Q. What is the difference in MW between the P50 and P90 forecasts in the year 2025? How does the impact of the P90 scenario compare to the impact of other what-if cases Hydro considers in its reliability planning studies; i.e., loss of a pole on the LIL?

A. The P90 peak demand forecast results in an incremental 60 MW of customer requirements as compared to the P50 peak demand forecast.[1] Newfoundland and Labrador Hydro ("Hydro") considers a number of operational scenarios as part of its operational planning.

As part of the planning criteria proposed in Hydro's 2018 filing, Hydro has also proposed adoption of deterministic criteria as well. Hydro proposes to require a minimum of 296.5 MW of operational reserve at system peak, with a portion required as ten-minute reserve to cover its first contingency loss, where the first contingency loss of 197.5 MW reflects the loss of a unit at the Muskrat Falls Generation Station at winter firm plant output of 790 MW, and the remaining 99 MW available as 30-minute reserves, reflecting one-half the magnitude of a second contingency loss, where the second contingency loss is the loss of a unit at the Muskrat Falls Generating Station at winter firm plant output of 790 MW.

The Labrador-Island Link ("LIL") is equipped with overload capability, meaning each pole is designed such that in the event of an interruption to one pole lasting less than ten minutes, the pole that remains in service can continue to operate at 900 MW. Each pole also has the ability to be loaded to 1.5 times its rated capacity on a continuous basis (675 MW). As such, for an interruption to one pole lasting more than ten-minutes, the pole that remains in service is capable of operating at 675 MW. In the event the pole which remained in service was operating at 675 MW, deliveries to the Island Interconnected System would be reduced by approximately 220 MW.[2]

[1] This difference in forecast is exclusive of transmission losses and station service.
[2] In the case of a sustained outage to one or more poles of the LIL, the amount of capacity required to be delivered to Nova Scotia decreases by an amount proportional to the outage severity.