1   Q.   **Reference: Study, page 1**

2

3   Please explain the P90 methodology used by NLH. Please discriminate between the

4   demand, climate (degree-year) and other risks. Explain if the P90 applies equally to all risks

5   and to the demand from all consumer classes.

6

7

8   A.   The P90 peak demand forecasts reflect an associated increase in demand over an average,

9   or P50, peak demand forecast resulting from instances of more severe wind and/or cold

10   temperatures. During P90 weather conditions, the peak demand will exceed the average

11   (P50) demand level. The P90 methodology used by Newfoundland and Labrador Hydro

12   ("Hydro") is applicable to Hydro Rural customer loads.

13

14   For the Hydro Rural systems of the Labrador Interconnected System, Hydro relies on an

15   average (P50) historical load factor applied to forecasted system energy requirements to

16   derive a forecast of P50 peak demand requirements. To derive the incremental P90 peak

17   demand requirement, scalars were estimated for Labrador East and Labrador West systems

18   based on the 90th percentile of historical system load factors on record. For Hydro Rural's

19   Labrador East and West systems, the P50 to P90 MW scalars were estimated at 3 MW and

20   4.5 MW respectively.