EfficiencyOne

IN THE MATTER OF *The Public Utilities Act*, R.S.N.S. 1989,

c. 380, as amended.

\- and -

IN THE MATTER OF An Application pursuant to Subsection 79J(3) of the *Public Utilities Act* for Approval of the 2016-2018 Supply Agreement for Electricity Efficiency and Conservation Activities

EFFICIENCYONE

COMPLIANCE FILING

FILED

September 15, 2015

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INTRODUCTION

On February 27, 2015, EfficiencyOne filed its Application for approval of an Electricity Efficiency Supply Agreement with NSPI, which included, *inter alia*, its 2016-2018 DSM Resource Plan for approval by the Nova Scotia Utility and Review Board ("UARB" or "the Board"). This Application was filed pursuant to the amendments established under the *Electricity Efficiency and Conservation Restructuring (2014) Act, S.N.S. 2014, c. 5* to the *Public Utilities Act, R.S.N.S. 1989, c. 380, as amended.*

DSM INVESTMENT

In its August 12, 2015 Decision, the Board adjusted the proposed DSM investment, approving the following:

2016	$33,210,000
2017	$34,020,000
2018	$34,920,000

The summary tables of EfficiencyOne's revised 2016-2018 DSM Resource Plan are provided below. The revised 2016-2018 DSM Resource Plan is attached as Schedule E of the Supply Agreement. The DSM investments have been revised to comply with the annual portfolio investment levels approved by the Board. Portfolio energy and demand savings targets for 2016 through 2018 have remained unchanged from EfficiencyOne's initial filing in this matter, although the distribution of savings and investment among programs has been revised as appropriate. This redistribution reflects EfficiencyOne's consideration of the best way to meet the challenge associated with the Decision. The investments presented in the summary tables are expressed in nominal dollars.

Figure 0. 2016-2018 DSM Resource Plan Investment and Savings

Year	Investment ($ million)	Lifetime Benefits ($ million)[a]	Incremental Annual Net Energy Savings at Generator (GWh)	Incremental Annual Net Demand Savings at Generator (MW)	Total Resource Cost Test (TRC)[b]	Program Administrator Cost Test (PAC)[c]
2016	33.21	126.6	133.1	20.4	2.3	4.2
2017	34.02	138.7	136.5	21.0	2.4	4.4
2018	34.92	148.3	136.3	21.0	2.5	4.6
Total	**102.15**	**413.5**	**405.9**	**62.5**	**2.4**	**4.4**

Investment is expressed in nominal dollars. Columns may not add correctly, due to rounding.
Annual avoided costs, calculated using ENSC's DSM Potential Study at the Base Level, were provided by NS Power. They include the cost of energy and capacity.
[a] Lifetime benefits are expressed as the net present value of the avoided costs, including energy and capacity, over the life of the program measures.
[b] TRC is a benefit/cost ratio comparing lifetime benefits to the sum of ENS's and participants' costs.
[c] PAC is a benefit/cost ratio comparing lifetime benefits to ENS's costs.

Figure 2. 2016 DSM Resource Plan Investment and Savings

2016	Investment ($ million)	Lifetime Benefits ($ million)[a]	Incremental Annual Net Energy Savings at Generator (GWh)	Incremental Annual Net Demand Savings at Generator (MW)	Total Resource Cost Test (TRC)[b]	Program Administrator Cost Test (PAC)[c]
Residential DSM Programs						
Efficient Product Rebates	3.20	6.2	12.4	1.1	1.5	1.9
Existing Residential	9.47	47.2	39.4	7.1	2.5	5.0
Low Income Participation[d]	*1.77*		*7.6*	*1.0*		
New Residential	1.23	7.2	3.8	1.1	2.5	5.9
Business, Nonprofit and Institutional Programs						
Efficient Product Rebates	5.89	24.6	33.1	5.3	2.3	4.2
Custom Incentives	6.79	33.4	34.0	4.3	3.0	4.9
Direct Installation	3.80	8.1	10.5	1.4	1.2	2.1
Enabling Strategies						
Education and Outreach	1.32					
Development and Research	1.00					
Other Enabling Strategies	0.52					
Total	**33.21**	**126.6**	**133.1**	**20.4**	**2.3**	**4.2**

Investment is expressed in 2016 dollars. Columns may not add correctly, due to rounding.
Annual avoided costs, calculated using ENSC's DSM Potential Study at the Base Level, were provided by NS Power. They include the cost of energy and capacity.
[a] Lifetime benefits are expressed as the net present value of the avoided costs, including energy and capacity, over the life of the program measures.
[b] TRC is a benefit/cost ratio comparing lifetime benefits to the sum of ENS's and participants' costs.
[c] PAC is a benefit/cost ratio comparing lifetime benefits to ENS's costs.
[d] Reflects ENS's planned participation by low income customers, per the 2015 DSM Resource Settlement Agreement.

Figure 3. 2017 DSM Resource Plan Investment and Savings

2017	Investment ($ million)	Lifetime Benefits ($ million)[a]	Incremental Annual Net Energy Savings at Generator (GWh)	Incremental Annual Net Demand Savings at Generator (MW)	Total Resource Cost Test (TRC)[b]	Program Administrator Cost Test (PAC)[c]
Residential DSM Programs						
Efficient Product Rebates	3.31	6.7	12.6	1.1	1.5	2.0
Existing Residential	10.62	53.7	43.3	7.9	2.5	5.1
Low Income Participation [d]	*1.82*		*7.8*	*1.0*		
New Residential	1.28	7.7	3.9	1.1	2.6	6.2
Business, Nonprofit and Institutional Programs						
Efficient Product Rebates	5.65	26.6	32.6	5.3	2.5	4.7
Custom Incentives	6.49	35.6	34.1	4.3	3.2	5.3
Direct Installation	3.62	8.3	10.0	1.4	1.2	2.3
Enabling Strategies						
Education and Outreach	1.43					
Development and Research	1.04					
Other Enabling Strategies	0.58					
Total	**34.02**	**138.7**	**136.5**	**21.0**	**2.4**	**4.4**

Investment is expressed in 2017 dollars. Columns may not add correctly, due to rounding.
Annual avoided costs, calculated using ENSC's DSM Potential Study at the Base Level, were provided by NS Power. They include the cost of energy and capacity.
[a] Lifetime benefits are expressed as the net present value of the avoided costs, including energy and capacity, over the life of the program measures.
[b] TRC is a benefit/cost ratio comparing lifetime benefits to the sum of ENS's and participants' costs.
[c] PAC is a benefit/cost ratio comparing lifetime benefits to ENS's costs.
[d] Reflects ENS's planned participation by low income customers, per the 2015 DSM Resource Settlement Agreement

Figure 4. 2018 DSM Resource Plan Investment and Savings

2018	Investment ($ million)	Lifetime Benefits ($ million)[a]	Incremental Annual Net Energy Savings at Generator (GWh)	Incremental Annual Net Demand Savings at Generator (MW)	Total Resource Cost Test (TRC)[b]	Program Administrator Cost Test (PAC)[c]
Residential DSM Programs						
Efficient Product Rebates	3.42	7.2	12.6	1.1	1.6	2.1
Existing Residential	11.10	55.7	43.0	7.9	2.5	5.1
Low Income Participation [d]	*1.75*		*7.3*	*0.9*		
New Residential	1.32	8.4	4.0	1.1	2.8	6.5
Business, Nonprofit and Institutional Programs						
Efficient Product Rebates	5.69	30.3	32.6	5.2	2.5	4.9
Custom Incentives	6.49	38.1	34.4	4.3	3.4	5.6
Direct Installation	3.62	8.5	9.6	1.3	1.3	2.4
Enabling Strategies						
Education and Outreach	1.43					
Development and Research	1.09					
Other Enabling Strategies	0.76					
Total	**34.92**	**148.3**	**136.3**	**21.0**	**2.5**	**4.6**

Investment is expressed in 2018 dollars. Columns may not add correctly, due to rounding.
Annual avoided costs, calculated using ENSC's DSM Potential Study at the Base Level, were provided by NS Power. They include the cost of energy and capacity.
[a] Lifetime benefits are expressed as the net present value of the avoided costs, including energy and capacity, over the life of the program measures.
[b] TRC is a benefit/cost ratio comparing lifetime benefits to the sum of ENS's and participants' costs.
[c] PAC is a benefit/cost ratio comparing lifetime benefits to ENS's costs.
[d] Reflects ENS's planned participation by low income customers, per the 2015 DSM Resource Settlement Agreement.

The revisions to investment levels, along with energy and demand savings, by program, were developed by EfficiencyOne. Navigant's ELRAM model was then constrained to replicate these amounts as closely as possible and used to produce program-level TRC and PAC ratios, as well as lifetime benefits.

ENERGY AND DEMAND SAVINGS TARGETS

In the course of the proceedings, EfficiencyOne reached a Settlement Agreement with the Nova Scotia Consumer Advocate, the Nova Scotia Small Business Advocate, the Affordable Energy Coalition and the Ecology Action Centre, referred to in the Board's decision as the "Quantum Agreement". The Board did not approve the Quantum Agreement.

However, in the Quantum Agreement, EfficiencyOne agreed to maintain targets as set out in its original DSM Resource Plan at a reduced annual investment level to its original Application. The following table reflects the changes from the original planned expenditure compared to the proposed Quantum Agreement and Board-approved expenditures:

Year	**Application ($M)[1]**	**Quantum Agreement ($M)[1]**	**Board Approved ($M)**	**Reduction from Application (%)**
2016	38.5	36.9	33.21	13.7
2017	41.2	38.6	34.02	17.4
2018	44.5	40.5	34.92	21.5
Cumulative Total	124.2	116.0	102.15	17.8

[1]Investment levels were expressed in 2016 dollars in EfficiencyOne's original Plan Application and the Quantum Agreement. They are expressed in nominal dollars (per EfficiencyOne's response to NSUARB (Pronko) IR-7 and Undertaking U-3) in this table for comparison purposes, as the Board's Decision approved investment in nominal dollars.

In its Decision the Board noted this further reduction in investment could affect EfficiencyOne's ability to meet its energy and demand savings targets. The Board indicated in the event EfficiencyOne determined it required a downward adjustment in its targeted savings, it could make application for such reductions in this Compliance Filing.

EfficiencyOne has carefully reviewed its DSM Resource Plan in view of the reduced approved amounts. It is pleased the Board has again shown confidence in its ability to achieve its energy and demand savings targets. EfficiencyOne recognizes that it has, in the past, experienced significant success in meeting or exceeding its approved targets. Based in part on this success, the Board saw fit to approve reduced 2016-2018 DSM expenditures. EfficiencyOne remains fully committed to its energy and demand savings targets as set out in its 2016-2018 DSM Plan and is determined to set itself on track to meet these approved savings targets over the three-year plan. However, the organization acknowledged during the course of the hearing, in reference to the reduced budget in the Quantum Agreement, that it would be challenged to meet the targets and some adjustments may be required. The further reduction of the budget approved by the Board will challenge EfficiencyOne even more. EfficiencyOne has revised its proposed program-level savings and investments and will examine its incentive structure as well as other potential cost efficiencies as it works to achieve its performance targets within the revised investment. However, given an aggregate expenditure reduction of approximately 18 percent from its original proposed investment, EfficiencyOne respectfully requests the Board permit EfficiencyOne the right to apply to the Board for reductions in the three (3) year energy and demand savings targets if, and when, it is determined that EfficiencyOne would be unable to achieve the Board-ordered savings amounts (within the ninety (90) percent threshold for compliance as granted by the Board) within the investment levels established under the Board's Decision.

The program-level adjustments made as a result of the Board's Decision are included in Schedule E attached to, and forming part of, the submitted Supply Agreement included with this Filing. EfficiencyOne has revised its original DSM Resource Plan to comply with the Decision, so a redline version of the original Plan has been included for clarity. Generally, minor changes were required to align with the Board's Decision. The exception is for the Direct Installation program. When EfficiencyOne filed its original Application, it indicated its expectation of making changes to the program that would open it to a broader group of contractors. As these changes have been implemented, the corresponding section has been updated to reflect operational realities rather than reflecting changes resulting from the Board's Decision specifically.

ADDITIONAL ITEMS

Where EfficiencyOne believes some clarification or confirmation of items resulting from the Board's Decision are required, they are included below.

SUPPLY AGREEMENT

EfficiencyOne was directed to complete the Supply Agreement in accordance with the Decision of the Board. Subsequent to the decision of the Board, EfficiencyOne and NS Power worked together in an effort to finalize the Agreement. The Parties anticipate filing an executed Supply Agreement within the immediate future. The current form of the Supply Agreement incorporating the decision of the Board, is filed with this Compliance Filing.

2014 EVALUATION AND VERIFICATION RECOMMENDATIONS

The Board directed EfficiencyOne to file an update on the status of the 2014 evaluation and verification recommendations in its next 2015 report.

EfficiencyOne notes that its second-quarter DSM report to the UARB, filed August 4, 2015, included an update on the status of the 2014 evaluation and verification recommendations.

HOME ENERGY REPORT PROGRAM - REPORTED TOTALS FOR 2014

The Board directed EfficiencyOne to remove the energy and demand savings related to the Home Energy Report program from the reported totals for 2014, with the ability to request their reinstatement should recommended changes to the evaluation be made.

EfficiencyOne will comply with the Board's direction on this matter and will implement the recommendations of its evaluator and the UARB's savings verification consultant in 2015, so the UARB can consider reinstating the appropriate savings following its verifier's re-assessment of the evaluations.

FINANCING DEFERRALS

The Board directed EfficiencyOne to enter into discussions with the Department of Energy and commercial lenders to determine if there is a less expensive method to finance deferrals, and, if so, whether that method is authorized by the *Public Utilities Act.*

In July 2015, EfficiencyOne, through a Request for Quote process, retained Grant Thornton to develop a report addressing potential financing options for Demand Side Management. The objective of the report was to estimate the cost of financing investments in electricity energy efficiency activities, back-stopped with payments from Nova Scotia Power to EfficiencyOne under a multi-year Supply Contract approved by the Nova Scotia Utility and Review Board (UARB), to outline the types of financing options available, and to determine the process and timeline involved in obtaining financing. The report is expected to provide information that will inform the decision on whether commercial financing for DSM activities could be further explored. The draft report will be discussed with the Department of Energy to determine the next steps.

INCENTIVES

EfficiencyOne is directed to undertake research and make recommendations for changes to the process of determining incentives, to be filed with the Board by March 31, 2016.

EfficiencyOne agrees to undertake this research with the intent to complete it as quickly as possible.

Upon review and discussion with consultants, EfficiencyOne respectfully requests that the related filing of recommendations on a more rigorous program for determining incentives be extended to June 30, 2016. This extension will allow sufficient time for a draft scope of work to be discussed with the DSM Advisory Group, EfficencyOne to conduct an effective procurement process that adheres to its procurment policies, consultant(s) to conduct the required research and make related recommendations, and for EfficiencyOne to review the recommendations and file its report and recommendations with the Board.

COLLABORATION WITH NS POWER ON GEOTARGETING OF DSM

The Board encouraged collaboration between EfficiencyOne and NS Power with respect to avoided cost analysis and locational DSM efforts.

EfficiencyOne and NS Power are in agreement to collaboratively explore the possibility of reasonable locational DSM efforts and the development of reasonable locational avoided costs.

EAC COSTS

EfficiencyOne was directed to discuss the issue of costs with Ecology Action Centre (EAC). Per the Board’s direction, EfficiencyOne and the Ecology Action Centre have resolved the issue of the EAC’s cost recovery for this proceeding.

NOTICE OF MID-COURSE ADJUSTMENTS

On the issue of mid-course adjustments, EfficiencyOne is seeking to clarify its position in regard to the provision of advanced notice to the Board and to Stakeholders.

In its Decision, the Board stated within clause 112 that EfficiencyOne also agreed "to give written notice of intent to implement any mid-course adjustments".

EfficiencyOne notes that in the majority of cases, advance notice can be provided to the Board and Stakeholders for mid-course adjustments. For mid-course adjustments driven by the receipt of Evaluation reports, however, EfficiencyOne may be unable to provide advance notice because of the need to make immediate changes to program budgets and savings as a response to reported results. Delays in making these changes could have a negative effect on portfolio unit cost and energy savings. Notwithstanding immediate implementation, all mid-course adjustments driven by evaluation results will be fully communicated and justified to the UARB and Stakeholders.

The Consensus Settlement Agreement notes this distinction:

> E1 will provide written advance notice of its intent to implement mid-course adjustments by program and their customer rate class impacts. The Parties acknowledge E1's position that it is not able to provide advance notice of mid-course adjustments resulting from third-party evaluation reports, as these adjustments are made immediately after receipt of these reports.

CONCLUSION

EfficiencyOne respectfully submits that this Compliance Filing, and the Supply Agreement filed herewith, achieves compliance with the UARB's decision of August 12, 2015. EfficiencyOne requests approval of this Compliance Filing and Supply Agreement, as filed.