Q. With reference to Application Schedule C page 302 to 313 of 325 and Technical Workshop presentation, slide 6:

Please confirm that the energy sold for the purposes of mini split heat pump under the UPPER incentives and Social Cost of Carbon exceeds the potential electrification benefit of EVs (per Technical Workshop presentation, slide 6) through at least 2029.

A. Newfoundland and Labrador Hydro ("Hydro") notes that the net energy impact as a result of fuel switching could be as high as 74 GWh by 2029;[1] however, this figure must be considered in the full context of the potential study analysis. Specifically, the scenario referenced assumes that the social cost of carbon pricing is included in the cost of home heating fuels in the province. As noted in Hydro's response to IC-NLH-031 of this proceeding, the social cost of carbon used in the Conservation Potential Study for 2030 is a cost of $264 per tonne or $0.72 cents per litre. The Government of Canada has proposed a maximum carbon price of $170 per tonne in 2030. Additionally, home heating fuels are currently exempt from carbon tax in Newfoundland and Labrador. Therefore, Hydro does not consider this to be a realistic scenario at this time, given current market conditions.

Further, there would be a significant increase in peak demand associated with new energy sales from fuel switching under the above-referenced scenario, as high as 123 MW by 2029.[2] Such a significant increase in winter peak demand would likely require capital investment by Hydro, the cost of which is reflected in Hydro's marginal costs and cost-effectiveness testing.

As noted by Dunsky Energy Consulting:

> When TRC screening is applied, only measures for domestic heat pump water heaters pass the cost-effectiveness screen to be included in the analysis. **All**

[1] "Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025," Newfoundland and Labrador Hydro, rev. July 8, 2021 (originally filed June 16, 2021), sch. 3, sch. C, at p. 313 of 325, Table F-34, Upper Net energy impact.
[2] "Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025," Newfoundland and Labrador Hydro, rev. July 8, 2021 (originally filed June 16, 2021), sch. 3, sch. C, at p. 313 of 325, Table F-35, Upper Net demand impact.

measures for space heating fuel switching from oil are screened out. This is primarily due to the costs associated with increasing peak demand.[3] [Emphasis added]

[3] "Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025," Newfoundland and Labrador Hydro, rev. July 8, 2021 (originally filed June 16, 2021), sch. 3, sch. C, at p. 127 of 325.