Q. Re: Pre-filed Testimony of Mr. P. Bowman, page 33, line 30 to page 34, line 8:

"The above rationale is a sound description primarily of the practical operating contribution of wind generation, which is a valid cost of service rationale. More importantly for the present time, the operating criteria is likely the more relevant characteristic given that the planning perspective would have to be grounded in the question of "what characteristics of wind would be beneficial so as to lead Hydro to add wind power producers to the system?" In today's reality, presumably Hydro would not add these IPPs at all. Hydro is apparently headed into a time of significant supply surpluses and cost pressures. The only resources being added are for capacity and reliability reasons (e.g., TL267) and adding additional energy supplies to the system will no longer give cost and environmental benefits associated with offsetting Holyrood generation (since there is only minimal if any Holyrood generation planned starting in the near future). In short, as of 2019, there would not be any economic rationale for planners to want to add or value incremental wind. This means the planning context is far less informative and instructive to cost of service methods than a focus on the operating perspective and, from an operating perspective, wind normally provides useful load carrying capacity through many high load hours of the year (particularly as high loads are often, though not always, driven in part by high winds)."

Why would anticipated generation investment decisions be determinative of capacity value for planning purposes? Would a more appropriate planning concern be whether a planner can count on a certain type of generator to assist in meeting increases in demand at peak times? Please explain.

A.

Anticipated generation investment decisions are the underlying Cost of Service test for classification decisions driven by a planning perspective (as opposed to an operating perspective, or a historical perspective, or others).

A valid planning concern is whether a planner can count on each generator to assist in meeting demand at peak times. However, two aspects of this concept require further detailing:

1. **Count on:** With respect to counting on the availability of capacity associated with a generation asset, no planner can 100% count on any asset to be available. This is why a probabilistic generation capacity planning criteria (e.g., LOLH) is typically used in the industry to plan for capacity sufficiency, including by NLH.

2. **Peak times:** A probabilistic planning criteria does not only consider the peak hour in a year, it consider the probability of loss of load in each hour of the year. Many hours are of minimal relevance, since the load is so low that it is almost guaranteed to have sufficient generation available. But there is typically a relatively large set of hours where the probability of loss of load is greater than zero, and any contribution by wind (or other generation) in any of those hours improves the LOLH metric (meaning provides beneficial capacity to the system).

Wind can readily contribute to LOLH improvements. Hence, when a utility is seeing a failure of its LOLH planning test, wind can be a valid asset addition (if the economics otherwise are beneficial, e.g., the low variable cost energy is of use to displace high cost fossil fuels).

It is also important to note that in the paragraph cited in the preamble to this question, Mr. P.Bowman is discussing (and, in fact, agreeing with) a quote written by Hydro in 2003. Further, although this response references planning considerations for wind, Mr. P.Bowman is not suggesting that a cost of service reliance on the planning value of wind be determinative to this issue at this time – the current recommendation is to consider the operating perspective (not the planning perspective), which Hydro also used to justify its 44.6% capacity proposal for wind in 2013 Amended GRA.