

August 7, 2009

TO : IESO Stakeholder Engagement Working Group #57

**RE: Centralized Forecasting for Variable Generation**

Brookfield Renewable Power (“Brookfield”) is a member of the current SE-57 working group and wishes to comment on the IESO initiative to implement centralized wind forecasting.

At the recent January meeting of the IESO Wind Power Standing Committee, a stakeholder group created to raise and discuss wind related concerns and issues, the following statements were made by the IESO: “Current levels of forecast errors and wind penetration do not necessitate a centralized system at this stage.(...) An IESO centralized system undertaking is dependant upon the outcome of forecasting accuracy studies, cost benefit analysis associated with higher wind penetration levels and a pilot project which would identify need of any centralized forecasting”<sup>1</sup>

Brookfield supports the IESO’s proposed centralized wind forecasting system with the following caveats:

- i. the system should be monitored for ongoing performance and effectiveness,
- ii. should be administratively simple,
- iii. cost effective, and
- iv. produce accurate forecasts

In addition, prior to implementing such a system the IESO should provide tangible evidence that centralized forecasting will provide reliability benefits for the rate payers of Ontario.

In so far as such costs are concerned, Brookfield supports a structure whereby the expenses are part of the uplift charges to maintain reliability of the overall system. As per NERC report, “forecasting the output of variable generation is critical to bulk power system reliability in order to ensure adequate resources are available for ancillary services and ramping requirements”<sup>2</sup>, the practice of centralized forecasting, when the critical mass of such generation dictates, should be considered a global

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<sup>1</sup> IESO Wind Power Standing Committee (WPSC), Status update – Recommendations and Action Items, January 2009

<sup>2</sup> NERC Special Report: Accommodating High Levels of Variable Generation, April 2009



reliability benefit. This appears to be the method being used in ERCOT, MISO and PJM whom have advanced experience with wind forecasting, and appear are not charging the variable generators for this service. If required, these costs should be borne by all ratepayers as they would be the beneficiaries from the apparent reliability improvements that will be created. This reliability enhancement to IESO tools should be no different than methods to improve accuracy in system load forecasting, etc.

In the longer term, wind forecasting costs should be compared with other markets to ensure they remain competitive and do not rise proportionally with growth of renewable generation.

The possibility of sharing or using a common Request For Proposal to procure centralized forecasting services with NERC/NPCC partners should also be considered as a method for optimizing long term system effectiveness.

Sincerely,

Tracy Brason  
Brookfield Renewable Power