EfficiencyOne

IN THE MATTER OF *The Public Utilities Act*, R.S.N.S. 1989, c. 380, as amended.

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IN THE MATTER OF An Application pursuant to the *Public Utilities Act* for Approval of the 2020-2022 Supply Agreement for Electricity Efficiency and Conservation Activities

EFFICIENCYONE

CLOSING SUBMISSION

FILED

July 4, 2019

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1. INTRODUCTION

On June 6, 2019, EfficiencyOne entered into an agreement (the "Consensus Agreement") with Nova Scotia Power Inc. ("NS Power") for the 2020-2022 Demand Side Management (DSM) Resource Plan. This Consensus Agreement has been signed by the Kwilmu'kw Maw-klusuaqn Negotiation Office and Assembly of Nova Scotia Mi'kmaw Chiefs, and the Berwick Electric Commission, and the terms of the Consensus Agreement have been, in large part, supported by the Consumer Advocate and the Small Business Advocate. This broad level of stakeholder support reflects the balance reached in arriving at a Demand-Side Management (DSM) Resource Plan for 2020 – 2022 that is in the best interest of NS Power ratepayers. The Consensus Agreement also reflects EfficiencyOne's renewed commitment to process aimed at achieving optimal results and transparency through enhancements to the Demand-Side Management Advisory Group (DSMAG).

EfficiencyOne submits the Consensus Agreement reached achieves a result consistent with EfficiencyOne's mandate to provide cost-effective energy and demand savings to Nova Scotian electricity ratepayers.

2. CONSENSUS AGREEMENT WITH NOVA SCOTIA POWER

EfficiencyOne is pleased to have reached a Consensus Agreement with NS Power for the 2020-2022 DSM Resource Plan.

2.1 Investment Level and Energy Savings

The proposed investment for the three year period of the DSM Resource Plan is $110 million (M). While less than the Preferred Plan proposed by EfficiencyOne in its Application[1], and similar in value to the Alternate Scenario,[2] the proposed investment established in the Consensus Agreement is a balance of important elements taken from both the Preferred Plan and the Alternate Scenario.

In achieving this Agreement, EfficiencyOne has ensured key initiatives identified in both its Preferred Plan and Alternate Scenario have been maintained. In particular:

- Increased availability of efficiency programs to underserved markets by maintaining investments in First Nation and Low-Income, for both investment and energy savings, at the level identified in the Preferred Plan;
- Removing barriers to participation by delivering the Consensus Agreement Scenario in accordance with the Alternate Scenario, which was designed to achieve this result;
- Achieving more energy savings from non-lighting measures by delivering the Consensus Agreement Scenario in accordance with the Alternate Scenario, which was designed to achieve this result;
- Maintaining a balanced DSM Resource Plan approach consistent with the requirements of the Standardized Filing Framework; incorporating the following key factors:
    - short-term and long-term energy avoidance;
    - program delivery costs;
    - avoided energy and capacity investments;
    - non-electric and non-energy benefits;
    - diversity of program delivery;

[1] M09096, E-1, EfficiencyOne Application for approval of a Supply Agreement for Electricity Efficiency and Conservation Activities between E1 and Nova Scotia Power Inc. (DSM 2020-2022), Appendix A, filed February 28, 2019.

[2] M09096, E-1, EfficiencyOne Application for approval of a Supply Agreement for Electricity Efficiency and Conservation Activities between E1 and Nova Scotia Power Inc. (DSM 2020-2022), Appendix C, filed February 28, 2019.

- business relationships and maintenance of market presence;
- access to programs by all market sectors and rate classes by addressing barriers to participation; and
- rate impacts.

The proposed Consensus Agreement Scenario investment level was arrived at by using the current funding levels of $34.05M per year, together with the accumulated underspend from the 2016-2018 DSM term ($7,508,216.00 as of June 3, 2019). Future accumulated interest on the underspend will be segregated and allocated to the 2020-2022 DSM Resource Plan. The result is an increase in investment level and energy savings for each year of the DSM Resource Plan as outlined in Table 1 below.

Table 1: 2020-2022 DSM Resource Plan Investment and Savings – Consensus Agreement Scenario

Year	Investment ($ million)	First-Year Energy Savings (GWh)	Peak Demand Savings (MW)
2020	34.4	119.2	30.9
2021	36.5	121.5	32.6
2022	39.1	127.1	34.8
Total	**110.0**	**367.8**	**98.3**

In Undertaking U-1, filed with the Nova Scotia Utility and Review Board (NSUARB) on June 14, 2019, EfficiencyOne provided a preliminary explanation of adjustments to the Alternate Scenario necessary to achieve the savings level in accordance with the Consensus Agreement Scenario. These preliminary adjustments demonstrate EfficiencyOne can deliver the Consensus Agreement Scenario with programming that passes the TRC test and delivers $530M in lifetime benefits within the agreed upon level of investment.[3]

[3] M09096, Exhibit E-50, EfficiencyOne Response to Industrial Group (IG) Undertaking, U-1, Table 2, page 2, filed June 14, 2019.

Based on preliminary adjustments, the Consensus Agreement Scenario will see an overall increase in low-income participation in the Residential DSM programs in each of the three years as outlined in Table 2 below:

Table 2: 2020-2022 DSM Resource Plan Residential Low Income Investment – Alternate Scenario vs. Consensus Agreement Scenario

Year	Alternate Scenario Low Income Participation Residential DSM[4] ($M)	Consensus Agreement Projected Low-Income Participation Residential DSM[5] ($M)
2020	2.9	3.1
2021	2.8	3.7
2022	2.7	4.4

Demand reduction investment will decrease by $1.6M from the Alternate Scenario. Further reductions will be equally distributed across all programs to minimize the impact on any particular class of ratepayers[6].

The proposed level of investment is supported by the Small Business Advocate[7], and while the Consumer Advocate viewed the Preferred Plan as the optimal plan, the Consumer Advocate has recommended the NSUARB adopt the level of investment agreed to in the Consensus Agreement.[8] The Industrial Group does not strongly object to the negotiated overall level of spending.[9]

EfficiencyOne acknowledges stakeholders such as the Ecology Action Center and the Affordable Energy Coalition express concern with the level of funding, and urge higher investment levels. The Consensus Agreement investment levels represent an increase over 2019 spending and will

[4] M09096, Exhibit E-50, EfficiencyOne Response to IG Undertaking, U-1, information extracted from Tables 3, 4 and 5, pages 3-4, filed June 14, 2019.
[5] M09096, Exhibit E-1, EfficiencyOne Evidence, Appendix C, information extracted from Tables 2, 3 and 4, pages 2-4, filed February 28, 2019.
[6] M09096, Exhibit E-50, EfficiencyOne Response to IG Undertaking, U-1, Table 1, page 1.
[7] M09096, Exhibit E-43, Small Business Advocate (SBA) Opening Statement, filed June 7, 2019, page 2.
[8] M09096, Exhibit E-45, Consumer Advocate (CA) Opening Statement, filed June 7, 2019, page 2, lines 7-9.
[9] M09096, Exhibit E-49, IG Opening Statement, filed June 7, 2019, page 1.

increase both at the investment level and energy savings level over the three year DSM Resource Plan.

EfficiencyOne respectfully submits that the Consensus Agreement investment levels and energy savings targets are affordable and will deliver cost-effective energy efficiency in the Province of Nova Scotia.

2.2 First Nation and Multi Family Affordable Housing

Under the Consensus Agreement Scenario, investment in First Nation communities will remain at the Preferred Plan level of $1.5M per year, for a total of $4.5M over the three year term. This investment will build upon the 2018 – 2019 First Nations pilot project targeting homes on-reserve for efficiency upgrades. This level of investment ensures the momentum building with the pilot project will not be lost and efficiency programming will continue to serve the needs of and support the development of energy efficiency in Nova Scotia's First Nation communities. The NSUARB heard from Chief Paul Prosper of the Assembly of Nova Scotia Mi'kmaw Chiefs.

Chief Prosper noted that:

> *"Mi'kmaw households tend to experience higher than average energy bills and problematic indoor air quality due to issues such as low quality housing, overcrowding and obstacles to individual home ownership"*[10].

Chief Prosper goes on to state that:

> *"Mi'kmaw communities are the hardest hit by rising energy costs and least able to respond to new opportunities in energy efficiency and conservation"*[11].

Stakeholder reaction to the First Nation investment level has been positive, in particular, that of the Affordable Energy Coalition[12], Nova Scotia Department of Energy and Mines[13], and the

[10] M09096, Exhibit E-40, Assembly of Nova Scotia Mi'kmaw Chiefs (ANSMC) and Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO) Opening Statement, filed June 6, 2019 page 3-4.
[11] *Ibid,* page 5.
[12] M09096, Exhibit E-44, Affordable Energy Coalition (AEC) Opening Statement, filed June 7, 2019, page 3, lines 17 – 20.
[13] M09096, Exhibit E-42, Nova Scotia Department of Energy and Mines (NSDME) Opening Statement, filed June 7, 2019, page 2, lines 47-51.

Consumer Advocate[14]. No stakeholder has explicitly opposed the specific funding directed to First Nation initiatives.

Multi-Family Affordable Housing investment levels are also maintained at the Preferred Plan investment level in the Consensus Agreement Scenario. Again, this is an investment category that is supported by stakeholders such as the Affordable Energy Coalition[15] and the Consumer Advocate[16], and one that is certainly not explicitly opposed by any stakeholder.

EfficiencyOne is pleased to have been able to reach a Consensus Agreement with NS Power which continues to make First Nations and low-income customers a priority for the 2020-2022 term by establishing investment levels that mark an increased focus on supporting access and availability to energy efficiency for all electricity consumers in Nova Scotia.

2.3 Demand Response Initiatives

EfficiencyOne has agreed it will focus on establishing and implementing demand response initiatives through engagement with NS Power.

2.4 Lifetime Energy Savings Targets

EfficiencyOne sought approval to include Lifetime Energy Savings as a performance target in order to more comprehensively measure a DSM Resource Plan's direct impact on ratepayers. It was EfficiencyOne's submission at the outset of these proceedings that while annual energy and peak demand savings provide useful information on the annual level of DSM resources acquired (e.g. energy and capacity savings), Lifetime Energy Savings provides additional useful information which is more closely correlated to lifetime ratepayer benefits.

EfficiencyOne acknowledges the questions raised by and concerns expressed by some stakeholders in this regard and has agreed to refer the Lifetime Energy Savings target issue to the Demand Side Management Advisory Group ("DSMAG") for further discussion. This will allow for open

[14] M09096, Exhibit E-45, CA Opening Statement, filed June 7, 2019, page 2, lines 11-14.
[15] M09096, Exhibit E-1, EfficiencyOne Evidence, Appendix C, information extracted from Tables 2, 3 and 4, pages 2-4, filed February 28, 2019.
[16] M09096, Exhibit E-50, EfficiencyOne Response to IG Undertaking, U-1, Table 1, page 1.

discussion and debate, outside the constraints of the regulatory process, by all stakeholders. EfficiencyOne looks forward to engaging with stakeholders in this regard.

2.5 Expensing DSM Funding

NS Power raised the issue of expensing DSM funding through the FAM or some similar mechanism in the course of these proceedings. EfficiencyOne supports this approach *in principle*. Any approach to expensing the DSM through the FAM or a similar process is subject to NSUARB approval. Further, it is expected that the adoption of a methodology to expense DSM will not result in any additional, material regulatory burden on EfficiencyOne.

2.6 HST Refund

In light of the approach taken by EfficiencyOne and NS Power in achieving consensus on the level of investment and energy savings, EfficiencyOne agrees that, subject to NSUARB approval, the HST Refund, standing at $15,277,651.23 (inclusive of interest) as at June 3, 2019, may be refunded to customers through the FAM.

2.7 Future DSM Applications

In the course of the presentation of evidence in these proceedings, it became apparent that a number of issues remain to be settled among stakeholders as it relates to the development of DSM Resource Plans and that there is room for improvement in the engagement process.

To that end, the Consensus Agreement has provided for a number of items which emerged as unresolved issues in this proceeding to be addressed through DSMAG, including:

- Development of revised terms of reference that will enhance the development of future DSM Resource Plan applications, with a focus on a collaborative and facilitated process.
- Development of a calendar and framework process to include developing:
    - Process and methodology for updating avoided costs;
    - Timeline for the development and stakeholder consideration of DSM Resource Plan scenarios prior to submission;
    - Adopting a recommended format for joint filing of DSM applications;

    - Agreed criteria to determine DSM program affordability; and
    - Information sharing protocols.
- Confirmation that long-term DSM planning levels will be reassessed during each Integrated Resource Plan (IRP).
- Consideration of the process to evaluate DSM Evaluation Reports and DSM Verification reports.
- Payback periods when setting incentives.

The DSMAG must achieve agreement on the final revised terms of reference by June 30, 2020. Failing this, the finalization of the revised terms of reference shall be referred to the NSUARB. This timeframe allows for determination of the revised terms of reference well in advance of the next DSM Resource Plan application which will take place in 2022.

This particular point of agreement is expressly supported by a number of stakeholders, including the Industrial Group[17], the Affordable Energy Coalition[18], the Consumer Advocate[19], and the Small Business Advocate[20].

EfficiencyOne looks forward to continued collaboration with the DSMAG to improve the DSM Resource Plan process for the benefit of ratepayers.

2.8 HomeWarming

The existing HomeWarming Program for electrically heated participants is funded by NS Power and currently administered by The Clean Foundation. For the three year term (2020-2022), NS Power and EfficiencyOne have agreed that EfficiencyOne will operate and administer the HomeWarming Program for electrically heated participants. EfficiencyOne will take steps to maintain the existing delivery model utilizing The Clean Foundation for the term.

EfficiencyOne's established and solid program administration foundation will ensure the

[17] M09096, Exhibit E-49, IG Opening Statement, filed June 7, 2019, page 2.
[18] M09096, Exhibit E-44, AEC Opening Statement, filed June 7, 2019, page 3.
[19] M09096, Exhibit E-45, CA Opening Statement, filed June 7, 2019, page 2, lines 36-38.
[20] M09096, Exhibit E-43, SBA Opening Statement, filed June 7, 2019, page 2.

HomeWarming Program is monitored and evaluated for positive results and outcomes.

2.9 Evaluation Reports

No express opposition has been raised with respect to the Econoler Evaluation Report for the 2018 DSM year, the Verification Report for the 2018 DSM year, or to EfficiencyOne's response[21] to the recommendations set out in either report. Further, no express opposition has been raised to the 2016-2017 verification and evaluation recommendations update filed by EfficiencyOne with its 2018 Annual Progress Report[22].

EfficiencyOne respectfully requests the NSUARB accept the reports and EfficiencyOne's responses as filed.

[21] M09226, Exhibit E-1, 2019 Q1 Demand Side Management Report, filed May 24, 2019, Attachment 1.
[22] M09096, Exhibit E-4, 2018 DSM Annual Progress Report, filed March 29, 2019, Attachment 1.

3. INTEGRATED RESOURCE PLAN

If the NSUARB approves the Consensus Agreement as filed, then it will not be necessary to make a determination as to whether the 2014 Integrated Resource Plan (IRP) ought to have informed the development of the 2020-2022 Preferred Plan or Alternate Scenario.

Notwithstanding, EfficiencyOne reiterates its position, as thoroughly canvassed in its evidence filed in this proceeding, that the development of an Integrated Resource Plan is the result of an extensive and collaborative process with stakeholders and NSUARB consultants. IRPs form the foundation of the electric utility's long-term planning and investment decisions. The IRP uses supply-side and demand-side options to determine the most cost-effective blend of energy resources to allow the electric utility to meet electricity demand over a long term planning period.[23]

EfficiencyOne wishes to be clear, on the record, that it supports the proposition that the most recent Integrated Resource Plan should guide DSM planning.

Throughout the 2020 – 2022 DSM Resource Plan Application, EfficiencyOne emphasized the need to focus on the empirical data derived from the 2014 IRP. EfficiencyOne urges the NSUARB to acknowledge the appropriateness of placing foundational reliance on IRPs in the development of future DSM Resource Plans. These IRPs' outcomes, as they relate to DSM investment, are acknowledged to produce investment levels which are in the best interest of Nova Scotia electricity ratepayers. While the Public Utilities Act requires that consideration be given to affordability issues, this should always be done in the context of, and with key reliance upon, the IRP generated results.

In the context of the current 2020 – 2022 DSM Resource Plan Application, a number of stakeholders expressed concern about placing reliance upon an IRP that is five years old. In reaching the Consensus Agreement, EfficiencyOne acknowledges those concerns and has agreed to support a DSM investment level which directionally moves toward the optimal IRP DSM

[23] M09096, E-1, EfficiencyOne Application for approval of a Supply Agreement for Electricity Efficiency and Conservation Activities between E1 and Nova Scotia Power Inc. (DSM 2020-2022), Evidence, filed February 28, 2019, section 4.1, pages 8 -10.

investment levels, but at a lower level than advocated for in the Application. The NSUARB should not view this Consensus Agreement as an abandonment of EfficiencyOne's steadfast belief that future DSM investment level decisions should be grounded in the most recent IRP results.

4. HISTORICAL UNDERSPEND AND PLAN DELIVERY COSTS

If the NSUARB approves the Consensus Agreement as filed, then it will not be necessary to make a determination as to the application of the 2016-2018 underspend. One issue that arose in NS Power's evidence was that EfficiencyOne has historically demonstrated its ability to deliver energy savings at lower than forecast spending levels. NS Power contends that this demonstrates that EfficiencyOne is capable of meeting efficiency targets with less spending, thus not requiring a material increase to its approved budget.[24]

EfficiencyOne's surplus from the 2016-2018 DSM Resource Plan was the result of several factors which resulted in the accumulation of surplus funds.

One such factor was the expected diversification beyond lighting in the 2016-2018 DSM Resource Plan filed in 2015. However, the requirement to reduce the funding levels and still attain the energy savings level resulted in the shift beyond lighting being delayed until 2019. As a result, funds that were to be used in the 2016-2018 DSM Resource Plan for this diversification were unused and thus accumulated over the three year plan period.

EfficiencyOne does not expect a surplus in 2019. The 2019 DSM Resource Plan included energy savings of 127.2 GWh with an investment of $34.05 million resulting in a $0.27/kWh first-year unit cost. EfficiencyOne's 2019 Q1 Report, filed May 24, 2019[25], demonstrates diversification efforts to move beyond lighting have been incorporated into operations. The 2019 Q1 Report to the NSUARB shows a $0.29/kWh first year unit cost of energy for the first quarter and $0.32 /kWh for the April year-to-date period. Although this is trending higher than approved, the Q1 and April year-to-date results have historically been higher by eight to ten percent. EfficiencyOne has no reason to expect this trend not to continue with 2019 results, resulting in a year end unit cost of $0.27/kWh, and does not anticipate any significant underspending in 2019.

EfficiencyOne's 2020-2022 DSM Resource Plan is built upon the ongoing transformation of the Nova Scotia DSM marketplace, including lighting. This market reality is reflected in both the

[24] M09096, Exhibit E-9, NS Power Evidence, filed April 12, 2019, page 8, lines 3-9.
[25] M09226, Exhibit E-1, 2019 Q1 Demand Side Management Report, filed May 24, 2019.

programs continued from 2016 – 2019 and through the adoption of significantly enhanced measures for underserved markets. The addition of higher unit cost programs for the underserved markets and the expansion of Demand Reduction (produces no first-year energy savings) resulted in the unit cost of $0.31/kWh for the Preferred Plan.

EfficiencyOne respectfully submits delivery costs applied in developing each of the Preferred Plan and Alternate Scenario are accurate. In order to achieve energy savings targets set out in the Consensus Agreement Scenario, EfficiencyOne will require the full investment amount of $110M.

5. HERITAGE GAS

In the course of these proceedings, Heritage Gas raised concerns about the proposed New Construction service under the Custom Incentives Program related to electric heat pumps and associated measures in multi-unit residential buildings in areas where natural gas is available.

EfficiencyOne and Heritage Gas have agreed to engage in a collaborative study of the New Construction service design and operation related to electric heat pump measures in multi-unit residential buildings where natural gas is available. EfficiencyOne and Heritage Gas will develop the terms of reference for the study and incorporate agreed, recommended changes into the existing New Construction service. The NSUARB will be informed of any changes made to the Custom Incentive Program as a result of the study. Failing agreement between EfficiencyOne and Heritage Gas to whether or what changes should be made to the Program, the issue will be referred to the NSUARB for determination. A time frame has been applied to each step of the process.

EfficiencyOne respectfully submits this proposed course will allow both parties to understand the impact of EfficiencyOne's Custom Incentives program in this discrete market.

6. CONCLUSION AND ORDER SOUGHT

EfficiencyOne respectfully submits the Consensus Agreement establishes cost-effective energy efficiency targets which are reasonably available to Nova Scotia ratepayers for the 2020 – 2022 term. The additional terms of the Consensus Agreement will ensure issues such as lifetime energy savings as a performance target, the use of Integrated Resource Plans in the development of DSM Resource Plans, factors in determining affordability, and the improvement of the DSM Resource Plan development process are addressed thoroughly through the DSMAG.

Further, EfficiencyOne respectfully submits the Settlement Agreement with Heritage Gas will allow the parties an opportunity to study and determine the appropriate manner in which to address the concerns which have been raised by Heritage Gas in this proceeding.

EfficiencyOne therefore requests the NSUARB order as follows:

1. Establish Cumulative Annual Net Energy and Net Peak Demand Savings and investment levels over the three year term in accordance with the Consensus Agreement outlined in Table 3 below:

Table 3: 2020-2022 DSM Resource Plan Investment Levels and Savings Targets – Consensus Agreement Scenario

Investment ($ million)	Cumulative Annual Net Energy Savings (GWh)	Cumulative Annual Net Peak Demand Savings (MW)
$110	**367.8**	**98.3**

2. Approval of the Terms and Conditions of the Consensus Agreement to form part of the Order of the NSUARB;

3. Approval of the Terms and Conditions of the Supply Agreement between EfficiencyOne and Nova Scotia Power Inc.; and

4. Approval of the Terms and Conditions of the Settlement Agreement between EfficiencyOne and Heritage Gas to form part of the Order of the NSUARB.

All of which is respectfully submitted this 4th day of July, 2019.

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