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MSA REPORT

**A Common
Understanding: Fair,
Efficient and Openly
Competitive**

4 November, 2005

MARKET SURVEILLANCE
ADMINISTRATOR

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INTRODUCTION

In July 2005, the MSA released a paper entitled 'Undesirable Conduct and Market Power'. One part of this paper dealt with the MSA's view on what constitutes a 'fair, efficient and openly competitive market'. Section 6 of the Electric Utilities Act 2003 (EUA) requires that:

Market participants are to conduct themselves in a manner that supports the fair, efficient and openly competitive operation of the market.

It is also the standard against which the MSA must measure conduct. Based on feedback we received on the July paper we believe some participants still remain unclear as to the importance of this conduct requirement. Consequently, in this follow-up paper we provide additional context around the MSA's view on the principles underlying a *fair, efficient and openly competitive market*.

This paper is intended to further assist participants in understanding the MSA's approach to discharging its surveillance and enforcement obligations under the EUA. We hope that participants:

- will be better able to assess whether their own conduct meets the requirements set out under Section 6 of the EUA.
- will find this paper useful in communicating their responsibilities under Section 6 to their employees; and
- will through an enhanced and common understanding of these principles contribute to a better and more smoothly functioning market.

In order to achieve these goals this paper considers the principles as to what constitutes a fair, efficient and openly competitive market in the context of the MSA's past work. We expect that in the course of our future work we will continue to add colour and clarity as to how we view *fair, efficient and openly competitive* in the context of particular market events. The MSA has committed to keeping participants informed about these views. We encourage any participant who feels they need further clarity to consult with the MSA at their earliest convenience.

FAIR, EFFICIENT AND OPENLY COMPETITIVE

The MSA believes that Section 6 of the EUA, as a standard of conduct, is necessarily imprecise and therefore it would be inappropriate to reduce it to a list of 'dos and don'ts'. For this reason we have sought instead to identify high level principles as to what we believe constitutes a *fair, efficient and openly competitive market*. These principles, identified in the MSA's July 26, 2005 paper entitled 'Undesirable conduct and market power', are:

- *High fidelity price signal*: A price signal that is reflective and responsive to changes in fundamentals such as fuel prices, outages, and supply-demand balance. It is particularly important in an energy-only market that prices are able to reflect conditions of scarcity.

Absence of a high fidelity price signal suggests the market may be inefficient and/or not openly competitive.

- *Competitive response:* In a competitive market, if a participant is able to profit from an innovative strategy, there should be a timely response from other market participants to contest this profit. Absence of such countervailing forces suggests an inefficient and/or unbalanced market.
- *Information rich environment:* Participants operating in an information rich environment are better placed to make rational and informed decisions that are consistent with the *fair, efficient and openly competitive* operation of the market;
- *Balance between risk and reward:* In a competitive market there should be opportunities for profit for those willing to take risks. For reasons of equity and efficiency it is important that potential risk and reward are balanced.
- *Level playing field:* A level playing field is a fundamental part of promoting confidence in a fair and openly competitive environment. The Trading Practices Guideline (“TPG”) and the Code of Conduct Regulation (“Code”) are two examples related to ensuring a level playing field with regard to access to information.
- *Opportunity to compete:* Market participants (and potential participants) should have the opportunity to compete or contest in any part of the market without undue barriers or interference, whether structural or by a competitor.

Since its formation the MSA has adjudicated on whether participant behaviour or market rules have been inconsistent with the operation of a *fair, efficient and openly competitive* market.¹ Through this body of work the MSA has identified the six key principles described above. Participants should also note that in assessing conduct the MSA also considers the nature and scale of the impact upon the market, focusing on four key areas:²

- Intent;
- Materiality;
- Sustainability; and
- Repeatability

¹ Prior to Section 6 of the EUA 2003, no specific expectation about participant conduct was included. However, the criteria for assessing behaviour under the prior legislation were similar to the *fair, efficient and openly competitive* standard. Section 9 of the EUA 1995 (amended in 2001) required that surveillance assessed whether ‘the results of activity are equitable and efficient’ and that rules, guidelines and conventions were sufficient to ‘discourage eligible persons from employing anti-competitive practices’. Section 11 of the Market Surveillance Regulation 278/98 also required the MSA to provide a view on whether an activity had affected ‘the establishment, maintenance or operation of a competitive and efficient market for electricity and electricity services’.

² For further information see *MSA Investigation Process and Assessment Guidelines*, 26 January 2004. Available for download at <http://www.albertamsa.ca/files/MSAInvestigationProcessGuidelines012604.pdf>

In this short paper we consider a number of the issues examined by the MSA over the last few years and how these relate to the six principles underlying a *fair, efficient and openly competitive market*. The list of issues considered in this paper is not exhaustive. For example, it does not include the many issues that the MSA has considered that have found resolution through natural market mechanisms. It remains the MSA's preference that, where possible, unhindered competition in the market place is allowed to provide a solution. While the summaries of issues below are intended to provide additional clarity, the MSA encourages participants to consult the more detailed analysis and findings presented in individual reports. For a number of the older issues we include additional commentary providing our current perspective in these areas.

ISSUE 1: CLOVER BAR OFFER STRATEGY (2001)³

Issue: MSA investigated the conduct of the Balancing Pool whereby offers for Clover Bar were made on the basis of ‘variable cost’ of a hedged price of gas that was not reflective of the then current gas price.

Assessment / Resolution: MSA assessment concluded that offering on the basis of a spot rather than hedged price of gas was more appropriate since this more accurately reflected the opportunity cost of a ‘for profit’ generator.

Relation to FEOC Principles: ‘For profit’ generators were unable to provide an efficient *competitive response* to the offers made by the Balancing Pool (i.e. there were times when it made more sense to sell gas rather than sell electricity). The problem was exacerbated by the relatively large size of Clover Bar in the market presenting a ‘soft-cap’ at a level not necessarily consistent with *high price fidelity*. The Balancing Pool in changing to an electricity offer strategy based on spot gas prices served to rectify this problem. Publishing this change in strategy (i.e. providing an *information rich environment*) helped achieve an appropriate competitive response.

Current perspective: The MSA has recently revisited the issue of Clover Bar in the context of the termination of the Clover Bar PPA.⁴ The MSA’s concern was with the possibility that Clover Bar units could be offered into the market and provide a ‘soft-cap’ inconsistent with *high price fidelity*. Following the decision to decommission Clover Bar the MSA has no further concerns in this area.

ISSUE 2: MISUSE OF LOCKING RESTATEMENTS (2002)⁵

Issue: Certain participants appeared to be using locking restatements to restate offers when the real time merit order above SMP was particularly steep. Restating a relatively small offer block up the merit order had the effect of increasing price. Typically, little or no response from load was observable in the merit order.

Assessment / Resolution: The MSA’s opinion was that the use of locking restatements in the above manner was contrary to the purpose for which they were originally intended. The existence of the real-time merit order graph helped to make the strategy very successful. The MSA, through the Power Pool Council, issued a guideline, mandating no non-operational locking restatements within 30 minutes of delivery. This was later codified in Pool rules. The real time merit order graph was also removed.

Relation to FEOC Principles: Crucial to the MSA’s assessment was the lack of a *competitive response* by load or other market participants. In this environment, the use of locking restatements to move small blocks of energy up the merit order was an undertaking where there was not an appropriate *balance between risk and*

³ See http://www.balancingpool.ca/pnp/notices/new_07-jun-2001.html for more information.

⁴ *Notice: Undesirable Conduct and Market Power*, 26 July 2005. Available for download at <http://www.albertamsa.ca/2665.html>.

⁵ See *Guidelines for the use of the ‘Locking Restatement’*, http://ets.powerpool.ab.ca/downloads/guidelines_locking_restatement.pdf

reward (i.e. low risk, high reward). Removal of real time merit order information is contrary to the principle of establishing an *information rich environment*. However, this has served to counter-balance the significant freedom that remains in the current market design for participants to restate offers.

Current perspective: The MSA is concerned that the use of energy restatements to offer additional energy at a low price in response to observing a high system marginal price (SMP) is not an optimal feature of the current market design. Such behaviour is sometimes referred to as ‘price chasing’. The MSA is particularly encouraged that two of the policy recommendations following from the Department of Energy review would appear to address this issue (the lock-down at t-2 and payments to marginal generators). In the interim period we expect that all forms of restatement behavior will continue to be monitored closely. Participants should be aware that while following the letter of rules may satisfy compliance criteria they should be particularly cognizant of the impact restatement behaviour has upon the *fair, efficient and openly competitive* operation of the market.

ISSUE 3: ZERO DOLLAR OFFERS (2003)⁶

Issue: The growth and high level of zero dollar offers in the Alberta market is cause for concern to the extent that it includes dispatchable generation (i.e. above minimum stable generation). Current restatement rules allow generators to ‘price chase’ at real time placing dispatch risk on other parties and damaging the accuracy of price forecasts.

Assessment: The MSA report noted a number of reasons for zero dollar offers being made in the market, assessing that it had likely contributed to a lower pool price and to increased price volatility. At the time of the 2003 report it was not felt that these impacts on the market had been large. The MSA was also sympathetic that offering at zero dollars was the major mechanism some generators had for managing dispatch risk.

The MSA report resolved to continue monitoring zero dollars offers and has done so in its Year in Review reports. The MSA also noted that the AESO was seeking to address this issue from the perspective of market design. Consequently no action was taken against specific participants.

Relation to FEOC Principles: The 2003 MSA report included assessing the findings of the report against the criterion of ‘fair, efficient and openly competitive’. In this report the MSA concluded that ‘fairness’ was ensured since all participants had the option to offers at zero dollars. The report also considered ‘efficiency’ concluding this may have been damaged by high cost units offering at zero, displacing units with lower marginal costs high in the merit order. To the extent that zero offers contributed to volatility this was also seen as damaging to ‘efficiency’. The ‘openly competitive’ nature of the market was seen damaged if

⁶ *Zero dollar offers*, 29 April 2003. Available for download at http://www.albertamsa.ca/files/Zero_Offers_-_042903.pdf.

zero dollar offers suppressed pool price and made the market less attractive to new investment.

The MSA's 2003 report applied our assessment directly against the terms that comprise 'fair, efficient and openly competitive'. We note that this direct comparison is difficult. Further, particular conduct must be consistent with not only the individual criteria of 'fairness', 'efficiency' and 'openly competitive' but in considering the interactions between all three. These limitations contributed to the MSA's decision to clarify the principles underlying what constitutes a 'fair, efficient and openly competitive'. In relation to these principles the impact of zero dollar offers are considered more easily. First, restatement of volumes at zero dollars at, or close to, real time may be considered inconsistent with a *high fidelity price signal*. Efficiency may also be damaged if this causes the system controller to move up and down the merit order due to what effectively amounts to self dispatch. Because everyone had the same right to offer we did conclude that there was a level playing field. However, the significant signal for the MSA was that there was no *competitive response* from other participants that erodes the incentive of offering at zero dollars.

Current perspective: The MSA is encouraged that the policy recommendations following the Department of Energy led review may address a number of issues surrounding zero dollar offers. Going forward the MSA intends to continue monitoring the number and composition of zero dollar offers and the impact that offering flexible blocks of energy at zero dollars has upon market efficiency.

ISSUE 4: POWEREX SPINNING RESERVES (2004)⁷

Issue: Under agreement with the AESO, Powerex continued to be paid for providing spinning reserves after being forced off due to the tie line becoming the largest system contingency. Energy flows on the intertie, especially those of Powerex, contributed to it becoming the largest single contingency.

Assessment: The MSA assessment noted that intra-Alberta providers of spinning reserves were not paid for undelivered reserves. For consistency, the MSA advised the AESO that it should seek to cease paying Powerex for undelivered reserves. Through revisions made to OPP 312 and OPP 403 by the AESO has sought to reduce or eliminate the need to curtail active spinning reserves.⁸

Relation to FEOC principles: Equal treatment for Powerex and intra-Alberta generators is part of ensuring a *level playing field*. The payment for reserves that are undelivered also represents an inefficient *balance between risk and reward*. This conclusion is stronger where the *balance between risk and reward* could be influenced by a participants' behaviour in another area (in this case, flowing energy contributing to the tie line becoming the single largest contingency).

⁷ *Powerex Active Spinning Reserve Review*, 27 August 2004. Available for download at <http://www.albertamsa.ca/files/PWXReport082704.pdf>.

⁸ *Re: AESO Comments about MSA Powerex Active Spinning Reserve Review*, September 30, 2004. <http://www.aeso.ca/files/MSAStakeholderLetter.pdf>

ISSUE 5: SPINNING RESERVES MARKET EVENT (2004)⁹

Issue: The MSA observed that from November 3-11 2003 offer for hydro reserves from TransAlta had a significant and negative impact on the on-peak spinning reserve index that appeared to result in a counter-intuitive market outcome.

Assessment: The MSA assessment noted that while TransAlta appeared to have engaged in rational and profit maximizing behaviour it lead to an outcome not consistent with market fundamentals. The incentive for this behaviour was related to the terms and conditions associated with the Hydro PPA. The MSA made a number of recommendations including that the Balancing Pool and TransAlta Utilities should develop and implement solutions to prevent this type of behaviour in the future. Following the renegotiation of the arrangement between the Balancing Pool and TransAlta Utilities no repetition of the event in question has been observed.

Relation to FEOC principles: This issue is one of ensuring a *high fidelity price signal*, i.e. that spinning reserves prices are related to fundamentals. We also note the behaviour in question relied on TransAlta dominating the spinning reserve market in order to affect the equilibrium price; at these times no *competitive response* was observable, or possible, from other market participants.

ISSUE 6: TRADING PRACTICES GUIDELINE AND INFORMATION DISCLOSURE PROTOCOL (2004)¹⁰

Issue: The MSA became concerned that PPA owners had access to outage information that PPA buyers did not. This information asymmetry led to the possibility that PPA owners could trade on information concerning outages before this information was revealed to buyers or other market participants. In addition the MSA was concerned that outside the PPA relationship, all owners of generation had the potential to trade on known but non-public information about upcoming outages.

Assessment: The MSA viewed the possibility of trading on non-public information as analogous to a situation of insider trading. The MSA published the Trading Practices Guideline (TPG) indicating that participants must not trade on known but not public information. The TPG was supported by an Information Disclosure Protocol (IDP) intended to facilitate the reporting of outage information from owners to other market participants. Outage reporting and communications have undergone a series of improvements during 2005 including real time reporting of outage updates on the AESO website

Relation to FEOC principles: The key principle underlying the TPG is intended to create a *level-playing field* among participants. The IDP is consistent with the creation of an *information-rich* environment where participants are well informed

⁹ *Spinning Reserve Market Event Report*, 23 January, 2004. Available for download at <http://www.albertamsa.ca/files/SpinningReserveMarketEventReport012304.pdf>

¹⁰ See papers available for download at <http://www.albertamsa.ca/TradingPracticesGuidelinesandInformationDisclosureProcedure.html>.

about market fundamentals, which facilitates both their participation in market and their ability to monitor conduct of other participants.

ISSUE 7: REGULATING RESERVE PERFORMANCE (2004)¹¹

Issue: The MSA investigated the assertion that the system controllers were using regulating reserves in order to manage price.

Assessment: The MSA did not find evidence that System Control was using regulating reserve to manage price. The MSA did find a general lack of dispatch fidelity (caused by price chasing and unoffered load), that was forcing System Control into a defensive position with respect to CPS2 violations.¹² Systematically, when the SC dispatched up the merit order, there was sometimes an unannounced reaction from load and generation causing CPS2 violations. These problems stemmed from the ability of participants to ‘price chase’ and in some cases from problems with dispatch compliance.

Relation to FEOC principles: Had the MSA found evidence of price management through the use of regulating reserves this would have been inconsistent with maintaining *high price fidelity*. Price chasing activity is addressed under our discussion of zero dollar offers (Issue 3) above. Failures to comply with dispatch are addressed under AESO rules. AESO rules, including those dealing with dispatch compliance, are an important part of establishing a *level playing field*. Some of the measures considered in the AESO’s Quick Hits package should eliminate some of this behaviour.

ISSUE 8: UNECONOMIC IMPORTS (2005)¹³

Issue: Flows over the intertie were observed over a period of time that seemed contrary to fundamental economics (e.g. imports were occurring during times when prices in neighboring markets (adjusted for transmission costs) were higher than Alberta Pool price). ‘Uneconomic’ flows were also observed to persist for several hours and at times when the differential was quite large. A market response (i.e. counter flow across the intertie) was not usually observed.

Assessment: The MSA conducted a number of investigations into activity on the interties, particularly the impact of imports on the BC intertie. The investigations were complicated by the fact that ex-post ‘uneconomic’ flows may have been inadvertent (i.e. based on expectations that pool prices were other than their actual value). Market rules forcing imports to be offered at \$0 were identified as part of the problem. A notice to participants was released in July of 2005 indicating

¹¹ *A Review of Regulating Reserves Performance in Alberta*, 16 September, 2004. Available for download at <http://www.albertamsa.ca/files/RegulatingReservesPerformance091604.pdf>

¹² CPS2 is a statistical measure of Area Control Error (ACE) magnitude. It is designed to measure a Control Areas unscheduled power flows. The Western Electricity Coordinating Council (WECC) maintains standards for CPS2 against which performance is compared.

¹³ *A Review of Imports, Exports, and Economic use of the BC Interconnection*, 10 January 2005, *Notice: Intertie Conduct*, 28 July, 2005, *Updated on Economic Use of the BC Interconnection*, 23 September 2005. Available for download at <http://www.albertamsa.ca/files/UpdateBCTieLineEconomics092305.pdf>, <http://www.albertamsa.ca/files/NoticeIntertieConduct072805.pdf>, <http://www.albertamsa.ca/files/UpdateBCTieLineEconomics092305.pdf>

steps participants should take in order to ensure their activities over the intertie were consistent with the fair, efficient and openly competitive operation of the market. Further analysis was published by the MSA in September 2005.

Relation to FEOC principles: The MSA's notice of July 2005 provided three guiding principles for conduct on the intertie:

- *A portfolio strategy which relies upon manipulation of pool price to be successful is not legitimate, and undermines the fairness and efficiency of the market.*
- *Import and export activity should normally be economic versus the next best market alternative (by opportunity cost), accordant with market efficiency. Given that current ISO rules require that imports and exports are price takers, some degree of economic uncertainty and inadvertence can be expected, and allowed for.*
- *As a matter of economic efficiency, absent transmission constraints, import and export activity should normally close arbitrage opportunities.*

All three principles are concerned with ensuring a *high fidelity price signal*. 'Uneconomic' flows were rarely seen to prompt a *competitive response* (i.e. counter flowing energy) due to the relative inflexibility of flows on the intertie (i.e. no real time counter flow possible) and due to the size and asymmetric nature of transmission costs. The lack of an observed *competitive response* or a viable alternative for enhancing this response in the market were factors contributing to the need for the MSA to issue its notice on this matter.

ISSUE 9: TRANSMISSION MUST RUN (2005)¹⁴

Issue: The MSA investigated whether the procurement process for Transmission Must Run (TMR) was one that facilitated a fair, efficient and openly competitive outcome.

Assessment: The MSA's assessment concluded that the process for TMR procurement could be improved. The identification of need focused on perceived solution rather than technical need. The process for procuring TMR relied too heavily on bi-lateral negotiations. The time frame for the procurement process was often too short to promote alternate solutions. A more structured process was suggested by the MSA to address these concerns. In circumstances where the potential for a competitive solution is severely limited the MSA recommended that a regulated solution was most appropriate.

Relation to FEOC principles: Procurement based on a perceived solution rather than technical need serves to limit a participant's *opportunity to compete*. The same reasoning applies where time frames are too short to allow alternate solutions. The more structured process contemplated by the MSA is also important in providing a *level playing field*. The system operator in being the sole procurer of TMR and in having the right to conscript has an inherently strong negotiating position; we see adopting a more formal and structured procurement process as helping to promote an *information rich environment* and aiding a *level*

¹⁴ Transmission Must Run, March 2005, prepared by Charles River Associates. Available for download at

playing field for negotiating parties. Where the potential for a competitive solution is clearly not an option (e.g. where only one participant is able to supply the required service) we have suggested a regulated solution be adopted.

ISSUE 10: SALE OF SHEERNESS PPA CAPACITY (2005)¹⁵

Issue: In anticipation of the forthcoming sale of Sheerness PPA capacity the MSA has indicated that it may require a conduct compliance plan should the sale result in the transfer of significant dispatch offer rights to participant that already has a significant market share.

Assessment: Assessment of this issue is ongoing by the MSA and we have conducted consultations with a number of participants on this matter. In general the MSA is concerned with the impact operation of Sheerness may have upon export ATC, requirements for Calgary area Transmission Must Run (TMR) and upon portfolio management.

Relation to FEOC principles: We note that an action taken with the intent to reduce export ATC is effectively removing the *opportunity to compete* by other participants. Profiting from a strategy that forces dispatch of TMR represents an inappropriate *balance between risk and reward*, is likely to be inconsistent with a *high fidelity price signal* and does not promote a *competitive response* from other participants. The issues surrounding Sheerness relating to export ATC and Calgary area TMR are not likely to persist in the long term. Current plans to upgrade transmission between Edmonton and Calgary should significantly reduce if not eliminate the need for Calgary area TMR. Further the Transmission Development Policy also speaks to returning the interties to their stated capacity. Given the long term goals set out in the Transmission Development Policy, the MSA will not tolerate participants engaging in strategies that exploit any current weakness in the transmission system.

Participants with significant market share¹⁶ (whether due to current holdings or due to the acquisition of Sheerness capacity) should be cognizant of the impact managing their portfolio has on the *fair, efficient and openly competitive* operation of the market. For example, moving large blocks of energy up or down the merit order due to portfolio considerations rather than changes in market fundamentals may have an adverse affect on maintaining a *high fidelity price signal*. In assessing whether strategies are appropriate the MSA will look at the both the *balance between risk and reward* and whether the strategy results in a *competitive response*.

¹⁵ Reference market power letter July 26, 2005.

¹⁶ While size is a factor in determining the potential for impact on the operation of the market, the composition of assets in a participant's portfolio is also important.