M12282 - EfficiencyOne

Application for a Benefit-Cost Test

Opening Statement of Patrick Bowman

EfficiencyOne ("E1") is proposing to adopt a new primary test for conducting Benefit-Cost Analysis ("BCA"), and related matters, such as the key discount rate input into the BCA calculation.

E1's Application on BCA addresses a valid concern in Nova Scotia – the previous version of BCA used the Total Resource Cost ("TRC") Test, which was unbalanced. It includes all costs typical of the TRC test (paid by the utility plus customer), but only included the benefits associated with the utility costs, not the customer cost savings.

E1 could have addressed this issue with its BCA in one of three ways. It has chosen the most inferior of the three options.

The first option would have been to keep the TRC test but adopt the standard practice of including benefits that the customer experiences into the Benefits side of the BCA. This option may be the simplest, but it would still suffer from two major weaknesses.

- First, it would continue to measure a complicated hybrid of the combined utility/customer perspective, without actually measuring either one accurately. For example, adopting a standard TRC test nets out utility incentives paid in the calculation (with the customers benefitting from the incentives), even though these are a key cost to the utility, and deeply affect its benefit:cost balance. For this reason, the TRC is rare as a primary test for BCA in Canada.
- Second, this approach would not help the Board meet its legislated requirement to consider Nova Scotia Power customer's interests – and specifically their interests *as customers* (e.g., price, reliability, etc.). The Board is required to consider this perspective in section 79L(4) of the Public Utilities Act.

The second option would be to change from the TRC test, to now add in not only customer benefits, but also a wide new range of broad societal costs and benefits that may not be directly experienced by either the DSM participant or the utility. This is the approach E1 has selected. The approach is almost unheard of in Canada, including among E1's direct peer Efficiency Manitoba. There is only one reference to another Canadian jurisdiction using this approach, and that is the now abandoned Alberta Energy Efficiency Office (which was not a regulated utility).

The third approach available to E1 would be to narrow the primary BCA, from the current hybrid TRC to remove customer-related costs such that the test now focuses primarily on the utility economics. This is known as the Program Administrator Cost Test, or PAC. This third approach was specifically suggested by the Board, and parallels the approach that has been adopted in almost every Canadian jurisdiction that uses a specific test: Manitoba, British Columbia, New Brunswick, Ontario, PEI, Saskatchewan, Newfoundland and Labrador, and Yukon. This PAC test also has the benefit of being a key part of the approach needed to fulfill the Board's role under section 79L(4) of the Act, where it must specifically assess impacts on NS Power's customers.

The PAC test is also beneficial as it permits a BCA assessment inclusive of the scale of incentives paid to customers, which are ignored in the TRC test or the E1 proposed test. It is well-understood that Nova Scotia has among the highest electricity prices in Canada, so the importance of focusing on cost-effectiveness and spending (including on incentives) at the level of the utility and its customers is particularly important.

For the above reasons, I conclude the Board should reject E1's proposed BCA approach and instead adopt the PAC test as the primary BCA test. Other tests should also be applied, in considering which DSM to pursue, including the proposed societal-focused test based on broad societal cost and benefit perspectives, as well as assessments of rate impacts, but these latter assessments should not be used as the primary BCA.

On the other matters under review, I conclude the following:

- On the **discount rate**, it is inappropriate to use a low discount rate as proposed by E1 when assessing utility resources that are complements to, or alternatives to, bulk power projects. In this manner, E1's proposal is contrary to the principles of the NSPM manual, which recommends that DSM be compared to other resources using "consistent methods and assumptions, to avoid bias across resource investment decisions". The references cited by E1 for using a low discount rate are for guiding government decision-making on policy, not utility decisions on spending. The discount rate used should continue to be NS Power's cost of capital.
- On **electrification**, which is a DSM measure, the only way to assess impacts on NS Power's customers is to include the benefits of the added revenue that will be received, as part of the PAC test. Absent including this revenue, there is basically no benefit to the remaining NS Power customers, only costs. E1's proposals for a BCA ignore the added revenue, and in effect also ignore the requirement for the Board to assess impacts on NS Power's other customers per section 79L(4) of the Act.
- I have other recommendations on diminishing the focus on producing a "balanced" plan, and on ensuring that the Participant Cost Test is used to inform the incentives being proposed at a level needed to encourage behavior, and not more. E1's BCA would provide no measurable guidance on incentive levels.

Finally, I find no persuasive evidence that the Board must restrict its assessment to DSM BCA applied only at the portfolio level. It is clear that the portfolio level is among the granularity levels that the Board must consider, but the very definition of DSM in the Act specifies that the Board must "determine" the DSM that "must be undertaken" where DSM means "activities, programs and plans". I cannot see how the Board can fulfill this mandate if only looking at BCA at the portfolio level. I have reviewed the E1 rebuttal on this matter, and I suspect that ultimately my position differs from E1's in nomenclature more than substance. To be clear - DSM should be assessed at the measure, and program, and portfolio level, and this information should be disclosed. Individual components (measures or programs) can fail the BCA and still be pursued if they are part of a coherent whole portfolio. My concern is about looking only at the portfolio level, such that the Board would miss the chance to see what programs and measures are being included that are not, on their own, cost-effective. It is important that the Board can decide whether those individual items should be undertaken on the basis of full assessments.

This same consideration applies to low-income and equity programs which I did not say should be abandoned (as suggested by E1 in their rebuttal).

Ultimately, the thematics of E1's rebuttal appears to imply that my proposals are designed to limit DSM spending, reduce E1's achievement of "high rates of savings", and achieve less electrification, energy efficiency, or GHG emissions. This is an inaccurate conclusion. It is accurate that using the PAC test will yield different metrics, and may result in different programs (which are, on net, better for NS Power customers and the rates they pay), but it will not necessarily lead to less investment in DSM. In many cases, the PAC test will support larger investment, and in the process guide DSM investments to activities that yield substantial rate benefits, not only diffuse societal benefits. In cases where the strict PAC BCA points to lower levels of investment, the Board may still elect to undertake more programming, but it would be doing so clear-eyed about ratepayer investment being used to pursue societal benefits, despite an overall net cost and upward rate impact to NS Power's customers.