

Responses to stakeholder comments on Market Suspension Recommendation Paper

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1. Purpose and Background

The AESO has initiated a review of the current Market Suspension Rule (ISO Rule 6.9 and OPP 201). Stakeholders were consulted on the Issue Identification Paper (July 2009), the Discussion Paper (July 2010) and the Recommendation Paper (Dec 2010).

The AESO has reviewed the stakeholder comments received on the Recommendation Paper and provide our responses in this paper. The AESO would like to thank all stakeholders for their input and looks forward to continued consultation. The next steps include the development of proposed rule changes and information documents to effect the recommended changes. These are planned to be issued for stakeholder consultation in Q2 of this year.

2. Policy Coherence and Principles

2.1. AESO Recommendation

The AESO recommends using the principles as described in the Discussion Paper to guide the review of the market suspension rule. The principles are as follow:

- a) Market suspension must be used as a last resort.
- b) The market should not be suspended for normal market activity.
- c) The market price should be visible and transparent to all competitors.
- d) The market should provide a level playing field for all competitors.
- e) Market suspension rule changes must balance design complexity and implementation simplicity.

2.2 Stakeholder Feedback

ATCO Power, Capital Power, MEG Energy, TransAlta and TransCanada support the principles recommended by the AESO.

2.3. AESO Response

The AESO acknowledges the stakeholder support for the principles.

3. Market Operation Tool Outages

3.1. AESO Recommendation

The AESO recommends using Limited Market Operation if the market operation tool is unavailable. The best available energy market merit order (EMMO) will be used for dispatch. The system marginal price (SMP) will be set by the highest priced block in the EMMO used by the system controller, as per the current practice.

The ancillary services (AS) merit order will be “frozen” and the providers of AS at the time of market suspension will continue providing the AS. If more AS is required, the system controller will direct assets to supply the additional AS.

If dispatch down service (DDS) is dispatched on at the onset of Limited Market Operation the DDS merit order will be “frozen” (i.e., will not switch to the future hour DDS merit order) and DDS will stay on but the dispatch volume will not change. If the SMP exceeds the reference price, all or part of the DDS will be dispatched off. If DDS is dispatched off or if it was never dispatched on, it will not be dispatched on even if the SMP goes below the reference price.

Payments to suppliers on the margin (PSM) will be suspended.

If the system controller can no longer dispatch based on the EMMO due to the significant deviations of generator availabilities from the EMMO, such that the EMMO becomes irrelevant for dispatch and the system controller is dispatching solely to maintain system reliability, the system controller may escalate and request authorization from the AESO Chief Executive Officer (CEO) to invoke market suspension.

3.2. Stakeholder Feedback

1. ATCO Power agrees with the AESO’s recommendation but would like to suggest that some wording should be added around the system controller using the most relevant EMMO during limited market operation.

ATCO Power would like to point out that the necessity to suspend DDS and PSM highlights the fact that these two mechanisms are not well integrated patches to market issues. Despite the fact that they might not be broken per se and would like the AESO to address them to avoid the ripple effect they caused in other areas.

2. Capital Power is pleased to see that the procedures for limited market operations strive to achieve market outcomes that are closest to those that would result if the market was fully functional. Capital Power looks forward to seeing the final procedures to more fully understand what and how the AESO will use the “best available” energy market merit order.
3. TransAlta supports the use of limited market operation when there are market operation tool (DT and ETS) outages. However, TransAlta believes that crossing from on peak to off peak periods or vice versa should automatically trigger market suspension. The EMMO will no longer be relevant when this occurs since offers may have substantially changed and will no longer be valid.

TransAlta supports posting the SMP on the AESO website and the use of fan out voice mail system if the website is unavailable.

TransAlta is concerned with freezing the AS market. AS levels can change significantly throughout the day. If the AESO were to freeze the AS market, TransAlta requests that it be done based on HLH and LLH volumes sold during the day. This would ensure that units will be able to handle the amounts of AS requested by the AESO and therefore would be less likely to default on volume. TransAlta requests further clarification on the payment price for the “frozen” AS. If limited market

operations crosses over from light load hours to heavy load hours, or vice versa, which AS index would be used?

4. TransCanada supports this recommendation, particularly the point that “the system controller may escalate and request authorization from the AESO CEO to invoke market suspension” if the EMMO becomes irrelevant for dispatch and the System Controller is dispatching for reliability only.

3.3. AESO Response

With respect to ATCO Power and Capital Power’s comments regarding the most relevant or best available EMMO to be used in a limited market operation, the AESO commits to provide more descriptive and detailed information on how the system controller makes this determination. The AESO will include this information in an Information Document which will be issued at the same time as the draft rule for stakeholder consultation in Q2 of this year.

With respect to ATCO Power’s concern regarding the integration of market upgrades, the AESO regularly reviews our IT systems and looks for optimized solutions to integrate the multiple components that have been developed over time. When the implementation plan for the market suspension rule changes is being developed, option for not suspending PSM will be reviewed.

The AESO does not agree with TransAlta’s suggestion on automatically triggering market suspension when a limited market operation transition over the on-peak and off-peak periods, or vice versa. The rationale is as follows:

- a) Both the AESO and stakeholders have confirmed the guiding principle that market suspension should only be used as a last resort.
- a) Planned market operation tool outages are typically scheduled to avoid the on-peak/off-peak, or vice versa, transitions. Therefore the exposure of a limited market operation progressing through an on-peak/off-peak, or vice versa, transition is anticipated to be small.
- b) Limited market operation is intended to be of short duration, typically in minutes, and all efforts will be made to limit the length of limited market operations along with any adverse impacts on the market.

Due to the unavailability of the market operation tool, it is anticipated that it will be a significant challenge for the system controller to manage the on-peak / off-peak, or vice versa, transitions. Therefore, the AESO recommends that under a limited market operation, the EMMO and AS merit order be “frozen”. For AS, this means that the AS providers that have been dispatched for AS will continue to provide the AS. If the AS provider does not have an existing AS contract when it is requested to continue to provide AS, it will receive compensation as specified in Article 11 of the AESO Tariff.

If an asset is unable to maintain at the level that it is dispatched, for either energy or AS, the pool participant must inform the system controller and provide a reason, similar to acceptable operating reasons or other constraints, and the system controller will re-dispatch the asset. If extensive re-dispatching is required and the system controller deems that it is not possible to continue dispatching under limited market operation, then an escalation to market suspension will be considered.

4. Market Suspension for Market Issues

4.1. AESO Recommendation

The AESO recommends that market suspension would not be invoked for supply shortfall, supply surplus or transmission constraints.

4.2. Stakeholder Feedback

ATCO Power, TransAlta and TransCanada support this recommendation.

4.3. AESO Response

The AESO acknowledges stakeholder support for this recommendation.

5. Market Suspension for Reliability Issues

5.1. AESO Recommendation

The AESO recommends that in addition to extended market operation tool outages, other potential market suspension causes would include:

- the system controller has to abandon the System Coordination Centre (SCC) and cannot activate the Backup Coordination Centre (BCC),
- the Alberta Interconnected Electric System (AIES) has broken up into two or more electrical islands or
- the AIES has experienced a blackout.

5.2. Stakeholder Feedback

ATCO Power and TransCanada support the AESO's recommendation.

5.3. AESO Response

The AESO acknowledges stakeholder support for this recommendation.

6. Authority to Suspend the Market

6.1. AESO Recommendation

The AESO recommends that the authority to suspend the market would be limited to the AESO CEO or his designee, except that in the case of an AIES blackout, the system controller may suspend the market.

6.2. Stakeholder Feedback

ATCO Power, TransAlta and TransCanada support the AESO's recommendation.

6.3. AESO Response

The AESO acknowledges stakeholder support for this recommendation.

7. Pricing during a Market Suspension

7.1. AESO Recommendation

The AESO recommends the energy price during a market suspension to be:

- a) 30-day rolling average on-peak price and 30-day rolling average off-peak price respectively, prior to the market suspension initiation, or
- b) \$999.99 when all available MW are dispatched, and the system controller has invoked the Supply Shortfall procedures.

The AESO also recommended that a payment mechanism, similar to that used for Long Lead Time Energy (LLTE), be defined to allow a market participant to recover any shortfall between the energy market receipts and their operating costs while generating during a market suspension. The exception to the LLTE incremental generation cost calculation when applied in the case of market suspension would be that start up costs would only be included for generating assets that were directed to start by the system controller during a market suspension, and

- a) directed off by the system controller during the market suspension, or
- b) dispatched off by the system controller upon the cancellation of the market suspension and return to normal market operation.

7.2. Stakeholder Feedback

1. ATCO Power comments that while ATCO Power would have preferred a more sophisticated approach to estimating the pool price during market suspension, e.g., similar supply cushion, it can appreciate the clarity and simplicity of simple rolling averages.

ATCO Power also would like the AESO to consider using a shorter time horizon though. A 30-day period would most likely reflect a variety of different market conditions that are less likely to reflect the conditions during the market suspension.

2. Capital Power comments that it understands the AESO rationale for pricing mechanism in blackout situations (\$999.99/MWh) and the compensation recommendations for operating and incremental generation cost. Capital Power appreciates that these are alternatives in situations where the AESO has exhausted limited market operations alternatives.

Capital Power asks the AESO to reconsider the use of a 30-day on-peak and off-peak rolling average pricing mechanism. Capital Power comments that practically speaking, this mechanism only makes sense if the market suspension event lasts for a single day. Beyond a single day, the pricing mechanism really begins to reflect fewer than 30 days of historic pricing (e.g., on the second day, the pricing mechanism would be based on 29 day of historic data, etc.)

Capital Power provided comments to the AESO discussion paper that stressed that the administrative pricing mechanism should strive to reflect, to the best extent possible, current market fundamentals – the use of historic price data points does not allow this to happen. One alternative that the AESO should consider is the use of NGX AESO forward prices from the last day prior to market suspension event. These prices are provided for Extended peak (7x16) and Extended Off-Peak (7x8) for forward days/weeks/months and would more closely reflect forward pricing fundamentals in the time periods when the rule is invoked (i.e. they are determined by the market on a forward basis rather than a backward one).

3. MEG Energy comments that it continues to believe, and support, the combined approach option wherein when all available MW are dispatched, or in the event of a blackout, the SMP is set at the price cap. In all other circumstances, SMP is determined by a reference price: 12.5 heat rate * daily AECO gas price. The attractiveness of this option includes:
 - a predictable and transparent pricing mechanism;
 - a price that is based on a functioning market and is therefore more likely to reflect supply and demand dynamics should the blackout continue for a number of days;
 - a price that is most likely to be greater than or equal to the variable costs of units on the margin;
 - a pricing mechanism for which implementation tools already exist; process and schedule for implementation should be simple and short.

However, given the small probability that the market will be suspended, MEG is able to accept the AESO's recommendation to utilize the 30 day rolling average, with on peak and off peak prices, for all suspension circumstances when all MW are not dispatched.

4. TransAlta supports that energy price during a market suspension to be the 30-day rolling average on peak price and 30-day rolling average off peak price respectively; and \$999.99 when all available MW are dispatched.

TransAlta believes that in the event of a blackout, price should be calculated in the same manner as any other market suspension.

TransAlta supports the AESO's recommendation that a payment mechanism similar to LLTE be developed to allow generators to recoup their operating costs during a market suspension. TransAlta would like to participate in future discussions when the payment mechanisms are developed to ensure that costs are appropriately compensated.

5. TransCanada is concerned that the recommendation fails to deliver a price setting mechanism that meets the principles of being visible and transparent as well as administratively simple for all market participants.

For these reasons, TransCanada reiterates its initial suggestion that the hourly Pool Price be set equal to the higher of the TMR Reference price (12.5 heat rate multiplied by the Gas Price for the hour, or part thereof) and \$125.00. This pricing option is easily understood, transparent and administratively simple for all market participants.

TransCanada also raises the following questions specific to the AESO recommendations:

- 1) How will the 30-day rolling average prices be communicated to market participants?
- 2) How will the system controller determine when all available MW have been dispatched such that Supply Shortfall procedures are invoked and the energy price defaults to \$999.99?

7.3. AESO Response

As a last resort and in the rare event of a market suspension the recommended 30-day on-peak and 30-day off-peak pricing mechanism provides a reasonable outcome, transparent price signal and is simple to implement. The recommended 30-day averaging period is intended to “even out” the price effects due to temporary system abnormalities. While a shorter time period may work better in some instances where the system abnormalities do extend to the day of the market suspension event, it may also in some other instances exaggerate the price effects of system abnormalities.

The proposed 30-day rolling on-peak and off-peak averages are calculated from the initiation of the market suspension and the same prices will be used for the entire duration of the market suspension event. The averages will not be based on a less than a 30-day period as described by Capital Power.

The AESO does not deem the use of the NGX Alberta forward market prices to be a preferred pricing option for use in market suspension. Although it is a forward looking pricing mechanism, the main concern of applying this price as the market clearing price when the market is suspended is its low market liquidity in Alberta. According to the MSA Q4 2010 report, forward trading volumes in Alberta further decreased from June 2010 and remained low throughout the rest of 2010.

The AESO has given consideration to the reference price pricing option and appreciates the simplicity that it offered. However, the AESO also considers that the 12.5 heat rate may not necessarily reflect the market heat rate under the prevailing market conditions as it does not differentiate on-peak and off-peak, demand trends (seasons or weather conditions), or supply trends (long term generator outages, interchange conditions). Comparatively, the 30-day on-peak and 30-day off-peak pricing option can better reflect market pricing under a recent and similar market condition.

To answer the questions raised by TransCanada:

- 1) The AESO proposes to modify its existing Daily Average Pool Price Report to add the 30-day on-peak price and the 30-day off-peak price. This report will be updated daily and posted on the AESO website.
- 2) The system controller will use the best available options to verify that all the available MWs have been used and to declare supply shortfall. The specific means that are available today include phone communication, website, ADAMS, etc. The option chosen will depend on the situation on hand (for example: is phone communication still available? Is the AESO web site or the internet still accessible?)

8. Import during a Market Suspension

8.1. AESO Recommendation

The AESO recommends that OPP 803 and OPP 807, governing the use of emergency energy, be applied in a market suspension if the specified conditions were met. For other import or export transactions, the pricing signal as recommended would be able to provide a clear and transparent price signal to market participants.

8.2. Stakeholder Feedback

ATCO Power, TransAlta and TransCanada support the AESO's recommendation.

8.3. AESO Response

The AESO acknowledges stakeholder support for this recommendation.

9. Next Steps

9.1. AESO Recommendation

The AESO recommends that after receiving stakeholder comments on the Recommendation Paper, the AESO will post all stakeholder comments on the AESO website, and will reply to stakeholder comments with further direction on the proposed rule changes in Q1 2011.

9.2. Stakeholder Feedback

ATCO Power comments that the AESO proposed next steps are reasonable way to proceed.

9.3. AESO Response

The AESO acknowledges ATCO Power's comment.

10. Additional Comments

10.1. Stakeholder Feedback

ATCO Power comments that:

In section 5.1.2 [of the Recommendation Paper] the AESO states:

Both IPCCCA and the UCA question why the AESO is putting priority on this rule review, perhaps over other market initiatives such as inertia ATC calculation. The AESO is not giving this rule review priority over other market initiatives such as wind integration, inerties, LSSi, and TCM. These initiatives are all deemed to be important and the AESO is pursuing them in a parallel manner utilizing various resources

within the AESO. It is the AESO's mandate to ensure that ISO Rules continue to be relevant and current within the market structure.

It is obvious that the AESO's resources are limited and while ATCO Power agrees that the AESO is pursuing the other listed initiatives in parallel, it is questioning how a fairly obscure rule like market suspension made the list. Instead ATCO Power would like the AESO to allocate resources to take a broader look at the AESO rules and identify improvements, simplifications, and seams that can be addressed (e.g. PSM).

10.2. AESO Response

The existing market suspension rule is outdated. It is the AESO's responsibility to ensure that the ISO Rules are relevant. The Alberta electricity market has evolved significantly since the existing rule was developed in 1999. Changes include a DDS market, and AS market and PSM as well as legislative and policy changes.

By upgrading this rule the market will receive an improved pricing mechanism, clear intent and transparency with respect to limited market operation.