



08 March, 2007

Ms. Colleen Fairhead

Mr. Gordon Nadeau

Market Services,
Alberta Electric System Operator

Via email: colleen.fairhead@aeso.ca; gordon.nadeau@aeso.ca

RE: Long Term Adequacy Recommendation

Dear Colleen/Gordon,

Please see our attached comments on the issue of Long Term Adequacy. In summary, we believe that the key points are as follows:

1. **Reserve Margin:** The proposed method of calculating the reserve margin underestimates the margin available by not including assets that have "approved" status.
2. **Contribution to Fixed Costs of Notional Gas Fired Peaking Unit:** Without including the impact that the unit would have on the pool price, this metric would overestimate the contribution to the fixed cost of a peaking unit and we propose that a first order attempt at including this impact be included in the methodology.
3. **Threshold Actions:** We support the concept of the threshold actions proposed inasmuch as they do not affect the wholesale price of electricity.

We appreciate the opportunity to input into this process.

Best Regards,

Dale Friesen

Manager, Regulatory Affairs
Commercial Group

xc. Carl Fuchshuber, VP Commercial Group - Strategic Planning

-Stakeholder Comment Form

Long Term Adequacy Recommendation

Date of Request for Comment: March 8, 2007
 Period of Consultation: February 21 – March 8, 2007

Stakeholder: **ATCO Power**

Section	Topic	Description	Stakeholder Comments
1	Introduction	Purpose of the paper is to recommend a solution that meets the requirements of the Policy Paper.	
2	Background		
2.1	Requirements of the Policy Paper	Definition of Metrics, Thresholds, Threshold Actions and Market Modifications.	
2.2	Long Term Adequacy in an Energy Only Market	The market determines the appropriate level of adequacy in the long term. LTA as a bridging mechanism.	
2.3	Locational Resource Adequacy	Within context of LTA, the paper is not proposing metrics or thresholds for locational issues.	
3	Metrics	The metrics were chosen because they cover the key elements that directly or indirectly measure adequacy, relatively simple to understand, to the extent possible	

			is based on public and verifiable information, provides an outlook on adequacy.	
3.1	New Generation Status and Retirements	Summarize public information on generation status and retirements.		
3.2	Reserve Margin	A forecast, expressed in percentage terms, of the amount of Alberta firm generation capacity at time of system peak that is in excess of the annual peak demand.	The proposed method for determining reserve margin is currently underestimated, as it will include potential retirements, but not assets that have approved status. A TCO Power would like to ensure that the AESO is aware of this underestimating bias in this metric.	
3.3	Supply Cushion	Two year forecast of available daily generation capacity and peak demand.		
3.4	Two Year Probability of Supply Adequacy Shortfall	A probabilistic assessment of a supply shortfall over the next two years.		
3.5	Loss of Load Probability and Expected Unserved Energy	Demonstrate the probability of involuntary curtailments, expressed in total hours, and the expected total amount of unserved load, in MWhs during those involuntary curtailments, over a forecast period of 10 years or greater. A shorter timeline, or elimination of this metric is being considered.		
3.6	Generation Investment	Show forecast/trends of reserve margin, forward electricity prices,		

	Signposts	forward natural gas prices, levelized cost of generation	
3.7	Contribution to Fixed Costs of Notional Gas Fired Peaking Unit	Demonstrate the contribution to fixed capital of a new gas-fired peaking unit could have received over each of the previous three years.	Without including the impact that the unit would have on the pool price, this metric would overestimate the contribution to the fixed cost of a peaking unit. We propose that as a first order recognition of this impact that the AESO simply estimate the pool price that would have resulted from the peaker's introduction into the merit order had all the offers remained the same.
4	Threshold	When the 2yrPSAS is calculated and breaches a specific level, the AESO would take steps to implement the Threshold Actions within the 2 year time frame.	We look forward to engaging with the AESO on the 2yrPSAS.
5	Threshold Actions	Determining threshold actions must balance effectiveness, market stability, and cost.	ATCO Power believes that it is critically important that the wholesale price of electricity must not be affected if the recommended threshold actions are put into place.
5.1	Threshold Actions for Inclusion in AESO's LTA Toolbox	Three options are recommended. Other options are not being considered due to significant cost that outweighs perceived contribution, or due to significant structural change that would be required to be made to the market. AESO would contract with load customers for the right to curtail load under specific terms and conditions.	
5.2	Load Shed Service	AESO would contract with load customers for the right to curtail load under specific terms and conditions.	
5.3	Self-Supply and Back-up Generation	AESO would contract with back-up generation owners for the right to dispatch it on under specific	

		terms and conditions.	
5.4	Emergency Portable Generation	AESO would contract with emergency portable generation owners for the right to dispatch it on under specific terms and conditions.	
5.5	Rationale for This Suite of Threshold Actions	The threshold actions provide a balance of effectiveness, market stability/certainty and reasonableness of cost, when compared to other alternatives. Load would pay for the service, either as an ancillary service, or through another AESO cost recovery mechanism.	
6	Market Modifications	Any market enhancement or modification can impact the level of adequacy in the market. Discussion of modifications that will require an extensive consultation effort are more appropriately held outside the LTA initiative, as outlined in the Policy Paper.	
6.1	Outage Disclosure	Generators 5 MW and greater must provide planned outages on a rolling 2 year basis, which will be used for calculating metrics. Forecasts will be provided in aggregate form, as provided today. Actual planned outages will be	

		reported after the fact. Forecasts may be made available on a historical basis.	
7	Next Steps	After considering feedback and making appropriate modifications, implementation of LTA will be in the form of rules, and adequacy reports. Topical workgroups will be hosted in areas that require further development.	
	Additional Comments	Additional comments that supplement the feedback being provided are welcomed.	

Stakeholder Comment Form