***Q.* Re: Pre-filed Evidence of Mr. C. Douglas Bowman, page 7 [Re: Classification of Wind Generation as 100% Energy Related]: Please confirm Mr. C. Douglas Bowman's recommendation that classification of wind generation as 100% energy related is concluded to be appropriate if wind generation is no longer considered available to supply system capacity requirements. Please provide Mr. C. Douglas Bowman's professional opinion regarding the benefits of wind generation, and if wind does or should be attributed some benefit to system capacity supply, to probabilistic calculations of LOLH and to assisting in meeting system reliability and peak demand requirements. Is it Mr. C. Douglas Bowman's contention that wind does not enhance reliability in any way?**

A. In Mr. Doug Bowman's experience, all generation sources contribute to the reliability of the power system and will reduce loss of load hours. Therefore, the issue is not "if" a generation source enhances reliability, but rather how much it enhances reliability. For example, a run-of-river hydro facility that has a water supply to drive the turbine in the spring and summer, but dries up in the winter, would enhance the reliability of the power system. If the power system is summer peaking, the contribution will likely be significant. On the other hand, if the power system is winter peaking, the reliability will be enhanced, but the enhancement will likely be negligible because the facility is not capable of providing power in the winter period when the system is under stress. In the case of the wind generators on the Island, it is necessary to incorporate the wind generators in Hydro's reliability model to determine the contribution made to loss of load hours. Of course, the contribution made by the wind generators during the outage events of January 2013 and January 2014 also provides valuable insights into the contribution of the wind generators to the reliability of the system. The impact on reliability is a function of the characteristics of the wind generators and the characteristics of the power system. For example, the amount of wind generation being provided during the winter peak period, the availability factor in the winter, and diversity are important considerations, as are considerations unique to the power system; i.e., if the system peak tends to be on cold days with high winds that cause the wind generators to be shut down for safety reasons. It is for these reasons that Mr. Doug Bowman recommended in his April 25, 2014 Pre-filed Evidence relating to the 2013 GRA (page 27, lines 6 to 10) that Hydro file a study for the Board's consideration on the appropriate capacity/energy classification of purchases from wind generation on the Island Interconnected System. In the Amended 2013 GRA, Hydro proposes that wind generation be classified as 100% energy related. In support of this classification, Hydro states: "*from a system planning perspective, Hydro no longer assumes that wind generation will be available to supply system capacity requirements*" (Amended 2013 GRA, Volume I, page 4.15, lines 13 to 14), and in its response to IC-NLH-198, Hydro states "*For all current and future Loss of Load Probability calculations, as well as Peak Load Carrying Capabilities, the default assumption is/will be that wind resources are ignored or provided a value of 0 MW*". Since the 2013 GRA was filed, Hydro has had the opportunity to discuss this issue with its system planners

and operators. Further, it has had the opportunity to take a closer look at the impact of the wind generators in its reliability models and has had "real life" experience during the outage events of January 2014. Mr. Doug Bowman understands that Hydro has used this information and experience to make its determination that the contribution from the wind generators has negligible impact on the reliability of the power system, and hence the change in classification to 100% energy-related.