Nova Scotia Utility and Review Board

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

-and-

IN THE MATTER OF AN APPLICATION by EfficiencyOne for Approval of a 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 2016-2018 Demand Side Management ("DSM") Plan (M06733).

2016-2018 DSM Plan

Nova Scotia Power
Reply to Closing Submissions

July 15, 2015

TABLE OF CONTENTS

1.0 INTRODUCTION

On July 8, 2015, Nova Scotia Power Inc. (NS Power or the Company) filed its Closing Submission in this matter. Closing submissions were also filed by EfficiencyOne (E1), the Nova Scotia Department of Energy (DOE), the Consumer Advocate (CA), the Small Business Advocate (SBA), the Industrial Group (IG), the Affordable Energy Coalition (AEG) and the Ecology Action Centre (EAC).

Please accept this Reply to Closing Submissions on behalf of NS Power. The Company does not intend to address all of the issues raised by E1 and the various Intervenors in their closing submissions. Instead, this submission will focus on some of the key issues raised. The absence of a reply to a specific issue raised by E1 or an Intervenor should not be construed as acceptance on the part of NS Power. If a matter is not addressed, the Company relies upon its Closing Submission as well as its testimony and written evidence in support of its position. The Company submitted its evidence to the Board on April 10, 2015, responses to information requests on May 19, 2015 and Rebuttal Evidence on June 9, 2015.

2.0 CONFLICT OF INTEREST

Both the CA and E1 have asserted that NS Power is in a conflict of interest position. However, while both have made generalized statements of this nature, neither has put forward any evidence of an actual conflict of interest, nor have they explained how NS Power's proposal to reduce rate pressure while avoiding new capacity additions for 17 years could be interpreted as being motivated by a conflict of interest.

The CA states that it is NS Power's "corporate objective to keep DSM programming at a minimum" and that as a result, the Board should "discount the weight given to NSPI's evidence and recommendations."[1] There is absolutely no evidence of any such strategy on the part of the Company.

E1 made a similar statement, stating it was concerned with "the conflict of interest inherent in a utility which sells electricity determining the appropriate and affordable level to invest in energy efficiency." Again, as with the CA, E1 provided no evidentiary basis for its assertion of a conflict of interest.

The issue of NS Power's alleged conflict of interest was addressed by Mr. Blunden in NS Power's Opening Statement:

> In closing, I would like to address two myths that some stakeholders are allowed to exist or even promote.
>
> The first is that Nova Scotia Power is against energy efficiency because we will make more money if we sell more electricity. That is simply not true. Our allowable earnings are based on our invested capital, our capitalization, and the Board-approved allowed return on equity. Increased or reduced sales would affect customer rates, when rates are reset, but sales levels do not affect the Company's earnings capacity.[2]

---

[1] CA Closing Submission, July 8, 2015, page 7.
[2] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 15, 2015, page 5-15.

It is noteworthy that this statement was not questioned during the hearing and remains unchallenged.

The suggestion that NS Power is somehow acting in its self-interest completely ignores the fact that the Company is recommending a level of energy savings and DSM expenditure that will avoid capacity additions out to 2032. NS Power is not recommending zero DSM. NS Power is recommending E1 be directed to develop a DSM plan that would provide annual energy savings of 100 GWh at a cost of $22 million per year because such a plan, as outlined in the Company's Evidence, is affordable and in the best interests of customers.

Arguably, E1 has a self-interest in obtaining as much DSM funding as it can get, notwithstanding concerns of customer affordability, in order to be able to maintain or grow its current level of infrastructure.

The only evidence before the Board of a conflict of interest is the evidence of the inherent bias in E1's incentive process which was brought forward during the IG's cross-examination of the E1 panel.[3] As summarized by the IG in its Closing Submission:

> 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.[4]

[3] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 16, 2015, page 499-502.
[4] IG Closing Submission, July 8, 2015, page 12.

The interests that must be served in this matter are the interests of customers. Their interest is in affordability, as stated in the Act and re-enforced in the submission of the DOE.

3.0 CONSUMER ADVOCATE'S CLOSING SUBMISSION

Although the Company disagrees with a number of contentions in the CA's Closing Submission, NS Power was appreciative of the CA's acknowledgement of issues with incentive levels as contained in E1's Plan. Despite the CA entering into a settlement agreement in relation to quantum prior to the hearing, the CA made the following acknowledgement in its closing submission:

> It is essential the incentives offered through DSM programming strike an appropriate balance. Incentive levels should only be set to the level needed to incent participation.
>
> At several times throughout the hearing, the Board raised the concern that there may be a risk that incentives are being paid that do not need to be paid and that some discipline needs to be brought to the process. **The Consumer Advocate acknowledges that risk and fully supports efforts to bring discipline to the incentive evaluation process** so that there is a robust assessment of the need for incentives.[5]
>
> [emphasis added]

NS Power submits that it would not be in the best interests of NS Power customers to approve the Financial Settlement Agreement when the CA has acknowledged the inherent risk in E1's incentive levels and the Financial Settlement Agreement provides no mechanism to quantify or otherwise address that risk.

3.1 CA Comments re Alternate Plans

(i) CA incorrectly states as follows:

> NSPI does not demonstrate that it is possible to design a reasonable plan at a $22 million per year spending level. Instead, it puts forth its "Alternative Plan", which cannot be evaluated because it is in "illustration" not a real portfolio.[6]

[5] CA Closing Submission, July 8, 2015, page 4.
[6] CA Closing Submission, July 8, 2015, page 4.

In the absence of E1 providing any alternate DSM scenarios with its Application, NS Power used E1's ELRAM model to produce alternate scenarios to demonstrate that there are lower cost alternatives to the proposed E1 DSM Plan. Those alternate scenarios are summarized in NS Power's Evidence.[7] Scenario D shows a plan could be developed that meets a total energy savings over the 2016-2018 contract period (Contract Period) of 300.8 GWh with spending of only $65.4 million. Mr. Pickles provided expert testimony that a plan with a unit cost of 22 cents/kWh as proposed by NS Power was in fact achievable.[8]

NS Power provided the details and information on how each of the scenarios was developed and all such scenarios, including Scenario D, were subject to evaluation and cross-examination by E1. There was no evidence presented that the information NS Power provided in connection with its alternate scenarios could not be evaluated. Arguably, there is not a considerable difference in the level of detail between NS Power's Scenario D and E1's Plan, as E1 confirmed in its evidence that its proposed E1 DSM Plan was only a "high level planning proposal" and not an "implementation plan" as "detailed program budgets have not yet been developed".[9]

(ii) The CA continues to reference Scenario C as NS Power's alternate plan and then claims that NS Power's plan "eliminates most residential programs, resulting in an inequitable portfolio that violates a primary requirement of affordable DSM."[10] To be clear, NS Power is not recommending a disproportionate reduction in residential programs. The methodology used to create Scenario C and intent of Scenario C was reviewed in detail in the proceeding (both written and oral portions) and, NS Power submits, such characterization by the CA is not an

[7] Exhibit E-33, NS Power Revised Evidence – Appendix A, Table 6 (Revised), June 1, 2015, p. 24.
[8] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, pages 768-769, lines 5-22 and lines 1-15.
[9] Exhibit E-7, E1(NSPI) IR-12(g)(viii).
[10] CA Closing Submission, July 8, 2015, p. 4.

accurate reflection of the evidence. NS Power refers the Board to Table 1 of NS Power's Rebuttal Evidence, which shows that Scenario D provides more DSM at the residential level than the proposed E1 DSM Plan.[11]

(iii) The CA asserts that "Mr. Pickles stated that there are new residential construction measures in the residential HVAC/Shell Category."[12] For clarification, Scenario C was discussed by Mr. Boutilier and not Mr. Pickles.[13] In addition, NS Power used the 2014 New Home Construction program costs and impacts in the RES-HVAC/Shell category in Scenario C (which Scenario was developed by Mr. Boutilier). It did not utilize E1's proposed 2016-18 New Home figures which were in that end-use category.

(iv) The CA's assertions that NS Power understated the energy-related value of DSM are incorrect for the following reasons:

- NS Power did not use a constant load shape as claimed by the CA.

- NS Power did time-differentiate the avoided energy costs.

- The benefits of reduced energy load were taken into consideration by NS Power, which included seasonal operation of steam plants and sustaining capital investments based on unit utilization as per the 2014 IRP analysis.

- NS Power did focus on short and long term avoided capacity.

[11] Exhibit E-45, NS Power Rebuttal Evidence, June 9, 2015, Table 1, page 10.
[12] CA Closing Submission, July 8, 2015, page 5.
[13] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, page 750-751.

3.2 Nova Scotia's Renewable Electricity Standards

The CA states that even though no additional DSM is needed over the Contract Period for compliance with Renewable Electricity Standards (RES), "DSM should be given RES credits since energy reduction can produce opportunities for selling excess renewable energy to New England."[14]

NS Power submits that the CA's assertion is misleading and fails to acknowledge the complexity of such a suggestion. For instance:

- Only a portion of the renewable generation in Nova Scotia would qualify for the New England RECs – new wind would qualify, but legacy hydro and biomass would not.

- The project would have to be registered in the state where it wishes to sell the RECs and be able to deliver the energy to the ISO New England market.

- Transmission costs and physical losses through New Brunswick also need to be considered (about CAD$7 on peak and $3.33 off peak plus 3.3% losses), and it is subject to curtailment risk which would prevent the energy from reaching New England. Any energy sent to New England must be replaced with another resource to serve load in Nova Scotia. With low energy prices in New England, the full cost of the replacement generation may not be recovered from an energy sale to New England.

[14] CA Closing Submission, July 8, 2015, page 5.

4.0 NOVA SCOTIA DEPARTMENT OF ENERGY CLOSING SUBMISSION

In its discussion of the affordability of DSM in the context of other rate pressures, the DOE referred to costs included in rates that are reducing and offsetting such rate pressure. The DOE noted the following:

> The FAM AA/BA is currently carrying an amount equivalent to the approximate $53 million 2014 DSM Cost Recovery Rider that was used to pay down, largely in one year for some rate classes, the FAM under-recoveries that had built up by December 31, 2014.[15]

For clarification purposes, NS Power notes a number of customers will still not see a reduction in FAM payments in 2016. This is due to the fact that the FAM under-recoveries for 2013 and 2014 will not be fully collected from all rate classes by the end of 2015. Specifically, Medium Industrial, Large Industrial and Municipal rate classes will not see a FAM AA/BA reduction in 2016 as the structure of their repayment obligations extended over a longer period of time.

[15] DOE Closing Submission, July 8, 2015, page 7, s. 19(b).

5.0 E1'S CLOSING SUBMISSION

NS Power submits this proceeding has suffered from an overly aggressive interpretation of the enabling legislation by E1. This has resulted in a departure from the typical regulatory construct under which utilities operate in Nova Scotia, which was evident throughout the proceeding and continued in E1's Closing Submission.

Essentially, it seems to have been E1's view throughout the process that they are the experts in the subject matters at issue (DSM and affordability) and, as such, only one option need be presented for consideration and contrary views should be discounted. Indeed, in its Closing Submission, in addressing the topic of incentives, E1 states that rather than it having the obligation to justify its incentives, the onus is somehow on NS Power and the other Intervenors to demonstrate that E1's incentive levels are incorrect:

> EfficiencyOne, as the DSM franchise holder in Nova Scotia, is recognized pursuant to legislation as having an expertise in respect of the delivery of electricity efficiency and conservation activities. In its Application, EfficiencyOne has detailed its approach to the establishment of incentives and has indicated through its testimony the manner in which incentives are determined. Absent direct evidence to the contrary that such an approach is incorrect on a measure-specific basis, it is respectfully submitted that the Board should accept this methodology as reasonable and appropriate in the circumstances.[16]

This is clearly not correct, particularly given the Act puts the obligation on E1 to provide the information and evidence to justify its DSM plan. Additionally, despite requests for E1 to submit plans at different budget levels, E1 decided to file just one plan and refused to provide any alternate scenarios. In response, NS Power provided DSM scenarios. E1 questioned Mr. Pickles on the few assumption adjustments to the ELRAM model that Mr. Pickles made in developing Scenario D. Although E1 questioned the appropriateness of the adjustments, they did not put forward any evidence to show why the assumptions

[16] E1 Closing Submission, July 8, 2015, page. 53, lines 11-17.

used by Mr. Pickles were inappropriate. E1 simply stated that there were assumption changes and that as such as the Board "should place no weight whatsoever on [NS Power's] indicative scenarios designed using the EL-RAM model."[17] In NS Power's view, E1's approach with these issues serves to undermine the objective of convening a public hearing.

Board practice, reflecting its commitment to transparency and rigorous test for prudency and determination of the public interest, requires the Board's decisions be based on facts and evidence and not general statements and opinions.

It has been NS Power's experience, that a utility has a duty to provide a robust defense of its application including:

- Qualitative and quantitative analysis of its Application.

- Comprehensive and detailed cost and benefit support (e.g. actual costs, support for forecasts and all assertions).

- Presentation of sensitivity analysis (i.e. the effect on the application of changes in spending levels and assumptions, both positive and negative).

- Analysis of the effect on the application on revenue requirement across periods.

- Discussion of available risk/cost mitigation tools; their availability, cost, effectiveness, etc.

Based on the record of the evidence before the Board, NS Power submits that E1 has not adequately satisfied these requirements.

[17] E1 Closing Submission, July 8, 2015, page 28, lines 5-6.

The following are some of the key evidentiary issues contained in E1's Closing Submission.

5.1 Benchmarking

E1 states as follows:

> During the course of the hearing, the Board heard testimony relating to the methodology followed by Mr. Pickles, noting a number of irregularities with regard to choice of jurisdiction, application of historical to forward-projecting data, and source information.[18]

NS Power will address the evidence on each of these matters.

(i) Choice of Jurisdictions

With respect to choice of jurisdictions, NS Power notes as follows:

- It was the evidence of Mr. Pickles that the benchmarking undertaken by ICF was a response to E1's lack of budget or program information, and to unreasonable assumptions made by E1.[19]

- ICF used benchmarks that, to the extent possible, included all Canadian administrators for which information was available, with the addition of Maine (where Emera owns another utility) and Wisconsin.

- E1 has stated that Mr. Pickles selection of jurisdictions was "largely wrong to effect a specific result; namely, dealing with analysis that showed higher unit costs than related jurisdictions."[20]

[18] E1 Closing Submission, July 8, 2015, page 18, lines 8-10.
[19] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, pages 662-663.

Mr. Blunden testified that the Company was only using jurisdictional benchmarking for guidance as to DSM costs in Canada:

> From my perspective and the company's perspective, benchmarking is just an indicator. You can look at it many different ways.
>
> What we were trying to do from a benchmarking perspective was just to get a sense as to where do we think we fit in to where the other jurisdictions, in particular in Canada. And it caused us -- it raised, quite frankly, red flags where it looked like our level of spend was materially higher on a cost basis than other jurisdictions.[21]

NS Power also notes that of the three Canadian jurisdictions noted by Mr. Dunsky in Table 1 in Appendix B of E1's Reply Evidence,[22] the average per centage DSM impact on load from those three Canadian jurisdictions is 0.6 per cent of sales, while the proposed E1 DSM Plan is double that amount at 1.2 per cent. Indeed, even the lower amount of DSM recommended by NS Power is still approximately 50 per cent higher than the average of these 3 Canadian jurisdictions.

- Mr. Pickles testified that E1's benchmarking (by Mr. Dunsky) attempted to create a peer group or "cohort" by selecting primarily utilities with large and expensive energy efficiency programs. As noted in Mr. Pickle's testimony, there is absolutely no quantitative or statistical support for Mr. Dunsky's selection of his cohort. [23] Mr. Dunsky also confirmed on cross-examination that despite including many high cost states (Massachusetts,

[20] E1 Closing Submission, July 8, 2015, page 22, lines 7-8.
[21] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 15, 2015, pages 976, lines 13-22.
[22] Exhibit E-46, EfficiencyOne Reply Evidence, Appendix B, Table 1, page 12.
[23] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, pages 663-664.

Rhode Island, Vermont, and Connecticut), he did not include many other low cost states, including: Pennsylvania, Illinois, Indiana, Minnesota, Ohio, Kansas, Missouri, Colorado, Idaho, and Utah – which selections, NS Power submits, made the E1 programs look "less expensive" than they would have had these states been included.[24]

(ii) **Use of Forward Projecting Data:**

With respect to the use of forward projecting data, NS Power notes as follows:

- Despite the fact that E1 disagrees with comparing historical cost to planned cost, Mr. Pickles testified that this comparison provides useful information for policy makers.[25]

- Mr. Pickles testified that planned performance should not, automatically, be anticipated to be more expensive than historical performance. He stated that there are a number of factors at play (including policy and program design choices that DSM administrators can make) that can be used to mitigate future cost increases.[26]

(iii) **Source Information**

With respect to source information, E1 criticizes Mr. Pickles use of secondary data from ESource. However, E1 used disaggregated data to adjust the benchmarking statistics. For example, Mr. Pickles testified on cross-examination that Mr. Dunsky used data from Toronto Hydro to represent Ontario costs. However, Toronto Hydro is the most expensive of five Ontario local distribution

[24] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 15, 2015, pages 156-157.
[25] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, pages705, lines 16-22 and page 708 Lines 1-7.
[26]2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, pages 706-710.

companies (LDC) with public information, and is approximately 30% more expensive than the other LDCs.[27]

In reviewing Mr. Pickles' analysis of unit costs of past savings in other jurisdictions, Mr. Pickles testified that Mr. Dunsky's various "adjustments" were "inappropriate".[28] As can be seen on pages 15 and 16 of Mr. Dunsky's benchmarking critique , Mr. Dunsky selectively removes some of the more cost effective measures (cited by Mr. Dunsky as "non-program sources") prior to calculating the average cost information. Mr. Dunsky did not elaborate on the definition of non-program sources, and the items that were removed by Mr. Dunsky, such as savings attributable to "industrial on-site generation projects" from Manitoba Hydro's figures, do not provide clarity to the definition - however, we can assume their exclusions do result in higher average costs in those jurisdictions.

5.2 Cost Pressure

E1 states that, "the level of DSM in the Quantum Agreement – on its own – will not impact rates. This is an important short-term affordability consideration."[29] NS Power submits that this statement is a misrepresentation of the evidence. All fuel and non-fuel costs incurred by NS Power, including DSM, have an impact on rates and cannot be viewed in isolation. NS Power provided evidence on cross-examination of a number of additional cost pressures facing the Company during the next three year period[30] including:

[27] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, page 664-665, lines 21-22 and 1-15.
[28] Ibid, page 667, lines 18-20.
[29] E1 Closing Submission, July 8, 2015, page1, lines 24-26.
[30] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 19, 2015, pages. 901-903.

- Estimated increase of $50 million in the base cost of fuel in 2016, primarily as a result of the increase in COMFIT projects that are not included in the 2014 Base Cost of Fuel.

- A forecasted under-recovery under the FAM in 2015 of between $10 to $20 million.

- The amortization of the 2015 DSM costs.

Unlike the other cost drivers, however, DSM should provide the flexibility to enable the Company and the Board to adjust the level of expenditure to avoid short-term rate impacts. As noted by Mr. Blunden:

> **MR. OUTHOUSE:** So to suggest that every penny that goes on rates is DSM money as opposed to Nova Scotia Power money seems to me both are contributing to whatever rate increase occurs and in whatever form it takes, whether it's in the FAM or whether it's in non-fuel. All those pressures create the rate, right; create the necessity for NSPI to seek an increase?
>
> **MR. BLUNDEN:** Yeah. I certainly accept that, Mr. Outhouse.
> Certainly what we do not have is the flexibility to reduce that fuel. I mean, we obviously manage it as aggressively as possible, but there's not a decision that can be made in terms of just running at a lower fuel level and not producing the energy.
> So there are some subtle differences, I would argue, between the two. But yes, I accept your premise.[31]

NS Power agrees with the position of the DOE which stated that these various cost pressures must be taken into account by the Board in assessing the affordability of the level of DSM spending proposed by E1:

[31] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 19, 2015, pages 904-905, lines 16-22 and 1-9.

> Regardless of the reasons, the cost pressures noted above are real and must be factored into the assessment of this application. While the concept of "affordability" affords the Board some measure of subjectivity in its assessment of ratepayer impacts, the Province respectfully submits that in the context of rising cost pressures in other areas, and recognizing that more modest levels of energy efficiency savings will avoid the need for new generation capacity for quite some time, affordability means not spending any more than is absolutely necessary at this time. Further, the fact that there is no need to stave off near term capacity additions also affords the Board the opportunity to sharpen its pencil on DSM costs, and to test the efficiency of E1's efficiency measures, particularly with respect to the setting of incentives.[32]

It is noteworthy that E1 did not acknowledge other cost pressures in its Closing Submission, nor did they acknowledge that DSM would in any way contribute to such rate pressures.

5.3 NS Power Alternate Scenarios

(a) E1 submits that it "rejects the proposition that it is appropriate to file and defend multiple scenarios in a DSM Plan Application filing." What E1 fails to recognize is that the franchise holder has an obligation to provide the Board and stakeholders with other scenarios in order to justify why its proposed plan meets the requirements of the Act (i.e. that it is affordable and in the best interests of customers). The regulatory construct in Nova Scotia requires the utility to provide the Board and stakeholders with a qualitative and quantitative analysis of its Application, which E1 has failed to do.

(b) E1 asserts that the Company's alternate DSM scenarios were not advanced as plans for approval "in part based on the obvious fundamental flaws in methodology and results that are included in each of these scenarios."[33] E1 also asserts that there was an inconsistency in NS Power's alternate DSM scenario

[32] DOE Closing Submission, July 8, 2015, page 8, para 22.
[33] E1 Closing Submission, July 8, 2015, page 24, lines 28-29 and page 25, line 1.

because NS Power recommended E1 design a plan that achieved 100 GWh of energy savings per year at an annual cost of $22 million and the alternate scenarios ranged from $21.7 million per year to $36.6 million per year.[34]

E1's assertions are incorrect. First, E1 provides no Evidence of any specific "flaws" in the methodology used by either Mr. Pickles or Mr. Boutilier in connection with the purpose for which these scenarios were prepared. Second, the Company was clear in its Evidence from the outset that it was not recommending anything other than a DSM expenditure of level of $22 million per year.

NS Power provided the alternate range of DSM scenarios because E1 failed to provide the Board and stakeholders with any additional information to justify the affordability of what it was proposing and to demonstrate that lower cost alternatives were available.

5.4 Incentives

E1 states that "there has been no evidence placed before this Board that would show that incentives provided by EfficiencyOne with respect to specific measures are excessive."[35] As noted above, this statement aligns with E1's general approach in this proceeding that it does not have to provide the Board and stakeholders with any type of qualitative and quantitative analysis of its Application. What E1 fails to acknowledge is the expert evidence on the record with respect to the concerns and risks associated with E1's incentive levels. Both Mr. Drazen and Mr. Pickles testified that E1 failed to provide enough information about how it arrived at its incentive levels.[36] In addition, Mr. Pickles

[34] E1 Closing Submission, July 8, 2015, page 26, lines 22-30.
[35] Ibid, page 47, lines 11-12.
[36] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015 pages 744-745 and 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 19, 2015, pages 1024-1025.

also testified that some of E1's incentives were "far outside the range of reasonableness."[37]

Moreover, Mr. Pickles provided several examples of what he identified as "unusually high" incentives, such as the incentive level for an LED lamp, the $600 per unit incentive for adjustable speed drives and incentives for the custom program[38]. Mr. Drazen also provided the example of an incentive used in connection with an under-counter commercial dishwasher, which he testified was not necessary to incent the customer.[39]

Notwithstanding the testimony of Mr. Pickles and Mr. Drazen, E1 surprisingly goes on to state:

> ….the uncontradicted evidence before this Board has established that incentive levels of EfficiencyOne are developed using a defined methodology that:
>
> (a) Is in keeping with industry standards; and
> (b) Is subject to third party evaluation and verification.[40]

E1 provided the Board and stakeholders with information regarding its "methodology" for developing stakeholders after the close of the hearing in response to U-4. However, there was no evidence presented to establish that such "methodology" was consistent with industry standards. Indeed, there is no evidence that the process outlined in U-4 was even followed by E1 in connection with the development of the incentive budget in the E1 DSM Plan. As noted in the Company's Closing Submission, this process was not referenced in any of E1's earlier evidence. NS Power had previously submitted an information request to E1 asking it to provide its rationale and supporting analysis for its incentive levels. E1 responded by providing the dollar amount for the measure-level

[37] 2016-2018 Demand Side Management Resource Plan, Transcript, June 18, 2015, page745, lines 4-5.
[38] Ibid, pages 743-744.
[39] Exhibit E-54, Opening Statement of Mark Drazen on behalf of the Industrial Group, June 11, 2015.
[40] E1 Closing Submission, July 8, 2015, page 55, lines 26-27.

incentives modelled in the EL-RAM but offered no rationale or supporting analysis and did not refer to any E1 processes.[41]

NS Power provides the following additional comments on E1's response to U-4:

- While there are individual examples of where a portion of this work is done, it provides little evidence that it was done comprehensively.

- It does not demonstrate that E1's incentive levels and strategies were more appropriate than any other potential amounts and strategies.

- It does not provide specific evidence that the incentive levels proposed in the E1 DSM Plan are appropriate.

While E1 cites liberally from the testimony of Mr. Dunsky on the issue of incentives, it is important to recall that Mr. Dunsky confirmed that he did not develop the E1 DSM Plan.[42] In addition, when asked by the Board if he had looked at the process E1 uses to determine the appropriate level of incentives, Mr. Dunsky stated: "I haven't looked at it in a comprehensive way."[43]

5.5 DSM vs. Fuel Costs

E1 makes the following assertion that the cost of DSM is more economic than fuel, leaving the impression that DSM is somehow more affordable than fuel even in the short-term:

[41] Exhibit E-13, NS Power (E1) IR 12(g)(iv).
[42] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 16, 2015, page 339, lines 7-22.
[43] Ibid, page 485, lines 20-22. Note: The transcript incorrectly attributes this testimony to Mr. Faulkner; however, it is clear from the context that the testimony was that of Mr. Dunsky.

> The uncontradicted evidence presented in the hearing established an estimated average generation cost of 12 cents per kWh while the corresponding cost of avoiding this kWh of generation through DSM equated to less than 3 cents per kWh. By any reasonable measure, DSM investment at a cost of at or less than 3 cents per kWh is affordable to Nova Scotia ratepayers when the corresponding cost of such generation is approximately 12 cents per kWh. As a result of the Quantum Agreement, EfficiencyOne has agreed to achieve its energy and peak demand savings for an investment of 1.7 cents per kWh.[44]

NS Power submits that the above statement represents a mischaracterization and over simplification of the evidence. E1 is not avoiding system costs of 12 cents/kWh with average program costs of 3 cents/kWh. E1's derivation of the 12 cents/kWh includes generation and all other utility revenue requirements including the cost of delivery, so it is not the cost of avoided generation. In addition, 3 cents/kWh is an average DSM cost and is only realized after expressing the upfront costs over the energy saved for the 15 year life of the measures. First year costs of DSM programming as proposed by E1 are 29 cents/kWh to 31 cents/kWh.

DSM above the levels required to avoid capacity additions do not benefit customers until many years later (if at all), while the costs are experienced immediately. Indeed, as noted by NS Power in its Closing Submission[45], and demonstrated by Figure 3.8 from NS Power's Evidence[46], customers will not see the benefit of fuel savings until 2034, and then only if the energy savings are achieved as forecasted. As stated by Mr. Blunden on cross-examination by E1:

> **MR. GOGAN:** Right. So for every dollar of investment by DSM there is a corresponding energy savings?
>
> **MR. BLUNDEN:** If you live long enough, yes. The challenge is, and I think we addressed in our Opening Statement, is the savings you get from fuel are over a very long period of time. The reality is in 2016 and 2017, where customers are most concerned about affordability, we will spend, if

[44] E1 Closing Submission, July 8, 2015, page 34, lines 17-23.
[45] NS Power Closing Submission, July 8, 2015, page 43-45.
[46] Exhibit E-33, NS Power Revised Evidence, June 1, 2015, Figure 3.8, page 33

> the application's accepted, $38.5 million on DSM to save 6 to $8 million on fuel. So it'll be an incremental cost to customers in that year of approximately $30 million.
>
> **MR. GOGAN:** That's in Year 1?
>
> **MR. BLUNDEN:** And we'll do it again in Year 2 and in Year 3, that's correct.[47]

E1's position continues to be that customers should pay now for the possibility of realizing future savings. As pointed out by Mr. Blunden, DSM, in the Contract Period, does not result in customers replacing 12 cent/kWh with 3 cent/kWh as suggested by E1, rather it leads to immediate increased rate pressures.

The reality presented by the evidence in this proceeding is that there is an optimal DSM investment that can result in a balance that achieves the long-term cost savings without sacrificing short-term affordability. The Company has identified the level of DSM that the system requires to achieve this goal to be 100 GWh in energy savings and associated demand savings for the cost of approximately $22 million.

5.6 Consistency in Investment

E1 states as follows:

> A level of consistency in investment is one of the underpinning concepts of appropriate DSM Plan development and one which was considered by EfficiencyOne in the development of its 21 2016-2018 DSM Resource Plan.[48]

It is important to note that E1 provided no evidence that consistency in investment was an "underpinning concept" of DSM or that a decrease in expenditure over the three year contract period would erode the long-term benefits of DSM in Nova Scotia. Indeed, it

[47] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, page 634, lines 2-16.
[48] E1 Closing Submission, July 8, 2015, page 41, lines 20-21.

was the expert testimony of Mr. Pickles that "the level of industry capacity should rise and fall with the level of need for the DSM resource itself."[49]

The IG provides a succinct summary in its Closing Submission of the inherent problems with E1's repeated assertions on this issue:

> From the Board's perspective, it is important that the decision on the investment level and savings targets be based on evidence, not fear and speculation. We have nothing but general statements with respect to industry risks and short and long-term impacts of scaling back the DSM budget. Despite having the opportunity to provide details as to how these have been quantified, E1 failed to do so. E1 simply did not offer any evidence respecting the cost, if any, of ramping up or pausing or restarting DSM.[50]

5.7 Mid-Year Adjustments

E1 cites the following testimony from Mr. Faulkner in support of its position on the appropriateness of its incentive levels:

> And another factor that we have to consider is that prices of products change over time. And one of the reasons we need flexibility to make mid-course adjustments is because of the change of the -- you know, change in product prices over time. So if the price of LED lighting drops 50 percent over the three-year plan, we would make adjustments accordingly.[51]

NS Power notes that such detail is not currently provided in E1's mid-year adjustments. NS Power would support the provision of this type of information and recommends the Board direct E1 to provide it in its mid-year/course adjustments on a go forward basis.

[49] 2016-2018 Demand Side Management Resource Plan (M06733), Transcript, June 18, 2015, page 651, lines 19-20.
[50] IG Closing Submission, July 8, 2015, page 6, para 26.
[51] E1 Closing Submission, July 8, 2015, page 51.

5.8 Affordability

E1 states that the Board should "fundamentally reject a definition of affordability grounded largely on the "here and now" as espoused by NS Power."[52] NS Power submits that this statement is a mischaracterization of Company's Evidence. NS Power acknowledges that near-term affordability is a priority for its customers. However, the Company has stated from the outset that there needs to be an appropriate balance between short term and long term affordability. This balance is reflected in NS Power's recommendation for a DSM plan based on 100 GWh of energy savings at a cost of $22 million - a plan which supports near-term affordability by alleviating cost pressures while avoiding additional capacity requirements out until 2032. In addition, as outlined in the DOE's Closing Submission, this approach is also consistent with how the Province intended the concept of "affordability" in the Act to be interpreted as it involves "not spending any more than is absolutely necessary at this time."[53]

5.9 Inflation Rate

In addition to proposing that the level of DSM spending increase each year over the Contract Period, E1 has also requested that its DSM expenditures for 2017 and 2018 include an inflation rate of 2.21 per cent for 2017 and 2.12 per cent for 2018.[54] E1 has continually presented its DSM Plan in 2016 dollars. The fact it is seeking approval for a DSM expenditure of $116 million in actual dollars over the Contract Period was only really made clear to stakeholders on questioning by the Board.[55]

E1 has provided no evidence to justify the inclusion of an inflation rate. In fact, the totality of the Company's evidence supports a reduction in DSM spending over the Contract Period.

[52] E1 Closing Submission, July 8, 2015, page 42.
[53] DOE Closing Submission, July 8, 2015, page 8, para 22.
[54] Exhibit 68, Response to Undertakings (U-3), June 24, 2015, page 19.
[55] Ibid, page 19.

NS Power submits that the level of DSM spending approved by the Board should not be adjusted upwards for inflation. Indeed, there was significant evidence to justify a deflation factor being applied during the Contract Period – supported by price decreases relating to major components of E1's DSM plan (i.e., LED pricing), to ensure operational efficiencies and to ensure a heightened level of attention on educating Nova Scotians regarding the benefits of participation (as opposed to providing excessive supplements funded by all NS Power customers).

5.10 Form of Agreement

NS Power does not support the approval of the proposed Schedule A (Scope of Services) and Schedule B (Compensation) to the Supply Agreement attached as Attachments 1 and 2 to E1's Closing Submission. The final form of Schedule A and Schedule B (including the monthly payments) will need to be finalized and agreed upon by E1 and NS Power after the Board approves the level of DSM savings and expenditure for the Contract Period. As such, NS Power requests the Board's decision allow time for the parties to finalize Schedule A and Schedule B and make any modifications to the Form of Agreement to reflect the Board's ultimate decision in this matter.

6.0 2014 BALANCE ADJUSTMENT

NS Power, E1, the IG, the CA, the SBA, the AEC and the EAC entered into a Consensus Settlement Agreement dated as of June 16, 2015 (Non-Financial Settlement Agreement).[56] As noted by the Company in its Closing Submission, the Non-Financial Settlement Agreement provides a resolution to a number of non-financial issues in this proceeding including, the establishment of a standardized filing, performance targets and thresholds, reporting and evaluation requirements, the withdrawal of the reserve fund and the development of cost allocation and cost recovery models as well as a final rate and bill impact analysis.

The closing submissions filed on behalf of E1, the DOE and the other Intervenors all provided support for the Non-Financial Settlement Agreement.

E1 has stated that the $8.4 million DSM Balance Adjustment for 2014 (2014 Balance Adjustment), was omitted from the Non-Financial Settlement Agreement and should be included in the DSM cost allocation and cost recovery models to be discussed by the parties.[57] NS Power supports the issue of the allocation of the 2014 Balance Adjustment being included in such discussions. However, NS Power submits that there was general consensus among the parties at the hearing that the 2014 Balance Adjustment should be applied to DSM costs over the Contract Period in a way that best alleviates rate pressure. For instance, the Board could award a budget over the three year period that decreases each year (possibly encouraging operational/incentive efficiency gains year over year), the 2014 balance adjustment could be used disproportionately in 2016 and 2017 in order to levelize the customer supplemented DSM spend profile.

[56] Exhibit E-62, Consensus Settlement Agreement – E1, NS Power, CA, SBA, IG, AEC & EAC, June 16, 2015.
[57] E1 Closing Submission, July 8, 2015, page 6, lines 8-11.

In order to avoid any ambiguity with respect to the 2014 Balance Adjustment, the Company requests the Board's decision reflect the consensus on this point that the 2014 Balance Adjustment is to be applied to DSM costs.

NS Power also recommends that similar direction be provided with respect to any 2015 balance adjustment, so that such funds can be utilized for customer benefit as soon as such excess (if any) is available.

Subject to the foregoing, NS Power respectfully requests the Board approve the Non-Financial Settlement Agreement.

7.0 UNDERTAKING U-9

In his response to U-9, Mr. Whalen identified the type of information which he thought should be required from NS Power in future DSM applications to assess rate impact factors during the three year contract period. [58] The IG has requested NS Power be directed to provide this information in future DSM Proceedings[59]. DOE has also requested the Company be directed to provide information on rate pressures in future applications.[60]

A similar issue arose in the context of the 2015 ACE Plan proceeding, where the SBA requested NS Power update its revenue requirement model to provide at least a ten year total rate outlook as part of future ACE Plan filings. NS Power disagreed but indicated it would work with stakeholders to provide a five year projection. In its decision, the Board agreed with NS Power:

> Quantifying the trend of capital investments in excess of current depreciation is useful in assessing the impact on future rates, but given this is only one element of the revenue requirement, it does not provide a complete picture. The increasingly complex analysis that is now being applied is becoming a re-casting of a rate case, although in an incomplete manner.
>
> The Board finds that the increased complexity of the revenue requirement model comes at the cost of understanding its purpose. The model, in itself, should not be seen as a prediction of accurate future rates; rather, it should only be seen as indicating the cost pressures that capital expenditures have on future rates.
>
> NSPI should continue its consultations with stakeholders on how to simplify the goal, and calculation, of the revenue requirement model, using a five-year projection.[61]

[58] Exhibit 68, Response to Undertakings (U-9), June 24, 2015, page 123.
[59] IG Closing Submission, July 8, 2015, page 19, para 78(10).
[60] DOE Closing Submission, July 8, 2015, page17, para 53.
[61] NSPI ACE 2015, Decision, 2015-NSUARB-92 (M06514), pages 22-23, paras 87-89.

NS Power has no objection to providing information to assist the Board and stakeholders in future DSM applications in the same manner as information to be contained in NS Power's ACE Plan filings. As such, NS Power respectfully requests the Board not adopt Mr. Whalen's response to U-9. NS Power submits that the information outlined in U-9 is at a level of detail normally reserved for a General Rate Applications and will only add to the complexity of the process, without a corresponding benefit to the process or customers. Indeed, many of the cost pressures influencing the Company's revenue requirement and rates such as its fuel costs and capital program have separate and fulsome processes.

8.0 CONCLUSION

As set out in its Closing Submission, NS Power respectfully requests the Board:

1. Approve the Non-Financial Settlement Agreement filed in this proceeding as Exhibit E-62.

2. Not approve the Financial Settlement Agreement filed in this proceeding as Exhibit E-61.

3. Not approve the 2016-2018 DSM Plan filed by E1.

4. Direct E1 to design a DSM Plan for the Contract Period with input from NS Power that would provide annual energy savings of 100 GWh per year (Revised 2016-2018 DSM Plan) at approximately $22 million of investment and resubmit such plan to the Board for approval.

5. Direct E1 and NS Power to finalize the Form of Agreement based on the Revised 2016-2018 DSM Plan prior to resubmission to the Board for Approval.

6. Not approve E1's request to change the cost-effectiveness testing methodology from TRC to PAC for subsequent DSM plans.

All of which is respectfully submitted.