obtain, the internal, market, contractor, administrative, and participant capacity necessary to deliver those incremental savings.

(b) Has Mr. Love assessed the feasibility of achieving the incremental 247.7 GWh of energy savings, including consideration of contractor capacity, participant uptake, free-ridership/spillover, measure availability, administrative capacity, customer disruption, and timing constraints? If so, please provide that assessment. If not, please explain the basis for Mr. Love's conclusion that the IRP-aligned scenario is achievable during the Plan period.

(c) Please identify the program areas, sectors, and customer classes in which Mr. Love expects the additional \$145.25 million DSM investment would be deployed in order to achieve IRP-aligned incremental savings.

(d) If the Board were to direct E1 to move toward the IRP-aligned scenario at a total investment of approximately \$464 million, does Mr. Love recommend any limits, conditions, or reporting requirements regarding how the incremental \$145.25 million should be allocated? Please explain.

Request IR-6:

Reference: E-21, Page 23, lines 15-17.

... However, customers are already paying a DCRR, and even the IRP level of DSM spending barely impacts the DCRR that customers are already paying.

(a) Please quantify the assertion that the increase in investment "barely impacts" the DCRR. In the response, please provide by customer class:

(i) the estimated DCRR impact of the Preferred Plan;

(ii) the estimated DCRR impact of the IRP-aligned scenario;

(iii) the incremental DCRR impact of moving from the Preferred Plan to the IRP-aligned scenario;

(iv) the impact by customer class, including the impact on medium industrial and large industrial customers; and

(v) all assumptions, calculations, and workpapers supporting the response.

(b) If Mr. Love has not calculated the DCRR impacts requested, please explain the basis for his conclusion that the incremental impact would be limited or immaterial.

(c) Please explain whether Mr. Love's conclusion that the IRP-aligned scenario would have only a limited impact on the DCRR depends on averaging costs across customer classes, or whether that conclusion holds for each customer class individually.

Request IR-7:

Preamble: At pages 24-25 of Mr. Love's evidence (Tables 2 and 3), he presents the change in non-participant bills for the IRP-aligned scenario compared to E1's Preferred Plan. For the plan years 2027-2031, he shows incremental bill increases of 2.82% for the Large Industrial class and 1.17% for the Medium Industrial class. He characterizes these impacts as "minimal" and state they "do not represent any rate shock."

(a) Please provide the absolute dollar value of the incremental annual DCRR cost borne by the Large Industrial class and the Medium Industrial class under the IRP-aligned scenario compared to the Preferred Plan, for each year, 2027 to 2031, and in aggregate over the five-year term. Please confirm the source and methodology used to derive these figures.

(b) Mr. Love's bill-impact analysis compares the IRP-aligned scenario to a no-DSM counterfactual as the baseline (as stated in his evidence and footnote 48 to Table 2). Please confirm whether the percentage increases shown in Tables 2 and 3 represent the incremental cost of the IRP scenario over and above what industrial customers would pay under E1's Preferred Plan, or the incremental cost relative to a scenario with no DSM at all. If the latter, please recalculate the incremental bill impact on the Large Industrial and Medium Industrial classes of the IRP scenario relative to the Preferred Plan as the proper counterfactual.

1 **Request IR-8:**

2 **Reference: E-21, Section VII – Unit Costs.**

3 **Preamble: At pages 26-35 of the evidence, Mr. Love analyzes E1's rising unit acquisition**
4 **costs, noting that the Preferred Plan projects a first-year EE unit cost of \$0.66/kWh, up 35%**
5 **from \$0.49/kWh in the 2026 Plan, and that this figure is more than double the U.S. fleet**
6 **average. He identifies four contributing factors: the end of federal Greener Homes funding,**
7 **the LED lighting transition, inflationary pressures, and revised heat-pump evaluation**
8 **results. Mr. Love states that E1 should be required to seek to redesign its programming to**
9 **ensure greater cost-effectiveness.**

10 (a) Where Mr. Love identifies the transition away from low-cost, high-volume
11 lighting as a driving force of the cost increase, does Mr. Love view the loss
12 of these savings as having been predictable at the time the 2023-2025 Plan
13 was approved, or the 2026 Extension was approved? If so, should E1 have
14 been planning for this? If not, why not?

15 (b) What documentation has Mr. Love reviewed in determining that E1 has not
16 actively pursued cost-containment measures during the current plan term?
17 Does this critique rest solely on E1's filed evidence and responses to
18 information requests, or are there additional records which can be
19 produced as part of this proceeding?

20 (c) The benchmarking Mr. Love references is based on the ACEE dataset for
21 one year, which does not include any Canadian comparators. Has Mr. Love
22 examined other Canadian jurisdictions? If so, which one(s), and please
23 provide the quantitative figures. If not, why not?

24 (d) Do the unit costs outlined for the US ACEE fleet account for relative
25 maturity of the market, scale of program, or any other comparative features
26 relevant to assessing unit cost comparisons to E1's?

27 (e) To the extent Mr. Love is of the view that US (or other Canadian
28 jurisdictions) unit acquisition costs have also been increasing over recent
29 years, how have other jurisdictions addressed the increase in unit cost
30 prices?

(f) Given that Mr. Love considers E1's existing unit acquisition costs as materially above comparable jurisdictions, please explain how directing E1 to acquire substantially more savings — using the same program designs and delivery models that produced the elevated unit costs — would result in lower average unit costs for ratepayers rather than higher ones.

(g) Where E1's evidence characterizes the remaining achievable market as harder to reach and more expensive to serve, in Mr. Love's view, would the marginal cost per kWh of the additional IRP-scenario savings be higher or lower than the Preferred Plan average of \$0.66/kWh? Please provide any analysis or evidence supporting the answer.

Request IR-9:

Reference: Pages 32-34.

Preamble: Mr. Love notes that customer incentives account for approximately 71% of total plan costs under the Preferred Plan, up from the 66% in the 2026 Plan. Mr. Love criticizes the approach to compare to the small number of jurisdiction unit-cost benchmarks in Atlantic Canada, and recommends the Board direct:

E1 to undertake measure-specific primary research (e.g., price-sensitivity or conjoint analysis) for high-value measures, consistent with the thresholds the CLEAResult methodology already contemplates, to confirm that incentive levels are set at the minimum necessary to secure participation. This research should then be used to inform updates to incentives no later than January 1, 2028.

(a) In Mr. Love's experience, is it typical for customer incentives to make up 71% of total plan expenses? Please explain, with examples.

(b) Can Mr. Love provide an outline of best practices in the industry for setting incentive levels for DSM programming?

(c) Is Mr. Love aware of any other jurisdictions which have completed similar price-sensitivity or conjoint analyses? Where?

(d) What does Mr. Love expect a "fresh, ground-up incentive-design study" to involve in terms of scope, methodology, data collection, and cost?

1 (e) Has Mr. Love taken into consideration the cost, timing, and administrative
2 burden of completing that research by January 1, 2028? If so, what
3 assumptions have been made?

4 (f) If the study is completed by January 1, 2028, as recommended, does Mr.
5 Love also recommend the study be filed with the Board and result in an
6 MCA process? Please elaborate on what thresholds in relation to
7 incentives would trigger an MCA.

8 (g) Given the noted concerns with the incentive amounts included currently
9 within the proposed Plan, does Mr. Love consider it appropriate to have
10 incentive reductions before the study is complete, and if so, on what
11 evidentiary basis?

12 (h) Given the high unit costs and customer incentives, does Mr. Love agree it
13 would be reasonable for the Board not to approve any increase in total
14 DSM spending until such time as E1 completes primary research and
15 reduces incentives to the minimum necessary to secure participation?
16 Please explain why or why not.

17 **Request IR-10:**

18 **Reference: E-21, pages 47 and 48, lines 21-22 and 1-7.**

19 ***Q. IN THE DSMAG MEETINGS E1 WAS ASKED TO EXTEND SMART***
20 ***SYNERGY ELIGIBILITY TO LARGE INDUSTRIAL INTERRUPTIBLE ("LII")***
21 ***CUSTOMERS FOR THE INTERRUPTIBLE PORTION OF THEIR LOAD. DO***
22 ***YOU SUPPORT THIS PROPOSAL?***

23 ***A. No. While E1 has not committed to this, but instead states it "may be***
24 ***appropriate" and that it is "committed to further discussions to fully assess***
25 ***the incremental value and appropriateness of such participation." I***
26 ***recommend the Board direct that LII customers not be made eligible for***
27 ***Smart Synergy on their interruptible load, because doing so would be paying***
28 ***twice for the same demand reduction.***

29 (a) Does Mr. Love agree that, per E1's own characterization, the question of
30 incremental value of LII eligibility for Smart Synergy has not yet been fully
31 assessed?

- 1 (b) Would it be reasonable for the Board not to foreclose LII eligibility before
2 E1 has completed the assessment and further discussions it has itself
3 committed to undertake?

4 **Request IR-11:**

5 **Preamble: Smart Synergy is described on E1's website as open to businesses willing**
6 **and able to reduce energy use during high-demand events, through manual shutdown or**
7 **automation, in four-hour morning or evening blocks. The current general eligibility rule**
8 **states: "Businesses must not be participating in and/or receiving incentives from an**
9 **existing demand response or demand reduction program." Participant eligibility is further**
10 **limited to customers on Rate Codes 10, 11, 12, 21, 22, and 23. Rate Code 25, the Large**
11 **Industrial Interruptible Rider, is not listed.**

- 12 (a) The current Smart Synergy eligibility rules exclude LII customers on two
13 independent grounds: (i) the general rule prohibiting participation by
14 customers in an "existing demand response or demand reduction
15 program"; and (ii) the omission of Rate Code 25 from the list of eligible rate
16 codes.

- 17 (i) Please confirm that these are E1-designed program rules,
18 and not constraints imposed by legislation, regulation, tariff,
19 or technical system limitation.

- 20 (b) Please confirm (or explain otherwise):

- 21 (i) LII customers participate in the interruptible program by
22 offering up to their full contracted load as a reliability
23 product, available for interruption on 10 minutes' notice at
24 any time.

- 25 (ii) Beyond this formal obligation, LII customers at times
26 voluntarily reduce load in advance of a potential interruption
27 event to avoid a disruptive full-interrupt call.

- 28 (iii) These voluntary pre-event reductions reduce system load,
29 assist in avoiding peak conditions, and provide reliability
30 value.

- 1 (iv) Voluntary pre-event load reductions by LII customers, i.e.,
2 reductions taken in advance of or outside of any formal
3 interruption call are functionally equivalent to the load
4 reductions that Smart Synergy is designed to incentivize? If
5 not confirmed, please explain the material operational
6 distinction between a voluntary LII reduction (outside a
7 formal call for interruption) and a Smart Synergy curtailment
8 event, and explain how that distinction justifies ineligibility.

9 **Request IR-12:**

- 10 (a) Please confirm that PJM, ISO-NE, Efficiency Maine, and CAISO operate
11 demand response frameworks in which interruptible or standby capacity
12 commitments and voluntary performance-based demand response are
13 treated as separate products with separate compensation rules, using
14 baseline or firm service level methodologies to measure only incremental
15 reductions. If not confirmed, please explain.
- 16 (b) On the basis that Smart Synergy incentives would apply only to
17 incremental reductions above the customer's operating baseline, and that
18 no Smart Synergy payment would be made for MW that are simultaneously
19 dispatched down or held in reserve under the LII tariff, does Mr. Love agree
20 that the two programs are operationally complementary rather than
21 duplicative? If not, please identify the specific interval or MW overlap that
22 would give rise to double compensation.

23 **Request IR-13:**

- 24 (a) Please confirm that under Nova Scotia's current beneficiary-pays DSM cost
25 allocation model, all Large Industrial customers (both firm and interruptible)
26 currently bear a share of Smart Synergy program costs.
- 27 (b) Does Mr. Love agree that, under the beneficiary-pays principle, a customer
28 class that is ineligible to receive benefits from a program should not bear
29 the cost of that program?

- 1 (c) If LII customers are confirmed ineligible for Smart Synergy, does Mr. Love
2 support removing their current share of Smart Synergy program costs from
3 the LII cost allocation? If not, please provide the policy or regulatory basis
4 for requiring an ineligible customer class to fund a program.
- 5 (d) If E1 declines both to extend eligibility and to adjust the cost allocation,
6 please explain how this outcome is consistent with the beneficiary-pays
7 principle and with the Board's direction on DSM cost allocation.