

1 Q. **Reference: Customer, Energy and Demand Forecast: Peak Load Forecast**

2 Does Hydro use a historical average load factor approach in forecasting system peak demand? If
3 not, please describe Hydro's peak load forecasting approach.

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6 A. Newfoundland and Labrador Hydro ("Hydro") does not use a historical average load factor
7 approach in forecasting Newfoundland Power Inc.'s ("Newfoundland Power") system peak
8 demand; however, Hydro does use a historical average load factor approach in forecasting
9 Hydro's Rural Interconnected and Isolated system peak demands.

10 Hydro's system peak forecast for Newfoundland Power is prepared through the estimation of
11 one regression equation. This regression equation is used to explain and predict the maximum
12 electricity demand requirements in a given year based on the number of Newfoundland Power
13 domestic non-electric and electric heat customers, the Newfoundland Power weather-adjusted
14 general service load, wind chill,¹ and the marginal price of electricity. The regression equation is
15 derived from historical information, including Hydro system load data, Newfoundland Power
16 customer billing data, and Environment Canada weather data.

¹ The wind chill variable is based on a 12-hour average temperature and an eight-hour average wind speed. The wind chills are calculated for weather stations at St. John's, Gander, and Stephenville and then weighted by the number of customers to calculate an Island wind chill figure.