Efficiency Nova Scotia Corporation

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

- and -

IN THE MATTER OF An Application to Approve Efficiency Nova Scotia Corporation's Electricity Demand Side Management (DSM) Plan for 2012.

Closing Submission of ENSC As DSM Administrator

May 13, 2011

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1. INTRODUCTION

In this proceeding, Efficiency Nova Scotia Corporation (ENSC) has filed detailed Evidence and seeks UARB approval for the proposed Electricity Demand Side Management Plan for 2012 (the 2012 DSM Plan).

The proposed 2012 DSM Plan – the first to be filed by ENSC as the new DSM Administrator – is the result of extensive and transparent collaboration and stakeholder consultation balanced with proven experience and expert advice.

ENSC is confident that the 2012 DSM Plan will continue to build on past success by exceeding the aggressive energy savings targets recognized in the 2009 IRP Update by a significant margin while introducing new Enabling Strategies designed to enhance long-term energy savings. ENSC is committed to ensuring that the value of DSM investments are understood, embraced and broadly supported by stakeholders and that Nova Scotia continues to develop as a North American leader in energy efficiency programming and innovation.

ENSC is pleased with the broad recognition given through the hearing process to the successful transition of DSM programming from NSPI throughout 2010. While complex, this collaborative transition process has built on the past success, implementation and evaluation of DSM programming and set a stable foundation for continued growth and achievement throughout 2011 and beyond for ENSC as the new Administrator.

As recognized at the conclusion of the hearing on April 19, 2011, there is a high level of agreement with respect to the elements of the 2012 DSM Plan for which ENSC is seeking approval.[1]

[1] Hearing Transcript, April 19, 2011, Page 401, Line 9.

Evaluation and verification of the success of the 2010 DSM Plan has been positively received and is not being challenged by any stakeholder. As part of the recognized cycle of continuous improvement to improve DSM program effectiveness and overall efficiency, recommendations from these expert reviews have been and will continue to be implemented by ENSC and reported to the UARB.

ENSC is committed to ensuring the long-term success of DSM for all ratepayers and stakeholders and requests Board approval of the 2012 DSM Plan as proposed and Board acceptance of the evaluation and verification reports for the 2010 DSM programs.

2. THE BOARD SHOULD ACCEPT THE EVALUATION & VERIFICATION OF 2010 DSM PROGRAMS

The Evaluation Report of NMR Group Inc. was filed by ENSC on February 28, 2011.[2] The subsequent Verification Report prepared by Board consultant H. Gil Peach & Associates was filed March 25, 2011.[3]

Subject to noted recommendations for improvement, both NMR and Dr. Peach found that all of the 2010 DSM programs were generally well run and competently administered by NSPI and ENSC as DSM Administrator.

In his Verification Report, Dr. Peach recommends acceptance of almost all NMR results for the 2010 program year.[4]

As requested by Dr. Peach at page 7 of the Verification Report, ENSC has committed to completing a review and providing a response to the recommendations for improvements.

[2] Exhibit [E-2], 2010 DSM Evaluation Reports – Final Report, February 28, 2011 [NMR Group].
[3] Exhibit [E-3], 2010 Savings Verification Study, March 2011 [H. Gil Peach & Associates].
[4] Exhibit [E-3], *Supra* Note 3, Page 6, Recommendation #1.

The 2010 DSM savings have been evaluated and verified, and the results have not been challenged by stakeholders. ENSC recognizes and is committed to the principle of continuous improvement in DSM program design, implementation and evaluation, and requests that the Board confirm acceptance of the 2010 results as evaluated and verified.

3. THE 2012 DSM PLAN SHOULD BE APPROVED AS FILED

ENSC submits that the mix of new and existing programs outlined in the Evidence filed to support the 2012 DSM Plan, including an enhanced suite of Enabling Strategies to support continued long-term growth in energy savings across all sectors, are broadly supported by the stakeholders and experts before the Board and should be approved.

The conservatively verified energy savings from the ELI class and Codes and Standards have been appropriately estimated and inclusion in the 2012 DSM Plan is consistent with the principles and goals of the IRP and should be approved.

With respect to the proposed budget for the 2012 DSM Plan of $43.7M – a modest increase over the 2011 DSM Plan budget of $41.9M – ENSC submits that there is insufficient evidence and rationale at this critical time in the aggressive ramp-up of DSM programming to order a further increase in DSM program expenditures, particularly when the 2012 DSM Plan as filed will already deliver incremental and cumulative energy savings[5] that significantly exceed the already aggressive energy savings targets found in the 2009 IRP Update.

[5] "Incremental" refers to first-year or annual energy savings realized from the suite of DSM programs included in the 2012 DSM Plan. "Cumulative" energy savings refers to long-term, accumulated savings. As discussed in the Evidence filed as Exhibit [E-1], Page 20, Lines 24-26, "ENSC's primary goal is to meet IRP targets as a whole, both in the short term (measured by incremental energy and demand savings) and long term (measured by cumulative savings)".

3.1 The 2012 Plan Strikes the Right Balance of Energy Savings & Expenditures

As noted in the Reply Evidence filed by ENSC on April 13, 2011,[6] ENSC has given extensive consideration to various options regarding the appropriate level of program spending and energy savings in the development of the 2012 DSM Plan, including expert opinion and experience from leading sources and advice and input from stakeholders.

While all parties agree that the projected IRP targets are not "prescriptive", per se, the record is clear that electricity DSM programs in Nova Scotia have been primarily designed to ensure that DSM programming meet the electricity and demand energy savings targets set out in the IRP.

All parties and experts agree that verified non-program savings from ELI projects and savings from Codes and Standards have been properly included – for the first time – in the 2012 DSM Plan, as contemplated by the IRP itself.

The evidence is clear that the 2012 DSM Plan filed by ENSC, properly including such energy savings, meets and exceeds the incremental and cumulative energy savings targets contained in the IRP.[7]

The difference is that the 2012 DSM Plan as filed exceeds the IRP incremental and cumulative energy savings targets by spending $17M less than the original $61M budget forecast within the IRP (which does not include such ELI projects within the load forecast).

As ENSC understands the evidence that has been introduced, there are three primary concerns raised to support the proposed alternate 2012 DSM Plan investment levels that

[6] Exhibit [E-14], Reply Evidence of Efficiency Nova Scotia Corporation, Page 2, Lines 22-26.
[7] Exhibit [E-1], Evidence of Efficiency Nova Scotia Corporation as DSM Administrator, Page 11, Figure 4.1.

would result in an increased 2012 DSM Plan budget to $53.4M or $58M:[8]

(a) There is sufficient uncertainty in achieving the aggressive energy savings targets projected for 2013 and beyond and a corresponding desire to “front load” savings beyond the existing IRP energy saving targets to provide greater flexibility in future years;

(b) IRP energy savings targets should be viewed as a “floor” and not a “ceiling”, and therefore the primary focus of DSM programming should be to implement “all cost effective” energy efficiency measures that can reasonably be achieved each year;

(c) Allowing a smaller level of program-based energy savings from 2011 may be regressive and “scaling back” DSM programming could interfere with established contractors and employment and threaten the ability to further ramp-up aggressive energy savings from actual DSM programs in future years.[9]

However, the result of ordering such further increases in DSM expenditures – of either $10M or almost $15M above the proposed 2012 budget of $43.7M – to meet the same level of program energy savings as found in the 2011 DSM Plan is clear on the record: the alternate plans would spend significantly more funds only to further increase the over-achievement in 2012 compared to the cumulative IRP target of 500 GWh: from 543 GWh as proposed, to 576 GWh and 592 GWh respectively.[10]

ENSC acknowledges some of the concerns raised. There has been extensive discussion among all stakeholders of the aggressive targets required to meet the long-term IRP energy savings. However, ENSC submits the proper question for the Board is not what evidence has been filed or formal rate impact studies have been conducted to justify the

[8] Exhibit [E-12], Evidence of Mel Whalen, Multeese Consulting, Page 7, Table 2.
[9] Hearing Transcript, April 19, 2011, Pages 316-317 (Cross Examination of Dr. Peach).
[10] Hearing Transcript, April 19, 2011, Pages 342-345 (Cross Examination of Mel Whalen).

proposed budget levels in the 2012 DSM Plan, but rather, what evidence is on the record to suggest that acknowledged "uncertainties" are of such magnitude to justify ordering such significant increases in spending, when the only result is to further increase the already significant over-achievement in cumulative IRP targets – particularly so, when most stakeholders are opposed to such increased spending at this time and have legitimate concerns with respect to short-term rate impacts.

ENSC submits there is no such evidence; in fact, the record suggests that while there are shared concerns, ENSC and other parties remain confident that DSM targets can continue to be met by maintaining sufficient flexibility in program design and adjustment in consultation with engaged stakeholders and experts.

There is no evidence that the proposed 2012 DSM expenditure levels (which will modestly increase from 2011, <u>not decrease</u>) will cause problems in engagement with contractors, suppliers or other segments of the DSM marketplace thereby risking continued and aggressive ramp-ups in 2013 and future years.

The words of Dr. Peach provide a note of caution and sound experience to guide the Board in balancing these delicate concerns and challenge the suggestion that ENSC must have an "obligation" to implement all cost-effective DSM (regardless of how far this may exceed the established IRP energy savings targets):

> On the other hand, since I'm under oath here, I'll give you one example. Massachusetts has a guidance to do all cost-effective conservation. They had that similar guidance in the 1990s when I was the primary evaluation advisor for a little utility called Com Electric that serves Wareham and Cape Cod, some areas on the coast. <u>They embraced that literally and pursued all cost-effective conservation and, unfortunately, it had a rate effect and within about three years, the rates were increasing too fast. There was a ratepayer revolt</u>… <u>so there's got to be a balance and there is a time to listen to the parties</u>.

> For the overall good of the effort, there's got to be a balance so that the parties are brought along and are happy with the level of effort.[11]

Keeping in mind that the additional savings from the ELI sector and Codes and Standards are extremely conservative[12] and indeed may provide additional savings, ENSC contends that the proposed 2012 DSM Plan providing overall cumulative energy savings of 543 GWh with a modest increase in investment from 2011 to a budget of $43.7M strikes the appropriate and <u>reasonable balance</u> at this point in time, by respecting the interests and listening to the concerns of stakeholders while maximizing the continued success of cost-effective DSM programs for the benefit of all ratepayers.

3.2 Enabling Strategies

ENSC submits that there is broad support for the suite of new and expanded Enabling Strategies, as outlined in detail in Appendix A to the Evidence.[13] The expert evidence before the Board supports approval of these Enabling Strategies as a product of consultation with stakeholders and third-party experts and adoption of best practices from other leading DSM jurisdictions.

With respect to issues of cost allocation for the broad suite of Enabling Strategies, ENSC submits that it has appropriately followed the methodology previously approved by the UARB for allocation of multi-sector costs.

[11] Hearing Transcript, April 19, 2011, Page 317 (Cross Examination of Dr. Peach).
[12] See ENSC Response to Multeese IR-8, Attachment 1, "Review of Energy Efficiency Projects at New Page – Port Hawkesbury", Tom Ryan, Energy Performance Services (EPS/Canada) Inc., March 21, 2011, Table 2, Page 82 of 260, which confirms the initial savings estimates provided by NPPH were 141.24 GWh, reduced by EPS/Canada down to 124.5 GWh, of which ENSC has included a further reduced amount of 80 GWh in the 2012 DSM Plan.
[13] Exhibit [E-1], *Supra* Note 7, Appendix A, Pages 30-38.

3.3 Participation of Renters and Low Income Households

ENSC submits the record is clear that it is committed to improving the participation in DSM programs by renters and low income households.[14]

ENSC is aware of the concern raised regarding transparency of programming of benefit to this sector, and has committed to tracking, measuring and reporting energy savings achieved by renters and low-income households.[15]

3.4 Free Ridership and Spillover

ENSC will carefully consider the comments and recommendations provided by Dr. Peach regarding his evaluation of free ridership and spillover.

With respect to continued refinements in the process of how free ridership and spillover are assessed and incorporated into DSM planning and reporting, ENSC agrees with the suggestions put by Board Counsel to the ENSC Panel on cross-examination that this process "is in Efficiency Nova Scotia's hands" and is not something that requires specific UARB approval.[16]

4. TRC TEST SHOULD BE APPROVED AT PROGRAM LEVEL

ENSC submits that all experts before the Board agree with the Evidence and justification filed by ENSC supporting the request to apply the TRC screening test at the program level, and to introduce reporting of the PAC test results.

In addition, no stakeholder has challenged or opposed this requested change, and the record is clear that there is broad support for the suite of DSM programs contained in the

[14] See, for example: Exhibit [E-1], *Supra* Note 7, Pages 25-26, ENSC Response to CA IR 7 and CA IR 10, and ENSC Response to Multeese IR-17.
[15] See ENSC Response to Multeese IR-17, Page 2, Lines 7-8.
[16] Hearing Transcript, April 18, 2011, Page 162, Lines 7-20.

2012 DSM Plan and recognition that the TRC and PAC test results demonstrate that the 2012 DSM Plan programs are cost-effective and offer significant benefits to electricity customers.[17]

5. SEGREGATION OF NON-ELECTRICITY PROGRAM COSTS

ENSC is fully committed to ensuring that no cross-subsidization occurs of non-electricity efficiency programs from approved DSM funds. In addition to confirmation of the segregated accounting of DSM funds received from electricity ratepayers, ENSC has committed to seeking expert assistance in determining the most effective and transparent allocation methodology for the sharing of common expenses that benefit both electric DSM and non-electric efficiency programs.

As noted and supported by Mr. Whalen, this methodology will be presented to the Board later in 2011 for review and approval. ENSC notes that no stakeholder has raised concerns with the Multi-Fuels Mandate as presented by ENSC in Evidence, or objected to the proposed steps that ENSC will take to segregate and allocate costs.

6. PDWG AND STAKEHOLDER CONSULTATION

ENSC is committed to broad, transparent and effective stakeholder consultation and input. ENSC is pleased with the support noted by various stakeholders of its transparent and collaborative consultations with stakeholders developing the 2012 DSM Plan[18] – as intended by the Board.

[17] See, for example, Exhibit [E-13], Evidence of Tim Woolfe, Synapse Energy Economics, Page 9, Lines 20-26, where Mr. Woolfe comments, "In addition, the efficiency programs currently being offered by ENSC are very cost-effective and offer significant benefits to electricity customers and society in general."
[18] See, for example, Exhibit [E-17], NPB Opening Statement, Page 1.

ENSC sees continued value and support in having the PDWG continue throughout 2011, as ENSC engages both the PDWG and broader stakeholders on necessary changes to the PDWG or creation of a new stakeholder process.

ENSC submits that there is expert and stakeholder support for this process, and that it should be approved by the Board.[19]

7. PROPOSED CONSIDERATION OF A MULTI-YEAR PERFORMANCE-DRIVEN REGULATORY MODEL

The Evidence filed by ENSC in support of the 2012 DSM Plan contains a request for the UARB to give approval to engage the Board, stakeholders and their experts in 2011 in an assessment of the options for implementing a multi-year performance-driven regulatory model that would move beyond the current regulatory framework focused on pre-approval of one-year annual DSM plans.[20]

In his evidence filed on behalf of Board Counsel, Mel Whalen provided tacit agreement to this proposal by ENSC, subject to confirmation "that the Board can accept a performance based model".[21]

During cross-examination of the ENSC Panel, the Board Chair provided comments with respect to the preliminary issue of whether the existing legislation governing ENSC and regulation of DSM would allow for "performance-based regulation":

> **THE CHAIR:** Seems to me an early inquiry you have to make is whether the **Public Utilities Act** allows it. Basically, the **Public Utilities Act** allows us to regulate those we regulate under the **Public Utilities Act** on a cost recovery basis, which is the way we regulate you folks. And there's no mention in the Act of any latitude with respect to performance-base regulation, as, for example, there is in the **Gas Distribution Act**, which

[19] See, for example, Exhibit [E-12], *Supra* Note 8, Page 3, Lines 5-6.
[20] Exhibit [E-1], *Supra* Note 7, Page 29.
[21] Exhibit [E-12], *Supra* Note 8, Page 2, Lines 26-28.

> specifically allows it.
>
> So I would think high up on your list of things to do would be to see whether you need legislative relief before you press on with this fairly extensive consultation.[22]

In this submission, ENSC intends to clarify, for the Board and stakeholders, what it seeks to review in the requested consultation process that should be approved.

ENSC is not proposing to move away from the established "cost recovery" regulatory model of rate making embedded within the *Public Utilities Act*, for the collection of DSM expenditures from ratepayers.

ENSC agrees that the current *Public Utilities Act*, and further the *Efficiency Nova Scotia Act* ("*ENSC Act*"), do not provide for the implementation of what are known as performance-based rates ("PBR") [23] to recover DSM expenditures.[24]

Further, ENSC would agree that its status as a non-profit corporation without shareholders, independent from both government and Nova Scotia Power Inc (as a profit-making utility), is contrary and not applicable to the underlying rationale of performance-based <u>rates</u> that are designed to provide financial incentives (or penalties) beyond cost recovery and rate of return to a for-profit entity to maximize efficiencies that must then be shared between rate-payers and shareholders.

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[22] Hearing Transcript, April 18, 2011, Page 167, Lines 1-15.

[23] Almost all jurisdictions that have implemented PBR within regulation of electricity rates have done so within the context of deregulation of the electricity sector and multiple utilities competing in an open access market. The hallmark of PBR is the change from traditional reliance on approving test-year cost of service plus an appropriate rate of return, to flexible longer term rates that provide an <u>economic incentive</u> to a <u>for-profit</u> utility to maximize efficiency and then <u>share the benefits</u> with both ratepayers and its shareholders.

[24] The *ENSC Act* is clear that while the *Public Utilities Act* applies to the supervision of ENSC, the Corporation is not entitled to recover any rate of return through its assessments on ratepayers (as would normally be permitted in the traditional cost recovery model). *ENSC Act*, section 38(a).

Rather, the intent and focus of ENSC to consider options for change to the existing regulatory framework, which is focused on annual pre-approval of one-year DSM plans, are the possible advantages and efficiencies available to all stakeholders in moving to a multi-year, performance-driven regulatory model.

ENSC submits that the *ENSC Act* explicitly authorizes the UARB to consider and approve such a multi-year framework, as found in section 35:

> **35.** The Corporation shall submit to the Review Board for approval an electricity demand-side management program for one or more calendar years, at the time and in the manner required by the Review Board, commencing with the program for the 2012 calendar year or such later year as the Review Board determines.[25]

ENSC submits there are numerous benefits to consider for all stakeholders in assessing such a future model, particularly once the initial five years of DSM programming have been established and the aggressive ramping up has been achieved and evaluated.

Parties recognize the administrative burden, both financially and in terms of time and human resources, of annual regulatory filings.

ENSC, as DSM Administrator, is currently unable to capture greater economic efficiencies by the requirement to enter into annual contracts and agreements with suppliers and contractors for implementation of DSM programming, rather than developing longer-term, multi-year agreements providing greater flexibility to ENSC and certainty for suppliers.

[25] *ENSC Act*, S.N.S. 2009, c.3, section 35.

A multi-year framework will also provide necessary flexibility for ENSC to respond to significant program adjustments that may be required to respond to external changes in government policy or funding that may occur.[26]

As such, the approval that ENSC is seeking from the Board at this time is to engage in necessary consultation and dialogue to further assess the available options for implementation of a future multi-year regulatory model, which will still provide "cost-recovery" rates to pay for DSM expenditures and will allow greater flexibility and performance in the delivery of DSM programming by ENSC.

8. CONCLUSION

The 2012 DSM Plan continues to build on Nova Scotia's achievements in energy efficiency while setting a path for long-term success, and should be approved.

The 2012 DSM Plan addresses the directives and recommendations of the UARB in its 2011 DSM Plan Decision. The 2012 DSM Plan also incorporates or responds to a wide range of suggestions from stakeholders and leading DSM experts.

The Board should not order ENSC to increase the budget expenditure for the 2012 DSM Plan to increase program energy savings and further exceed IRP targets at this time, and should approve the 2012 DSM Plan as filed.

In the words of Dr. Peach, "If the ratepayer doesn't believe in the project, there won't be a project".[27]

[26] For example: the federal government announcing the closure of the Existing Houses incentive program to new entrants in March 2010, the later reinstatement of federal incentives to the Existing Houses program announced in the March 2011 federal budget, or the recent announcement by the federal government on April 16, 2011, to delay implementation of the general service lighting requirements in the *Energy Efficiency Regulations* by 2 years to January 1, 2014.

[27] Hearing Transcript, April 19, 2011, Page 322, Lines 18-19.

ENSC has effectively and responsibly balanced the competing concerns raised with respect to achieving reasonable, cost effective energy savings.

In total, the 2012 DSM Plan combines innovation with proven approaches, experience gained from within Nova Scotia and from other leading North American jurisdictions, and it strives for ambitious energy efficiency and conservation goals while remaining financially responsible and supported by stakeholders.