Q. Reference Application Rev. 1, Volume 2, Diesel Genset Replacements

What is driving the "increasing load profile" in Nain? Has Hydro considered energy efficiency and demand management alternatives as a means for decreasing the very high cost of supply to Nain that is subsidized by other customers in the Province?

Α.

Newfoundland and Labrador Hydro ("Hydro") develops isolated systems load forecasts based on historical energy and demand trends from each community. These trends are modified by specific increases or decreases in energy or demand, as communicated by customers and regional or municipal governing bodies or organizations. The load growth experienced in Nain has been driven by new housing developments and funding from the Nunatsiavut Government to build or improve government facilities and services. Continued housing developments and a shift in residential and general service customer preference for electric heat are forecast to continue, increasing the energy and demand requirements for the community.

By incorporating historical energy and demand trends in the forecast, Hydro inherently includes the impact of ongoing Conservation and Demand Management ("CDM") programs that have been present in isolated systems over the past ten years. Savings associated with delaying the requirement for infrastructure additions due to reduced energy and demand are realized by planning infrastructure additions based on this load forecast.

In Nain, Hydro has been promoting and supporting CDM initiatives such as the Isolated Systems Energy Efficiency Program. The objective of this program is to provide outreach, education, and the direct installation of energy-efficient products to home owners and business owners. Over the past five years, 9,508 energy efficient products have been installed in Nain resulting in a savings of 505 MWh of electricity. Hydro prioritizes implementing CDM programs in communities that experience high levels of system growth and, in an effort to help minimize impacts and delay the requirement for infrastructure upgrades, engages larger customers that

- have indicated a preference to switch to electric heat to educate them on the CDM
- 2 opportunities available and encourage their participation in Hydro's CDM programs.