STEWART McKELVEY
LAWYERS • AVOCATS

Purdy's Wharf Tower One, 900 – 1959 Upper Water Street, P.O. Box 997
Halifax NS B3J 2X2 Canada tel: 902.420.3200 fax: 902.420.1417 stewartmckelvey.com

Nancy G. Rubin
Direct Dial: 902.420-3337
nrubin@stewartmckelvey.com

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Nancy McNeil
Regulatory Affairs Officer/Clerk
Nova Scotia Utility and Review Board
3rd Floor 1601 Lower Water Street
PO Box 1692 Unit "M"
Halifax NS B3J 3S3

Dear Ms. McNeil:

Re: Efficiency Nova Scotia DSM Plan 2012 – E-ENSC-R-10/Matter No. M03669

These submissions are filed on behalf of the Avon Group in accordance with the timetable established by the Board.

As this is the first Demand Side Management (DSM) Plan submitted by Efficiency Nova Scotia Corporation (ENSC) the Avon Group wishes to note with appreciation the efforts that were made by ENSC to consult with stakeholders through a number of public stakeholder sessions as well as to dialogue and respond to inquiries even outside the formal IR process.

In this submission, the Avon Group offers comments on the following issues:

1. The overall program budget and the inclusion of non-program savings.

2. Allocation issues.

OVERALL BUDGET

The Avon Group is supportive of the overall program budget as filed with its recognition of non customer-funded program savings from Codes and Standards and the extra large industrial class.

The overall program budget for 2012 is $43.7 million, up marginally from the 2011 budget of $41.9 million. The incremental savings targets are 233.6 GWh and 44 MW[1] among the highest in North America as a percentage of utility revenue and demand.

While some Intervenors and consultants may argue for higher spending levels, the 2012 DSM Plan as filed, exceeds the savings targets which were included in the 2009 IRP update.

[1] Figure 5.1, p.14, Evidence of ENSC, Exhibit E-1.

The IRP targeted cumulative energy savings for 2012 is 500 GWh; the proposed plan results in 543 GWh savings. The 2012 cumulative demand savings is targeted in the IRP at 101 MW; the proposed plan results in savings of 100 MW.[2]

As noted by Mr. Dunskey, the level of savings and speed of ramp-up, "exceed anything envisaged in other leading North American jurisdictions".[3]

To date, previous DSM Plans were focused on programs funded by electricity ratepayers in order to meet the IRP target. As demonstrated in the Dunskey report and the ENSC evidence, the IRP targets were never intended to rely exclusively on customer-funded DSM programs. The 2009 IRP update assumed energy savings from all sources:

> *All DSM is assumed to be included in the projection used in the 2009 IRP. This encompasses conservation efforts and investments occurring both inside and outside of customer funded DSM programs, including:*
>
> - *consumer behaviour and investments,*
> - *energy efficiency codes and standards,*
> - *other agencies,*
> - *NSPI, and*
> - *DSM Administrator.*[4]

With that assumption, ENSC is including a conservative estimate of savings from the adoption of energy-efficient codes and standards as well as savings from energy-efficiency projects (or at least, a portion thereof), as implemented by NewPage, one of the the extra large industrial customers of NSPI.

Figure 5.1 of the ENSC evidence (Exhibit E-1) lists the savings attributed to these two non-program sources. Mr. Crandlemire noted that the approach taken when accounting for these ELI projects was a "conservative on conservative estimate."[5]

While the thrust of the questions by the Ecology Action Centre were with a view to establishing that savings outside customer-funded efficiency programs should not reduce the DSM budget figure drawn from the IRP, none of the experts adopted that position. Indeed, the EAC consultant, Glenn Reed concurred that it was appropriate to include savings and that the savings estimate was "conservative".

Board consultant, Tim Woolf of Synapse likewise agreed with the manner that ENSC included the savings from other sources as part of the 2012 DSM Plan. Going forward, he recommended

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[2] Figure 4.2 Cumulative Savings Targets and Results 2008-1012, ENSC Evidence, Exhibit E-1, p.12.

[3] Evidence of ENSC, Exhibit E-1, Appendix C, Electricity DSM Review, p.21.

[4] 2009 IRP Update Report, Appendix D, Attachment 1, p.50, as cited in Evidence of ENSC, Exhibit E-1 at footnote 13, p.15.

[5] Transcript, p.129.

a closer look at savings that can be achieved from outside sources versus program budgets so that there can be more transparency in the estimates. George Foote, retired from the Provincial Departments of Energy and Environment, also concurred that inclusion of savings from outside customer-funded DSM was appropriate and consistent with the IRP. Finally, Board consultant Mel Whalen also expressed satisfaction that the savings from the large industrials and codes and standards were appropriately estimated and included in the 2012 DSM Plan. Mr. Whalen also observed that the ELI savings estimate appeared to be a very conservative number with the preliminary work done and that further verification would follow with the potential for further savings in years to come.

The Avon Group supports the current budget and recommends the Board confirm that the inclusion of non-program savings is appropriate.

ALLOCATION ISSUES

- **Large Industrial Customers**

In its 2009 decision approving the 2010 DSM Plan and Rider, the Board accepted NPSI's proposal that there be two filings per year on DSM (2009 NSUARB 116). As in this case, the spring filing consists of the DSM Plan for the following year with the projected costs of the 2012 Plan. This proceeding also allocates the cost of the programs to the various customer classes.

The fall filing includes an updated sales forecast and determines the DSM charges per class.[6] This year, for the first time, in addition to including the DSM charges per customer class on a ¢/kWh basis for the 2012 Plan, the October filing will also include a true-up for 2010. At that time, audited 2010 expenditures will be submitted.

The Board's 2009 decision approved the general methodology to allocate DSM program costs i.e. 25% of the overall budget is characterized as system benefits and allocated to all customer classes, (except for the Mersey system rate), in accordance with the Cost of Service Study methodology of NSPI, reflecting the allocation of generation rate base.[7] The remaining 75% of the DSM costs are characterized as "class and participant benefits" and assigned to the participating classes "in proportion to the amounts invested in each class."[8]

The methodology for the direct assignment of program costs (i.e. the class/participant benefits) is a matter of concern to the Avon Group. None of the individuals at Efficiency Nova Scotia or its consultant, Mr. Dunskey had experience or were qualified in cost allocation.[9]

ENSC indicated in response to questioning that the development of program costs and assignment of those costs to the large industrial class was based on judgment, knowledge of the market and tempered by 2010 participation, but acknowledged it is "more than estimate than a scientific projection". The starting point was the 2010 participation.[10]

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[6] Transcript, p.89.

[7] Transcript, p.91 and 2009 NSUARB 116.

[8] Transcript, p.92.

[9] Transcript, pp.90-91.

[10] Transcript, p.93.

In its application, ENSC proposes to allocate approximately $1.473 million to the large industrial class.

This compares to an actual expenditure of $527,908 in 2010 and approximately $1.464 million in 2011.[11]

Given the reliance on 2010 experience, it is therefore important to look at the take-up of available programs by the large industrial customers in that year. In response to Avon IR-4, ENSC provided a variance analysis respecting the 2010 spending on the large industrial class.[12]

It is noted that just prior to the hearing ENSC discovered an administrative tracking error resulting in program spending being attributed to the large industrial class when it should have been attributed to the medium industrial class. As a result, an updated response to IR-4 was filed.[13] The total actual 2010 expenditures for programs (subject to audit) were approximately $528,000 in 2010 compared to the forecasted expenditures of $800,000 plus ENSC start-up and transition costs of $41,000 which had not been budgeted.

The 2012 program costs that have been assigned to the large industrial customer class relate to three categories: Prescriptive Rebate program, Custom program as well as the Enabling Strategies. The C&I Custom program is for any commercial or industrial customer that completes energy studies and audits and implements efficiency measures in their facilities.[14] The C&I Custom program includes a new construction component to offer incentives to create more efficient buildings.[15] The Prescriptive Rebate program (which also includes a new construction component) comprises the "Smart Lighting Choices" and Business Energy Rebates (BER). The BER program offers incentives in the form of rebates for eligible products like lighting, motors, drives, HVAC, refrigeration and compressed air.[16] Those programs are available to any of the six tariffs that comprise the general and industrial customers of Nova Scotia Power as well as municipal customers (and their customers) and certain residential customers who are on charitable rates such as hockey rinks.[17]

The ENSC Panel was questioned as to the basis for assigning costs for programs targeted for new construction to the large industrial customers. Mr. Faulkner struggled to explain how NSPI could provide a breakdown for the 2011 plan where ENSC was not able to do so in response to IR; ultimately, he stated that ENSC would look back at 2010 participation to estimate the 2012 program cost assignment to large industrials for new construction.[18] In response to Undertaking U-1, ENSC estimated the new construction component of the C&I Custom and Prescriptive rebate at 20% of the overall program costs or approximately $295,000.

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[11] ENSC (Avon) IR-7, Attachment 1, revised, column J, Exhibit E-16.

[12] ENSC (Avon) IR-4, Exhibit E-5.

[13] Exhibit E-15.

[14] Transcript, p.102.

[15] Transcript, p.103.

[16] Transcript, p.103.

[17] Transcript, pp.103-104.

[18] Transcript, pp.105-109.

ENSC, however, has no evidentiary basis to support the take-up of these programs (and expenditures in relation to) large industrial customers. The figure is nothing more than an estimate or a guess. ENSC has no record of any large industrial customers which in 2010 accessed any of the Business Energy Rebate program, the Core Performance path or the While Building path of the Custom program.[19] At the time of preparing the 2012 Plan, ENSC was not aware of any new construction projects planned by large industrial customers.[20]

As far as the number of large industrial participants who took advantage of the "Smart Lighting Choices" program, this information is simply not available, as customer rate codes are not collected at the point of sale for eligible products.[21]

There are between 30-35 customers who take energy under Rate Code 23, the large industrial class, and while Mr. Faulkner believed that a couple of medium industrial customers had migrated to the large industrial class, ENSC is not projecting any increase in the number of customers in the large industrial class in 2012.[22]

The 2012 programs are essentially a continuation of the programs that were begun in 2010, and continued in 2011 for large industrial customers. Notwithstanding, in 2012, ENSC has earmarked $1.473 million to be recovered in rates from these same 30-35 large industrial customers.[23] Program expenditures in 2010 were about $22.71 million; in 2012 the Plan is $43.7 million, an overall increase of 192%. ENSC has not doubled its overall program costs since 2010 but has increased the assignment of costs to the large industrial customers by almost triple.[24]

In response to questioning, ENSC could not point to any new or additional information that would warrant such an increase in the assignment of costs to the large industrial customers:

> **Mr. Faulkner:** ... I can't give you a breakdown on exactly why it's more than double, but it's a combination of things, plus the availability of more programs and the expectation that those customers will participate at least in the proscriptive program.
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> **Ms. Rubin:** I'm struggling to find the evidentiary basis for your expectation or your judgment. Is there an evidentiary basis that you can point to?
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> **Mr. Faulkner:** No, it's a forecast based on judgment, so we don't really have an evidentiary basis in terms of, you know, like I said, a scientific analysis. But, you know, we look at the market, we look at the customers, we look at the activities that our staff are doing in those areas, and we try to make our best estimate based on that.

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[19] ENSC (Avon) IR-5, Revised, Exhibit E-16.

[20] Transcript, p.110.

[21] Avon IR-5, Exhibit E-16.

[22] Transcript, pp.112-113.

[23] Exhibit E-16, Table 2, line 16, column I.

[24] $1.473 million ÷ $528,000 = 279% and see Transcript, pp.117-118.

> **Ms. Rubin:** But what information do you have as to allocation among the six or more customer classes who can take advantage of the C&I programs?
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> **Mr. Faulkner:** As I said, those are based on our judgment, really, more than anything else, and, again, our consultants would look at the various measures and which ones are more applicable to the large industrial class, for example. Maybe compressed air has more viability in the large industrial than it would in, say, commercial, but it's really based on a judgment of a variety of staff and the activities that we've seen to date.[25]

Unlike the residential class which will see continued growth in the sector, the large industrial class customer count is virtually flat. There is no evidentiary basis to assume that there will be new construction among this group or that there will be such significantly greater uptake in relation to the existing programs that a threefold increase in the assignment of costs is warranted.

Before filing the 2012 DSM Plan, no steps were taken to survey the 30-35 large industrial customers for their planned DSM programs in 2012. The Avon Group recommends that, in an effort to more accurately assign costs to the class, the two account managers with specific responsibility for these customers be directed to make inquiries as to specific plans which would help inform the development of future years' DSM plans and allocation of costs to the large industrial customers.

Furthermore, the Avon Group is concerned with respect to tracking of program expenditures. In this proceeding already, it was demonstrated how an administrative error in relation to a single customer had a significant effect on the variance analysis. While the custom program would, by necessity, have documented expenditures because of the qualifying criteria and audit requirements, the same cannot be said for all of the other programs such as Smart Lighting which are, apparently, not even tracked. All this leaves a lingering doubt regarding the reliability of the tracking and validity of the true-up.

Concerns regarding the accuracy of the true-up make it all the more important that the assignment of costs in this proceeding be done as accurately as possible and based on the best evidence. The best evidence in this case are the actual 2010 expenditures.

The Avon Group submits that for the 2012 Plan, in the absence of evidence that there will be a take-up in relation to the new construction components and particularly given the significant impact on the large industrial customers which are so few in number, the Board ought to reduce the amounts directly assigned to the large industrial class from $1.473 million to $1.01 million. This is a proportionate increase of 192% times the actual expenditure for this class in 2010.

- **Enabling Strategies**

The allocation of Enabling Strategies is a matter of concern for the Consumer Advocate which represents the residential class. The allocation of Enabling Strategies by ENSC was consistent with the Board's decision last year on Education and Outreach costs and based on the number of customers in each class. The 2012 DSM Plan includes investments in eight Enabling

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[25] Transcript, p.120.

Strategies: Education and Outreach, Development and Research, Innovative Financing, Codes and Standards, Building Energy Labelling, Training and Quality Assurance, Renewable Heating and work with local governments.[26] As is evident from the discussion of these programs in Appendix A, in large part, they continue to support the residential and commercial sectors. The Consumer Advocate had advanced this same issue in relation to the 2011 Plan and in the Board's decision, it noted that the methodology to distribute multi-sector costs on a customer basis was an approved methodology and was being applied in a way that had been approved and the Board chose not to revisit the issue.[27] Given the increase in costs and the expansion of the programs, it is understandable why the Consumer Advocate would wish for the issue to be revisited.

However, in the absence of reliable evidence demonstrating a more equitable assignment, the Avon Group submits that this is an issue to be addressed when the overall allocation of costs is reviewed upon the expiry of the Board's decision approving the 2009 Settlement Agreement. Mr. Whalen, also recommended that any reallocation discussion regarding Enabling Strategies should await the 2013 review. This could take the form of a separate proceeding similar to a rate design or could be part of settlement negotiations and hopefully an agreement.[28]

ADDITIONAL POINTS

It became apparent during the hearing that ENSC has assumed responsibility for efficiency programs beyond electricity. One can reasonably expect there will be overlap in service delivery and administrative overheads in relation to these multi-fuels. Costs which would otherwise be solely borne by electricity customers could be shared and billed to the Province for recovery in the general tax base. The Avon Group recommends that the Board direct ENSC to prepare a report with respect to the allocation of shared services, quantifying the impact upon 2012 programs and its proposal for allocations going forward. The Avon Group further recommends that such report be made public and accessible to intervenors and interested parties for comment and debate as appropriate.

Secondly, there was much discussion in the hearing with respect to rate impacts. Clearly, this is a matter of concern for our clients as well as other intervenors. It is exceedingly difficult to evaluate the impact of various proceedings when they are developed in a silo. In the ACE Plan filing, NSPI resisted even a high level analysis of rate impacts. Here, ENSC did not include in its Table 3, Preliminary Allocation Program Costs Among Rate Classes, a further column as in previous filings with a Sales Forecast column and DSM Program Cost Recovery (PCR) column in ¢/kWh. Even had this information been forthcoming, it only tells part of the picture, as Mr. Whalen sought to demonstrate in his "back of envelope" results provided in Response to Undertaking U-2 and U-3.

As the undertakings were filed following the close of evidence, the Avon Group was unable to ask questions regarding the analysis. These would have included the sources of the marginal cost assumption, the inclusion of demand-related costs and load assumptions.

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[26] ENSC Evidence, Exhibit E-1, pp.27-28 and Appendix A, pp.30-43.

[27] Transcript, p.358.

[28] Transcript, pp.364-365.

While little weight can be put on this quick exercise, the Avon Group recommends that in future, where possible, rate impacts should be included as part of any filing such that customers better understand the import of any filing and decision.

CONCLUSION

On behalf of the Avon Group, we recommend:

(a) the budget as filed, be approved, subject to either a deduction for budgeted DSM expenditures assigned to the large industrial class (or a reallocation). It is recommended that 2012 program costs should be lowered from the amount of $1.473 million to $1.01 million consistent with the percentage increase from 2010 actuals;

(b) the Board should confirm the approach to include non-program savings to meet targets;

(c) ENSC should be directed to liaise directly with its individual large industrial customers for more accurate information respecting plans for future years and provide evidence justifying its assignment of costs to the large industrial customers;

(d) the allocation of multi-sector costs on the basis of customer accounts should be confirmed for this proceeding;

(e) the Board should carefully scrutinize shared services and the allocation of administrative overheads as ENSC has assumed responsibility for multi-fuels; and

(f) the Board should consider the utility of information with respect to rate impacts to be included as part of future DSM filings.

Respectfully Submitted,

Nancy G. Rubin

NGR/lmc

cc Bruce Outhouse, Q.C.
ENSC
Intervenors