**M10473**

# NOVA SCOTIA UTILITY AND REVIEW BOARD

**IN THE MATTER OF:** ***The Public Utilities Act, R.S.N.S. 1989, c. 30*** **as amended**

**- and -**

**IN THE MATTER OF:** **An Application by EfficiencyOne for Approval of Supply Agreement for Electricity Efficiency and Conservation Activities between EfficiencyOne and Nova Scotia Power Inc., the establishment of a final agreement between the parties, and approval of a 2023 – 2025 Demand Side Management ("DSM") Resource Plan**

## INFORMATION REQUESTS

**To:** EfficiencyOne

**From:** NS SBA

**Responses Due:** April 29, 2022

**Copies:** 1 electronic copy (PDF searchable)

**Contact Person:** **E.A. Nelson Blackburn, Q.C.**
**Blackburn Law**
**Small Business Advocate**
**Phone (902) 835-8544**
**Nblackburn@blackburnlaw.ca**

Issued at Bedford, Nova Scotia on this 14th day of April, 2022

**Request IR-1:** Please refer to the Efficiency 2023-2025 DSM Resource Plan, Page 19 of 65, Table 2: 2023-2025 Settlement Plan Cost-Effectiveness Results by Program.

a) Understanding that each program listed in Table 2 has passed the Total Resource Cost (TRC) test, please describe the process and provide a list of criteria used to justify the even split in investments between Residential Programs and the Business, Non-Profit & Institutional (BNI) Programs (as described on Page 13, Line 19).
b) Page 22, Lines 5 & 6 describes the investment in Residential and BNI sectors as a "55/45% split in energy efficiency". Is this contradicting Page 13, Line 19, which describes it as a 50/50 split? If not, please describe the difference.
c) Notwithstanding the above, has EfficiencyOne performed analysis to determine the additional benefits of aggressive investment in the BNI program which, according to TRC ratios and Page 13 Line 20, provides more benefit to the system per investment dollar?
d) Given the higher benefits associated with BNI programs, has thought been given to targeting opportunities lost in previous years, to recoup potential lost savings identified in Section 8.7, starting at Page 52 of 65?
e) Please provide the results of the TRC test and Program Administrator Cost (PAC) test if IRP Scenario 3.1C were used instead of IRP Reference Plan 2.0C. Would decisions on levels of investment in each program have differed from the Settlement Plan had Scenario 3.1C been used as the basis of these cost-effectiveness tests?

**Request IR-2:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Section 7.

a) Please provide the Settlement Plan's savings as a percentage of load in each of the three years 2023-2025.
b) Please provide the Settlement Plan's spending as a percentage of Nova Scotia Power's revenue in each of the three years 2023-2025.

**Request IR-3:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 4 of 65, line 1.

a) This line begins "The Settlement Plan is the DSM Plan that will provide the best value to Nova Scotians…" Please provide any analysis performed on all other scenarios studied (such as the 'Alternate Scenario') that supports this claim.
b) Was a plan examined that met the savings identified in the 2020 IRP?

**Request IR-4:** Throughout the EfficiencyOne 2023-2025 DSM Resource Plan, EfficiencyOne uses an inflation assumption of 2%.

a) Please provide the source of this assumption.
b) Should inflation run higher or lower, how will this impact the spending and/or savings associated with years two and three of the Settlement Plan or Alternate Scenario?
c) Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 42 of 65, Figure 6: Proposed Investment Ramp-up Between 2022 and 2023. This ramp up assumes an inflation rate of 4%. Please provide the source of this assumption.

**Request IR-5:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 41 & 42 of 65, Figure 5 and Figure 6.

a) Year One of the Settlement Plan represents a $12 million increase over 2022 spending levels. Given that this is the largest increase in year-over-year spending, what is the plan to ensure that the increased investment levels reach the savings desired?
b) Are current industry partners or delivery channels being utilized to achieve this ramp up? Are new industry partners and delivery channels being sourced?
c) Given that BNI programs account for 60% of the savings in the plan despite being 50% of investment (Page 13, Line 19), increased importance is given to the efficacy of each dollar of investment. What steps are specific to the BNI programs are taken to ensure savings are achieved?

**Request IR-6:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 34 of 65, Lines 21-22, which states "[the lower cost of DSM] results in lifetime fuel savings of approximately $187 million assuming fuel costs remain consistent with 2021 levels.

a) Please provide EfficiencyOne and Nova Scotia Power's fuel cost projections and any fuel cost scenarios used in formulating the plan.

**Request IR-7:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 45, Lines 4-5, which states: "E1's RBIA for 2023-2025 indicates that DSM, and specifically its energy efficiency portfolio, is the only resource option available to ratepayers that generates true bill savings."

a) Is this statement true for non-participants?
b) What other resource options were considered in this analysis?
c) Please provide all workpapers with functional formulas in excel format used to arrive at this conclusion.

**Request IR-8:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Section 4.5.

a) Section 4.5, at Page 21 of 65, Line 22, describes diversity in program delivery as being "a crucial way to minimize risk..." Please define what risks diversity of program delivery is mitigating.
b) Please provide any analysis done to quantify risks to each program in excel format with intact formulas

**Request IR-9:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Section 6.2.

a) Given the rapid acceleration of climate goals by the province, what extra consideration, if any, was total annual carbon emission reductions given when making investment allocations within the Settlement Plan?

**Request IR-10:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Appendix A, Page 10 of 149, Table 1: New Initiatives and Key Enhancements in the 2023-2025 Settlement Plan and Section 7.3.3.3 Beneficial Electrification, Page 134 of 149.

a) Beneficial Electrification is listed as a new Cross-Sector Initiative under Enabling Strategies. Has the province of Nova Scotia or the UARB directed EfficiencyOne to engage in Beneficial Electrification?
b) Is it EfficiencyOne's understanding that the programs and incentives the utility offers will be the lead electrification driver for the province?
c) When determining cost-effectiveness of beneficial electrification measures, what financial savings are considered that are not savings on customers electric bills (example, savings on oil deliveries, etc)? Are these types of benefits included when determining cost-effectiveness with other more traditional DSM programs?
d) Are Beneficial Electrification programs consistent with what is stated on Page 45 of 65, lines 4-5 which state that "DSM … is the only resource option available to ratepayers that generates true bill savings"?

**Request IR-11:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 11 of 65, Table 1. 2023-2025 Settlement Plan and please provide additional information as described below:
a) The same table format showing savings for measures in five strata by life of the measures expected to be implemented
   i) Measure Life 0-5 years
   ii) Measure Life 6-10 years
   iii) Measure Life 11-15 years
   iv) Measure Life 15-20 years
   v) Measure life greater than 20 years
b) Table 1 showing only residential programs
c) Table 1 showing only BNI programs
d) Table 1 showing data estimated for customers in the following rate classes;
   i) General,
   ii) Small General
   iii) Small Industrial
e) Please estimate the Tables in 'b' and 'c' above if the same budgets that are proposed in the Settlement Plan we directed only at measures with lives of 10 years or more. To the extent these estimates are approximate please describe the method for the approximation.

**Request IR-12:** Please refer to the EfficiencyOne 2023-2025 DSM Resource Plan, Page 11 of 65, Table 1. 2023-2025 Settlement Plan and please provide additional information as described below:
a) Savings estimated from new buildings or as part of a building refurbishment
b) New equipment purchased and installed for the customers in addition to current equipment on the premises
c) New equipment purchased or installed to retrofit or replace current equipment that are operating at the time of removal

**Request IR-13:** How has the avoided cost calculations changed, if at all, with the increased importance on Decarbonization as a response to climate change? Please describe the costs of the lowest cost new resource option to reduce carbon in the NS Power current IRP and compare to the avoided costs used in the EfficiencyOne analysis of programs and measures in the Settlement Plan.

**Request IR-14:** On Page 13 of 65, Line 8 of the EfficiencyOne 2023-2025 DSM Resource Plan, it refers to "evolving customer needs". Please explain what that means, how it varies by customer class (especially noting small businesses), and provide all the results of research that EfficiencyOne has relied upon to understand the evolving needs of those customers.

**Request IR-15:** Is customer owned or leased rooftop behind the meter solar considered an energy efficiency measure? Please explain your answer in detail.

a) If it is, please provide metrics similar to those found in Table 1, Page 11 of 65 for roof top solar behind the meter EfficiencyOne programs.

**Request IR-16:** Please provide the answers to the following questions regarding individual measure cost benefits, incentives and customer costs only, with no program costs allocated;

a) Do all measures included in the Settlement Plan have individual TRC and PAC Test ratios greater than 1.0? Please provide individual measure cost economic analysis for each measure if available.
b) If EOne does not have the information to answer 'a' above please explain how EfficiencyOne knows that they have not included measures in the Settlement Plan that raise costs rather than provide savings?

**Request IR-17:** Please estimate the total Demand Reduction (DR) program participation for the DR Program included in EfficiencyOne 2023-2025 DSM Resource Plan, Table 2 - 2023-2025 Settlement Plan Cost-Effectiveness Results by Program, Page 19 of 65, which is expected to go to BNI participants.

a) How much of that program will be directed to small business customers?

**Request IR-18:** Regarding Government Appliance Efficiency Standards:

a) Does EfficiencyOne view raising Appliance Efficiency Standards a way to reduce consumption in Nova Scotia and as an alternative to EfficiencyOne energy efficiency programs?
b) To what extent has EfficiencyOne assumed any changes to current Appliance Efficiency Standards in developing the Settlement Plan? Please describe in detail if it affected participation, incentive levels, or cost effectiveness calculations.
c) Does EfficiencyOne participate in any provincial or federal Appliance Efficiency Standards review or development process or something similar? Please describe in detail what this participation is and how much is spent and note whether any of those expenditures are part of the budgets proposed in the Settlement plan.
d) If EfficiencyOne does not participate, please explain why not.

**Request IR-19:** Please provide all workpapers in working excel format with formulas intact, for all Figures and Tables in the EfficiencyOne 2023-2025 DSM Resource Plan and Appendix A to the Plan.

**Request IR-20:** Please provide the data and referenced reports referred to when EfficiencyOne conducted the jurisdiction scan, as referred to in EfficiencyOne 2023-2025 DSM Resource Plan, Section 7.2, Page 36 of 65.

**Request IR-21:** Regarding Figure 3 – Payback Analysis – Settlement Plan, Page 36 of 65 of the EfficiencyOne 2023-2025 DSM Resource Plan, it appears the amount of avoided costs in dollars is near zero from 2045 on. Please provide the Settlement Plans energy, capacity and carbon savings impact in the year 2045 and the year 2050.

**Request IR-22:** Please explain why Figure 4 on page 40 of 65 of the EfficiencyOne 2023-2025 DSM Resource Plan is relevant to deciding if the proposed Settlement Plan is in the best interest of NS Power customers.

**Request IR-23:** Referencing Figure 6 or Section 7.2.3.5 of the EfficiencyOne 2023-2025 DSM Resource Plan Why is there a 'Wind up of New Home Construction' program expenditures, i.e., program costs are reduced or eliminated? Are all new homes assumed to be incorporating all energy efficiency measures that are TRC Test cost effective?

**Request IR-24:** Please provide figures similar to Figure 7 page 46 of 65 of the EfficiencyOne 2023-2025 DSM Resource Plan showing the data for 2011-2022 instead of 2011 – 2038.

**Request IR-25:** Please provide figures similar to Figures 8, 9 and 10 pages 47 and 48 of 65 of the EfficiencyOne 2023-2025 DSM Resource Plan showing the data for 2023-2026 instead of 2023 – 2039.

**Request IR-26:** Please explain why Table 8 on page 51 of 65 of the EfficiencyOne 2023-2025 DSM Resource Plan is relevant to deciding if the proposed Settlement Plan is in the best interest of NS Power customers, especially since it shows average fuel costs.