

Stakeholder Comment Matrix – October 8, 2019
Request for input on market power mitigation



Period of Comment: October 8, 2019 through October 29, 2019 Comments From: ██████████-Individual Date: [2020/10/30]	Contact: ██████████ Phone: ██████████ Email: ██████████
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The AESO is seeking comments from stakeholders on market power and market power mitigation in Alberta’s energy and ancillary services markets.

	Questions	Stakeholder Comments
1.	What has been effective in Alberta’s historical approach to market power mitigation in the energy-only market, and what could be improved?	<p>Effective: In most hours and seasons, the level of available capacity has been adequate to reliably meet instantaneous needs. In scarcer hours, pivotal suppliers (any supplier who individually has enough capacity, without which total load could not be reliably met) have spontaneously shown restraint in offer prices, perhaps partly due to Market Surveillance Administrator scrutiny. Carbon taxes and emission limits have encouraged near-term conversion of the most emissive technologies. A move to more natural gas (conversion of coal, new cogen and traditional gas units) will use significantly more trapped Alberta gas and increase government gas royalty revenues.</p> <p>Improvements: The significant increase in “zero marginal cost” assets (mostly green) plus the existing large base of long lead time assets whose marginal cost and emissivity in the first hours of operation after a cold start is significantly higher than their average cost across multiple hours, has created significantly more hours where the marginal hourly profit for many suppliers is zero or negative. In addition, many out-of-market payments, often unconnected with the hourly clearing price (e.g., REC credits, wind and solar subsidies) have removed the harsh market discipline for new entrants and encouraged more unnecessary new development, in a different fuel mix than would have been built in a pure “energy-only” market environment. Any fuel types not eligible to receive these payments have been disadvantaged and prices overall have been artificially subdued and will continue to be so until the long-term subsidies have lapsed and the temporary over-build (~1,500 MW) has been absorbed by currently lack-lustre market growth.</p> <p>Day(s) ahead pricing would allow a more energy and cost-efficient hourly dispatch. New tie capacity would increase competitiveness, but strong seams issues with our</p>

		<p>government-owned suppliers in neighboring jurisdictions will simply and uneconomically move new generation additions outside of the province unless the capital costs of new and existing tie transmission are more appropriately allocated to importers rather than being spread over internal Alberta load through a postage-stamp tariff. Virtually every other jurisdiction has some form of location-based marginal pricing that creates a flow-dependent and price differential-dependent sliding cost of transmission that reflects the true hourly value of the transmission (i.e. the differential in hourly prices between two territories).</p>
2.	<p>Do you expect the historical approach to market power mitigation in the energy-only market (e.g. OBEG, ex-post monitoring, must offer, 30% offer control limit, FEOC Regulation) will be effective on a go-forward basis?</p> <p>If yes, please explain your rationale. If no, please explain your rationale and changes required.</p>	<p>Must-offer obligation is useful. Imports do not have a must-offer obligation, so are advantaged in Alberta market.</p> <p>An offer control parameter (not necessarily limit) should be set dynamically, not on a particular supplier's nominal total capacity, but on the hourly level of scarcity of total supply. It should only control the amount and extent of mitigation that should be applied to any specific supplier of generation, not limit his actual fleet size. When there is abundant capacity in an hour, the mitigation should be non-existent. As scarcity increases, the maximum allowable offer (in terms of \$/MWh or % of their declared marginal cost) should gradually increase for each pivotal supplier in proportion to their market power. Only in the top, say 1% or less tightest hours, should the maximum mitigation be applied and more aggressively to the largest supplier, less for medium suppliers and not at all for small suppliers. This mitigation algorithm should be calibrated over time to result in an expected long-term return on investment of new entrants that would be expected to just motivate enough new generation to meet target reliability. In progressively less tight hours, the mitigation would be progressively less severe and affect fewer suppliers. If the calibration was too lenient, it would show up as over-build and excessive profits and should be re-calibrated to be more stringent, and vice versa, with periodic sanctioned reviews similar to and perhaps in conjunction with the Long-Term Adequacy review.</p> <p>A more simplistic, but more invasive approach would be to have no mitigation but a much lower offer control limit. At 30%, the number of pivotal supplier hours is very large and could result in many legitimate \$1000/MWh hours, if suppliers were less timid. So, the magnitude of mitigation must be tuned to the offer control limit. The larger the limit, the more aggressive should be the application of mitigation.</p>
3.	<p>If deemed that additional mitigation measures are required in the energy-only market, please indicate whether they should be applied ex-ante (mitigation occurs prior to prices being set) or ex-post (mitigation occurs following market prices being set).</p>	<p>Mitigation should be ex ante, but based on AESO short-term forecasts of individual availability and demand. The protocol should be transparent and as objective and predictable as possible. Monitoring for compliance (e.g., collusion, uncompetitive behavior) should be ex post, but obvious and have tangible consequences.</p>

4.	<p>What has been effective in Alberta's historical approach to market power mitigation in the operating reserves market, and what could be improved?</p>	<p>Existing suppliers have been unexpectedly restrained in exercising legitimate scarcity pricing. Just like it is not appropriate for a supplier to over-exercise his market power, it is just as inefficient to have offer behavior to be too meek. A strong price signal is needed to signal new entry and discourage premature market exit.</p>
5.	<p>Do you expect the historical approach to market power mitigation in the operating reserves market (e.g. FEOC regulation, indexed to pool price) will be effective on a go-forward basis? If yes, please explain your rationale. If no, please explain your rationale and changes required.</p>	<p>It would be more market efficient to give the AESO the authority to jointly optimize across both energy and AS procurement as is done in many other jurisdictions.</p> <p>Ancillary services should be procured more differentially. There is inherent value in the speed of response. A second or sub-second response time is much more valuable than a 10-minute response time for certain system reliability events. Assigning such value would encourage some new technologies (e.g., high energy density storage devices). This practice is already proven and well-established in other jurisdictions.</p>
6.	<p>If deemed that additional mitigation measures are required in the operating reserves market, please indicate whether they should be applied ex-ante (mitigation occurs prior to prices being set) or ex-post (mitigation occurs following market prices being set).</p>	<p>See similar response in energy section.</p>
7.	<p>What criteria should be considered in evaluating Alberta's mitigation framework? Would you rank one or some of these criteria more highly than others?</p>	<p>Dynamically responsive to sub-hour scarcity levels. As much forbearance as possible in all but extreme events (e.g., a province-wide ice-storm might require more mitigation than simply a high load situation).</p>
8.	<p>Are there unique characteristics of Alberta's electricity market that may impact whether the market power mitigation approaches used in other jurisdictions are suitable for Alberta? If so, please describe them.</p>	<p>Unless transmission tariffs allocate more cost-responsibility to importers and exporters and less to postage stamp load tariffs, mitigation may inadvertently and inappropriately further disadvantage local generators and favor ex-Alberta suppliers. The \$1000/MWh cap may need a raise.</p>
9.	<p>What do you think the appropriate role for the AESO is in Alberta's mitigation framework?</p>	<p>AESO should run the administration and information systems that operationalize the mitigation system in real-time. The AESO, in tight coordination with the MSA, should investigate and brief market participants and government in the processes used in other jurisdictions. The AESO should coordinate industry consultation sessions. The AUC should increase its in-house expertise in market design and prepare itself to adjudicate differences in opinion between AESO and various participants.</p>
10.	<p>What do you think the appropriate role for the MSA is in Alberta's mitigation framework?</p>	<p>As a surveillance body, the MSA must be careful not to conflict itself by making the rules it will administer, but it has a wealth of information and contacts in other jurisdictions that can be helpful during deliberations.</p>

11.	Please describe your role in the Alberta electricity market.	I am a former, currently inactive consultant to the Alberta electricity industry with no biased affiliation with any market stakeholders. I am semi-retired and have a personal stake in keeping electricity affordable and reasonably reliable. As a regulatory economist, I have a reflexive need to pursue efficiency and fairness and a passionate curiosity about best practices and designs in other jurisdictions.
	a. Are you a load, a generator, both, neither (e.g. developer, storage, interested party)	Load, interested party, occasional consultant.
	b. What is the approximate size of your load and/or generation?	1000 kWh/month
	c. Do you participate in the energy market, AS market, both?	Only casually, as a small consumer, energy only.
	d. Do you forward hedge? If so, is it physically, financially, both? What percentage of your portfolio is hedged?	Yes, to the extent that I may opt in or out of a fixed rate plan for domestic consumption. 100%, currently, but dependent on my view of forward prices.

Thank you for your input. Please email your comments to: stakeholder.relations@aeso.ca.