MARKET
SURVEILLANCE
ADMINISTRATOR
ALBERTA CANADA

ALBERTA ELECTRIC SYSTEM OPERATOR

SUBMISSION RELATED TO
ELECTRICITY MARKET REFORMS

MARKET SURVEILLANCE ADMINISTRATOR

NOVEMBER 1, 2019

INTRODUCTION

On July 24, 2019 the Government of Alberta announced that Alberta would not be proceeding with a capacity market, and that the industry would remain with an energy-only design. In late July 2019 the Alberta Electric System Operator (AESO) received direction from the Alberta Ministry of Energy:

> ... to provide advice regarding market power and market power mitigation by November 29, 2019. Additionally, the AESO was directed to provide analyses and recommendations on whether any changes to the energy-only market are needed, including changes to the price floor/ceiling and shortage pricing, by July 31, 2020. The AESO recognizes that there is a strong linkage between market power mitigation, the price floor/ceiling and shortage pricing, and will consider this connection as it undertakes its work.[1]

On October 8, 2019 the AESO issued a request for input from the Market Surveillance Administrator (MSA), market participants, and interested parties. The letter contained eleven questions. The MSA, in this submission, is providing an opinion on the six questions that relate to the MSA. These questions are:

- Should Alberta maintain the current offer price cap?
- Should Alberta use shortage pricing?
- Is the current FEOC regime satisfactory in the post-2020 era?
- Is the current 30% limit on market share appropriate?
- What is the role of MSA Guidelines? How should they be created and approved?
- What is the proper role of the MSA going forward?

Before answering these questions, the MSA has some general observations. Alberta has operated a competitive, energy-only electricity market since 2000. During this time, the market has provided reliable supply at reasonable cost. Electricity prices have been at the lower end when compared to other Canadian provinces. The risks associated with investments in Alberta generation have been mainly borne by investors in the industry.

In short, over the past two decades, the energy-only market has worked well in Alberta.[2] However, past performance does not necessarily predict future success, particularly if underlying conditions change. One issue in particular needs to be considered. As the PPAs

[1] Letter dated October 8, 2019 from the AESO to the Market Surveillance Administrator, Market Participants and Other Interested Parties regarding “Request for Information regarding Market Power Mitigation”.

[2] Indeed, in testimony before the AUC in the capacity market proceeding, AESO witness Ms. Keating Erickson stated the energy-only market structure has worked “extremely well”.

expire at the end of 2020, there will be increased concentration and potential for increased exercise of market power and higher prices.

Historically, Albertans have supported market-based mechanisms, rather than administrative and regulatory solutions. This approach has been reaffirmed by the present Government. This is an important consideration in developing a new market design that is sustainable.

BACKGROUND

Prior to 1996 the Alberta electricity market was dominated by three utilities, TransAlta Utilities Corporation (formerly Calgary Power), ATCO Ltd. (formerly Alberta Power), and EPCOR Utilities Inc. (formerly Edmonton Power). These utilities were vertically integrated, with each providing generation, transmission, and distribution of electricity. The rates for all three segments were regulated.

In 1996, the Alberta government passed the *Electric Utilities Act* (EUA), restructuring the Alberta electricity market and providing a separate regulatory regime for each of the three sectors. Two years later in 1998, the Alberta government amended the EUA to deregulate the generation sector. Alberta is unique in Canada. It is the only province where electricity generation is entirely carried out by the private sector. There is no regulation and efficient market outcomes are driven by competitive market forces. To ensure that market forces act properly, the government created the MSA to guard against anticompetitive conduct in the new electricity market.

Initially the MSA was part of the Power Pool Council but in 2003 the EUA was further amended to make the MSA an independent agency reporting directly to the Minister of Energy. The Commission has described the MSA's role as follows:

> The powers granted to the MSA in that act are broad; its mandate includes surveillance, investigation and enforcement in respect of: the conduct of market participants, the conduct of the Independent System Operator and the structure and performance of the electricity market. Generally speaking, the applicable provisions of the Alberta Utilities Commission Act establish the MSA as a market "watchdog"[3] with the responsibility to oversee the fair, efficient and openly competitive operation of the electricity market.[4]

THE MSA MANDATE

The MSA is an independent enforcement agency that protects and promotes the fair, efficient and openly competitive operation of Alberta's wholesale and retail electricity markets. The MSA also ensures that Market Participants comply with the Alberta Reliability Standards and Independent System Operator's rules.

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[3] *TransAlta Corporation v Market Surveillance Administrator*, 2014 ABCA 196 (CanLII), paragraph 1.

[4] AUC Decision 21115-D01-2017, *Application by the Market Surveillance Administrator Regarding the Publication of the Historical Trading Report* (May 17, 2017) at para 64.

The MSA's mandate is set out in section 39 of the *Alberta Utilities Commission Act* (AUCA). The MSA is required to:

- Carry out surveillance in respect of the supply, generation, transmission, distribution, trade, exchange, purchase or sale of electricity, electric energy, electricity services or ancillary services or any aspect of those activities

- Investigate matters (either on its own initiative or on receiving a complaint) regarding potential contraventions of:

    - the EUA, the regulations under the EUA, the ISO rules, reliability standards, or decisions, orders or rules of the Commission,

    - conduct that does not support the fair, efficient and openly competitive operation of the electricity market, or

    - any other matters that relate to or affect the structure and performance of the electricity market.

Section 39(2) of the AUCA states that the MSA's mandate includes surveillance, investigation and enforcement of:

- the conduct of electricity market participants,

- the structure and performance of the electricity market, and

- the conduct of the Independent System Operator and the Balancing Pool.

Section 39(3) of the AUCA then directs the MSA to assess:

- whether or not the conduct of an electricity market participant supports the fair, efficient and openly competitive operation of the electricity market, including complying with the EUA, the Regulations under the EUA, the ISO rules, and Reliability Standards or Decisions, Orders or Rules of the Commission, and

- whether or not the ISO rules are sufficient to discourage anti-competitive practices in the electric industry and whether or not the ISO rules support the fair, efficient and openly competitive operation of the electricity market.

The wide jurisdiction granted to the MSA to guard against anticompetitive conduct reflects the importance that Alberta attributes to private, investor-owned generation facilities.

THE OFFER PRICE CAP

The MSA believes that Alberta should maintain the current offer price cap of $999.99/MWh which has existed since the market began. Offer caps in wholesale energy markets provide

protection against extreme exercise of market power. Offer caps can also protect consumers from extreme price spikes.

The MSA sees no reason to change the offer price cap. Instead, the MSA recommends that shortage pricing be introduced. This will provide incentives by introducing higher prices in those hours when additional supply is necessary. The MSA is not aware of any evidence that supports reducing the offer price cap.

If shortage pricing is adopted in Alberta, the existence of a $$999.99/MWh offer price cap does not imply that market prices cannot exceed $999.99/MWh. Under shortage pricing, the MSA expects that prices during shortage periods would exceed the offer price cap through adders to the energy market price. As long as excessive prices are not allowed during other periods, the resulting periodic high price periods will support market price signals that produce new investment in generation capacity.

SHORTAGE PRICING

The MSA believes that Alberta should implement shortage pricing rules. This was the major point that three world-class experts emphasized in the recent capacity market hearing. The experts called by the Commission,[5] the MSA,[6] and ENMAX,[7] were clear on this point.

Shortage pricing is an important element of an effective energy market design. It is principled, transparent, and predictable. Shortages occur when supply is not sufficient to satisfy both energy and reserve requirements, which can lead to a reduction in reliability. As an operator dispatches reserves to satisfy the system's energy demand, the system becomes less capable of responding to contingencies and the expected costs of a power outage increases. Shortage pricing is intended to reflect these costs and should produce prices and revenues that can be sharply higher than the prices that prevail under non-shortage conditions. A well-designed shortage pricing regime provides signals for performance to existing resources, as well as signals for future investment in capacity, including flexibility. As indicated, a shortage pricing relies on efficient pricing during **actual** shortages.

Current market conditions in Alberta are favorable for the implementation of shortage pricing rules. At present, there is more than adequate capacity, so shortages are likely to be infrequent. This will limit near-term price shocks, creating a situation where a shortage pricing regime, based on sound economic principles, could be implemented without the immediate threat of

[5] The CV of Dr. Cramton is at Exhibit 23757-X0033 in the capacity market proceeding. He is an independent director on the board of the Electric Reliability Council of Texas and Professor of Economics at the University of Maryland and the University of Cologne.

[6] The CV of Dr. David Patton is at Exhibit 23757-X0389 in the capacity market proceeding. He is President, Potomac Economics which is the Independent Market Monitor for the Mid-Continent ISO (MISO), the New York ISO (NYISO), the New England ISO (ISO-NE), and the Electric Reliability Council of Texas (ERCOT).

[7] The CV of Dr. Sotkiewicz is at Exhibit 23757-X0400 in the capacity market proceeding. Formerly he was Chief Economist, Market Services Division, PJM Interconnection.

higher prices for consumers. Investors and generator owners can develop a longer-term outlook based on the expectations of future shortage pricing revenues. In both economic and political terms, now is an ideal time to move forward with shortage pricing.

Well-designed shortage pricing is a critical component of efficient energy and ancillary services markets. Energy prices that prevail during shortage conditions play a fundamental role in sending efficient price signals in the short run and long run:

- In the short run, efficient shortage pricing sends appropriate price signals to suppliers in other markets to export energy to the region in shortage and for participants with existing capability to supply additional energy or reduce consumption.

- In the long run, efficient shortage pricing is an important component of the economic signal governing new investment and provides incentives for existing units to remain in operation. In the absence of a capacity market, these longer-term signals are critical.

A shortage occurs in real time when demand is high enough that available resources are not sufficient to meet the demand for both energy and operating reserves. In such a case, reserve shortages occur and prices must reflect the cost of degraded reliability. These shortage prices can occur even for very short-duration shortages, but they are nonetheless real shortages. Typically, these transitory shortages occur when the system is ramp-constrained (i.e., output is increasing as rapidly as possible). These are true shortages because if a large contingency occurs during this period (e.g., a generator tripping offline), the transmission operator will not have the ability to replace the capacity because its other generators are already ramping as quickly as possible.

Operating reserve demand curves establish an economic value for reserves that will be reflected in energy prices if the energy market must bid scarce resources away from the reserve markets. When this condition occurs, the reserve market effectively becomes the marginal source of supply to the energy market, and therefore appropriately influences energy prices.

The typical reserve demand is sloped or tiered so that a small reserve shortage will cause energy prices to increase by a relatively small amount, while deeper shortages resulted in much higher prices. This increasing shortage pricing reflects the increasing risk of shedding load as operating reserve levels fall and, therefore, reflects the true value to the system of incremental energy and reserves.

Without reserve demand curves to set the price during shortages, the price will be set at the marginal cost of the last segment of supply dispatched from the online resources, which will generally be less than $200 per MWh. Under these shortage conditions, energy prices at these levels are inconsistent with the true value of energy or the costs of restoring reserves on the system.

Establishing demand curves for reserves is the best practice for setting efficient shortage prices in the energy market. Demand curves should be based on the value of lost load (VOLL). VOLL

is the estimated cost to consumers of involuntarily losing their supply of electricity. In MISO, these are based on estimates from a variety of studies. At the low ends of the demand curves, the curves are set at a level that would generally cause all available offers to be accepted when the system is in a shortage. This is consistent with the mandatory nature of the reliability requirements. An efficient ORDC should conform with three principles:

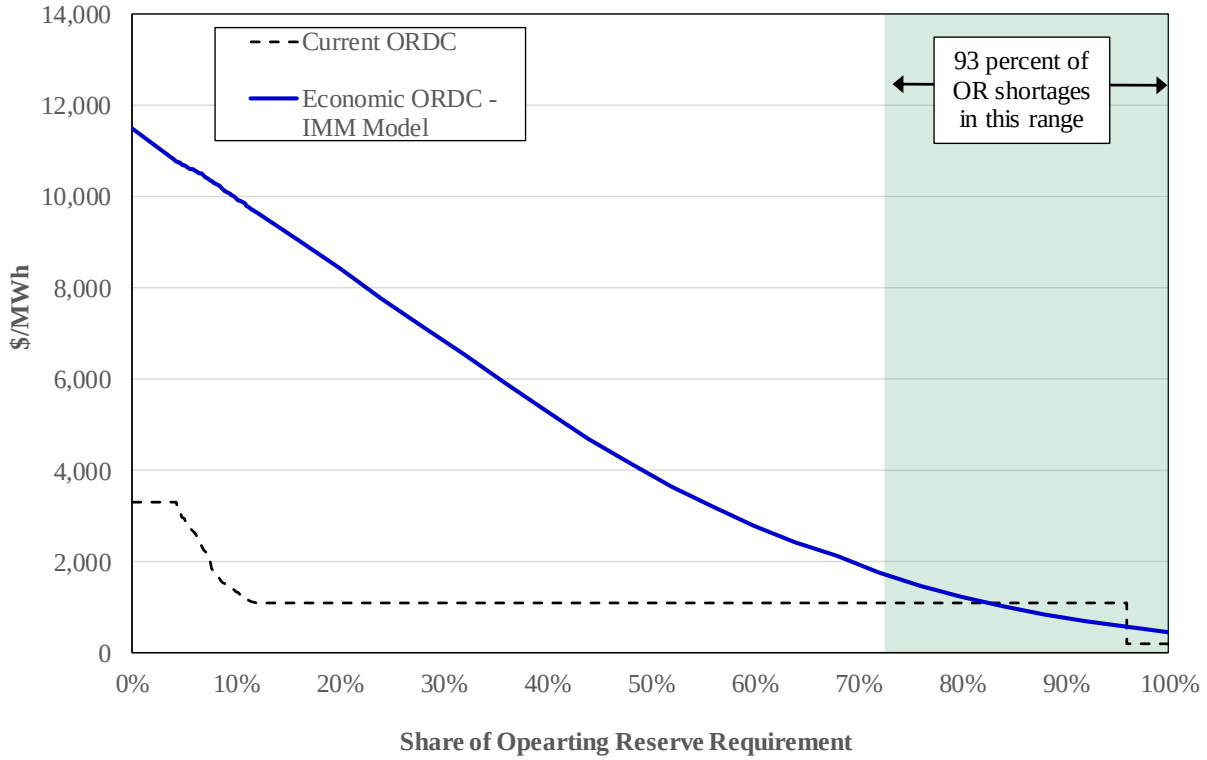
- Reflect the marginal reliability value of reserves at each shortage level;
- Consider all significant supply-side contingencies, including the risk of multiple contingencies occurring simultaneously; and
- Avoid discontinuities as these can lead to excessively volatile outcomes.

The marginal reliability value of reserves at any shortage level is equal to the expected value of the load that may not be served. This is equal to the following product at each reserve level:

VOLL * the probability of losing load

As an illustration, consider the following example. Potomac Economics, a witness called by the MSA in the capacity market proceeding, has recommended that MISO improve its ORDC, which steps up to $1,100 and remains constant as reserve levels fall. The probability of losing load rises as reserve levels fall and the shortage increases. By simulating market conditions, Potomac Economics has developed a Monte Carlo model to estimate this relationship, accounting for volatility of wind output, imports and exports, and energy demand. This model allows the probability of losing load to be estimated and to trace out an “economic ORDC” based on an assumed VOLL of $12,000. The figure below illustrates Potomac Economics’ proposed curve and MISO’s current ORDC. As the figure shows, although MISO has an ORDC and uses it for shortage pricing, it does not qualify as a best practice because the value of the reserves does not increase as reserve levels drop over most of the range of the curve. This implies that the reliability value of the remaining reserves does not grow as the shortage becomes more severe, which is not true and is why the shape of the current ORDC does not match the economic ORDC that Potomac Economics has estimated.

An Illustration of an Economic Operating Reserve Demand Curve



Allowing prices to increase during shortages would provide efficient compensation for flexible, fast-ramping resources in Alberta. These are the resources that can respond quickly to help resolve shortages. Such pricing rules will provide incentives for resources to invest in and provide flexibility in the operating timeframe, including:

- Offering faster resource ramp rates;
- Offering wider dispatch ranges; and
- Offering shorter start-up times.

Additionally, these incentives have important long-term implications. They provide efficient incentives for participants to build more flexible, fast-ramping generating resources and to make maintenance decisions on existing resources to increase their flexibility. Hence, this is a critical component of an efficient energy and ancillary services market design.

Of all major U.S. electricity markets are designed to price all shortages, regardless of duration. The design causes the operating reserve demand curves to set price in any five-minute interval in which the operating reserve requirements cannot be fully satisfied. This is important in periods when the system is ramp constrained—when slow-ramping units are moving as rapidly as possible—causing the system to be short of operating reserves because other units must provide energy that would otherwise be providing reserves.

THE EXISTING FEOC REGIME

The FEOC (fair, efficient, openly competitive) regime has served Albertans well over the last two decades in terms of reliability and prices. First, the electricity industry has delivered reliable service with adequate resources. Second, electricity prices have been low relative to most Canadian Provinces.

FEOC is consistent with the historical political economy of Alberta – reliance on markets where possible and development of regulatory remedies only where necessary.

It is generally agreed that Alberta has effective legislation when it comes to challenging anti-competitive conduct in the energy market. Section 6 of the EUA states:

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

Section 2 of the *Fair, Efficient and Open Competition Regulation* (FEOC Regulation) identifies certain conduct that constitutes anti-FEOC conduct under section 6 of the EUA. This includes conduct where a market participant (a) directly or indirectly agrees with another market participant to restrict competition, (b) engages in predatory pricing or any other form of predatory conduct, and (c) manipulates market prices away from a competitive market outcome.

The most important Alberta decision regarding anticompetitive conduct is undoubtedly the *TransAlta* case.[8] There the company was alleged to have deliberately taken generation out-of-service at times of high demand and limited supply to cause prices to increase.

The investigation started on March 1, 2011 and ended four years later with a Commission decision on July 27, 2015. The Commission found that the company had breached the FEOC Regulation and handed down a $25 million administrative penalty, disgorgement of $26.9 million in profits gained, and $4.3 million in MSA legal costs.[9]

These types of cases take a long time to prosecute and are very expensive. The decision issued by the Commission is lengthy, totaling 217 pages. However, the decision created a clear roadmap regarding the fundamental principles that apply in Alberta when determining anti-competitive conduct.

The lesson from the *TransAlta* is that the existing legislation is broad and effective. It provides the MSA with the necessary tools to guard against anti-competitive conduct in the Alberta electricity market. The MSA does not believe that any change in this legislation is required.

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[8] AUC Decision 3110-D01-2015. "Market Surveillance Administrator allegations against TransAlta Corporation et al., Mr. Nathan Kaiser and Mr. Scott Connelly: Phase 1." July 27, 2015.

[9] AUC Decision 3110-D03-2015. "Market Surveillance Administrator allegations against TransAlta Corporation et al.: Phase 2 – request for consent order." October 29, 2015.

MARKET SHARE LIMITATIONS

Section 5 of the FEOC Regulation limits the maximum share generation capacity of any individual company to 30%. This restriction was introduced with the in September 2009 and serves as a guardrail to protect against excessive market power that is obtained without anti-competitive conduct that may nonetheless have the effect of increasing prices.

The MSA publishes an annual report on market shares, one purpose of which is to ensure that market participants comply with the limit. The limit has never been breached.

The MSA does not recommend changing the existing 30% limit on market share. Revising this limit in either direction does not offer any clear benefits.

THE MSA GUIDELINES

In June 2003, the EUA was amended to establish the MSA as an independent corporation reporting to the Minister of Energy. At the same time, the legislation granted the MSA the authority to issue guidelines. Four sets of guidelines have been issued to date.[10]

The most recent guideline was the Offer Behaviour Enforcement Guidelines (OBEG) set out in Appendix A. The OBEG was introduced on January 14, 2011, and revoked six years later in May 2017. In 2018, the MSA announced that a new OBEG would be issued. A consultation was held[11] and it was determined that further consideration of guidelines would be deferred until a decision in the capacity market proceeding had been made by the Commission.[12]

Following the Government's decision on July 24, 2019,[13] to cancel the capacity market and the AESO's withdrawal of the application there were further calls by market participants to reintroduce the OBEG. The MSA decided to postpose further consideration of the OBEG until after the Government completed the review of the energy-only only market that it announced on July 25, 2019.[14]

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[10] The guidelines that have been issued by the MSA are the *Code of Conduct Reporting Guideline*, which was put in force on March 4, 2004 and revoked on April 11, 2016, the *Trading Practices Guideline*, which was put in force on February 18, 2004 and revoked on September 1, 2009, the *Intertie Conduct Guideline*, which was put in force in July 2005, amended on July 14, 2008 based on changed market conditions, and revoked on January 14, 2011, and the *Offer Behaviour Enforcement Guidelines* (OBEG).

[11] The consultation documents and independent consultants' report is available online at https://static1.squarespace.com/static/5d88e3016c6a183b1bcc861f/t/5d8e7e5630253172129308c0/1569619542374/2018-12-10+MSA+Consultation+re+Offer+Behaviour+Enforcement+Guidelines.pdf.

[12] The MSA's decision is available online at https://static1.squarespace.com/static/5d88e3016c6a183b1bcc861f/t/5d8e7e5630253172129308c0/1569619542374/2018-12-10+MSA+Consultation+re+Offer+Behaviour+Enforcement+Guidelines.pdf.

[13] The Government's decision is available online at https://www.alberta.ca/release.cfm?xID=642387D0ECA3E-ED8E-6B02-885D35312EBBB3EE.

[14] The Government's review announcement is available online at https://www.aeso.ca/assets/Uploads/Alberta-Energy-Direction-to-AESO-07-25-19.pdf.

There is no doubt that guidelines can be helpful. However, the MSA must be careful when exercising its powers to interpret legislation to not create new policy or legislation. That is the role of government. The MSA believes that, going forward, any new guidelines issued should be first approved by the Commission. Such a procedure would create a proper governance structure to ensure that all interests are considered.

There is an additional policy that may provide more precise and timely guidance than industry wide guidelines. On October 23, 2019, following a consultation, the MSA established the Advisory Opinion Program set out in Appendix B.[15] This allows individual market participants to seek guidance on a timely basis regarding particular fact circumstances. Guidelines take months if not years to develop. The MSA believes that the Advisory Opinion Program could become important as market concentration increases.

Finally, there is another reform which the MSA believes may provide more timely remedies than industry-wide guidelines. As market concentration increases the MSA believes there may be an increased reliance on settlements. The settlement process before the Commission can be improved. To this end, the MSA made a submission on October 29, 2019 to the Commission in the Commission's proceeding related to its 2019-2022 Strategic Plan. There the MSA recommended that the Commission establish a panel of mediators that could be appointed to settlements proceedings and that mediation be compulsory in all settlement proceedings. It was also suggested that there be time limits on the Commission's decision making in any settlement applications.[16] Other jurisdictions that have implemented these settlement procedures have found that the number of settlements have increased, resulting in more timely decision-making.

ROLE OF THE MSA

Regulatory Non-Alignment

The role of the MSA going forward must also consider claims by certain parties that there is non-alignment among Alberta regulatory agencies. The MSA does believe there is any non-alignment. It must be recognised that the legislation specifically grants the MSA regulatory authority over certain activities of both the AESO and the Balancing Pool.[17] For example, the MSA audits the AESO for potential breaches of Alberta Reliability Standards. This may lead to controversy and proceedings before the Commission.

Parties may question why the MSA has appeared to oppose either the AESO or the Balancing Pool before the Commission. The fact is that where those actions have been taken, such as in

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[15] The process to request an Advisory Opinion from the MSA is available online at https://static1.squarespace.com/static/5d88e3016c6a183b1bcc861f/t/5db0bb5e32a93274d096913f/1571863390875/Notice+re+Advisory+Opinion+Program+Process.pdf

[16] The MSA's submission in this proceeding is available online at https://static1.squarespace.com/static/5d88e3016c6a183b1bcc861f/t/5db8996ffdcb9618d1fdd83a/1572378995553/MSA+Submission+related+to+the+AUC%27s+2019-2022+Strategic+Plan.pdf

[17] The MSA's mandate is set out in section 39 of the AUCA.

the matter of the Historical Trading Report, the Commission has invariably upheld the MSA's position. The MSA was properly discharging its statutory obligations.

The MSA Advisory Board

There is one further step the MSA has taken to guard against claims of a non-alignment among agencies. As of November 1, 2019, the MSA has established an Advisory Board. The Advisory Board is a three-person panel that meets quarterly. The chair is Neil McCrank, QC, a former chair of the Alberta Utilities Commission and a former Deputy Attorney General of the Province of Alberta. The two other members are Joseph Doucet, Dean of the Business School at the University of Alberta and David Erickson, former President and CEO of the AESO.

At each quarterly meeting the Advisory Board will review the Reports from the Chairs of the Enforcement Committee, the Compliance Committee, the Critical Infrastructure Committee, and the Market Analysis Committee. The Board also advises on any proposals by the MSA to either start an investigation or bring an application to the Alberta Utilities Commission relating to a potential breach of the EUA or the AUCA, including any related regulations, the ISO Rules and Alberta Reliability Standards.

Regulatory Jurisdiction

The AESO has argued in the capacity market proceeding that the MSA's regulatory jurisdiction is limited to **past** conduct.[18] This is not the law in Alberta and never has been.

Investigation can and should take place if possible **before** the offending conduct takes place. Competition regulators in virtually all jurisdictions operate on this basis. It is in the interest of all parties. There is nothing in the legislation that prevents investigation **prior** to the conduct taking place, or that stipulates that future conduct cannot be subject to an investigation. In fact, the legislation clearly suggests otherwise and specifically empowers the MSA to deal with future conduct.

- Section 39 of the *Alberta Utilities Commission Act* which sets out the MSA's mandate in includes an assessment of whether or not the ISO rules are sufficient to **discourage** anti-competitive practices in the electric industry.[19] This is a forward-looking concept. It has nothing to do with past conduct.

- Guarding against conduct set out in section 2 of the *Fair, Efficient and Open Competition Regulation* is the principle responsibility of the MSA. That conduct includes the following example cited in section 2(h): "restricting or **preventing** competition, a competitive response or market entry by another person." The word "**preventing**," refers to future not past conduct.

[18] The final argument of the AESO is Exhibit 23757-X0795 in the capacity market proceeding. See section 14, page 333, PDF page 343.

[19] *Alberta Utilities Commission Act*, section 39(3)(d).

- Section 25(1.1) of the *Electric Utilities Act* outlines what complaints the MSA may make to the Commission. They include an ISO rule that "**may** have an adverse effect on the structure and performance of the market." The word "**may**" suggests that this relates to future not just past conduct.

- Alberta Utilities Commission Rule 027, *Specified Penalties for Contraventions of Reliability Standards*, states that the MSA may accept a mitigation plan in assessing penalties for contraventions of an Alberta reliability standard where the plan will **prevent** the occurrence or re-occurrence of a reliability standard contravention. This jurisdiction also looks to forward conduct not past conduct.

In summary, there is no basis for the argument that the MSA's jurisdiction is limited to investigating past conduct. Not only is there no support for this in the legislation, no one has ever advanced this claim in the 16-year history of the MSA. Nor should it be considered now.

RECOMMENDATIONS

The MSA recommends that the Government, in reforming Alberta's energy-only market, implement the following:

- Maintain the current offer price cap of $999.99/MWh and the 30% limit on market share for any one market participant;

- Maintain the current FEOC regulatory regime;

- Introduce shortage pricing as outlined in this submission;

- Maintain the provisions that allow the MSA to issue guidelines provided they are approved first by the Commission and the MSA offers an Advisory Opinion Program to deal with specific situations in real time; and

- There should be no change in the regulatory jurisdiction of the MSA. The existing FEOC regime is capable of safeguarding the market from any anti-competitive conduct.

APPENDIX A

Offer Behaviour Enforcement Guidelines

For Alberta's Wholesale Electricity Market

January 14, 2011

PREFACE

Effective September 2009 the *Fair, Efficient and Open Competition Regulation* introduced a number of specific prohibitions some of which have application to market participant offer behaviour in the Alberta electricity market. In the absence of jurisprudence, the Market Surveillance Administrator (MSA) believes it is helpful to stakeholders to explain our analytical framework and how we intend to enforce the provisions in the Regulation with potential application to offer behaviour. We have done so in this document, called the Offer Behaviour Enforcement Guidelines.

The development of the guidelines was the subject of stakeholder engagement, commencing with a roundtable in February 2010 and culminating in this release in January 2011. The engagement process sought input from interested stakeholders with a view to testing and informing the MSA's views prior to the finalization of the document. The approach taken has been to build upon the experience gained since the opening of the Alberta market, draw on relevant experiences from other electricity markets and set the document within the context of well established analytics from the domain of competition law and economics.

The guidelines strive to provide transparency and predictability regarding the MSA's assessment of market participant offer behaviour so that participants can govern themselves accordingly. The document goes beyond enforcement in the narrow sense of the term to explain our approach where there is not a breach but, in our view, the ISO rules or other elements of the market framework are not adequately supporting the *fair, efficient and openly competitive operation of the market*. We believe it is equally important to publicly identify, document and propose remedies for these kinds of shortcomings.

The Market Surveillance Administrator is an independent enforcement agency that protects and promotes the fair, efficient and openly competitive operation of Alberta's wholesale electricity markets and its retail electricity and natural gas markets. The MSA also works to ensure that market participants comply with the Alberta Reliability Standards and the Independent System Operator's rules.

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Interpretation

These guidelines describe the general approach of the Market Surveillance Administrator (MSA) in applying the *Fair, Efficient and Open Competition Regulation* (FEOC Regulation) to market participant offer behaviour in Alberta's wholesale electricity market. They supersede all previous statements of the MSA addressing offer behaviour. Specifically, in publishing this guidance the MSA's *Guideline: Intertie Conduct* (July 14, 2008) is revoked.

The guidelines are not intended to restate the law. They have been made in relation to powers given to the MSA under section 39(4) of the *Alberta Utilities Commission Act* (AUCA). In making a decision, under section 56 of the AUCA the Alberta Utilities Commission (Commission) may take into consideration guidelines made by the MSA; however final interpretation of the law is the responsibility of the Commission and the courts.

The Offer Behaviour Enforcement Guidelines do not provide a comprehensive review of all possible offer behaviour nor do they replace the advice of legal counsel. Participants seeking further clarification on the guidelines are encouraged to seek the advice of the MSA. Any advice given will subsequently be made public in a manner that protects commercial sensitivity and the confidentiality of the request.

These guidelines remain in effect until overtaken by jurisprudence, new legislation / regulation or amendment by the MSA. If a material change is warranted, the MSA will address this through its public Stakeholder Consultation Process.[1]

These guidelines apply only to 'electricity market participants' as defined in the AUCA and any references to 'market participants' in the document should be so interpreted.

[1] MSA *Stakeholder Consultation Process,* January 15, 2008.

1 Introduction

The Alberta wholesale electricity market consists of a power pool that facilitates the exchange of electric energy between market participants. By law, all wholesale electrical energy from generation that is not consumed on site must flow through the power pool. Subject to certain exceptions generators are required to offer available generation to the power pool, by submitting price and quantity pairs indicating 'offers' to generate. The Independent System Operator (ISO) dispatches market participants, as required, in order to balance total load with supply, with generators dispatched by relative economic merit (i.e. lower price offers are dispatched before higher price offers). In real time, price (known as the system marginal price or SMP) is set by the marginal participant. Wholesale settlement is conducted hourly at pool price, defined as the time weighted average of the SMP. Electric energy may be exchanged between participants at other prices (e.g. through direct forward sales) but these transactions are all influenced by the expectation of pool price, since all participants have the option to exchange electricity in the pool.

Other than through the signals generated by pool price, neither the power pool nor ISO administer which generators are utilized, determine how much demand response occurs or whether participants invest in or retire generation assets. Instead all of these rely on the signals generated by pool price. Achieving the 'right' or efficient level of each of these factors is left to be the product of competitive market forces. The purposes set out in section 5 of the *Electric Utilities Act* (EUA) place significant emphasis on the role of competitive market forces and efficiency:

> "The purposes of this Act are…
>
> (b) to provide for a competitive power pool so that an efficient market for electricity based on fair and open competition can develop, where all persons wishing to exchange electric energy through the power pool may do so on non-discriminatory terms and may make financial arrangements to manage financial risk associated with the pool price;
>
> (c) to provide for rules so that an efficient market for electricity based on fair and open competition can develop in which neither the market nor the structure of the Alberta electric industry is distorted by unfair advantages of government-owned participants or any other participant;
>
> (d) to continue a flexible framework so that decisions of the electric industry about the need for and investment in generation of electricity are guided by competitive market forces;
>
> (h) to provide for a framework so that the Alberta electric industry can, where necessary, be effectively regulated in a manner that minimizes the cost of regulation and provides incentives for efficiency."
>
> (Emphasis Added)

These provisions place principal reliance on competitive market forces to achieve the desired outcome, to be supplanted by regulation only "where necessary" and then in a manner "that minimizes the cost of regulation and provides incentives for efficiency." An efficient market, including investment in

generation, is the desired (and expected) outcome from competitive market forces. Among electricity markets across North America the reliance in Alberta placed on competitive market forces from a power pool is unusual. Many other markets feature mechanisms to mitigate market participant bids and offers, enhance demand response and supplement the signal for new investment through capacity markets or more direct measures.

Given the reliance the Alberta market places on competitive market forces in the pool it is important that competition is not hindered or otherwise prevented. The legislation instructs market participants to support fair, efficient and open competition (section 6 of the EUA) and provides a non-exclusive list of prohibitions and other measures as part of the *Fair, Efficient and, Open Competition* Regulation. The legislation does not specify permitted and prohibited behaviour in all circumstances but rather articulates concepts to be applied based on particular facts. Section 39(4) of the *Alberta Utilities Commission Act* (AUCA) allows the MSA to make guidelines, essentially providing its views to further enunciate analytic principles and meaning given to provisions so that market participants and other stakeholders can conduct themselves accordingly.

1.1 ORGANIZATION OF GUIDELINES

These Guidelines are organized into 3 sections after this introduction:

- **SECTION 2** provides an overview of the analytical framework applied by the MSA in assessing market participant offer behaviour, focusing on the importance of economic efficiency and relevant learning from competition law.
- **SECTION 3** contains an overview of relevant provisions from the *Electric Utilities Act* (EUA) and the *Fair, Efficient and Open Competition Regulation* (FEOC Regulation). Specific interpretation is provided on the meaning of provisions in the FEOC Regulation relevant to offer behaviour. The section concludes with a description of how the MSA will carry out its mandate in response to offer behaviour beyond enforcement activity.
- **SECTION 4** provides a number of hypothetical examples illustrating the MSA's approach in the application of these guidelines.

2 Analytic Framework

This section of the Guidelines outlines the MSA's broad approach drawing on two insights:

1) concepts of economic efficiency and recognition of the importance of dynamic efficiency in the context of Alberta market; and
2) competition law analysis.

2.1 ECONOMIC EFFICIENCY

2.1.1 Efficiency Concepts

As stated earlier, efficiency is a core objective in the Alberta market framework. Economists typically evaluate whether an outcome is efficient using three concepts: allocative efficiency, productive efficiency and dynamic efficiency.

- **Allocative efficiency** – at a given point in time if resources are allocated such that the net benefit attained through their use is maximized, then a market is said to be allocatively efficient. If it is possible for both a producer and a consumer to gain through additional trade then the market is not allocatively efficient. The role of price is key in achieving allocative efficiency since it serves as a signal to:
  - consumers to consume until the price rises above their willingness to pay; and
  - producers to produce until the price is insufficient to cover the costs of production
- **Productive efficiency** – at a given point in time if a given level of output is produced consuming the least amounts of inputs then the outcome is said to be productively efficient.
- **Dynamic Efficiency** – Allocative and productive efficiency are static concepts – they are tests conducted at a given point in time. Dynamic efficiency recognizes that over time there is the ability to innovate and invest leading to superior allocative and productive outcomes. In a market economy the forces of competition are seen as key in providing the correct incentives to innovate and adapt.

Many economists view the true benefit of competition as being the spur to dynamic efficiency that can outweigh static efficiency losses. That, of course, requires a longer term perspective.

2.1.2 Efficiency in the Alberta Wholesale Electricity Market

At a given point in time the Alberta wholesale electricity market achieves productive efficiency if the least cost resources are dispatched in order to meet demand. Note that productive efficiency does not require that generators offer at cost, merely that the costs of production are minimized. There is no loss in productive efficiency if a generator offers above its marginal cost unless its offer price is sufficiently high that a generator or generators with a higher cost are dispatched instead.

The electricity spot market would also achieve allocative efficiency if price is such that no additional benefits could be realized from trade between consumers and generators. At a given point in time, opportunities for trade no longer exist where the short run marginal cost of generation equates to the short run marginal benefit derived from consumption.

If both conditions are met the spot market would be efficient from the perspective of static efficiency. Both allocative and productive efficiency would be met in a spot market where all generators offered at short run marginal cost and where price was set at the offer of the most expensive generator.

This short run cost-based standard and associated efforts to police against the exercise of market power is important for most other competitive electricity markets in North America because they rely on separate

capacity markets to ensure adequate new investment in generation. Given the absence of capacity markets or other mechanisms in Alberta the MSA believes giving too much weight to static efficiency concerns is not appropriate. Such an approach could chill the incentive to innovate or invest and therefore may harm dynamic efficiency. Conduct inconsistent with static efficiency can be acceptable so long as there is a corresponding benefit to dynamic efficiency, and thus a net efficiency gain, that results (or will likely result) from the forces of competition. The MSA will monitor the market for static efficiency losses caused by market structure, rules and/or market participant behaviour. Where static efficiency losses appear to have no corresponding dynamic efficiency gain the MSA will make recommendations aimed at eliminating or reducing efficiency loss. In the event that monitoring for efficiency reveals anti-competitive conduct the MSA would take enforcement action. In the next section we provide further definition to what would constitute anticompetitive behaviour drawing upon concepts common in competition law.

2.2 COMPETITION LAW ANALYSIS

In the assessment of competition, many competition authorities have found it useful to distinguish two main theories: unilateral and coordinated effects. Unilateral effects arise from individual market participants responding to incentives and acting alone. Coordinated effects refer to concerns where two or more market participants directly or indirectly act to promote their combined self interest.

2.2.1 Unilateral Effects

Unilateral effects can be distinguished as two types:[2]

1) Single participant conduct aimed at capturing surplus (profits) that a market participant has created independent of the conduct's effect on rivals. This type of conduct has been termed 'extraction'.
2) Single participant conduct that increase surplus (profits) by weakening or eliminating the competitive constraints imposed by rivals. This would include conduct that resulted in an impediment or prevention of competitive response. This type of conduct has been termed 'extension'.

Conduct of the first kind is considered competitive and consequently would not result in enforcement action from the MSA. Conduct of the second kind poses a concern and is likely to be subject to investigation and potential enforcement action.

In relation to offer behaviour this means market participants are free to pursue individually profit maximizing behaviour that does not impact on rivals' conduct. This would include strategies typically characterized as economic withholding, which the MSA defines as:

> "economic withholding" means offering available supply at a sufficiently high price in excess of the supplier's marginal costs and opportunity costs so that it is not called on to run and

[2] The distinction between 'extraction' and 'extension' is found in Carlton and Heyer (2008).

where, as a result, the pool price is raised. Such a strategy is only profitable for a firm that benefits from the higher price in the market.[3]

Similarly, market participants are free to offer below marginal cost and opportunity cost such that they receive dispatch and lower pool price. The MSA accepts that both this and economic withholding are in different circumstances rational profit maximizing behaviour. Which strategy would benefit a market participant is dependent on the market participants portfolio position (i.e. whether they are a net buyer or seller at the pool).

In a workably competitive market the use of both strategies is disciplined by the actions of competitors such that there is no expectation that a market participant can exert significant control over market outcomes. The MSA is mindful that dynamic efficiency gains are not assured if the price signal is effectively controlled by one or more market participants – new entrants and investment will be dissuaded if they believe prices are only high because of market participant control, reasoning that post entry the controlling incumbent may set prices at a level that would not enable the entrant to recover costs. Potential entrants may also be deterred if they observe a large amount of capacity being economically withheld. The MSA will closely monitor episodes of this nature to determine whether the pattern of behaviour is consistent with a plausible theory of predation, that is, evidence of sufficient market power to create a barrier to entry for potential competitors.

Even in the absence of anticompetitive conduct, the MSA would be concerned if we observed outcomes that we believe are inconsistent with a workably competitive market. In such cases the MSA would consider recommendations to change market rules / procedures and where necessary market structure.

2.2.1.1 'Extension' of market power

For further clarity, conduct that would be classified as an 'extension' includes but is not limited to:

- Enhancing the effect of a unilateral offer strategy by engaging in transactions where the primary purpose is to reduce the response from competitors or customers.
- Enhancing the effect of a unilateral offer strategy through conduct that breaches ISO rules.
- Enhancing the effect of a unilateral offer strategy by providing misleading records to the market or any other person.[4]

[3] The MSA definition is consistent with that adopted by FERC. The FERC definition refers to 'bidding available supply' and 'market clearing price'. For application in Alberta we have amended this to 'offering' consistent with Alberta terminology that generators 'offer' rather than 'bid' and substituted 'pool price' for market clearing price. See Investigation of Terms and Conditions of Public Utility Market-Based Rate Authorizations, at P 102 n.57.

[4] Note that even in the absence of a particular offer strategy, provision of misleading records is prohibited under section 2(a) of the FEOC Regulation.

2.2.2 Coordinated Effects

Alberta's tight oligopoly structure means the MSA must be vigilant to potential adverse competitive effects termed 'coordinated effects', that is, the risk of coordinated, accommodating, or interdependent behaviour among rivals. Simply put, it is easier to organize anticompetitive behaviour when there are a small number of competitors than when there is a large number.

Coordinated behaviour among competitors can run the range from explicit collusion through tacit agreement to 'consciously parallel' behaviour. We define these as:

- **Collusion:** presence of an explicit agreement (written or verbal) either directly between two or more parties or facilitated without direct contact by a third party (a hub and spoke conspiracy); agreement could be written or verbal in form.
- **Tacit Collusion:** in the case of tacit collusion the agreement is unspoken but implied by one participant's signaling, or other similar conduct, and is inferred or understood by the co-conspirators.
- **Conscious Parallelism:** describes the situation whereby a participant independently adopts a common or accommodating strategy with only an *expectation* or awareness of their competitors' responses. 'Conscious parallelism' is not by itself sufficient to establish an 'agreement' between parties and consequently is not typically viewed as a competition law offence.

In addition to the provisions applicable to market participants under Alberta legislation, market participants should be aware that the recently amended criminal provision of the *Competition Act* outlaws agreements among competitors to fix prices, allocate markets or restrict output that constitute 'naked restraints' on competition (restraints that are not implemented in furtherance of legitimate collaboration, strategic alliances or joint ventures). These categories of agreements are *per se* illegal and subject to significant criminal sanctions, including imprisonment. While each matter will be decided individually, the MSA's general intention is to refer any matters where there is evidence of explicit collusion to the Competition Bureau. Section 45 of the *Alberta Utilities Commission Act* gives the MSA authority to do so and also allows us to collaborate with a Bureau investigation. Should the Director of Public Prosecutions (Public Prosecution Service of Canada) decide to prosecute, the MSA would not seek a remedy from the Commission on the same evidence so participants do not face double jeopardy.

The MSA will work to support the Competition Bureau's Immunity Program under which businesses or individuals who are first-in may approach the Bureau and request immunity in return for cooperation.[5] If a party involved in a conspiracy to lessen competition in the Alberta electricity market approached the MSA we would facilitate its immunity application process with the Competition Bureau. If immunity is granted the MSA would discontinue its investigation into the activities of the immunity applicant.

Overt conspiracies to lessen competition are extreme forms of behaviour that one would expect would be rare; however, tacit collusion and other forms of less formalized cooperation among competitors also

[5] Bulletin - Immunity Program under the Competition Act, June 7, 2010.

deny Albertans the benefits of competition in our wholesale electricity market and may be prosecuted. The MSA is likely to pursue enforcement action against any instances of tacit collusion rather than refer to the Competition Bureau.

'Conscious parallelism' is not by itself sufficient to establish an 'agreement' between parties. Parallel conduct coupled with facilitating practices (such as sharing competitively sensitive information or activities that assist in competitors monitoring one another's prices) may be sufficient to conclude that an agreement was concluded between the parties.[6]

Cases of 'conscious parallelism' that are similar in effect to overt collusion but lack the element of agreement among the parties involved will not face enforcement action. In such cases the MSA would seek to address this through recommendations to change market rules and/or structure.

3 Alberta Framework

The section is organized into the following parts:

- *Electric Utilities Act*, Section 6
- *Fair, Efficient and Open Competition* Regulation
- Other responses by the MSA to market participant offer behaviour

3.1 *ELECTRIC UTILITES ACT*, SECTION 6

Section 6 of the *Electric Utilities Act*, set out expectations for market participants:

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

The MSA notes there is limited jurisprudence on the meaning of *fair, efficient and openly competitive.* Some Commission proceedings have considered objections to rules on the basis that the proposed rule does not support the fair, efficient and openly competitive operation of the market.[7] None of these proceedings has considered whether market participant 'conduct' has supported fair, efficient, open competition.

In the context of market participant offer behaviour the MSA expects to deal with conduct under the provisions of the *Fair, Efficient and Open Competition* Regulation; however, further interpretation of the standard set out in Section 6 is provided in Appendix B.

3.2 *FAIR, EFFICIENT AND OPEN COMPETITION* REGULATION

The *Fair, Efficient and Open Competition Regulation* came into force on September 1, 2009. The regulation consists of four sections that relate to or place restrictions upon market participant conduct. These are:

[6] Competitor Collaboration Guidelines, December 23, 2009, p.7.
[7] For example, AUC decisions 2008-137, 2009-007 and 2009-042.

- Section 2: Conduct not supporting fair, efficient and open competition
- Section 3: Preferential sharing of records that are not available to the public
- Section 4: Restrictions on trading using outage records that are not available to the public
- Section 5: Market share offer control

In the following sections the MSA provides our views around the meaning of these provisions. Later, in Section 4 we provide a series of hypothetical examples to show how we would apply these provisions.

3.2.1 Section 2: Conduct not supporting *fair, efficient and open competition*

This section contains a non-exhaustive list of conduct that does not support the *fair, efficient, openly competitive market*. These guidelines provide further interpretation of these provisions. Most provisions within section 2 do not require further clarification or do not relate to offer behaviour. Specific interpretation is given to three provisions:

- Subsection 2(h)
- Subsection 2(j)
- Subsection 2(k)

3.2.1.1 Subsection 2(h)

Subsection 2(h) reads:

> (h) restricting or preventing competition, a competitive response or market entry by another person, including
>
> (i) a market participant directly or indirectly colluding, conspiring, combining, agreeing or arranging with another market participant to restrict or prevent competition, and
>
> (ii) a market participant engaging in predatory pricing or any other form of predatory conduct;

We consider the general prohibition before considering the inclusions (paragraphs i and ii) which are two examples of the prohibited conduct. The general provision consists of two components; the description of an act and a description of its application:

- **"Restricting or preventing competition, a competitive response or market entry"** – The language is similar to that used to describe an 'extension' of market power (Section 2.2.1 above). The provision suggests no requirement for intent. Similarly the provision does not require a demonstrable effect upon price or other market outcomes, beyond that competition or competitive response is hindered. The provision suggests a single event as well as a course of action might constitute a breach.
- **"by another person"** – The *Fair, Efficient and Open Competition Regulation* defines person as "includes an individual, unincorporated entity, partnership, association, corporation, trustee, executor, administrator or legal representative". This means subsection 2(h) applies

> broadly and is not limited to restriction of competition on current market participants and includes both actual and potential competitors.

Paragraph (i) deals specifically with collusion though it describes that behaviour in various terms. The MSA would assess conduct against two elements of the provision: 1) an agreement between or among market participants, and 2) that the agreement is directed at restricting or preventing competition, a competitive response or market entry.

To satisfy the first element we would have to show the classic 'meeting of the minds' among the parties. In the case of tacit collusion this would be discharged if one is able to infer an agreement from evidence of a course of conduct, with or without direct evidence of communication among the parties. To establish the second element, we would show that the evidence is consistent with the intent to restrict or prevent competition, competitive response or market entry and inconsistent with competitive behaviour (i.e. a test for 'objective intent').

As in the general provision, there is no requirement for demonstrable effect upon price or outcomes, beyond that competition or competitive response is hindered. While the provision is made broader in application by the prohibition against "indirectly colluding", conscious parallelism is not prohibited since, by definition, actions are taken independently meaning that there is no agreement between participants. The collusion is to be between market participants, but this would include a so called 'hub-and-spoke conspiracy', where a central mastermind, or 'hub', controls numerous 'spokes,' or secondary co-conspirators. In this case the hub need not be a market participant.

Subsection 2(h)(ii) deals with predatory conduct. The MSA intends to follow an approach consistent with the Competition Bureau's Enforcement Guidelines.[8] This approach is succinctly summarized in the following passage:

> The Bureau considers predatory pricing to be a firm deliberately setting prices to incur losses for a sufficiently long period of time to eliminate, discipline, or deter entry by a competitor, in the expectation that the firm will subsequently be able to recoup its losses by charging prices above the level that would have prevailed in the absence of the impugned conduct, with the effect that competition would be substantially lessened or prevented. The jurisprudence indicates that predatory pricing occurs where the prices charged by the firm are below an appropriate measure of costs and that there is no reasonable business justification for the low pricing policy or practice, such as selling off perishable products or matching the price of a competitor.[9]

As a general comment the MSA believes market participants should pay particular attention to subsection 2(h). Of all the prohibitions in Section 2 it is arguably the broadest in application and presents a high requirement for participants to avoid restriction or prevention of competition by others. Whereas Subsection 2(j) deals with something akin to 'harm', subsection 2(h) remains close in spirit to the positive obligation in Section 6 of the EUA to 'support' fair efficient and open competition.

[8] Predatory Pricing Enforcement Guidelines, July 2008

[9] Ibid., page ii.

3.2.1.2 Subsection 2(j)

Subsection 2(j) reads:

> "(j) manipulating market prices, including any price index, away from a competitive market outcome;"

We consider each element in turn.

- **"Manipulating"** The term "manipulating" implies
  - Intentional conduct; that is, conduct intended to control or manage an outcome. Effect alone would not necessarily mean that conduct was a manipulation. The intent behind that conduct must be determined (along with a realistic expectation of success) either through:
    - direct evidence that a participant intended to move prices away from a competitive market outcome – 'subjective intent' - or;
    - 'objective intent' - showing that a reasonable business person, understanding the facts and market circumstances at the time, would conclude that the consequences of conduct would be to move prices away from a competitive market outcome.
  - There is requirement for an effect. i.e. an attempted manipulation without effect would not contravene subsection 2(j).
- **"Market prices, including any price index"** - The MSA is of the view that this includes, but is not limited to:
  - Pool price;
  - Prices for operating reserves on Watt-Ex markets; or
  - Forward prices of transactions that are revealed publicly, or a potential constituent component of a number that is made public. For example, forward transactions that influence the pricing of Regulated Rate Option (RRO).

  The MSA is of the view that this would not include:
  - operating reserves procured over-the-counter; or
  - prices that result from bilateral negotiations and are not disclosed to the public or potentially impact any publicly disclosed number.
- **"Competitive Market Outcome" –**
  - There is no requirement that market participants' offers should equal their marginal costs for the result to qualify as a "competitive market outcome";
  - Likely to be a range of outcomes. At any instant in time a competitive market outcome could be consistent with a large range of possible prices and these may involve static efficiency losses;
  - As the time horizon gets longer, competitive responses from other market participants should increasingly come to bear and the range of outcomes consistent with a competitive market should narrow; and
  - Evidence of a market participant taking action to constrain or prevent a competitor's response means there cannot be a "competitive market outcome".

3.2.1.3 Subsection 2(k)

Subsection 2(k) reads:

> "(k) carrying out actions or transactions to circumvent any enactment, order or decision of the Commission, ISO rule or other rule applicable to a market participant."

Again, we consider each element in turn.

- **"Actions or transactions"** – The term "conduct" in the EUA and in the FEOC Regulation is defined to include "acts and omissions". Subsection 2(k) requires a narrower definition such that breaches of this subsection can only occur through a positive act, not an omission. However, notwithstanding that the conduct is described in plural form (actions or transactions), the MSA takes the view that a single act or transaction may be sufficient conduct to contravene subsection 2(k).
- **"Circumvent"** - The term "circumvent" connotes conscious avoidance or evasion. As in the case of 'manipulation', we take the view subsection 2(k) requires intent. For the same reasons given regarding subsection 2(j), the MSA believes that it is reasonable to apply a standard of objective intent. However, unlike subsection 2(j), the MSA does not see that the conduct must necessarily achieve the effect of circumventing the obligation, duty or requirement seen as applicable to the market participant (for example, an ISO rule) in order to contravene subsection 2(k). Attempted circumvention will also breach subsection 2(k).
- **"any enactment, order or decision of the Commission, ISO rule or other rule applicable to a market participant"** - The scope of subsection 2(k) is broad covering "any enactment, order or decision of the Commission, ISO rule or other rule applicable to a market participant." This would include reliability standards but not include contractual terms between market participants.

3.2.2 Section 3: Preferential sharing of records that are not available to the public

Section 3 of the *Fair, Efficient and Open Competition Regulation* requires that market participants do not share records relating to any past, current or future offers to the power pool or for the provision of ancillary services. Participants wishing to share records must apply for Commission approval unless they are exempted under subsection (2). The Commission has characterized the rationale for this provision in the following terms:

> The sharing by two market participants of their non-public records has the potential to allow collusion and price-fixing by these participants, especially if the two participants have a substantial market share or market power. Such collusion can be harmful to the marketplace as a whole, especially consumers. It is, therefore, incumbent upon the Commission to carefully scrutinize record-sharing agreements in order to maintain the competitive environment that the Electric Utilities Act so ardently emphasizes as its goal.

The MSA does not interpret the presence of an approval under subsection 3(3) for otherwise prohibited information sharing to obviate the need to comply with prohibitions set out in section 2 of the FEOC Regulation or other conduct obligations. This view rests in part upon the wording of subsection 3(3)(a),

which makes clear the requirement to meet such other requirements. Participants with an approved agreement or exemption should note that compliance undertakings supporting the approval may be monitored to ensure it does not extend beyond the explicit terms set by the AUC order.

3.2.3 Section 4: Restrictions on trading using outage records that are not available to the public

Section 4 of the Regulation prohibits the trading on outage records until after an outage record has been made available to the public by the ISO, and also sets out the requirements for market participants to provide outage records to the ISO as soon as reasonably practicable. Allowance is made for the ISO to create an exemption from those requirements in certain circumstances.

In the view of the MSA, offers to the Power Pool are caught by the trading prohibition in section 4, as are trades in the forward market and AS market. Furthermore, breach of the obligations in section 4 may be relevant to an assessment of conduct as against subsections 2(h) and 2(j) of the FEOC Regulation, insofar as the conduct can prevent or restrict competition or competitive response, or may be seen as part of an effort to manipulate market prices.

3.2.4 Section 5: Market share offer control

Section 5 of the Regulation places a requirement on market participants to not exceed 30% of offer control and on the MSA to publish, at least annually, an offer control report. The MSA has created a process to document and clarify the expectations placed on market participants and when the MSA will meet the annual requirement for reporting.[10]

The MSA is not of the view that being below the offer control limit represents an exemption or defence from the application of other sections of the Regulation or Competition Act, e.g. merger review. Further. similar to our interpretation of the ambit of an approval for information sharing under subsection 3(3) of the FEOC Regulation, we interpret the restrictions in Section 5 to be separate from, and additive to, those contained in the remainder of the FEOC Regulation.

3.3 OTHER RESPONSES BY THE MSA TO MARKET PARTICIPANT OFFER BEHAVIOUR

The MSA mandate extends beyond enforcement activity, to taking an active role on facilitating and promoting competition.[11] In the context of offer behaviour, the MSA believes it is an important part of its mandate to describe and interpret the extent to which behaviour, rules or structural problems drive market outcomes not consistent with *fair, efficient and open competition*. Section 3.3.1 describes the typical process the MSA expects to follow where it has detected an event of interest but on the basis of that event believes there are no concerns around participant conduct. The MSA also believes a *fair, efficient and openly competitive market* is facilitated by the provision of specific guidance from the MSA in the form of illustrative examples, a number of which are included in Section 4. The MSA expects that market participants may seek further clarification as to the meaning of these guidelines. Section 3.3.2 describes a

[10] Market Share Offer Control Process, September 2009,
[11] A brief outline of the MSA's mandate is provided in Appendix A.

process for requesting that clarification. Consistent with the intent of s.39(4) the MSA intends to make all its views regarding these examples public.

3.3.1 Publishing events of interest and naming

An event that, in and of itself, raised no concerns around participant conduct under section 6 of the *EUA* or section 2 of the *Fair, Efficient and Open Competition Regulation* would not be subject to enforcement action but analysis of such an event may shed light on the health of the market. The MSA notes that it is an important part of our mandate to monitor such events of interest and feels it is important to report on the occurrence of such events and the conclusions we draw. We intend to employ a number of analytical tools to assist in its efforts to identify events of interest.

Having identified an event of interest the MSA would include a factual description in our next Quarterly Report (or similar). Participants involved in the event would not be named. The MSA would provide its interpretation of the event, including whether the event involved an exercise of market power, whether the event implied a loss of static efficiency and whether ISO rules or procedures contributed to the occurrence of the event. Participants involved in the event would be afforded an opportunity to comment on whether the description is factually correct or there are other relevant circumstances that should be noted. Alternatively, they may simply choose not to comment.[12]

Over time the MSA would categorize and roll up events of this nature as part of a periodic scorecard on the health of the market. Observation of persistent problems would cause the MSA to consider available non-enforcement remedies, including but not limited to requesting a change in ISO rules or a change in market structure.

3.3.2 Non-enforcement remedies

Should the MSA determine that enforcement action is not warranted but that there is evidence that the operation of the market is not *fair*, *efficient and openly competitive*, we would propose other remedies, including, but not limited to:

- **Recommendation:** Make recommendation for rule or policy change. The MSA will make all final recommendations public.
- **Request a hearing under section 51(1)(b) of the AUCA:** The application would identify relevant conduct as part of the fact pattern but not allege wrongdoing or seek any penalty against it. Rather, after presenting evidence that the operation of the market is not *fair, efficient and openly competitive*, the application would propose other remedies addressing the ISO rules or other elements of the existing market framework to restore it.
- **Request an interim order under subsection 8(5)(c):** Depending on the assessment of the situation, the MSA may also apply to the Commission for an interim order under subsection 8(5)(c) of the AUCA until such time as a more permanent remedy may be put in place.

[12] Where a participant is not named, the provision of an opportunity for comment is not required by the Market Surveillance Regulation. Nonetheless the MSA wishes to interpret this liberally as much as possible.

3.3.3 Process for further clarification of these guidelines through illustrative examples

The MSA expects these guidelines to be a living document in that we expect to issue additional clarifications and bulletins will be issued as required. Material changes would be addressed through further stakeholder consultation. These guidelines also contain a number of illustrative examples that are intended to assist market participants' understanding the meaning of these guidelines. The MSA believes it is helpful to provide a timely process for market participants seeking further clarification of these guidelines.

- Requests for further clarification should be submitted to stakeholderconsultation@albertamsa.ca.
- The MSA would determine whether the clarification requested can be done within the context of these guidelines (i.e. does not represent a new guideline or a material change). If the matter cannot be addressed within the existing guidelines the MSA would follow its *Stakeholder Consultation Process* to consult on possible amendments.
- Prior to determining its view the MSA may meet with the requesting participant to provide its initial feedback.
- If the MSA is able to provide a clarification, any advice given will subsequently be made public in a manner that protects commercial sensitivity and the confidentiality of the request.
- Participants wishing to comment on the MSA's clarification should send those comments to stakeholderconsultation@albertamsa.ca. The MSA may make comments received public. Should the MSA be convinced that its clarification needs to be amended (or that the matter should be addressed through further consultation) it would post a notice to that effect.
- Clarifications provided in accordance with the process above will be archived along with these guidelines on the MSA website (www.albertamsa.ca).

4 Examples

4.1 ECONOMIC WITHHOLDING

4.1.1 Fact Pattern

Fact Pattern A - Muted competitive response within the T-2 window: Participant A adopts an offer strategy for HE14 – HE16 inclusive, moving 300MW from a level currently in merit ($50) to a range of prices price currently out of merit (between $400 and $500). In HE17, Participant A returns to the previous offer of $50. The resulting pool price for HE14-HE16 is between $400 and $500. During the hours HE14-HE16 there is sufficient space on the intertie for additional imports. The average pool price for other hours in the month is $62/MWh.

Fact Pattern B – Pivotal participant combined with significant withholding: Participant A offers 1000MW of energy at a price of $900 setting system marginal price. During the period of this offer strategy there is a supply cushion of 800MW (i.e. 800MW remain undispatched in the merit order) of which 500MW is controlled by Participant A. There is no un-utilized import ATC. Historical observation suggests supply cushions of 800MW are usually associated with prices significantly lower than $900. Participant A takes no other action to impede or otherwise prevent market response.

4.1.2 MSA Comments

As described, both examples represent unilateral conduct without anticompetitive conduct (extension). Consequently, neither would raise an issue under section 6 of the *EUA* or section 2 of the *Fair, Efficient and Open Competition Regulation*. The MSA may determine that the hours in question represented an event of interest and would report on it as such. In variant B the outcome is noted to differ from historical observations and therefore is likely to be seen as an event of interest.

Persistent or repeated occurrences of the above conduct would suggest an ongoing efficiency loss. The MSA would conduct an assessment to determine if the *fair, efficient and openly competitive* standard was being undermined; we would consider remedies to address the situation. If we remain satisfied that further repetitions involved no extension of market power the MSA would look to assemble the necessary analysis and evidence and seek a non-enforcement remedy.

In variant A, the remedy would most likely be for a rule change. The MSA notes that ISO rule 3.5.3.3 prevents source assets, importers and exporters from making price restatements within two hours of a settlement interval (also known as the T-2 lockdown). While loads can still respond during this period, competitive response is muted by the existence of the rule. This may cause losses in both static and dynamic efficiency. Taking advantage of the existence of the T-2 rule would not be construed as 'circumvention' (*Fair, Efficient, and Open Competition Regulation*., subsection 2(k)). There is nothing in ISO rule 3.5.3.3 that addresses, directly or indirectly, a market participant's freedom to change its offer price before the 2 hour lockdown. The inability of competitors to respond is a function of the rule and not the result of a barrier created by Participant A. For this same reason the MSA would not view the action of Participant A as conduct that prevents or hinders competitors from responding (subsection 2(h)).

In variant B, the fact pattern describes a unilateral effect whereby a large market participant has adopted a simple, if large, withholding strategy. The fact pattern suggests that if all out of merit participants other than A offered at less than $900 there would be no change in the resulting market price. Participant A is not taking any additional actions to impede or prevent a competitive response but relying on the size of the strategy to dominate the response of others. Given a sufficiently long portfolio position for Participant A such a strategy might remain profitable for an extended period.[13] The MSA assessment would focus on the size of the efficiency loss – if the conduct suggested a large efficiency loss the MSA would be most likely address the issue under section 51(1)(b) and consider application for an interim order under subsection 8(5)(c) of the AUCA.

[13] Assuming a price of $90 would exist with Participant A's MW being fully dispatched the withholding strategy (even ignoring the avoided fuel costs associated with withholding) would be profitable with a long position of X MW when, in the absence of supplier response $900/MWh * (X-500) MW > $90/MWh *(X)MW or X>555MW, and would remain profitable even if all other suppliers responded when $900/MWh * (X-800) MW > $90/MWh *(X)MW or X>888MW.

4.2 OFFERING BELOW MARGINAL COST TO IMPACT POOL PRICE

4.2.1 Fact Pattern

Fact Pattern A: Market participant A becomes unexpectedly short after experiencing a unit contingency. The unit contingency is expected to last approximately 36 - 48 hours and results in the participant having a short corporate position (a net buyer at pool price). Prior to T-2 the market participant offers its generating assets at $0 with the intention of lowering pool price during the period of the unit contingency.

Fact Pattern B: Market participant A decides to take a short position for the next quarter, selling forward more volume than it owns generation (a 'naked short'). Prior to T-2 the market participant offers its generating assets at $0 with the intention of lowering pool price during the quarter.

Fact Pattern C: Market participant A offers certain generating assets below marginal cost in order to avoid the costs associated with those assets being dispatched on and off at the margin.

4.2.2 MSA Comments

As described, these examples represent unilateral conduct without anticompetitive conduct (extension). Consequently, none would raise an issue under section 6 of the *EUA* or section 2 of the FEOC Regulation. Persistent or repeated outcomes would face the same scrutiny as the examples of economic withholding discussed above. In addition the MSA would test the conduct against a theory of predation.

As with instances of economic withholding, conduct of the kind described may be the subject of MSA reporting. If reporting identified persistent or repeated outcomes where there was an efficiency loss or no credible competitive response the MSA would seek to quantify the efficiency loss. Assuming these further repetitions involved no anti-competitive conduct the MSA would look to assemble the necessary analysis and evidence and take a non-enforcement remedy e.g. present a case for a rule and/or structural change.

4.3 OPERATING RESERVES: IMPACT OF CANCELLED TRADES

4.3.1 Fact Pattern

The AESO bids to procure all of its requirement for a particular kind of active operating reserves one day before delivery (D-1), bidding $0 for 150MW. Shortly before close Participant A offers 146MW at -$1000 and Participant B offers 4MW at $-2000, Participant C offers 10MW at -$100. Only Participant A and B offers are required to meet the AESO's requirement and the trade price is -$500 (the mid point between the bid of $0 and the last required offer of -$1000). Subsequently, Watt-ex cancels the trade in accordance with its rules since the volume is less than 5MW (minimum that the ISO will dispatch).

4.3.2 MSA Comments

The MSA believes market participants should not offer volumes in operating reserve markets with the intent of the trade being cancelled. Such a practice may be harmful to competition and may be a

circumvention of the rules. Isolated instances of intentional cancelled trades are unlikely to impact dynamic efficiency but neither do they appear to have legitimate purpose.

Should the MSA observe the fact pattern above it may seek an explanation from Participant B as to the intent of its offer. The likelihood of the MSA seeking such an explanation would increase if the conduct appeared to be repeated, material or if other market participants submitted a complaint.

If the conduct appeared minor (for example, resulting from an error inputting the offer by Participant B) the MSA may consider publishing a summary of the event and, if necessary provide further guidance.

If the conduct appeared to be repeated and/or material in nature the MSA would consider whether the conduct was contrary to subsection 2(j) and subsection 2(h) of the *Fair, Efficient and Open Competition Regulation*. The former would require demonstration of price effect away from a competitive market outcome. Restricting or preventing competition would not require a price effect but rather that another market participant had been excluded from trading.

4.4 INTERTIE CONDUCT

4.4.1 Fact Pattern

Fact Pattern A - Uneconomic flow on an intertie: The market is tight due to a unit trip. Participant A has a long portfolio position. Participant B is importing 75 MW at a $5 profit. Participant A believes that if these MW were not being imported, pool price would increase by an estimated $60/MWh. The next hour (when possible) Participant A counter-flows 75 MW to Mid-C and pool price rises to $100/MWh. On the export, Participant A loses money but benefits on its long position.

Fact Pattern B - Sale of Financial swap to importer at a discount to reduce imports: Participant B is short energy in Alberta due to a unit outage. Consequently they are importing 150 MW from Mid-C to cover their position. Participant A is long energy. Participant A then offers financial swaps to Participant B at a discount to the cost of the landed imports. The hope is that Participant B will be motivated to reduce its imports as it covers its position with financial swaps and thus pool price will rise. Although Participant A will lose money on its swaps sold to Participant B, it will profit on the rest of its portfolio from the resulting higher pool price.

Fact Pattern C – Financial transaction at less than expected pool price followed by the schedule of physical import: On a given day, Participant A has physical power to import on the BC intertie at a landed cost of $50 (cost of power in Mid-C plus transmission costs) and expects the Alberta pool price for that day to be $250. Participant A sees that there are intraday broker bids for Alberta financial power at $200. Participant A executes a deal via the broker at $200 and schedules the physical import.

Fact Pattern D - Timing of intertie scheduling: Import ATC for hour ending X is 400MW and Export ATC is 0MW. Prior to T-2, Participant A offers to import 200MW and Participant B to export 200 MW. Participant A submits an e-tag for the import shortly before the gate closes at T-20 minutes. At this time, 200MW of exports are now possible but there is insufficient time for Participant B to submit an e-tag for the offered export.

4.4.2 MSA Comments

In variant A the conduct described is unilateral and there is no attempt by the participant to limit competition. Consequently the conduct does not raise a concern for the MSA. The MSA expects, and will monitor for, a competitive response to uneconomic flows in subsequent hours. Evidence of a persistent lack of competitive response would cause the MSA to seek evidence of whether rules or structure are impeding response and consider making recommendations to resolve the impediment. Variant A deals only with exports, however, unilateral import conduct would be treated in a consistent manner.

Variant B suggests potential breaches of subsections 2(h) and 2(j) of the FEOC Regulation. With respect to subsection 2(h), Participant A's action appears intended to restrict or prevent competition by attempting to stop imports from bidding down the pool price. The fact of Participant A's long portfolio position and that it either expects to lose money on the sale of the swaps or does indeed lose money on the transaction, supports the anticompetitive nature of its behaviour. Because this could be perceived as an agreement between competitors to lessen competition, Participant B, may wish to record evidence of its refusal of Participant A's overture and report the matter to the MSA to protect itself if there is an investigation into collusion and perhaps the referral of the case to the Competition Bureau. With respect to subsection 2(j) the fact pattern suggests intent, effect on price and that Participant A has engaged in an extension of market power (i.e. the outcome is not one consistent with a competitive market). Consequently, the MSA would consider enforcement action under both subsection 2(h) and 2(j).

Variant C describes unilateral conduct by a market participant where there is no attempt to limit competition or the behaviour of others. Participant B's choice to transact at a price lower than its expectation for pool price appears to be motivated by a desire to lock in a certain return. In addition, the choice to transact through a broker suggests no attempt by participant A to influence the behaviour of a specific counterparty. Variant C deals only with an import, similar unilateral export behaviour would be viewed in a consistent manner.

In variant D the conduct raises potential concern under Section 2(h) of the FEOC Regulation, since the timing may inhibit the competitive response of others. Observation of a single or small number of events that led to a loss of static efficiency would likely result in the MSA publishing a summary of the event. With evidence of a systematic problem that appeared material in nature, the MSA would seek evidence of the prevention of competition. Based on that the MSA would consider whether to proceed with enforcement action or seek broader changes, such as, modifications to ISO rules or business practices to remove the constraint on competition (in this case, lack of export ATC) or facilitate competitive response.

4.5 COORDINATED OFFER BEHAVIOUR

4.5.1 Fact Pattern

Participant A offers blocks of energy out of merit in a relatively narrow range. Participant B also offers a number of blocks of energy, some slightly higher and some slightly lower than Participant A. The combined impact of the offers is such that SMP is set at a level where some but not all of A's and B's reoffered blocks are dispatched. This pattern is observed to persist over time without A or B undercutting the offers of the other.

4.5.2 MSA Comments

Observation of the above conduct is sufficient to raise a potential concern of coordinated effects, since ex-post it appears individually both Participant A and B could have been better off undercutting the other (offering slightly lower to increase dispatch and presumably profiting at the expense of the other). While potentially of concern, the above fact pattern is not sufficient to describe a situation of explicit or tacit collusion. For example, the lack of competition may have resulted from impediments to competition (e.g. restrictions on the ability to restate) or it may have been the case that Participants A and B had other reasons to independently adopt similar strategies.

To test a hypothesis that the fact pattern was the result of collusion the MSA would look for additional evidence, such as:

- Were the actions of Participant A and B inconsistent with short run profit maximizing? Could either participant have made significant short run profits from undercutting the other? Were the opportunities for undercutting observable?
- Did the conduct persist for a long period of time despite changes in market fundamentals and portfolio positions?
- Did the two participants have unique opportunities to coordinate behaviour, e.g., through a PPA relationship, joint ventures elsewhere, the hiring of the other firm's senior staff, etc.
- Did the participants engage in strategies aimed at disciplining others or otherwise encouraging the continuation of the behaviour? For example:
  - Participant A observes Participant B undercutting its offers by a few dollars for the last few hours and decides to drop all of its offers to $0 with the expectation of a resulting pool price below both A and B's costs. A repeats this strategy whenever B deviates from the fact pattern described above.
  - Participant A and B have both been following the above fact pattern for a number of hours. Participant B experiences an unplanned outage leaving it a net purchaser in the pool. Both Participant A and B offer at cost until Participant B's unit returns to service. At this time both return to the above fact pattern.
- Was there evidence of signaling that would support a hypothesis of an agreement? For example:
  - Participant A offers a small block of energy out of merit at exactly $250, Participant B observes this and places a similar small block of energy at $250.01. Two hours later both participants offer much larger volume around $250 as described in the fact pattern above. Absent an alternate explanation for the offer strategy the MSA may consider this evidence of signaling.
  - A trader at Participant A calls a trader at Participant B to enquire whether they have power for sale at $250 three hours from now, even though expected supply demand conditions would suggest a significantly lower price. No transaction is concluded. Both Participant A and B enter offers for three hours time around a price level of $250.

Should evidence of overt collusion be found the MSA is likely to refer the matter to the Competition Bureau. If evidence points to tacit collusion the MSA is likely to pursue enforcement action against any instances of tacit collusion rather than refer the matter to the Competition Bureau. [6] If a party involved in

a conspiracy to lessen competition in the Alberta electricity market approached the MSA we would facilitate its immunity application process with the Competition Bureau. If immunity is granted the MSA would discontinue its investigation into the activities of the immunity applicant.

If evidence of collusion was weak but nonetheless suggest a coordinated effect that was detrimental to the *fair, efficient and openly competitive* market the MSA would seek changes to rules and/or market structure that would limit the future ability for coordination.

4.6 SHARING OF OFFER INFORMATION

4.6.1 Fact Pattern

We consider five different fact patterns:

Fact Pattern A - Power Purchase Arrangements: Participant B, a Power Purchase Arrangement (PPA) owner provides Participant A, a PPA buyer, with details of its offers for increased capacity and/or excess energy in accordance with a Power Purchase Arrangement (in accordance with AUC Decision 2010-293 PPA owners and buyers were not required to have an order pursuant to section 3 of the FEOC Regulation in respect of records relating to excess energy and increased capacity so long as the requirements of the PPA were followed). Participant A's dispatch services desk shares with Participant A's real time traders the price and quantity offers provided by Participant B to Participant A.

Fact Pattern B - Approval for sharing information for $0 offers: Participant A will dispatch all units of Participant B. Participant A will set up a dispatch services desk to manage the dispatch of all units of Participant B. All generation dispatched will be $0 (price is not mentioned or is otherwise understood to be zero). Participant B has applied for and received Commission approval for the preferential sharing of price and quantity pairs. Participant A does not have offer control. Participant A's dispatch services desk shares with Participant A's real time traders the price and quantity offers provided by Participant B to Participant A.

Fact Pattern C: Approval for sharing information around non-zero dollar offers: All generation dispatched has a price above $0. Participant B has applied for and received Commission approval for the preferential sharing of price and quantity pairs. Participant A does not have offer control. Participant A's dispatch services desk shares with Participant A's real time traders the price and quantity offers provided by Participant B to Participant A.

Fact Pattern D - Transfer of offer control: Participant A has offer control of all units of Participant B. In other words, Participant A has the ultimate control and determination of the price and quantity offers made to the power pool for all units of Participant B. There is no preferential sharing of price and quantity pairs. Participant A's dispatch services desk shares with Participant A's real time traders the price and quantity offers for all units of Participant B.

Fact Pattern E – Communication between market participants: Participant A observes a particular strategy being followed by Participant B. Staff at Participant A call Participant B to advise them that if it continues the strategy they will report them to the MSA.

4.6.2 MSA Comments

Variants A, B and C all raise concerns that the sharing of price quantity information may lead to coordination between participants A and B. If so, the MSA would examine whether the conduct breached subsection 2(h)(i) of the FEOC Regulation.

In variant A the MSA believes that PPA owners and buyers need to be cognizant that the lines of communication that result from the interactions necessary to facilitate the PPA should be managed carefully in order to avoid anticompetitive effects. The MSA is of the view that nothing in the Commission decision exempts market participants from the prohibitions in the other parts of the FEOC regulation. To the extent that this sharing of preferential records is used to coordinate the pricing of offers between competitors our view is that there is no protection afforded by the Commission's order from the application of section 2 of the FEOC Regulation.

The fact pattern falls short of establishing a conspiracy between Participant A and Participant B (subsection 2(h)(i)) or "manipulating" prices (subsection 2(j)) but any suggestion of coordinated behaviour will be carefully scrutinized by the MSA, likely resulting in an investigation. Such an investigation would seek to determine whether there is an understanding between A and B that the sharing of information is a mechanism for coordination of pricing. Further analysis would assess the impact on prices as part of a determination of a manipulation. As a working hypothesis the MSA would view any assessed change in prices attributable to Participant A as "away from a competitive market outcome" because A's readjusted offers are not the result of a competitive process.

The fact pattern also presents the possibility that Participant B may not be an active part of the conspiracy and that A uses the information without the express knowledge of B. In such circumstances the MSA believes it would be prudent for Participant B to report as soon as possible any suspicions it has that Participant A may be using the information inappropriately.

In variants B and C the MSA would carefully review the AUC approvals to understand how the Commission was satisfied that "the records will not be used for any purpose that does not support the *fair, efficient, and openly competitive* operation of the market, including the conduct referred to in section 2" (subsection 3(3)(a) of the FEOC Regulation). The MSA would also carefully review the "terms and conditions the Commission considers appropriate" in issuing its order (subsection 3(3)). If necessary, the MSA would closely monitor the implementation of these terms and conditions to determine if there is a potential breach of subsection 2(k) of the FEOC Regulation (circumvention).

In variant D there is no sharing of information and no concern around potential collusion. The fact pattern is included here to demonstrate that while the subsuming of one participant's offer control by another may be similar in effect to the 'coordinated behaviour' described in the other variant's it would be treated differently. The fact pattern provides no further detail around the size of the acquisition of offer control or impact on competition. Should the MSA perceive no competition issues it would monitor Participant A in a manner consistent with other market participants. In some circumstances the arrangement could still pose competitive concerns. We consider two possibilities, (1) where Participant A's arrangement is not declared, (2) where the arrangement is declared but has the potential to undermine competition.

1) **Offer control not declared** - While formal notification is not required under section 5 of the FEOC Regulation it is certainly implied by virtue of the MSA's obligation to update its offer control report when required (see subsection 5(4)). Participants failing to do so run the risk of an investigation of a potential breach of subsection 2(h) or a referral to the Competition Bureau for a possible inquiry as to whether there is an offence under section 45 of the *Competition Act*. Such an investigation or inquiry under the federal legislation would be *per se* in nature; the breach or offence would flow from the fact of an agreement between competitors without a need to show competitive harm.
2) **Offer control declared** – In the event of declared change in offer control the transaction and/or subsequent behaviour need to comply with competition rules. For example, if the MSA believes that the assumption of offer control by Participant A potentially undermines the *fair*, *efficient and openly competitive* standard, we would consider applying to the Commission for an appropriate remedy under subsection 51(1)(b) of the AUCA. This determination would be fact specific and the MSA may come to this view that a transaction undermines FEOC even if Participant A's aggregate control falls below the 30% threshold (Section 5, FEOC Regulation). Alternatively, the matter might be referred to the Competition Bureau for consideration whether Participant A's control of price/quantity decisions constitutes the acquisition of a "significant interest" under the terms of the *Competition Act*'s merger provision.

Variant E might suggest an overture to enter into coordinated behaviour. The MSA would assess carefully to see if subsequent actions and market outcomes support such a theory. Alternatively, the direct contact by Participant A may be interpreted as an effort to unduly influence competition and restrict the competitive response of Participant B, contrary to subsection 2(h). Again, the MSA would monitor if subsequent actions and market outcomes would support such a case.

As a matter of principle market participants should avoid talking to competitors about current or future offer strategies. Discussions of high level strategy that are restricted to long term strategy at joint ventures such as deciding whether to participate in ancillary service markets are considered acceptable. More specific communications could form the basis for suspicion of collusion.

Should A suspect that B is engaging in inappropriate conduct the obvious course of action is to report it to the MSA and not threaten B. By the same token, if Participant B perceives the communication as an attempt to alter its competitive behaviour it should report it to the MSA. Participant A is also free to adopt a countervailing strategy as a competitive response as long as it does not itself run afoul of the provisions of the *Fair, Efficient and Open Competition Regulation*.

4.7 OUTAGE SCHEDULING

4.7.1 Fact Pattern

We consider four different fact patterns:

Fact Pattern A - Discretionary Outage: Wednesday afternoon Participant A finds it has a unit with a boiler leak. The leak is such that a 48 hour outage will be required at some point within the next 72 hours

but is not required immediately. Based on the **flat** corporate position, Participant A decides to wait until late Friday evening. The estimated impact on pool price is negligible over the 48 hour weekend outage.

Fact Pattern B – Discretionary outage to benefit portfolio position: Wednesday afternoon Participant A finds it has a unit with a boiler leak. The leak is such that a 48 hour outage will be required within the next 72 hours but is not required immediately. Based on the **long** corporate position, Participant A decides to take the unit off at the top of the hour. With the unit coming offline, the estimated price impact is $100 for 4 hours in the evening and $20 to the flat pool price the next day. The portfolio impact is favourable to taking the unit off immediately.

Fact Pattern C - Discretionary outage to benefit portfolio position with change to offer behaviour: Wednesday afternoon Participant A finds it has a unit with a boiler leak. The leak is such that a 48 hour forced outage will be required within the next 72 hours but is not required immediately. Based on the **long** corporate position, Participant A decides to take the unit off at the top of the hour. In addition, Participant A prices up 200 MW on another unit to $900 outside T-2, but before it notifies the AESO of the outage. With the unit coming offline, the estimated price impact is $900 for the first two hours and then Participant A's offer sets price at $900 for 3 more hours that evening. The next day prices are $100 higher than the expected day's forecast price. The portfolio impact is favourable to taking the unit off immediately.

Fact Pattern D – Agreement to modify planned outages: Participants A and B begin planning maintenance outages for some of their units. In separate discussions with an independent service provider who would carry out key aspects of their equipment overhaul, Participant A learns that Participant B has already tentatively reserved the service provider for most of A's planned outage. Participant A contacts Participant B and offers to pay it $25K if it will change its reservation time slot. B accepts and the result is that non-conflicting maintenance outages are rescheduled.

4.7.2 MSA Comments

The MSA recognizes that additional considerations under the *fair, efficient and openly competitive* standard may apply in the above Fact Patterns A and B if Participant A is a PPA Owner and the unit is subject to a PPA. The MSA is still considering the application of these examples to units subject to a PPA and at this time offers no guidance on outage timing at PPA units. Once the MSA is in a position to provide such guidance this section of the guideline will be revised.

Information about upcoming outages is provided in aggregate and on an anonymous basis on the AESO's website through the S*hort Term Outage* and *Monthly Outage* graphs. Additional information on the forthcoming supply demand situation is provided in the *Year End Supply Demand Projection*. Subject to the requirements of the ISO rules regarding submission of outage information, the MSA believes market participants are free to take into account this information when deciding on whether to change future planned outages.

Variant A is an example of unilateral conduct with no suggestion of anticompetitive effects. Consequently the conduct raises no competition concerns with the MSA. The market participant should take care to comply with ISO rules regarding submission of outage information and with section 4 of FEOC Regulation.

Similarly, variant B also describes a unilateral conduct. Assuming the participant complies with ISO rules and section 4 of the FEOC Regulation the conduct would not pose a particular concern for the MSA. To the extent that the impact on pool price was significant the event would be catalogued and reported upon.

Variant C suggests possible breaches of ISO rule 5.2 and FEOC Regulation subsections 4(1), 4(2) and 2(h) and 2(j). If, as a result of an investigation, the MSA was satisfied of a breach or breaches, it would likely seek a comprehensive remedy within the terms of section 63 of the AUCA. The size of the penalty sought would depend on when participants were made known of Participant A's outage and our assessment of the impact of Participant A's actions on market prices.

With respect to ISO Rule 5.2, the investigation would seek to establish whether Participant A failed to submit a schedule to the AESO immediately after a decision was made to correct an anomalous operating situation. With respect to subsection 4(1) of the FEOC Regulation the investigation would seek to establish whether Participant A used the knowledge of its outage decision to trade before the AESO had made the outage record in question available to the public and whether under subsection 4(2) it had provided the outage record to the AESO as soon as reasonably practicable. In our view, the term "trade" in subsection 4(1) includes offering into the pool. Finally, assuming we found that Participant A did not comply with these provisions, we would investigate whether there was evidence in support of the elements contained in subsections 2(h) and 2(j) of the FEOC Regulation.

Subsection 2(j) is relevant because Participant A's action to price up 200 MW before notifying the AESO of its outage appears to be a conscious effort to manipulate pool prices to its benefit. Its long position supports this theory as does taking the action before its competitors are in a position to respond. Its action appears to be intended to manipulate market prices "away from a competitive market outcome" because if its competitors had knowledge of the imminent outage they would have been in a position to react. Simply put, a "competitive market outcome" is prevented by virtue of the denial of material information to competitors in the marketplace. These same findings would be equally applicable to subsection 2(h) insofar as they support a finding of "restricting or preventing competition, a competitive response…by another person".

In summary, the response is markedly different from the previous variants because Participant A's action is seen as an 'extension' of market power through impeding competition.

Variant D describes an arrangement between market participants. In general the MSA would be concerned by direct or indirect (e.g. through the independent service provider) arrangements that caused outages to be changed. Such arrangements would be scrutinized to see if the conduct was inconsistent with subsection 2(h) of the FEOC Regulation. With the fact pattern above the MSA would have sufficient evidence to conclude that there was an 'agreement' (the first element). Further analysis would be required to support a conclusion that the agreement was directed at restricting or preventing competition (the 'naked restraints' described in section 2.2.2).

Appendix A: MSA Mandate

The MSA mandate is described in Section 39 of the AUCA.

> 39(1) Subject to regulations made under section 59(1)(a), the Market Surveillance Administrator has the mandate
>
> (a) to carry out surveillance in respect of
>
> (i) the supply, generation, transmission, distribution, trade, exchange, purchase or sale of electricity, electric energy, electricity services or ancillary services or any aspect of those activities, and
>
> (ii) the provision of retail gas services, or services provided under a default rate tariff, to natural gas customers by natural gas market participants, or any aspect of those activities,
>
> (b) to investigate matters, on its own initiative or on receiving a complaint or referral under section 41, and to undertake activities to address
>
> (i) contraventions of the *Electric Utilities Act*, the regulations under that Act, the ISO rules, reliability standards, Part 2.1 of the *Gas Utilities Act* or the regulations under that Act or of decisions, orders or rules of the Commission,
>
> (ii) conduct that does not support the *fair, efficient and openly competitive* operation of the electricity market or the natural gas market, and
>
> (iii) any other matters that relate to or affect the structure and performance of the electricity market or the natural gas market, including negotiating and entering into settlement agreements and bringing matters before the Commission.

Without limiting the generality of s.39(1), further specifics are provided in s.39(2) and s.39(3). The legislation also provides for:

Guideline making – MSA may establish guidelines to support FEOC. and shall make those guidelines public (s.39(4)). New, or material changes to existing, guidelines must be the subject of consultation with market participants (MS Regulation s.8)

Publishing reports - MSA's powers include its ability to make public reports on matters relating to its mandate (MS Regulation s.6(2)) and the considerations it should make when naming a market participant (MS Regulation s.6(4)).

Notice to another body having jurisdiction – The MSA must give notice to other bodies having jurisdiction, including but not limited to the Commission and the Competition Bureau. The MSA may collaborate with such bodies on investigations. (AUCA s.45)

Forbearance - The MSA may forbear conditionally or unconditionally if a matter is or will be subject to competition to protect the public interest.(AUCA s.57)

Ability to Negotiate Settlements – MSA may enter in a settlement agreement with a person on any matter related to its mandate. Settlements will be filed with the Commission for approval. (AUCA s.44).

Appendix B: *Electric Utilities Act*, Section 6

Section 6 of the *Electric Utilities Act*, set out expectations for market participants:

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

The MSA observes that this is a conduct oriented test and not necessarily an outcome based test as is found in companion statutes, such as the federal *Competition Act*. In other words, it is not in all cases necessary for the MSA to be satisfied that the *fair, efficient and openly competitive* operation of the market was actually undermined in order to launch an application before the Commission. Rather, depending upon the nature of the alleged contravention, it may be sufficient to show that the conduct of a market participant (or more than one market participant) is inconsistent with what a reasonable business person would regard as supporting the *fair, efficient and openly competitive* operation of the market.

Section 6 does not contain any qualifying adverbs like 'substantially', 'unduly' or 'unreasonably'; thus, materiality is not an explicit element of this conduct standard. As a practical matter, however, this does not mean the MSA is prepared to take a case based on the barest evidence of 'conduct not supporting'.

Section 6 implies a conjunctive interpretation of the terms "*fair*", "*efficient*" and "*openly competitive*" operation of the market. In other words, a single substantive test in which each of the terms would be considered as part of the overall standard of conduct; the terms are assessed individually but considered as a whole to find a breach. In the assessment of each component of *fair, efficient, openly competitive* the MSA will typically assess each using a range of factors, such as:

- **Fair**
  - Is the conduct consistent with practice commonly employed by others?
  - Is the practice in line with legal obligations?
  - Does the conduct involve an element whereby parties are or may be misled?
  - Does the participant enjoy an advantage that results in a distortion of competition?
- **Efficient**
  - Does the conduct have an impact on static efficiency?
  - Overall is this impact positive, negative or neutral?
  - Does the conduct lead to, or is it likely to lead to, an enhancement or impediment to dynamic efficiency?
  - If dynamic efficiency is, or is likely to be, enhanced, does this benefit outweigh any static efficiency loss?
- **Openly Competitive**
  - Does the market participants' conduct include discriminatory or exclusionary terms?
  - Does the conduct result in or is it likely to result in an impediment to competition?
  - Is the conduct subject to sufficient competition to protect the public interest?
  - Is there evidence to suggest sufficient competition will develop over time?

References

Market Surveillance Administrator

Market Share Offer Control Process (September 2009)
http://albertamsa.ca/uploads/pdf/About%20Us/Market_Shares_Process__092409.pdf

Intertie Conduct Guideline (revoked) http://albertamsa.ca/index.php?page=intertie-conduct-2

Investigation Procedures (August 2010)
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The Market Surveillance Administrator is an independent enforcement agency that protects and promotes the fair, efficient and openly competitive operation of Alberta's wholesale electricity markets and its retail electricity and natural gas markets. The MSA also works to ensure that market participants comply with the Alberta Reliability Standards and the Independent System Operator's rules.

APPENDIX B

MARKET SURVEILLANCE ADMINISTRATOR
ALBERTA CANADA

NOTICE

NOTICE TO PARTICIPANTS AND STAKEHOLDERS

October 23, 2019

Re: Advisory Opinion Program Process

The MSA has created an Advisory Opinion Program (AOP) that will provide Advisory Opinions with respect to whether **proposed** business conduct and practices of Alberta electricity market participants comply with their obligations under the *Electric Utilities Act*, including regulations created thereunder. This notice sets out the process by which Advisory Opinions may be requested from the MSA.

Request for an Advisory Opinion from the MSA

Alberta electricity market participants who wish to obtain a non-binding Advisory Opinion from the MSA ("the Applicant") must submit a request **in writing** to enforcement@albertamsa.ca that contains all of the following information:

- Details of the Applicant's proposed business practice;
- Relevant data and analysis available to the Applicant;
- Relevant third-party data and analysis; and
- The Applicant's contact information.

Issuance of Advisory Opinions by the MSA

On receipt of a request for an Advisory Opinion, the MSA the will consider whether it has sufficient information to make a decision on the request. If not, the MSA may request additional information from or meetings with the Applicant.

The MSA retains the discretion to decline to issue an Advisory Opinion in certain circumstances. These circumstances include, but are not limited to:

- The business conduct at issue occurred in the past;
- The business conduct is subject to an ongoing investigation by the MSA;
- The Applicant has not provided sufficient and / or suitable information;
- The underlying facts being uncertain or hypothetical;
- Necessary third-party information is not available to the MSA; and
- The business conduct is a matter for which the AESO provides guidance pursuant to its requests for information process outlined in Information Document 2017-001.[1]

If issued, an Advisory Opinion will be issued in writing and will be signed by the MSA's Chief Executive Officer.

In the interests of facilitating greater understanding and transparency of the MSA's views to the broader market, the MSA will publish a version of any Advisory Opinion it issues that maintains the confidentiality of the Applicant and any commercially sensitive information.

As the MSA's opinion may change if the applicable legislation or ISO Rules change, it is suggested that Applicants receiving a written Advisory Opinion seek independent legal advice or re-contact the MSA to ascertain whether such changes have an impact on a previously-issued Advisory Opinion.

There will be no fee payable by an Applicant who requests an Advisory Opinion from the MSA.

Background

Following requests received from market participants, in October 2018, the MSA initiated a stakeholder consultation to consider whether a voluntary advisory opinion program would be helpful to market participants.[2]

The MSA retained Independent Economics Consultant Ian Nielsen-Jones to prepare a Report that addresses three questions:

- Could an AOP assist market participants?
- If so, what form should that program take?
- What has been the experience of other regulators with these types of programs?

The Report was made public on December 14, 2018[3] and a public stakeholder session was held on February 27, 2019.[4] Market participants provided written comments to the MSA in response to the Report itself[5] and orally[6] at the stakeholder meeting.

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[1] Information Document 2017-001 – Requests for Information, Waivers or Variances Regarding Authoritative Documents effective June 20, 2017.

[2] MSA notice re Advisory Opinion Program. October 22, 2018.

[3] Ian Nielsen-Jones, "Report to the Market Surveillance Administrator of Alberta regarding the merits of introducing an Advisory Opinions Program." December 14, 2018.

[4] MSA notice re Advisory Opinion Program Public Meeting. January 18, 2019.

[5] MSA notice re Stakeholder Comments re: Advisory Opinion Programme. January 23, 2019.

[6] MSA notice re Oral feedback re: Consultant's report on Advisory Opinion Programme. May 7, 2019.