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RE: Renewable Integration Design Principles

Mr. Finkbeiner:

I am writing in response to the IESO's request for stakeholder input on the IESO design principles for SE-91; Renewable Integration. As the generator that has been most impacted by SBG Bruce Power has the most experience with this issue and has a vested interest in the effective management of surplus conditions.

Bruce Power supports the principles presented by the IESO to alleviate the short-term operational concerns driven by surplus generation. However, it's important to recognize that there is more to address. The industry must recognize that not all surplus circumstances are the same. From Bruce Power's experience with SBG it can be classified into 3 general groups:

1. Short Term or transient SBG
    - E.g. Less than 6 hours and 300 MW or less
    - Requires immediate actions for a short period of time
    - May be driven by operational restrictions such as gas unit minimums
    - Nuclear is not the best resource in these circumstances
    - All other resources, including wind, should be dispatched first
    - Nuclear manouvers should be performed as the last resort
    - This form of SBG is where the IESO's integration principles will provide the most benefit
    - The IESO's Principle 10, floor prices for baseload generators may be an attractive idea but further details are required. Effectively managing SBG is the company's primary concern but as a merchant generator we must always consider the market impact of any initiative. Incorporating these principles and maintaining the market fundamentals is essential.

2. Prolonged periods of SBG
    - E.g. Greater than 6 hours and surplus of at least 300 MW
    - Curtailing wind resources and many of the other principles presented will do little to addressing these prolonged periods of SBG
    - Coordinated proactive approach must be developed for these situations

3. Periods of Excess Generation
    - The OPA plans and builds generation to meet Ontario demand peaks
    - As a result sustained periods of SBG are possible when demand is low
    - The IESO's 18-month forecast has an SBG outlook for these periods
    - This is an ideal situation to utilize nuclear units to alleviate SBG
    - This should drive planning actions to remove a nuclear unit from service to alleviate the excess. This action will also have the effect of extending the normal operating life of the unit and could, if required, provide an opportunity to carry out additional maintenance that may improve plant reliability
    - As a prudent nuclear operator the majority of outages are scheduled in shoulder seasons when surplus are likely to arise. To the extent that additional outages are required Bruce Power would be amenable to scheduling additional outages subject to appropriate commercial arrangements being made.

The industry must recognize that surplus situations will persist for sometime and adopt a holistic approach to managing this situation. The current proposals to increase the costs charged to exports is an example where the industry has worked at cross purposes. This must be addressed through a coordinated approach that crosses Agency, Ministry and Regulatory boundaries. The policy objectives of the Long Term Energy Plan can only be achieved through such an approach.

The record low hydro output of 2010 provided a brief reprieve of the SBG situation in Ontario and we fully expect SBG to return in 2011. So far in 2011 Bruce Power facilities have been manoeuvred on 3 different occasions for SBG -- this happening in the dead of winter with 16,000 MW of demand. The situation will only worsen in the spring when demand falls to 13,000 MW or less and the output from Ontario's hydro resources increases -- that's the short-term view. In the longer term, the IESO forecasts surplus situations approximately 15% of the time by 2013. This level of surplus requires a proactive coordinated approach to addressing SBG -- an approach that will drive significant benefits to the rate payers of Ontario.

Yours truly,

Chris Loughren
Market Regulatory Affairs Advisor, Bruce Power, Power Marketing

cc: Richard Horrobin, Vice-President, Power Marketing, Bruce Power