Q. Footnote 14 in Table I-2 of Schedule I of the Electrification Conservation Demand Management Plan 2021-2025 states that "Overall cost assessment includes utilities that are using the TRC, SCT or a test created by the utility specifically for electrification that evaluates programs from the perspective of the customer, the utility and the ability to meet policy objectives."

a) Is the proposed mTRC test a jurisdiction specific test?

b) Is the proposed mTRC test used in other jurisdictions?

c) What considerations at the jurisdictional level would be incorporated into a jurisdiction-specific test such as the mTRC test?

A. *This Request for Information relates to the Electrification, Conservation and Demand Management Plan: 2021-2025 (the "2021 Plan") developed in partnership by Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro" or, collectively, the "Utilities"). Accordingly, the response reflects collaboration between the Utilities.*

a) Yes, the mTRC test is a jurisdiction-specific test.

Jurisdiction-Specific Test ("JST") is a broad term used by the *National Standard Practice Manual* (the "Manual") to describe the primary test applied for evaluating the cost-effectiveness of utility initiatives.[1] The critical question to be answered by a JST is whether the benefits of an initiative exceed its costs and therefore merit utility support on behalf of customers.[2]

The mTRC test is the primary cost-effectiveness test proposed by the Utilities for evaluating customer electrification programs. The purpose of the mTRC test is to determine whether the benefits of customer electrification programs exceed the costs. For example, the mTRC test determines whether the benefits of reduced fuel and maintenance costs of an electric vehicle exceed the electricity supply costs, incremental equipment costs and program administration costs. The inputs included in the mTRC test, including non-energy benefits, are consistent with those recommended in the Manual.[3]

The Manual provides principles to develop a JST. The principles prescribed by the Manual reflect sound economic and regulatory practices.[4] These principles were applied by the Utilities in developing the mTRC test and include:

(i) Aligning the test with policy goals;
(ii) Ensuring benefits and costs are treated symmetrically to avoid a biased assessment;
(iii) Accounting for relevant material impacts;

[1] See the Manual, page 3-1.
[2] See the Manual, page 3-3.
[3] See the Manual, page 10-11 to 10-12.
[4] See the Manual, page iii.

(iv) Conducting long-term, incremental analysis;
(v) Avoiding double counting costs and benefits;
(vi) Ensuring transparency in assumptions, methodologies and results; and
(vii) Conducting analyses of rate impacts separately.

The Utilities applied the mTRC test to determine whether electrification programs will provide a net benefit to participating customers. Ensuring customers benefit from programs is essential to encouraging their participation in those programs. The mTRC test also ensures that the Utilities' costs of delivering a program do not exceed the benefits provided to customers, which is necessary to confirm that utility investment is beneficial for customers.

Consistent with the Manual's principles, the Utilities also applied a net present value ("NPV") analysis to assess separately the rate impacts of customer electrification programs. The NPV analysis assessed the net revenue of increased energy sales through electrification to 2034. The net revenue impact was then divided by projected energy sales to determine an indicative customer rate impact.[5]

The combined use of the mTRC test and the NPV analysis ensures that: (i) electrification programs are sufficiently economical to enable customer participation; and (ii) customer participation in electrification programs will provide a rate mitigating benefit to all customers. This benefit is consistent with the provincial policy goal of customer rate mitigation.[6]

b) Yes, an mTRC test is used in other jurisdictions. However, given the mTRC test is applied to align with the specific policy goals of each jurisdiction, the inputs applied in each case will vary.

For example, the Colorado Public Utilities Commission approved calculating the cost-effectiveness of demand side management programs, including electrification offerings, using an mTRC test. In Colorado, the benefits included in the mTRC test are: (i) the utility's avoided production, distribution and energy costs; (ii) the participant's avoided operating and maintenance costs; (iii) the valuation of avoided emissions; and (iv) non-energy benefits. Utility and participant costs are also included.[7]

In Wisconsin, an mTRC test is designed to include the value of emissions avoided through programs, including carbon dioxide, sulfur oxides and nitrogen oxide

[5] See Newfoundland Power's *2021 Electrification, Conservation and Demand Management Application,* Volume 1, Exhibit 2, Appendix A.

[6] The Provincial Government stated: *"The Plan indicates the province's utilities are taking actions to begin addressing the electrification, and conservation and demand management (CDM) recommendations in the Board of Commissioners of Public Utilities Rate Mitigation Options and Impacts Report. The Board's report demonstrated clearly that these action areas have excellent potential to assist with our rate mitigation efforts."* See Newfoundland Power's *2021 Electrification, Conservation and Demand Management Application,* Volume 2, Schedule M, page 1 of 7.

[7] See Code of Colorado Regulations, 4751. Definitions and 4753. Periodic DSM Plan Filing.

emissions. This reflects the environmental policy goals of that jurisdiction. The Public Service Commission of Wisconsin found it is reasonable to use the mTRC test to evaluate the cost-effectiveness of program portfolios.[8]

c) As described in part (a), the Manual provides a set of principles in developing a JST. The Manual also addresses the impacts that should be considered in assessing the costs and benefits of electrification initiatives. These impacts are grouped into 4 categories:

(i) Impacts on the electric utility system, including impacts on energy and capacity;
(ii) Impacts on other fuels, such as declines in energy bills across all fuels;
(iii) Impacts on customers, such as the costs of electric products and the costs of upgrading services to use those products; and
(iv) Impacts on society, such as reductions in greenhouse gas emissions.[9]

The Manual establishes that not all impacts are applicable in each jurisdiction, depending on a jurisdiction's policy goals and the specific initiatives being pursued.[10]

In the Newfoundland and Labrador context, the mTRC test is specifically designed to ensure electrification programs are cost-effective for customers. Appropriate considerations for the mTRC test therefore include impacts on customer costs (e.g. fuel, maintenance and equipment costs) and impacts on utility costs (e.g. electricity supply and program administration costs).

As described in part (a), the mTRC test, used in conjunction with the NPV analysis, supports the provincial policy goal of customer rate mitigation.

[8] See Public Service Commission of Wisconsin, Final Decision, Docket 5-FE-101, page 8.
[9] See the Manual, pages 10-3 to 10-6.
[10] See the Manual, page 10-2.