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# MSA REPORT

## Undesirable Conduct and Market Power

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26 July, 2005

**MARKET SURVEILLANCE**  
ADMINISTRATOR

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# 1 INTRODUCTION

Early in 2004, the Department of Energy (“DOE”) began a process with stakeholders to review the competitive framework for Alberta’s electricity market. This review concluded in June 2005, with policy recommendations approved by government. An important part of these recommendations is work relating to the functions of market monitoring and surveillance. These functions are necessary to provide stakeholders with confidence in their participation in the market.

Across the world electricity markets have evolved in recent years. In particular, for electricity markets in the United States there has been an overriding concern about the existence and abuse of market power. Although market power and abuse of market power are of concern to the Market Surveillance Administrator (“MSA”), in reality, the abuse of market power is just one form of behaviour that leads to undesirable market outcomes. The MSA is focused on monitoring and investigating all undesirable outcomes.

The current market design and rules in the Alberta electricity market already form a framework for mitigating undesirable conduct and outcomes in the market.<sup>1</sup> For example, the *Transmission Regulation* provides a robust safeguard against many undesirable outcomes that could be associated with congestion. In a few areas, we note current rules have been the subject of consideration by the MSA. We are encouraged that the government approved policy recommendations will strengthen this framework further.

The approach taken to deal with concerns about undesirable outcomes and the abuse of market power varies considerably amongst electricity markets. Differences in market design and regulatory structure mean that we believe none of the approaches taken elsewhere can be directly ‘transplanted’ to provide a useful and comprehensive framework suitable for Alberta’s electricity market.

The MSA recognizes that some stakeholders desire very specific ‘bright line’ limits against which they can measure their conduct. In some limited cases, this approach may be beneficial to the operation of the market and, accordingly, the MSA will seek to identify appropriate limits. Generally, however, we believe that the market will be best served without ‘bright line’ tests which may have the unintended consequence of constraining beneficial and vigorous competition. In these cases, the MSA will proceed to investigate - on a case by case basis - seeking to continually provide guidance to participants on conduct that supports the *fair, efficient and openly competitive* operation of the market.

The market monitoring and surveillance described herein continues the MSA’s existing method and process, while seeking to provide participants with further guidance with regard to desirable conduct and outcomes. In addition, we consider that in light of the pending changes to the wholesale market design and holding restrictions, in some limited circumstances (such as significant changes in asset ownership) there is a need to clarify how participants will meet their

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<sup>1</sup> The MSA considers electricity market design to include legislation, regulations, ISO rules and MSA guidelines.

responsibilities under section 6 of the EUA. To do this we propose using a ‘conduct compliance plan’. Compliance plans have already proved a successful tool in assisting retailers in meeting their obligations under the Act, regulations and market rules. We recognize that implementing the conduct compliance plans as described in the paper may require a change to regulations.

The *Electric Utilities Act* (“EUA”) places responsibility on participants for the consequences of their conduct. The primary objective of this brief paper is to assist participants by describing conduct that is consistent with the *fair, efficient and openly competitive* operation of the market. A secondary objective is to clarify for market participants that the MSA is concerned with a broad range of conduct related issues, including but by no means limited to the abuse of market power. This paper and the MSA Investigation Process and Assessment Guideline (January 26, 2004)<sup>2</sup> are intended to be companion documents. The guideline describes the investigation process the MSA will use when assessing participant conduct.

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<sup>2</sup> <http://www.albertamsa.ca/files/MSAInvestigationProcessGuidelines012604.pdf>

## 2 UNDESIRABLE CONDUCT AND MARKET POWER

### 2.1 Conduct and the Abuse of Market Power in Electricity Markets

Business conduct is subject to regulations and laws designed to promote efficiency and guard against the abuse of market power or other anti-competitive acts. In Canada, the Competition Bureau is charged with the responsibility to administer and enforce the Competition Act which governs acceptable business conduct. In restructured electricity markets, standard tests for the abuse of market power and anti-competitive behavior may not present a sufficient safeguard. In Alberta's electricity market additional responsibility for the surveillance and investigation of participant conduct is part of the mandate given to the MSA.

Our examination of restructured electricity markets indicated that no consistent approach has been taken to defining undesirable conduct and abuse of market power. We note two main reasons for this:

- Restructured markets differ greatly on the detail of market design and rules. These differences impact upon the definition of undesirable conduct. For example, in a market design where some portion of fixed costs are intended to be recovered from a capacity market, market power mitigation often includes measures to constrain energy market prices below a unit specific reference level. In the absence of separate payments for capacity such constraints do not appear to have a role in Alberta's electricity market. Some jurisdictions also face significant 'market power' issues that emerge as a result of transmission congestion. Alberta's *Transmission Regulation* and relative homogeneity removes many of these potential problem areas.<sup>3</sup>
- Restructured markets differ in the powers and function assigned to market monitors and regulators. For example, market monitoring functions that are contained within an independent system operator ("ISO") typically have less discretion and no powers relating to the imposition of penalties for past abuses. This is one reason why some jurisdictions have favoured a prescriptive ex-ante approach in the form of automatic mitigation procedures ("AMP"). In Alberta, the EUA section 67(4) sets out that a tribunal may impose penalties on participants who have contravened the Act, regulations or ISO rules or who have engaged in undesirable conduct.

The favoured academic approach to the assessment of market power is usually one involving a behavioural simulation of a competitive outcome.<sup>4</sup> Deviations between actual and simulated outcomes are seen as evidence of an abuse of market power or other anti-competitive conduct. While behavioral simulations are becoming increasingly sophisticated they still rely heavily on the accuracy of data inputs and modeling assumptions made. As a consequence, the results of

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<sup>3</sup> The nature of Transmission Must Run (TMR) payments remain one source of possible concern and is the subject of a recent MSA report.

<sup>4</sup> Based either on Cournot competition, (participants are price takers but can choose quantities offered) or a Supply Fundamentals Equilibrium approach (SFE).

such simulations remain controversial. The MSA does not favor reliance on methods that attempt to determine reference prices in a purely simulated environment. Indeed, if it were possible to accurately simulate ‘competitive prices’, price revelation in the market would be largely redundant. In some cases we recognize that the reconstitution rather than simulation of price may represent the best option, and, as such, support the governments’ recommendation regarding the reconstitution of pool price to address the impact of Transmission Must Run (TMR).

The above reasons suggest that the approach adopted to assess undesirable conduct and abuse of market power in Alberta should be a function of the market design and regulatory framework in Alberta. The June 2005 policy recommendations approved by government include a number of significant changes to market design. Our initial review of these changes suggests that the MSA’s existing approach to assessing undesirable conduct will continue to work well within the new framework. For the benefit of clarity, we set out the MSA’s existing approach to defining undesirable conduct in the next section of this report. Fundamental to this approach is the mandate assigned to the MSA in protecting the *fair, efficient and openly competitive* operation of the market. Guarding against abuse of market power is only a part of this broader function.

## **2.2 Undesirable Conduct and Market Power in Alberta’s Electricity Market**

The MSA has a broad mandate, pursuant to the EUA, to undertake surveillance and investigation in respect of the Alberta electricity market. As part of this mandate the MSA is required to assess the conduct of participants.<sup>5</sup>

The EUA section 49(3) contemplates various forms of undesirable conduct including that which:

- is not consistent with the *fair, efficient and openly competitive* operation of the market; and
- does not comply with the Act, regulations or ISO rules.

Different electricity markets have defined the concept of ‘market power’ in subtly different ways. In order for the concept to have meaning in the context of the Alberta electricity market, we take direction from section 6 of the EUA that places a requirement on participant’s conduct:

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

We thus define *market power* as:

**Market Power:** means the ability, whether exercised or not, to materially affect the *fair, efficient and openly competitive* operation of the market.

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<sup>5</sup> The EUA section 49(1) mandates the MSA to ‘carry out surveillance and investigation 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.

At most times, we expect competitive forces to effectively constrain the potential for participants to influence the market. Possessing market power for most participants is likely to be a transitory state; that is, there are times when they are able to affect the operation of the market and times at which they are not. The structure of Alberta's electricity market is such that at some times even small market participants will possess market power. Consequently, we do not find a definition that links market power solely to the size of participants (e.g. as measured by capacity share) to be complete. However, the MSA recognizes that larger market participants may possess market power more often than smaller participants and should naturally expect to be the focus of a larger proportion of the MSA's surveillance activities.

The EUA requires market participants to be responsible for their actions and to ensure their conduct supports the *fair, efficient and openly competitive* operation of the market. A failure by a participant to support the *fair, efficient and openly competitive* operation of the market will be viewed by the MSA as undesirable conduct. Participants must recognize that with the possession of market power there comes an increased responsibility to ensure their conduct supports the *fair, efficient and openly competitive* operation of the market. One type of undesirable conduct we distinguish is the *abuse of market power*:

**Abuse of Market Power:** means conduct that may be reasonably foreseen as likely to materially undermine the *fair, efficient and openly competitive* operation of the market.

In this regard, the MSA offers the following interpretations:

- “*Conduct*” includes acts and omissions<sup>6</sup>;
- “*Likely*” means having a non-trivial probability of occurrence;
- “*Market*” means any type of market through or under which an offer, purchase, sale, trade or exchange of electricity, electric energy or ancillary services takes place in relation to the production or consumption of electricity, electric energy, electricity services or ancillary services<sup>7</sup>;
- “*Materially*” includes relatively low probability outcomes of higher individual impact, as well as relatively high probability outcomes of lower individual impact. Assessment of materiality also includes factors such as duration, persistence, repeatability, and sustainability;
- “*Reasonably foreseen*” means conduct that can be anticipated by a reasonable person to directly cause or contribute to a given outcome; and
- “*Undermine*” means to adversely impact.

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<sup>6</sup> As defined in the EUA section 1(1)f

<sup>7</sup> As defined in the EUA section 1(1)dd

The MSA, in fulfilling its mandate, will continue to operate from the position that market participants are deemed to intend the reasonably foreseen and likely outcomes of their conduct. Participants are further expected to be cognizant of the likely outcomes associated with their actions. Given a choice between conduct that supports *fair, efficient and openly competitive* and conduct that does not, the EUA requires participants to resolve in favour of the former. However, the MSA may consider, as a mitigating circumstance, the case where a participant can clearly demonstrate they have made commercially reasonable efforts to avoid undermining the *fair, efficient and openly competitive* operation of the market.

The '*fair, efficient, and openly competitive*' operation of the market is not precisely defined in the EUA, nor do we believe the dynamics of the market lead to a completely comprehensive definition. Two key characteristics the MSA considers worthy of note are:

- there should be an appropriate balance between risk and reward; and
- a profitable strategy entered into by a participant should prompt a competitive response.

We consider these and other characteristics associated with a *fair, efficient and openly competitive* market in Section 3.

It should be emphasized that the MSA's primary concern is with all types of undesirable outcomes and conduct. Abuse of market power represents only a subset of conduct that is undesirable. Other forms of undesirable conduct include those with unforeseen or unintended consequences that are nevertheless inconsistent with the *fair, efficient and openly competitive* operation of the market. Consequently, the monitoring and investigative activities of the MSA will continue to focus on a broad range of conduct to determine whether it has undesirable and material consequences.

The MSA's mandate also includes the surveillance and investigation of the structure of the market and of the arrangements and relationships that exist between market participants, as set out in the EUA section 49(2). It is possible to envisage changes in control or ownership of assets that would significantly increase the market power of a participant. An example of this could be a merger between two existing market participants or significant new capacity additions. In this situation, a participant has an increased responsibility to ensure their conduct supports the *fair, efficient and openly competitive* operation of the market. For this reason, changes in control or ownership of assets could warrant review by the MSA. The MSA, for similar reasons, will also consider the impact of decisions to retire or 'mothball' generation units upon the operation of the market. In some cases it may be necessary for participants to clarify for the MSA how they will meet their obligations under section 6 of the EUA. In section 5 we propose that such participants would be required to submit a conduct compliance plan.



### 3 FAIR, EFFICIENT AND OPENLY COMPETITIVE

The meaning of *fair, efficient and openly competitive* is not defined in the EUA. Through regular publications and, as a result of specific investigations, the MSA is engaged in providing continual guidance to participants on what constitutes *fair, efficient and openly competitive*. A number of high level principles have been identified:

- *High fidelity price signal*: A price signal that is reflective and responsive to changes in fundamentals such as fuel prices, outages, and supply-demand balance. It is particularly important in an energy-only market that prices are able to reflect conditions of scarcity. Absence of a high fidelity price signal suggests the market may be inefficient and/or not openly competitive.
- *Competitive response*: In a competitive market, if a participant is able to profit from an innovative strategy, there should be a timely response from other market participants to contest this profit. Absence of such countervailing forces suggests an inefficient and/or unbalanced market.
- *Information rich environment*: Participants operating in an information rich environment are better placed to make rational and informed decisions that are consistent with the *fair, efficient and openly competitive* operation of the market;
- *Balance between risk and reward*: In a competitive market there should be opportunities for profit for those willing to take risks. For reasons of equity and efficiency it is important that potential risk and reward are balanced.
- *Level playing field*: A level playing field is a fundamental part of promoting confidence in a fair and openly competitive environment. The Trading Practices Guideline (“TPG”) and the Code of Conduct Regulation (“Code”) are two examples related to ensuring a level playing field with regard to access to information.
- *Opportunity to compete*: Market participants (and potential participants) should have the opportunity to compete or contest in any part of the market without undue barriers or interference, whether structural or by a competitor.

#### 4 CONDUCT OF MARKET PARTICIPANTS

Section 3 above provided insight into the principles the MSA believes underpin the interpretation of *fair, efficient and openly competitive*. In this section, we provide an overview of our expectations regarding participant conduct necessary to support those principles. The appropriate conduct of participants is set out in the EUA, regulations, ISO rules and through guidelines and advice issued by the MSA. Many market participants have chosen to adopt a corporate code of conduct to communicate a common understanding of appropriate and ethical conduct to employees, officers and their board of directors. These often embody many of the principles underlying appropriate business conduct. Below we set out our view of some key principles underlying appropriate market conduct by participants and their employees.

- *Integrity*: Participants must comply with the letter, spirit and intent of the EUA, regulations and ISO rules. Participants should also heed the advice given in MSA guidelines. Compliance will be achieved by operating in an honorable and principled manner consistent with ethical business practices.
- *Unconstrained competition*: Participants shall not seek to prevent competitive outcomes by withholding production, colluding with competitors, refusing to deal or engaging in other unethical practices to increase market share.
- *Legitimate business purposes*: The conduct of market participants must be for legitimate business purposes only and shall not include transactions aimed at misleading others or intended to manipulate market prices. These include but are not necessarily limited to: 1) transactions for which the primary benefit is derived from altering market price; and 2) the (systematic/regular) use of uneconomic supply resources (including either through an intertie or in-province generation) that results in a material impact on pool price and/or the *fair, efficient and openly competitive* operation of the market.
- *Insider trading*: Participants must comply with all applicable laws, regulations, ISO rules and MSA guidelines regarding the disclosure of non-public ('inside') information. Participants must comply with the Trading Practices Guideline.<sup>8</sup>
- *Sound trading practices*: Participants shall not engage in activities to misrepresent the operational capabilities of generation facilities, enter into activities intended to mislead other participants or otherwise engage into misrepresentative trades.
- *Responsible*: Notwithstanding conduct that is consistent with applicable laws, regulations, ISO rules and MSA guidelines, participants are deemed to be cognizant of the likely outcomes

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<sup>8</sup> MSA Trading Practices Guideline, 18 February 2004, p.1.

associated with their actions. Participants shall not engage in any activities which endanger system reliability, safety and security.

- *Understanding:* Employees of market participants are deemed to understand the EUA, regulations, ISO rules and MSA guidelines. Employees are also deemed to have a detailed understanding of those parts of the EUA, regulations, ISO rules and MSA guidelines that directly affect their work. Moreover, corporate management must provide their employees with sufficient training and regular review of these obligations and the expectations placed on participant conduct.
- *Internal documentation:* Participants must maintain internal procedures sufficient to ensure that all trading and operational activity is properly documented. This must be done in a timely fashion and trades shall not be concealed or misrepresented. Participants must adopt reasonable standards for the retention of information relating to trading and operational activities.
- *Cooperation:* Participants must provide information to the ISO and MSA in accordance with the EUA, regulations, ISO rules and MSA guidelines. In order to support the proper operation of the market, participants must cooperate with the ISO and MSA as is reasonably necessary. Provision of information must be both timely and accurate.<sup>9</sup>
- *Accountability:* Participants must have clear lines of accountability for market conduct, including provisions relating to the responsibilities of senior management and corporate officers.

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<sup>9</sup> The MSA appreciates the efforts participants make in responding in a timely and candid manner. We view developing a good relationship with participants as a key goal in providing effective surveillance and investigation with the minimum of disruption to participants' daily activities. The MSA will continue to work with stakeholders to achieve this goal.

## 5 CONDUCT COMPLIANCE PLANS

In light of the pending changes to the wholesale market design and holding restrictions we believe that in some circumstances (such as significant changes in asset ownership) there is a need to clarify how participants will meet their responsibilities under section 6 of the EUA. To do this we propose using a 'conduct compliance plan'.

Parties that possess market power may be required to satisfy the MSA that the potential for undesirable outcomes is sufficiently mitigated. Where the MSA has a particular concern with the potential for undesirable outcomes it will require that a participant submit a conduct compliance plan sufficient to address those concerns. A conduct compliance plan is a document which allows the MSA to see what actions, measures and safeguards the participant will use to ensure that their actions will not result in undesirable outcomes. The MSA will then approve such plans and audit the participant against those standards.

The requirement to submit a conduct compliance plan will be automatic should the MSA determine a participant is able to exercise control over 30 percent of installed capacity. Below an installed capacity share of 30 percent the requirement to submit conduct compliance plans will be at the discretion of the MSA. Conduct compliance plans may apply to conduct in all areas of the market including energy, ancillary services and forward markets. In evaluating the need for conduct compliance plans the MSA will also consider the appropriate geographical and temporal definition of the market.

On submission of a conduct compliance plan, the MSA will decide whether to approve the plan, request supporting information to assess the efficacy of the plan, or request further amendment. Once in place a participant may request the MSA to review a conduct compliance plan based on a change in market conditions. Similarly, the MSA reserves the right to review a conduct compliance plan in the event it does not represent an appropriate safeguard against undesirable outcomes. In the interest of balancing transparency and confidentiality, the MSA will place a notification on its website in the event it approves a conduct compliance plan. However, dependent on the nature of that plan the MSA may keep some or all aspects of it confidential. In the event a participant cannot propose a conduct compliance plan acceptable to the MSA, the MSA may refer the matter to a tribunal.

The MSA believes that it has the power, today, to negotiate with participants as required, to obtain conduct compliance plans. However, in the interest of clarity and to ensure an even handed approach, the MSA believes it is helpful to have regulations which speak to the concept of 'conduct compliance plans'; not unlike how the Code of Conduct Regulation speaks to compliance plans for the retail sector.

## 6 CONCLUSIONS

Sections 1 to 4 of this paper are intended to continue to clarify for participants how the MSA looks at undesirable conduct. In section 5, the MSA has introduced a new process it believes becomes more necessary with the removal of government mandated holding restrictions.

The MSA is engaged in continual monitoring for undesirable outcomes whether the result of limitations in the existing market rules or as a result of undesirable conduct. This brief paper has sought to clarify for market participants the nature of conduct that is consistent with the *fair, efficient and openly competitive* operation of the market. We have provided a definition of the abuse of market power and note that this represents only one type of undesirable conduct that is of concern to the MSA.

The consistent approach taken by the MSA is to support a market that allows vigorous competition without the need for unnecessary constraints on market participants' behavior. We believe this approach best supports the current market design in achieving a *fair, efficient and openly competitive* outcome.

A market design and rules that allow vigorous competition does, however, impose a higher level of responsibility on market participants, particularly at times in which they possess market power. Market participants have responsibility to ensure that their own conduct is supportive of the *fair, efficient and openly competitive* operation of the market.

Market participants have a crucial role in identifying potential conduct that may be inconsistent with the *fair, efficient and openly competitive* operation of the market. In this environment, all participants should recognize that market confidence will be best served by active surveillance and investigation by the MSA.

Finally, in anticipation of the pending removal of holding restrictions the MSA is advancing an approach that requires some participants to enter into 'conduct compliance plans'. We believe this approach strikes an appropriate balance in providing pre-emptive protection for the market from harm, has significant participant input and can be tailored to specific circumstances to avoid the problems of loop-holes and efficiency loss associated with highly prescriptive tests. We see the 'conduct compliance plan' framework evolving over time and welcome participants input on this approach.

The MSA is responsible for ensuring a *fair, efficient and openly competitive* market. To that end we believe that our suggested 'conduct compliance plan' is the tool best suited to meeting those responsibilities. As such we are seeking government support for appropriate changes to the regulations to simplify the MSA's ability to request such plans.