CC/MIPUG-1 Reference: Pdf Page # 7

Preamble:

The Evidence states: "EM does not include cumulative savings in its target calculation but does include codes and standards".

Question:

a) Please explain more fully what is meant by the statement – "EM does not include cumulative savings in its target calculation".

b) Please outline Mr. Bowman's understanding as to the codes and standards savings included in the target calculation.

Rationale:

To better understand MIPUG Evidence.

Response:

(a)

The Efficiency Manitoba plan focuses on actions in a given year and does not include the effects of programs operated in past years and the related savings which lead to cumulative savings already reflected in the base load forecast.

(b)

The codes and standards savings are set out at pdf page 513 of 591 of EM's filing (Attachment 3) which shows 88 GWh in 2020/21, 103 GWh in 2021/22 and 108 GWh in 2022/23. These are due to actions occurring in the year (e.g., a customer installing a high efficiency device due to a code requirement). These are the only codes and standards included in EM's plan.

In the target calculation, it is Mr. Bowman's understanding that the target is derived in PUB/EM I-45a, based on a denominator of the reference electrical load (GWh). That IR relies upon the 2018 Electric Load Forecast, which is in turn based on 2017 actual loads. As such past codes and standard activities are included up to 2017. The activities occurring in 2018 to 2022 would be taken into account by Hydro's load forecast department in producing the load forecast (since these activities are required by code). However, under Hydro's approach, the tendency has been to report these same savings as part of the DSM plan. In order to avoid double counting, the codes and standards savings due to activities occurring after 2017 are added-back to the load forecast prior to applying the DSM plan.

Unfortunately, in the case of the calculation at PUB/EM I-45a, it appears that there may have been an error made by EM in adding back 160 GWh to 2019/20, 224 GWh to 2020/21 and 278 GWh to 2022/23, as these amounts should have then been subtracted as part of applying post-2017 DSM plans. Instead, EM has only applied the effects of the 2019/20 DSM plan, which it appears does not capture these cumulative codes and standards savings.

CC/MIPUG-2 Reference: Pdf Page #s 10, 21 and 22

Preamble:

The Evidence states (page 10): “the latest reported marginal values for Manitoba Hydro (as shown in section 3.3 below) indicate a long-term marginal value for bulk power resources of only 4.39 cents/kWh”.

The Evidence also states (page 22): “If a residential kWh is saved through DSM, 8.00 cents of revenue is lost to the system. This may be replaced by some opportunity export revenue in the near term and some avoided import costs during droughts or avoided generation and transmission costs in the long-term, but as of 2017/18, the long-term levelized value of this was 4.96 cents”

Question:

a) Please confirm that the referenced 4.39 cents/kWh does not include any allowance for transmission or distribution marginal values.

b) Please explain how the 4.96 cents was derived from the marginal values set out in the table at the top of pdf page 21.

Rationale:

To clarify the basis for statements in the MIPUG Evidence.

Response:

(a)

Correct. This value was used because there is minimal if any immediate or short-term marginal value to transmission or distribution load reductions – the derivation of these wires based marginal values is primarily related to long-term infrastructure deferral and is likely of limited value during the first five years, which was the focus for the cited paragraph.

(b)

4.96 cents/kWh is the sum of the generation marginal value (4.39 cents/kWh) and the transmission marginal value (0.57 cents/kWh). As noted in the response to part (a) above, this is likely an overstatement as it includes transmission marginal values that are likely to only arise in the longer-term.

CC/MIPUG-3 Reference: Pdf Page # 11

Preamble:

The Evidence states: “the imposition of the EM plan in full is neither required nor cost-effective”.

Question:

Please explain more fully what Mr. Bowman means by “cost-effective” and what time frame he is using when concluding that the EM plan is not cost-effective.

Rationale:

To understand the basis for statements in the MIPUG Evidence.

Response:

“Cost-effective” is being used in the quoted sentence in the sense that the resources being acquired are the lowest reasonable cost to acquire the same amount of energy and capacity. The EM program proposed is likely not cost-effective because some higher cost programs are being operated when lower cost programs appear to not be maximized, and because no comparison has been done on alternative approaches to acquiring the same amount of power, such as through other renewable generation.

Further, no justification has been made as to whether the power is actually required to supply the system at the lowest reasonable rates – this is inferior to even the NFAT framework (which the PUB highlighted as inadequate) as the NFAT did assess impacts on rate levels of alternative supply options (even if that list of supply options was limited in that it failed to consider DSM).

CC/MIPUG-4 Reference: Pdf Page #s 15 & 16

Preamble:

The Evidence states: “The PUB should explicitly indicate that the EM plan is intended to be tested as part of a resource acquisition model, focused on cost-effectiveness in relation to other supply options (including differently sized conservation programs).”

The Evidence also states: “The approvals should be subject to revisions to EM’s budgets coming out of a future Manitoba Hydro GRA, where resource options, supply needs, and marginal values can be tested in a model far closer to the intended IRP than can be achieved in the current proceeding.”

The Evidence further states: “Future three-year EM reviews should require appropriate IRP information, including testing of resource plans, supply options and marginal values.”

Question:

The first referenced statement from Pdf page 16 appears to suggest that a future Manitoba Hydro GRA is the appropriate forum to more broadly test resource options, supply needs, and marginal values. However, the second referenced statement appears to suggest that this “testing” should be done as part of future EM plan reviews. Please clarify what, in Mr. Bowman’s view, is the appropriate forum for this “testing” to occur.

Rationale:

To clarify statements in the MIPUG Evidence.

Response:

In the current context, there is no option (given scope, and severe information and time limits) to assess appropriate IRP issues in this proceeding. There is no option remaining to address the EM plan except at a next Manitoba Hydro hearing.

In establishing the practice and scope for future EM three-year reviews, the Board should remain cognizant of its original intent to achieve Integrated Resource Planning for all resource acquisition in Manitoba (which should include DSM activities) and require information to permit this to occur.

CC/MIPUG-5 Reference: Pdf Page # 16

Preamble:

The Evidence states: “Take the example of Regulation section 8(1)(c). This section effectively provides that a code, standard or regulation may be successful in reducing electrical consumption in Manitoba, achieving the exact intent and purpose of the EM mandate, but unless EM itself actually helped make “a material contribution” to the development of the regulation, code or standard (“material” is not a defined term), the savings are irrelevant to Manitoba’s conservation objectives.”

Question:

a) Please confirm that Regulation section 8(1)(c) deals specifically with what “savings” can be counted towards the achievement of Efficiency Manitoba’s targets.

b) Must energy savings be included in Efficiency Manitoba’s targets in order to be relevant to Manitoba’s conservation objectives?

Rationale:

To clarify statements in the MIPUG Evidence.

Response:

(a)

Confirmed.

(b)

Manitoba’s conservation objectives should be broad and met with all available tools at the lowest reasonable cost. If there are alternative approaches to achieve 1.5% savings that do not arise from EM (e.g., through actions of other parties, or through rate adjustments that Hydro requires that drive elasticity effects) these should not be ignored. The economic framework for focusing only on EM’s own actions with blinders to all other achievements of conservation is likely to be inefficient and lead to inferior outcomes. EM can be a consolidator of actions of other parties, helping coordinate or measure conservation achievements, and acting where needed, rather than solely functioning in a narrow command-and-control framework.

CC/MIPUG-6 Reference: Pdf Page # 17

Preamble:

The evidence states: “This pricing effect is why other jurisdictions such as British Columbia include conservation from elasticity effects as part of their DSM plans.”

Question:

Please confirm that in BC Hydro only includes in its DSM plan the elasticity effects from rate structures such as its Residential Conservation Rate but does not include the elasticity effects from general rates increases. If not confirmed, please provide the supporting references.

Rationale:

To clarify statements in the MIPUG Evidence.

Response:

It is generally understood that BC Hydro includes elasticity from rate design measures such as conservation rates in DSM planning and includes elasticity from general rate increases in its load forecast and Integrated Resource Planning.

The referenced paragraph indicated that impacts of elasticity that can occur from rate structures, rate design and/or other pricing impacts (carbon tax, environmental handling fees, etc.) will have effects on customer uptake, required incentive levels, payback periods and resulting energy savings and these impacts were not considered in Efficiency Manitoba’s analysis

CC/MIPUG-7 Reference: Pdf Page # 20

Preamble:

The Evidence states: “The principle of resource acquisition underpinning Manitoba DSM should support the lowest cost supplies being pursued, regardless as to the class that provides the resource.”

Question:

In Mr. Bowman’s view is “lowest cost” the only principle that that should be pursued in determining which DSM programs should be offered?

Response:

No, in Mr. Bowman’s view “lowest cost” is not the only principle that should be pursued in determining DSM program offerings. Please see the response to EM-MIPUG-I-3 for more on this.