

1 Q. Reference: Bowman, Patrick, "Electrification, Conservation and Demand
2 Management Plan Review, including Use of a Modified Total Resource Cost
3 Test," InterGroup Consultants Ltd., May 4, 2022, p. 2/20–22.

4 Hydro (and NP) should also be directed to ensure that assessments
5 focus primarily on the early years of any program. Specifically,
6 annual Net Revenue impacts should be positive from the outset or
7 should achieve zero-to-positive within no more than about 5 years at
8 the longest.

9 a) Mr. Bowman's evidence suggests that a maximum five-year term be given
10 for programs to achieve a positive net present value ("NPV"), regardless of the
11 potential long-term benefits. Does Mr. Bowman consider this proposal to be
12 consistent with generally accepted public utility practice?

13 b) Is Mr. Bowman aware of utilities in any other jurisdictions that require short-
14 term positive NPV outcomes in the evaluation of long-term investments?

15 c) How did Mr. Bowman determine that a time horizon of "...no more than
16 about 5 years at the longest" was appropriate for the evaluation of electrification
17 programming?

18 A.

19 (a) As noted in the response to TC-PUB-IC-4(a), the Island is not facing the conditions
20 of a generic public utility at this time. The Island is facing conditions of
21 unacceptable rate increases requiring massive rate mitigation efforts to stem
22 further declines in load that would only further exacerbate load and revenue issues.

23 Making investments in programs, such as large energy efficiency programs, that
24 have net costs in the near to medium term in order to yield long-term benefits can
25 be a sensible practice for a public utility.

26 At this time, however, the utility sector on the Island is not in a position to make
27 material investments in programs with this cost profile. The investment that
28 generates short-term increases for theoretical (but uncertain and potentially risky)
29 long-term benefits is Muskrat Falls. ECDM programming (particularly
30 electrification) is the opportunity to offset that economic profile on ratepayers, not
31 exacerbate it.

2021 Electrification, Conservation and Demand Management Application

1 (b) Short-term positive NPV outcomes are always desired for any investment,
2 particularly when affordability of the investment is a concern. On the Island, it is
3 not clear that the utility and their ratepayers are in a position to make further
4 investments that only pay off in the long-term.

5 In many cases, this short-term return outcome is possible for electrification and
6 energy efficiency as well.

7 For example, the Efficiency Manitoba 3 year plan 2020-2023¹ provided metrics for
8 PAC and NPV (excluding revenues) and LC over horizons of 5, 10, 20 and 25
9 years to show the impact of truncating the horizon and indicated that the PAC and
10 NPV remained positive. In this case, Efficiency Manitoba is required to meet a
11 1.5% saving target, which is legislated regardless as to rate impacts, so RIM
12 related measures were not calculated in this manner.

13 For electrification programming, immediate and positive benefits can arise under
14 every relevant metric (PAC, RIM, NPV) through greater offering of interruptible
15 energy to customers who can make use of it at prices set any amount above the
16 relevant export market benchmark. Examples could include further additions of
17 electric boiler capacity to large institutional buildings and industrial customers.

18 (c) While immediate benefits would be preferred, there is the possibility that some
19 investment will be needed on the part of the utility that may take some time to
20 recover, before electrification benefits begin accruing to all Island customers.
21 Limiting the horizon to five years is a judgment based on a reasonable threshold
22 between initiatives that can provide rate mitigation benefits in a time horizon that
23 is still relevant to helping manage the Muskrat rate shock, and not too long as to
24 get into investments that are far more speculative. In general, NPV assessments
25 are far more driven by results in the early years, and later years are of discounted
26 importance. Once a program takes 5 years or more to turn positive, it is often the
27 case that the program's returns overall can be quite sensitive to assumptions and

¹ MIPUG-EM-1-1r(Revised) at <http://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2020-em-3-yr-plan/em-int-ex/mipug-3-mipug-em%20i-1-18r.pdf>

2021 Electrification, Conservation and Demand Management Application

- 1 forecasts of things like export prices, etc. and as such may be not only too late to
- 2 contribute materially to rate mitigation, but also too risky.