Q. On page 3 of the Application [paragraph 8] Hydro notes that "the mTRC test is consistent with 1 2 sound utility practice and tests previously approved by the Board for customer CDM programs" 3 and that "Consistent with the TRC test, a result of 1.0 or greater indicates that a program is costeffective from both a customer and a utility perspective." (Schedule 1, page 2) 4 5 a) Please provide all inputs used to calculate an mTRC ratio and indicate the basis for Hydro's 6 derivation of those values (e.g., how does Hydro estimate the customer benefits of owning an EV, or other energy efficiency improvement?). 7 8 b) Please confirm that an mTRC test does not in fact calculate whether the measure is 9 beneficial for the customer and for the utility individually, but only whether the measure is beneficial for the customer and utility collectively? Specifically, confirm that a program that 10 11 had exceptionally good customer cost profile, but poor utility economics could still pass with 12 an mTRC of above 1.0 (or even 2.0). c) For each TRC and mTRC quoted, please also provide the metrics for utility economic 13 14 perspective (PACT), for participating customers (PCT) and for ratepayers overall including non-participants (RIM) (e.g., for Schedule L, Table L-6 and L-7). 15 16 d) Please confirm that programs which have a positive mTRC will not necessarily lead to lower rates for non-participants in any given year, or even in all future years. If not confirmed, 17 please provide a detail description supporting the answer, including calculations. 18 19 20 21 Α. a) For transportation electrification, the modified Total Resource Cost ("mTRC") test calculation would include customer benefits of owning an electric vehicle ("EV") versus a 22 gasoline powered vehicle; this includes fuel and maintenance savings. Costs would include 23 24 electricity supply costs, incremental equipment cost, and program administration costs.<sup>1</sup> 25 Estimates of customer benefits of owning an EV are based upon a combination of data from

<sup>&</sup>lt;sup>1</sup> Rebate costs are excluded as they are both a benefit for customers and a cost for the utility.

- the Conservation Potential Study<sup>2</sup> (i.e. energy consumption and load profile of EVs) and third party research (i.e. incremental EV cost versus a gasoline powered car). Please refer to Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NH-025 for more details.
- b) It is confirmed that the mTRC test reflects the combined impact for customer and utility collectively, not individually; for this reason the mTRC test is not the sole evaluation method used for electrification programming. Newfoundland and Labrador Hydro ("Hydro") and Newfoundland Power Inc. ("Utilities") have applied the mTRC test in conjunction with a net present value ("NPV") analysis. The combined use of the mTRC test and the NPV analysis ensures that: (i) electrification programs are sufficiently economic to enable customer participation; and (ii) customer participation in electrification programs will provide a rate mitigating benefit to all customers. The use of a secondary assessment is consistent with the principles provided in the National Standard Practice Manual and the approach taken in several jurisdictions that use multiple tests. Please refer to Hydro's response to PUB-NLH-021 for more details.
- c) The requested results for the overall electrification portfolio are provided in Table 1.

Table 1: Electrification Portfolio Results

Test	Result
RIM <sup>3</sup>	1.02
PCT⁴	1.96

Hydro notes that the planned electrification programming passes both the RIM and PCT tests, while providing rate mitigation benefits to customers over the long term as demonstrated through a positive NPV analysis. Hydro has not computed the Program Administrator Cost Test ("PACT") ratio due to a technical limitation in its model.

d) Please refer to Hydro's response to IIC-NLH-005, part b).

<sup>&</sup>lt;sup>2</sup> "Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025," Newfoundland and Labrador Hydro, rev. 1, July 8, 2021 (originally filed June 16, 2021), sch. 3, sch. C.

<sup>&</sup>lt;sup>3</sup> Ratepayer Impact Measure ("RIM").

<sup>&</sup>lt;sup>4</sup> Participant Cost Test ("PCT").