

1 **Q. (response to CA-NP 228) "Based on the historic variability of its weather**
2 **normalized peak demand, Newfoundland Power estimates that, in most years, the**
3 **weather normalized native peak will be within $\pm 4\%$ of forecast." Is it correct to say**
4 **that NP plans its system on the basis of a potential load forecast error of $\pm 4\%$**
5 **about its forecast of roughly 1% annual load growth?**
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7 A. No. The potential variance of $\pm 4\%$ between the forecast of native peak and actual
8 weather normalized native peak is not used by Newfoundland Power to assess the
9 capability of Newfoundland Power's system to meet customer electricity requirements.
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11 The forecast of Newfoundland Power's native peak is used primarily to forecast the
12 Company's purchased power expense. It is also provided to Newfoundland and Labrador
13 Hydro for their use, which includes the forecasting of revenue.
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15 Newfoundland Power plans the capacity of its transmission and distribution system based
16 on the forecast peak load on each component, with consideration given to how much
17 actual loading may vary from forecast.¹ Variance in actual loading (as opposed to
18 weather normalized load) takes into account historic load variations, including
19 phenomena such as cold load pickup.²
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21 Potential variances on individual components of the power system can be much higher
22 than the $\pm 4\%$ variability of the weather normalized native peak demand. For example, a
23 distribution line can experience demands in the order of 60% greater than peak under
24 cold load pickup conditions.

¹ Newfoundland and Labrador Hydro is responsible for planning to ensure the generation and the bulk transmission system is capable of meeting overall system load requirements. Newfoundland Power's native peak load forecast would factor into Hydro's planning activities.

² Cold load pickup is a phenomenon whereby the load placed on the electrical distribution system immediately after a power outage is temporarily higher than normal due, for example, in cold weather, to the coincident load placed on the system by electric heating systems in homes that have grown colder during the outage. Cold load pickup conditions typically last for up to 20 minutes.