

July 26, 2011

Dear Market Participants and Other Interested Parties

Re: **Phase Two Operating Reserve Market Redesign – August 2nd 2011 Changes**

As part of the ongoing operating reserve (OR) market redesign initiative, the AESO will be making several changes to the market that will come into effect on for trading August 2nd, 2011 (for August 3rd delivery). These changes are an interim step that will improve the function of the market and will move more volume onto the Watt-Ex platform, increasing market transparency.

The August 2nd changes apply to both the standby and active markets. The standby market will be altered to create a transparent and consistent selection criterion that results in the lowest priced offer being selected. While a fully automated solution to the standby market will not be in place until later this year, the improvements to the market function are clear and justify the interim step. The changes to the active market will result in more active volumes transacting on Watt-Ex and the over the counter (OTC) market will be discontinued for spinning and supplemental reserve.

Active Market Changes

Two changes will be made to the active market. First, the volume of active contingency reserve purchased on the Watt-Ex platform will be increased and the OTC market for contingency reserve will be discontinued. The rationale for this 'block procurement' strategy has been outlined in previous AESO communication.

The impact of this change is expected to be minimal but it does result in increased market transparency and improved price signal for contingency reserve. The active market for Spinning and Supplemental reserve will be unchanged on Watt-Ex, albeit with slightly higher volumes transacted.

The OTC market for Regulating Reserve will also be changed. The AESO will purchase OTC volumes for the following hours:

- AM Super Peak – HE 6 through HE 8
- PM Super Peak – HE 17 through HE 24 in November, December and January, HE 18 through HE 24 in all other months.

Market participants in the OTC market will be able to submit multiple offers for either or both of the Super Peak blocks, however each Super Peak Block must be offered individually (AM Super Peak and PM Super Peak can not be combined in the same offer). Consistent with current OTC practices, the volume offered in one hour must be the same as the volume offered for all other hours in each Super Peak block (different volumes can not be offered for each hour within each offer). The AESO will supply an offer template to all OTC market participants. Only Regulating Reserve will be purchased OTC.

Standby Market Changes

The standby market will continue to be purchased on a two-part pricing model with a premium and activation price. The market will remain as a pay as bid market, but the AESO will clear the market with an explicit formula. The formula will calculate a single 'blended' price that will rank the standby offers based on the following algorithm:

$$\text{Price} = \text{Premium} + \text{Activation \%} * \text{Activation Price}$$

The Activation % element of the formula is found in the table.

	Regulating	Spinning	Supplemental
On Peak	1%	10%	10%
Off Peak	3%	10%	10%

As an example, this formula would evaluate two standby on peak regulating reserve offers as follows:

1. \$2 premium, \$250 activation = \$4.50 blended price ($\$2 + 0.01 * \250)
2. \$4 premium, \$100 activation = \$5 blended price ($\$4 + 0.01 * \100)

In the event that two blended prices are equal, the AESO will select the offer that was entered onto the WattEx system first.

The standby market will be closed to further bids ("closed") at defined times and then cleared as is done for the active market. Initially, the close will not be enforced by the trading software, and market participants will be expected to leave their offers in place until the AESO restates the bid volume to 0 MW. Offers in place at the market close should remain in place until the AESO bid volume goes to 0 MW in all cases. If there is a potential trade in error or if there is uncertainty whether the offer was made before the close the offer should not be removed.

This requirement is in place to ensure the smooth function of the market as well as to promote of level playing field for all market competitors. Offers that are altered or removed after market close will not be

selected even if they are the lowest priced offer. In addition, if the behaviour serves to frustrate the fair and efficient operation of the market, the behaviour will be referred to the MSA for further follow-up.

Trading Schedule

The standby market will continue to trade in advance of the active market. The trading schedule will be as follows:

9:00am – AESO posts bids

9:10am – Standby Regulating Reserve market closed for further offers

9:20am – Standby Spinning Reserve market closes for further offers

9:30am – Standby Supplemental Reserve market closes for further offers

9:40am – Active Regulating Reserve market closes

9:50am – Active Spinning Reserve market closes

10:00am – Active Supplemental Reserve market closes

Next Steps

The AESO is currently working with NGX to make changes to the Watt-Ex platform that will allow two changes. First, the super-peak regulating reserve products will be traded on the Watt-Ex platform and the OTC market will be discontinued entirely. Second, a lockdown will be added to the software and the standby markets will be cleared automatically. The 'blended' price criteria will remain the same as described in this letter, but the process will occur automatically. At this time the trading schedule will be revised and active markets will close prior to standby markets. Please see http://www.aeso.ca/downloads/April_1_Stakeholder_Session.pdf for the revised trading schedule when the Watt-Ex platform changes are complete. These changes are currently expected to be in place in Q4 2011. The AESO will hold an information session prior to the platform changes to ensure a smooth transition.

Following the changes to the Watt-Ex platform, the AESO will continue the process of implementing changes to the OR market outlined in the March 25th 2010 Recommendation Paper.¹ These changes may include altering the market to a blind auction design and removing the AESO bid in the active markets.

Please contact Kris Aksomitis (Kris.Aksomitis@aeso.ca or 403-539-2646) or Daniel Clark (Daniel.Clark@aeso.ca or 403-539-2810) with any questions.

Yours truly,

Original signed by

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¹ http://www.aeso.ca/downloads/Revised_AESO_Recommendation_Paper_-_Operating_Reserves_Market_Redesign_-_March_2010.pdf