

July 31, 2007

Dear Stakeholder / Market Participant:

Re: As requested in the Department of Energy's Electricity Policy Framework issued June 6, 2005, the AESO consulted with stakeholders to draft a Long Term Adequacy recommendation paper (LTA paper) which was released in February 2007. The paper recommended three key actions: publish a specific suite of Long Term Adequacy metrics; develop a Threshold associated with the two year Probability of Supply Adequacy Shortfall; and create a framework for Threshold Actions which the AESO can implement to address an impending Long Term Adequacy shortfall.

A first draft of Long Term Adequacy metrics is now being published to the AESO website. A detailed description of the metrics is provided in the LTA paper and a simplified summary is provided below:

1. **[New Generation Status and Retirements](#)** – a summary report on the near term outlook for generation capacity in Alberta, drawn from a variety of public sources. The report outlines a high level of planned activity at various stages of development. The report excludes new wind generation projects primarily because a list of all projects is already publicly available in the AESO Generation Interconnection Queue report on our website. In Alberta's deregulated electricity market, market competitive forces will determine the actual magnitude and timing of new generation additions.

2. **[Reserve Margin](#)** – a forecast for the next three years with and without intertie capacity; defined as

$$\frac{(\text{Installed Generation Capacity} - \text{Peak Demand})}{\text{Peak Demand}} \times 100$$

Reserve Margin calculations are often customized to better represent the unique characteristics of a system and need to be interpreted in the appropriate context. The Alberta Reserve Margin five year forecast shows a decline from recent historically high margins to more moderate levels in line with longer term averages.

3. **Supply Cushion** – defined as daily Alberta Integrated Electricity System supply minus daily peak hour demand; the Supply Cushion provides a two year seasonal outlook that, among other things includes planned outages and provides a more complete picture of adequacy. The Supply Cushion results indicate tighter supply conditions than the last two years primarily in the winter periods, however the patterns are similar to the conditions experienced during the 2003-04 period.
  
4. **Two Year Probability of Supply Adequacy Shortfall** – a probabilistic assessment of a system supply shortfall over a two year period. This metric builds on the supply cushion metric, incorporating the probability of wind production and forced generation outages into the available daily supply. The metric output is generally consistent with the trends suggested from the other metrics with a forecast for tighter supply in the near term compared to the last two years but with the overall likelihood of a supply shortfall being in line with the recent past.

Click on each title to view the metric / graph, or visit the AESO website at [www.aeso.ca](http://www.aeso.ca) and follow the path “Market > Design Initiatives > Market Policy Implementation > Long Term Adequacy.”

These metrics were chosen by stakeholders because they cover the key elements that directly or indirectly measure adequacy, are relatively straightforward to understand and therefore promote general awareness of Alberta’s supply adequacy, and are based on publicly available information.

The intent of the Long Term Adequacy initiative is that these metrics, threshold and threshold actions will work together to create awareness of the long term adequacy of Alberta’s electricity system and maintain the integrity of Alberta’s energy only market.

Further stakeholder consultation to finalize all the metrics and develop the threshold actions will take place over the next couple of months. If you have any questions or concerns, please contact me at [gordon.nadeau@aeso.ca](mailto:gordon.nadeau@aeso.ca) or directly at ph: 539-2568 .

Sincerely,

Original signed by,

Gordon Nadeau,  
Market Design Specialist