Q. If the target loss of load probability for the system were 1 day in 10 years, how would Hydro determine the value of reliability improvements beyond this level, for example, 1 day in 20 years?

A. A target loss of load probability is a metric used in generation planning analysis to assess the adequacy of system capacity in consideration of a fleet of generating resources. In contrast, the Network Additions Policy relates to transmission planning analysis and typically involves the deterministic application of Transmission Planning Criteria to ensure the reliable operation of an interconnected network of system elements.

In the context of the reliability analyses associated with Network Additions Policy considerations, probabilistic methodologies are applied. However, for transmission planning purposes, expected unserved energy ("EUE") is a preferred metric as opposed to target loss of load probability. The basis for this is that supply for a specific customer is dependent on a relatively small number of network elements that have a relatively high availability and a relatively high impact on capacity. In such a scenario, reliability targets such as 1 day in 10 years or 1 day in 20 years cannot typically be met. Rather, analysis would involve the calculation of EUE as a representation of expected supply interruptions on an annual basis.

On this basis, the value of reliability improvements associated with criteria involving loss of load probability would not be relevant in the context of the Network Additions Policy.