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

REBUTTAL SUBMISSION

FILED

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INTRODUCTION

Please accept the following as EfficiencyOne's rebuttal submission following the hearing on its Application for Approval of the 2016-2018 Supply Agreement for Electricity Efficiency and Conservation Activities and the filing of closing arguments by the various parties and intervenors.

In their respective closing arguments, both Nova Scotia Power (NS Power) and the Industrial Group argue that EfficiencyOne has somehow failed in its obligation under the *Public Utilities Act*. To that end, and for the reasons that follow, it is respectfully submitted that EfficiencyOne has complied with its obligation under the *Act* to bring forward an affordable plan for the provision of DSM services in Nova Scotia for both the short and long-term. With respect, EfficiencyOne submits that there is nothing in either the evidence or argument of either NS Power or the Industrial Group that ought to deter the Board from approving EfficiencyOne's 2016-2018 DSM Resource Plan, as modified by the terms of the Quantum Agreement and the Consensus Agreement signed with parties, as applicable.

COMPLIANCE WITH THE *PUBLIC UTILITIES ACT*

NS Power has stated that EfficiencyOne has failed to discharge its burden under the *Public Utilities Act*:

> **E1 has failed to discharge the burden placed on it under the Act. E1 has not provided the evidence necessary to justify the DSM programs and level of expenditure put forward in the E1 DSM Plan as being affordable for and in the best interests of NS Power customers[1].**

[1] NS Power Closing Submission, Page 49, Lines 3-5.

The *Act* requires EfficiencyOne to develop a DSM Resource Plan and present it, along with information and evidence to support its proposed Plan, to the Board for assessment. EfficiencyOne has filed information and evidence in support of its Plan in its Application, in its response to Information Requests, and in testimony before the Board. The *Act* provides at s. 79L:

> **(5) Each of the applicants shall provide any information or evidence required by the Board for its determination of the application.**
>
> **(6) Notwithstanding subsection (5), in the application, the franchise holder is primarily responsible to provide information and evidence to the Board to justify the electricity efficiency and conservation activities that it proposes to undertake for Nova Scotia Power Incorporated, and Nova Scotia Power Incorporated is entitled to rely upon the expertise of the franchise holder in respect of the delivery of the electricity efficiency and conservation activities.**
>
> **(7) Notwithstanding subsection (6), in the application, the franchise holder is entitled to rely upon the written information and evidence filed with the Board by Nova Scotia Power Incorporated for the purpose of the application and proceeding. [emphasis added]**

It is EfficiencyOne's position that it has complied with the *Act* in providing information and evidence to the Board to justify the electricity and conservation activities it proposes in its DSM Plan.

NS Power suggests EfficiencyOne's decision to file only one plan with the Board is "inconsistent with the evidence of the Board's Consultant, Mel Whalen"[2] and sets out Mr. Whalen's testimony in this regard:

> **MS. CLARKE: Okay. And just one other question and I'm – perhaps I should have asked this of some of the previous panels.**

[2] NS Power Closing Submission, Page 11, Line 12.

But if, as contemplated under the legislation, EOne and Nova Scotia Power had come to the Board with an agreement that detailed the amount of spending and all the rest of it, would the Board need to have various scenarios to assess whether that was the right one? I mean, would you have to look at alternatives or would you just say, "Well, all right, these two parties have agreed to it, so therefore, it must be right"?

MR. WHALEN: It probably could be accepted from the two parties, but with the understanding that the two parties would have looked at some scenarios that would be available to the Board if the Board ---

MS. CLARKE: Okay.

MR. WHALEN: --- wanted to see them[3].
[emphasis added]

It is respectfully submitted that NS Power has misconstrued Mr. Whalen's testimony. Mr. Whalen was simply confirming that where an agreement between EfficiencyOne and NS Power had been reached, then it would be presumed the parties, during negotiations, would have looked at some scenarios and these scenarios would be available if the Board wanted to see them. He did not go so far as to suggest that multiple plan filings were required. In fact, multiple preliminary plans were prepared and shared with NS Power throughout the negotiation process based on NS Power's feedback, as was described several times in EfficiencyOne's testimony[4].

The *Act* does not require the filing of multiple plans for consideration by the Board. The Industrial Group has asked the Board to direct EfficiencyOne to model multiple plans in future

[3] Transcript, June 19, Page 1054, Line 12 to Page 1055, Line 6.
[4] Exhibit E-1, EfficiencyOne Evidence, Page 40, Lines 11-26; Transcript June 16, Page 526, Lines 5-8; Transcript, June 15, Page 169, Lines 8-10.

applications[5]. With respect, this is analogous to requiring NS Power to file and defend multiple levels of proposed rate increases for the Board's consideration in general rate applications.

It is the Board's role to assess the proposed DSM Plan based on all of the evidence before it and determine whether it strikes an appropriate balance of all factors to be considered by the Board, in accordance with s. 79L (8) and (9):

> **(8) The Board shall approve an agreement pursuant to this Section if, in addition to any other matters considered appropriate by the Board, it is satisfied that the agreement, including the proposed electricity efficiency and conservation activities that are the subject of the agreement, is in the best interests of Nova Scotia Power Incorporated's customers and satisfies the requirements of Section 79J.**
>
> **(9) The Board's assessment of the proposed electricity efficiency and conservation activities for the purpose of the approval must take into account their affordability to Nova Scotia Power Incorporated's customers, along with any other matters considered appropriate by the Board or as may be prescribed.**

EfficiencyOne maintains its position that there is sufficient evidence before the Board to make this determination based on the Plan EfficiencyOne has submitted for approval.

100 GWH PLAN

NS Power recommends the Board direct EfficiencyOne to develop a DSM plan that would deliver 100 GWh per year in energy savings over the contract period at a cost of $22 Million per year[6]. NS Power suggests its proposal supports near-term affordability, while avoiding additional capacity requirements for the next 17 years and forecasting a more affordable plan for

[5] Industrial Group Closing Submissions, Page 19, Paragraph 7.
[6] NS Power Closing Submission, Page 49, Lines 25-27.

customers (as compared to EfficiencyOne's Plan) for almost 20 years. NS Power suggests this level of DSM savings could be accomplished for $22 million per year[7].

This recommendation is at odds with NS Power's testimony that the scenarios presented were not intended to be plans for consideration by the Board[8].

The support for a 100 GWh plan now proposed by NS Power, and supported by the Industrial Group and the Department of Energy, appears largely focused on capacity avoidance. The Nova Scotia Department of Energy states:

> **It is not necessarily the case that authorizing a lower budget for E1 than requested will result in the need to incur steep rate increases in the future to achieve increased capacity savings:**
>
> > **a. <u>NSPI has noted that energy savings of approximately 100 GWh/year with associated demand savings of 18MW/year would avoid the need to add any additional generation capacity until 2032</u>…[9]** (footnotes omitted) **[<u>emphasis added</u>]**

And further:

> **The guiding posts for the development of a plan at a lower budget would be the targeted energy savings of 100 GWh/year and associated demand savings of 18MW/year that NSPI suggests is needed to avoid capacity additions until 2032. Within these parameters, the Province submits that the program design should be as equitable as possible, so that all customers have an opportunity to participate in programs that will lower their electricity bills[10].**

The Industrial Group, in its closing submission, stated:

[7] NS Power Closing Submission, Page 15, Lines 6-14.
[8] Transcript, June 18, Page 724, Lines 5-8; Page 726, Lines 1-5; Page 747, Lines 5-11.
[9] NSDOE Closing Submission, Page 11, Paragraph 32.
[10] NSDOE Closing Submission, Page 14, Paragraph 37.

> **There is no dispute that, from the perspective of NSPI's system, E1's targeted energy and demand savings are not needed during the contract period. As shown in figure 4.1 (revised) of the NSPI evidence, DSM savings in the range of approximately 100 GWh per year and associated demand savings would enable NSPI to avoid adding any additional generation capacity until 2032[11].** (footnotes omitted)

It is EfficiencyOne's position this is a very narrow view of energy efficiency that fails to take into account all of the factors that ought to be considered in the development of a DSM Plan, including the benefits outlined in EfficiencyOne's Evidence, the testimony of Synapse, Dr. Peach, the Consumer Advocate, and others. In addition, while EfficiencyOne does not dispute that energy savings of 100 GWh per year and associated demand savings are required for the purposes of capacity avoidance to 2032, EfficiencyOne's proposal includes 20-21 MW of demand savings per year[12]: this is not far above the 18 MW/year savings required to defer or avoid these additions, as referenced in NS Power's Evidence[13]. It is therefore respectfully submitted that approval of a Plan at a lower level may well compromise the level of associated demand savings that might otherwise be achieved.

PLANNING HORIZONS

NS Power contends that the adoption of shorter IRP periods in other jurisdictions is due to the increasing level of uncertainty associated with predicting or forecasting further out in time:

> **NS Power introduced evidence in the form of a report prepared by Synapse which shows that many jurisdictions in the United States [sic] follow IRP planning horizons at 10, 15 or 20 year periods. NS Power submits that adoption of shorter**

[11] Industrial Group Closing Submission, Page 2, Paragraph 10.
[12] Exhibit E-1, EfficiencyOne Evidence, Page 21, Figure 3.1.
[13] Transcript, June 19, Page 925, Lines 16-19.

> **IRP periods in other jurisdictions is largely due to the increasing level of uncertainty the further out in time one tries to predict/forecast[14].** (footnotes omitted)

It is respectfully submitted that NS Power has misconstrued Synapse's report by focusing on utilities' current practices, not recommended best practices. The authors of the report state at page 31:

> **<u>The study period for the IRP analysis should be sufficiently long to incorporate much of the operating lives of any new resource options that may be added to a utility's portfolio – typically at least 20 years – and should consider an "end effects" period to avoid a bias against adding generating units late in the planning period</u>. Arizona rules require a 15-year planning period, Oregon a 20-year planning period, and Colorado a utility-specified planning period of between 20 and 40 years. Of the rules examined here, only Oregon explicitly states that an end effects period should be considered[15].**
>
> **[<u>emphasis added</u>]**

FUEL COSTS

In its submissions, NS Power states:

> **Indeed, as noted above, using a partial revenue requirement analysis, Figure 3.8 from NS Power's Evidence demonstrates that customers under the E1 DSM Plan do not become better-off financially relative to NS Power's proposal until 2034. In other words, it will take approximately 19 years before customers will start to**

[14] NS Power Closing Submission, Page 37, Lines 20-24.
[15] Exhibit E-60, *Best Practices in Electric Utility Integrated Resource Planning Examples of State Regulations and Recent Utility Plans* (Synapse), Page 31.

> **realize the benefit of the fuel savings and then only if the energy savings are achieved as forecasted[16].** (footnotes omitted)

With respect, EfficiencyOne states that the assertion made in the foregoing paragraph is inaccurate. This is due to the fact that Figure 3.8[17], as referred to by NS Power, shows projected rate effects as opposed to projected revenue requirements. Consequently, Figure 3.8 is incapable of supporting the assertion that NS Power puts forth and this argument should therefore not be considered by the Board.

AFFORDABILITY

EfficiencyOne reiterates its position on affordability as presented in its Closing Arguments. However, it is appropriate to address the level to which both NS Power and the Department of Energy (in argument) have elevated affordability in this proceeding. For example, the Department of Energy states:

> **The Board must also take into account the extent to which NSPI's customers can afford the proposed DSM. This is similar to legislation in other jurisdictions, but with notable differences relating to the extent of the directive to obtain DSM, <u>and the focus on affordability</u>[18].** (footnotes omitted)
> **[<u>emphasis added</u>]**

NS Power states:

> **In assessing the E1 DSM Plan, the Act mandates that the Board must satisfy itself that the plan put forward by E1 is "affordable" and in the "best interests of NS Power's customers". <u>NS Power submits that the inclusion of such a requirement</u>**

[16] NS Power Closing Submission, Page 44, Lines 26-30.
[17] Exhibit E-33, NS Power Revised Evidence, Page 33, Figure 3.8.
[18] NSDOE Closing Submission, Page 2, Paragraph 7.

reflects a deliberate intent on the part of the legislature to ensure the level of DSM approved is only what is determined to be affordable for Nova Scotians and that short-term affordability must be taken into account when making such determination[19].
[emphasis added]

It is respectfully submitted that affordability has **always** been a factor considered by the Board in assessment of DSM Plans. That it is now explicitly referred to in legislation may add a greater level of awareness, but it does not add a level of scrutiny to this application greater than that the Board has applied in consideration of past DSM Resource Plan applications. The legislation states:

(9) The Board's assessment of the proposed electricity efficiency and conservation activities for the purpose of the approval must take into account their affordability to Nova Scotia Power Incorporated's customers, along with any other matters considered appropriate by the Board or as may be prescribed.
[emphasis added]

Affordability is, and always has been a factor, for consideration by the Board. It must take this into account ***along with*** any other matters considered appropriate. This wording suggests balancing all of the factors the Board deems appropriate.

DSM IN NOVA SCOTIA

NS Power states in its submissions that EfficiencyOne's model of DSM would make it a price leader in Canada[20]. DSM as a percentage of utility sales sets Nova Scotia as a leader in DSM investment, not a "price leader". As Mr. Dunsky's benchmarking analysis demonstrated, Nova Scotia's DSM investment on a unit-cost basis is middle of the pack.

[19] NS Power Closing Submission, Page 2, Lines 14-19.
[20] NS Power Closing Submission, Page 5, Lines 3-7.

NS Power states, "there has been much discussion in this proceeding about the reliability of benchmarking[21]." EfficiencyOne submits that this discussion is generated with very good reason. EfficiencyOne does not wish to reiterate its closing arguments on this issue other than to state once more that the benchmarking analysis undertaken by NS Power's expert does not provide a reliable basis upon which to state that EfficiencyOne's proposed Plan would be among the most costly in Canada.

Despite the various challenges to NS Power's methodology in this regard, none of which have been refuted, in a footnote within its closing argument, NS Power continues to maintain that the Plan proposed by EfficiencyOne would be among the most expensive in Canada. The basis for this assertion, according to Footnote 4 found at page 5 of NS Power's closing argument, is an alleged agreement from EfficiencyOne's expert, Mr. Dunsky, as to the contents of NS Power's Exhibit E-46. A consideration of the transcript and the discussion leading up to this purported agreement should provide some clarity:

> **MR. CLARKE: Can we go back to Table 1 on page 12? Here by savings, you -- sorry. The DSM's percentage of sales, the purpose of this application process is to determine the appropriate level of DSM spending and savings; correct?**
>
> **MR. DUNSKY: Yes.**
>
> **MR. CLARKE: And it's not to identify jurisdictions with savings consistent with EOne's proposed plan necessarily, is it?**
>
> **MR. DUNSKY: Not necessarily. However, the purpose of a benchmarking exercise, I would argue, is to make sure that you're comparing -- again, comparing apples to apples. There's, really, from my perspective, very little value in comparing, let's say, Nova Scotia -- the plan that Nova Scotia is proposing with a region, let's say, that -- you know, that's doing 10 times less and suggest that the unit cost is too high. You**

[21] NS Power Closing Submission, Page 5, Lines 5-6.

can argue that the budget is too high or too low, but -- but for unit cost comparison, if you want to pull any conclusions or even guidance from it, you have to make sure that you're comparing apples to apples.

MR. CLARKE: But Mr. Dunsky, if the objective of the exercise is to determine a robust DSM program which is focused essentially -- or with, I would suggest to you, the central issue being affordability for customers, then -- then what's the purpose of comparing a program which is almost identical to the DSM one?

I would have thought you'd go in a different direction and want to stretch the analysis as far as possible.

MR. DUNSKY: I'm not sure why I'd want to stretch the analysis as far as possible. It depends -- I guess it depends what the question is. And if the question is what is the appropriate level of investment or even what is the appropriate level of targeted savings for Nova Scotia, then the benchmarking of unit costs per savings is not going to help you. And I don't think that's the purpose for which it was provided in -- by Mr. Pickles, and certainly not the purpose for which I produced mine as well. The way in which it was presented, I believe, in Mr. Pickles' evidence was -- had nothing to do with setting the right level, but had to do with determining whether the unit cost, both achieved in the past by Efficiency Nova Scotia and proposed going forward in their plan, is a reasonable unit cost. And for that, one must compare with like to like. So that's what I'm -- what I hope to have done here and hope to have corrected an inappropriate approach.

MR. CLARKE: Mr. Dunsky, with respect to the Canadian provinces that you've left on your Table 1, all three of them have a DSM percentage of sales less than EOne; correct?

MR. DUNSKY: This is true.[22]

It is clear from the foregoing passage that the quote that NS Power relies on was simply Mr. Dunsky confirming the contents of a visual graphic that was presented to him. It most certainly should not be construed as an endorsement of NS Power's Evidence or the methodologies used to produce such evidence. To suggest otherwise is misleading. EfficiencyOne therefore maintains that the benchmarking methodology undertaken by NS Power is unreliable for the exercise currently before the Board.

RISKS TO THE EFFICIENCY INDUSTRY IN NOVA SCOTIA

Both NS Power and the Industrial Group have argued that loss of industry capacity should not be taken into account by the Board in determining the appropriate level of DSM spending for the Contract Period. However, industry capacity was merely one factor used in the development of the DSM Plan[23]. It was not the sole or even primary consideration. EfficiencyOne's concern relates to future capacity needs. Mr. Dunsky pointed to maintaining a market presence as a strategy to minimize risk:

However, long-term success requires market credibility – faith by key partners and suppliers that they can count on a PA's [program administrators] presence over the long haul; that they can make investments in training, marketing, retooling, changed product suppliers and specifications, developing new relationships and business ventures, etc., with a reasonable expectation that their partner will not leave them "high and dry" at the earliest change in short-term context. The reverse – neglecting the interests of partners and suppliers by cycling efficiency on and off too easily – will ultimately harm a PA's market credibility, diminishing its ability to influence market change in the long-term, and adding cost as suppliers demand

[22] Transcript, June 15, Page 157, Line 21 to Page 160, Line 13.
[23] Transcript, June 16, Page 460, Lines 1-12.

higher risk premiums in pricing and/or hesitate to adopt changes when DSM programs once again return to their markets.

Ultimately, a sustained presence in markets provides a hedge against future resurgence in DSM needs, while supporting the principle of investing in sustainable, long-run market transformation. Most effective PAs we are aware of have made a point of maintaining investments in markets during short-term lulls (e.g. power surplus periods), in keeping with their long term mandates[24].

While EfficiencyOne's Plan is based on a 3-year term, pursuant to its Franchise Agreement, EfficiencyOne, or any successor franchisee, must be able to rely on the stability of the industry well beyond 3-year terms.

INCENTIVES

Both NS Power and the Industrial Group take effort in their closing arguments to assert that the cost of incentives provided by EfficiencyOne are too high and, somewhat relatedly, that there is a lack of evidence to support the value of the incentives that EfficiencyOne offers. In particular, NS Power has attempted to introduce, *ex post facto*, evidence from Mr. Pickles regarding the information provided by EfficiencyOne in Undertaking U-4.

In a separate letter, EfficiencyOne has addressed the issue of the weight, if any, that should be given to evidence filed after the closing of the hearing. However, for the purposes of this rebuttal, EfficiencyOne wishes to address a fundamental flaw in the assessment undertaken by Mr. Pickles. With respect, EfficiencyOne submits that Mr. Pickles' assessment of EfficiencyOne's failure to provide certain information in Undertaking U-4, outlined by NS Power on pages 34 and 35 of its closing arguments, takes an interpretation of the undertaking

[24] Exhibit E-1, EfficiencyOne Evidence, Appendix F, Page 7.

provided that the transcript simply does not support. For ease of reference, the exchange leading up to the provision of the undertaking was as follows:

> **MR. CLARKE: One other question, Mr. Chair.**
>
> **Mr. Faulkner, if I understood you correctly, in response to some of the questions from the Chair, I thought you said that EOne had studies or data respecting the process for the vigorous assessment of incentives.**
>
> **MR. FAULKNER: We have done studies and we have data on certain programs and measures, yes.**
>
> **MR. CLARKE: Great. Would you undertake to provide that to all of the parties, please?**
>
> **MR. FAULKNER: Yes.**
>
> **MR. CLARKE: Thank you. Those are my questions, Mr. Chair.**
>
> **THE CHAIR: That will be Undertaking U-4.**[25]

The foregoing passage makes it abundantly clear that Mr. Clarke simply asked for EfficiencyOne's research with respect to its assessment of incentives. Nowhere in the transcript leading up to the provision of the undertaking is there a discussion of EfficiencyOne being required to provide a certain type of research or a comparison of its incentives to other jurisdictions or levels. The requirement was to simply provide the research undertaken by EfficiencyOne to that point. EfficiencyOne has complied with this requirement, providing an overview of its process to address the wording included in the undertaking. Therefore, it is respectfully submitted that the critique provided by Mr. Pickles on behalf of NS Power, separate

[25] Transcript, June 16, Page 498, Line 12 to Page 499, Line 5.

and apart from the issue of being filed too late to be considered by the Board, is based on an erroneous interpretation of the requirement of U-4.

For its part, the Industrial Group has taken an approach in its analysis of the incentives offered by EfficiencyOne that is, with respect, somewhat flawed. Specifically, the Industrial Group states the following:

> **In addition, the Industrial Group is concerned that the established service delivery framework for E1 which requires it to deliver its targeted energy savings disincents E1 from eliminating incentives. E1's performance will be measured against achievement of those targets and failing to do so, puts it at risk of losing its franchise. E1's formal process for evaluation and verification does not allow it to "count" its "Enabling Strategies" (which include measures such as education and advertising) towards its performance targets. In other words, if a consumer may be persuaded solely by information to undertake an efficiency measure because it will pay for itself in a relatively short period of time, E1 cannot count this toward its performance target; however, if that education or information is coupled with an incentive then E1 can measure and count it[26].**

With respect, the assertion made in the foregoing passage is not completely correct. In essence, the Industrial Group is attempting to argue that EfficiencyOne cannot count savings toward its performance target if it does not provide incentives. In reality, EfficiencyOne counts savings when such savings are attributable to EfficiencyOne's efforts, such as when customers do not apply for rebates in the Home Energy Assessment service despite completing upgrades based on the information provided by EfficiencyOne and its delivery agents), and through information activities such as the Home Energy Report and the strategic energy management component of the Custom program[27].

> **MS. RUBIN:** …**The Chair asked a question about whether the framework biased**

[26] Industrial Group Closing Submission, Page 12, Paragraph 46.
[27] Transcript, June 16, Page 500, Line 16 to Page 504, Line 12.

incentives, and I just wanted to clarify. If you're providing education or information to consumers about payback as part of your enabling strategy that moves people to make purchases on their own, you don't count the energy savings from this towards your performance targets; correct?

MR. FAULKNER: When we can measure it and when we know it's a direct result of our influence, yes, we do claim them. So one example is our Home Energy Assessments Program; over the past couple of years the evaluator has gone back to talk to homeowners who've done the pre-retrofit home audit and then discovered that they have done some work on their own, not nearly everything we would normally recommend, but as -- because that work has been identified as attached to the audit, then it's something that we can claim as a result of our efforts[28].

Other energy savings outside of DSM, such as codes and standards, are built into the load forecast. As explained in its Reply Submission to intervenors' evidence, EfficiencyOne's approach is to report on these savings for system planning purposes, not for DSM results, which avoids double-counting energy savings at a system level[29]. EfficiencyOne does not count these savings towards its approved performance targets since they are not directly attributable to EfficiencyOne's efforts[30]. It is therefore respectfully submitted that the reporting measures taken by EfficiencyOne are sound and appropriate.

EfficiencyOne respectfully submits that the Industrial Group has committed an erroneous interpretation of EfficiencyOne's Evidence. The Industrial Group states:

In response to Undertaking U-4, E1 provided additional information regarding its assessment of incentive levels attaching certain research it had carried out. It is noted that E1 states that the "setting and adjusting of incentive levels follows a generally cyclical process, and it is not uncommon to adjust incentive levels multiple times over the lifecycle of program offerings." However, in the Workbook produced

[28] Transcript, June 16, Page 499, Line 17 to Page 500, Line 12.
[29] Exhibit E-46, EfficiencyOne Rebuttal Evidence, Page 14, Lines 8-16.
[30] Transcript, June 16, Page 501, Line 13 to Page 504, Line 12.

> **by E1, in contrast to this statement, the incentives appear to remain constant over the three-year period. If E1 does adjust incentive levels then it has built in for itself a cushion by straight-lining incentives over three years[31].**

With respect, the foregoing passage provides an inaccurate description of EfficiencyOne's Evidence. EfficiencyOne has not built a cushion by straight-lining incentives since, over time, some incentives will go down and others will be increased. What EfficiencyOne put forward in its Evidence is an overall Plan, which has an overall unit cost that EfficiencyOne believes it can achieve. This Plan includes specific incentives at a measure level that are not intended to be exactly as built into the RAM.

In it closing submission, the Industrial Group also states:

> **The fact that E1 had not looked at the incentive levels and the payback periods by measure is a matter of some concern. In the technical tables produced in response to Undertaking U-8 it appears there are some 44 measures with a payback period in *under 12 months* (Column 7b). Even with this very favourable return on investment, in many of these, E1 shows that it is paying up to 100% of the incremental measure cost as an incentive (Column 8)[32].**

However, the Industrial Group has not provided the context to the statement it is referencing:

> **MS. RUBIN: Would you acknowledge that there are measures in your portfolio that pay for themselves from the customers' perspective without any incentive from EfficiencyOne? On an economic basis.**

> **MS. VINCENT: Yes.**

[31] Industrial Group Closing Submission, Page 11, Paragraph 40
[32] Industrial Group Closing Submission, Page 10, Paragraph 36.

MS. RUBIN: And some of them would pay for themselves in as little as three to four months?

MS. VINCENT: Some may. We haven't specifically looked at every one[33].

Ms. Vincent did not state that EfficiencyOne "had not looked at the incentive levels and the payback periods by measure".

Following Ms. Vincent's response, a lengthy exchange between Mr. Faulkner and Ms. Rubin took place[34]. In that exchange, Mr. Faulkner reiterated several times that customer simple payback was a factor considered by EfficiencyOne when developing its incentives. Mr. Faulkner notes other factors as well, which are absent in Mr. Drazen's approach:

MS. RUBIN: Is it Efficiency's position that the level of Nova Scotia Power's rates is relevant or irrelevant in determining the amount of subsidy for each measure?

MR. FAULKNER: Certainly, one of the factors we consider when we set incentives is the customers' simple payback, and, of course, that's affected by their electricity rates. But it can also be -- it's pretty to clear to us that even though the rates are relatively high in Nova Scotia, customers still haven't implemented a lot of those measures, and sometimes they're in facilities that are 30-years old and the measures have never been touched.

So it seems there's more than just the simple payback that's affecting their willingness to do it, and what we've found is that a lot of times it's still a financial barrier for them.

We've done research in the last year that shows the biggest single barrier to getting business is to make efficiency upgrades is the access to capital, the affordability of

[33] Transcript, June 16, Page 336, Lines 1-9.
[34] Transcript, June 16, Page 336, Line 10 to Page 340, Line 8.

those, and the biggest single motivator is incentives. So we're always looking at trying to balance the incentives against their simple payback, and their cost of electricity is one of those factors[35].

The Industrial Group's concern over EfficiencyOne's inclusion of measures with shorter paybacks per Mr. Drazen's calculation, despite EfficiencyOne's and its expert DSM consultant's explanations that simple payback is rarely enough to cause customers to invest in DSM measures, is also based on an over-simplification of individual customer paybacks. Mr. Drazen uses representative energy savings and representative measure incremental costs from the technical tables, calculating simple payback using one value of customer rates. In reality, customer paybacks for measures can vary widely due to the specific operating characteristics of their facility (including run-time hours), their rate class, and the price paid for a specific measure. To eliminate measures based on this representative information is problematic in that one can have no confidence in the distribution of customer simple payback periods, only their representative values. NS Power's consultant, Mr. Pickles, agreed with this during the course of the hearing:

MR. PICKLES: … However, my experience in running programs across the country is that while the mix of customers and industry certainly varies from jurisdiction to jurisdiction, customer purchasing and corporate purchasing is really a function of the kind of industry that they're in, the kind of customer they are, the segment that they're in, the prism segment that they're in, if that means much to you[36].

Similarly, NS Power has included sections of Mr. Pickles' testimony regarding his analysis of incentives included in Navigant's EL-RAM model[37]. However, Mr. Pickles and NS Power have not provided any evidence that EfficiencyOne's incentives are too high. In fact, the references from Mr. Pickles' testimony referenced by NS Power include inaccuracies and errors in his use and interpretation of the EL-RAM that, while EfficiencyOne had not intended on detailing

[35] Transcript, June 16, Page 336, Line 10 to Page 337, Line 12.
[36] Transcript, June 18, Page 746, Lines 15-22.
[37] NS Power Closing Submission, Page 24, Line 1 to Page 25, Line 2.

because of the overall, higher-level issues with NS Power's and Mr. Pickles' approach, now appear to warrant explanation. For example, in the EL-RAM and the associated technical tables[38], incentives are never more than 100 percent of incremental measure costs (the incentive modelled for the variable speed drive example used by Mr. Pickles is a 42 percent incentive when averaged across a range of sizes); Mr. Pickles appears to be assuming LED measure costs are for point-of-sale discount programs, not direct install programs (which include installation costs); costs for specialty LEDs are higher than $10; and the Custom program models incentives of 14 cents/kWh, not 17 cents/kWh.

While this information is in evidence, EfficiencyOne has not pointed to these specific errors in past submissions because, as it has stated previously, the measure-level incentives modelled in the EL-RAM will not always match exactly the incentives offered by EfficiencyOne over time, or the specific incentives offered to each customer, as explained in EfficiencyOne's testimony[39]. EfficiencyOne has used modelling assumptions to develop a DSM Resource Plan that it is confident can be implemented at the overall portfolio unit cost it has proposed. Operational flexibility, including reducing or increasing incentives as required based on its market research, will allow it to do so.

Lastly, a review of the closing submissions of both NS Power and the Industrial Group, along with a consideration of the transcript of the hearing before the Board, make it clear that both NS Power and the Industrial Group take the position that there is a lack of evidence to support the incentive levels provided by EfficiencyOne. The following exchange between counsel for EfficiencyOne and Mr. Drazen on behalf of the Industrial Group is illustrative of this point:

> **MR. DRAZEN: So that in any event, I think EOne should have provided more information as to how it got the incentive levels because some of the things are just -- well, you know, they appear not to be terribly consistent where you have one measure that has a high TRC level and a high investment and then compared to another measure where the TRC is lower, but EOne's proposed investment is lower.**

[38] Exhibit E-28(c), EfficiencyOne Response to SBA IR-34, Attachment 1, Filed Confidentially; Exhibit E-7(i), EfficiencyOne response to NSPI IR-10, Attachment 1.
[39] Transcript, June 16, Page 362, Line 18 to Page 363, Line 7; Page 342, Line 22.

MR. GOGAN: Right. And my question, though, to you is would you adopt the statement that setting these incentive levels, recognizing your methodology, is part science and part art? Would you agree with that?

MR. DRAZEN: Right, but all we have right now is that it looks like magic because we don't see what lies behind the numbers.[40]

This reference, although it may have intended to be a bit glib, does help to illustrate that NS Power and Industrial Group appear to be of the position that EfficiencyOne is relying on evidence akin to "magic" to support its incentive levels. With respect, this is not the case. EfficiencyOne is providing the exact same type and level of information that it, and NS Power as interim DSM administrator, has provided to the Board in past DSM applications. EfficiencyOne certainly understands that it is operating in a new legislative regime with respect to DSM Plan development and approval. However, EfficiencyOne respectfully submits that it should be entitled to rely on the same type and level of evidence it has provided in the past. This is because no intervenor has provided any cogent evidence to indicate that the evidence provided by EfficiencyOne with respect to incentives is wrong.

Despite the foregoing, however, EfficiencyOne wishes to make it clear to the Board that, if so ordered, it will provide stakeholders with information deemed necessary by the Board to appease stakeholders that its incentive approach, follows accepted industry practice and its incentive levels are appropriate in acquiring cost-effective energy savings.

REASONABLY AVAILABLE ENERGY EFFICIENCY

The Department of Energy states that NS Power is directed to "undertake cost-effective electricity efficiency and conservation activities that are reasonably available in an effort to

[40] Transcript, June 19, Page 1024, Lines 10-22; Page 1025, Lines 1-3.

reduce costs for its customers", not to "undertake *all* cost-effective electricity efficiency and conservation activities that are reasonably available in an effort to reduce costs for its customers"[41].

EfficiencyOne's DSM Plan is not proposing an undertaking of "all" cost-effective DSM. Of the four DSM levels from its DSM Potential study; Low-DSM, Base-DSM, Mid-DSM and High-DSM, EfficiencyOne's 2016-2018 DSM Resource Plan is proposing to achieve Base-DSM energy savings at the Low-DSM investment level.

OTHER ITEMS

In its closing submission, the Industrial Group states:

> **The holiday light exchange is an example of a 100% E1 funded initiative whereby customers exchange old inefficient holiday lights for new ones, at no cost to the customer. While it is categorized under "Enabling Strategies" (and the Industrial Group queries why it is not more properly classified as part of the Residential Program) it is an example of information coupled with a 100% subsidized measure[42].**

The Industrial Group then further recommends:

> **Direct E1 to re-allocate the costs and savings from the holiday light exchange to the Residential Sector[43].**

The rationale for such a recommendation is not clearly stated by the Industrial Group in its closing submission. EfficiencyOne is not aware of any compelling case or evidence for this

[41] NSDOE Closing Submission, Page 4, Paragraph 10.
[42] Industrial Group Closing Submission, Page 12, Paragraph 48.
[43] Industrial Group Closing Submission, Page 18, Paragraph 78.5.

change. The LED Holiday Light Exchange has the primary goal of educating participants about the benefits of energy efficiency, hence its placement in Enabling Strategies. Further, moving it to the Residential sector would have no impact on EfficiencyOne's overall investment levels, energy savings, or cost allocation to rate classes under the existing cost-allocation methodology, since the LED Holiday Light Exchange is allocated solely to the Residential rate class.

CONCLUSION

For the reasons set out herein, along with its earlier submissions and evidence, EfficiencyOne continues to respectfully request an Order from the Board approving:

(1) The 2016-2018 DSM Resource Plan[44], as modified by the terms of the Quantum Agreement and the Consensus Agreement as applicable; and

(2) The agreed form of Supply Agreement[45]; and

(3) Schedules A and B to the Supply Agreement, as provided in EfficiencyOne's Closing Submission[46].

[44] Exhibit E-1, EfficiencyOne Evidence, Appendix "A".
[45] Exhibit E-1, EfficiencyOne Evidence, Appendix "J".
[46] EfficiencyOne Closing Submission, Attachments 1 and 2, filed July 8, 2015.