

AESO Discussion Paper – Alberta Wholesale Market Price Cap Review Stakeholder Comment Matrix

ENMAX

ENMAX’s comments on the AESO’s *Alberta Wholesale Market Price Cap Discussion Paper*, dated June 23, 2009, are as follows. ENMAX sincerely appreciates the collaborative approach the AESO took to developing this paper, and recommends that such an approach be used on future issue papers as well.

For the reasons set out on a section-by-section basis below, ENMAX supports further work on the price cap issue, including the investigation of alternatives to the existing, fixed, \$1000/MWh price cap.

The AESO states that it “does not believe that the current price cap level is a barrier to the FEOC operation of the energy market.” ENMAX disagrees. By definition, the market price in Alberta is (supposed to be) set at the intersection of the supply and demand curves. The price cap is an administrative (i.e., out-of-market) price-setting mechanism that: (a) prevents the supply and demand curves from intersecting; (b) allows demand to remain higher than it would be in the absence of the cap; (c) reduces the incentive for loads to respond to prices; and (d) sometimes leads to further out-of-market actions by the AESO as set out in OPP 801.

Section	Subsection	Stakeholder Response
2.0 Price Cap Policy and Background	2.2 FEOC Market and the Price Signal – the price cap must balance competing objectives in the promotion of a FEOC market	<p>The AESO states that the price cap level “should be set such that it is consistent with the AESO’s mandate. Specifically, it should promote a fair, efficient, and openly competitive (FEOC) market and help ensure system reliability.”</p> <p>Price caps do not promote a FEOC market. While it is true that a cap limits the extent to which market power could be abused by generators through their offer prices, this is the only contribution the price cap can</p>

		<p>make to FEOC. However, there are other mechanisms that mitigate such abuse, including the multi-million-dollar-per-day fines that can be levied on parties found guilty of violating the FEOC provisions of the <i>Electric Utilities Act</i>.</p> <p>A price cap cannot promote an <i>efficient</i> market. In any hour in which the price cap is binding, system load is higher than it would be if the price were set at the intersection of the supply and demand curves. This leads to higher peak demands overall, which in turn leads to higher capital costs for generation, transmission, and distribution infrastructure, and may also lead to distortions in the generation mix. These factors were not addressed in the AESO's analysis.</p> <p>Clearly, a price that is set administratively rather than through the operation of the competitive market does not promote an <i>openly competitive</i> market.</p> <p>In addition to <i>not</i> supporting a FEOC market, price caps do not—and indeed can not—promote reliability. As already noted, when the price cap is binding, demand is higher than it would be in the absence of the cap. Even if the AESO's assertion that the price cap has not limited the development of new supply in Alberta is correct, it is obvious that the price cap has not (and can not) <i>increase</i> supply. No mechanism that increases demand but does not increase supply can be considered to enhance reliability.</p> <p>The AESO appears to take the view that the effect on prices of what it calls "random" events must be suppressed, in part because such events are unpredictable and in part because loads cannot always respond to them. ENMAX disagrees.</p> <p>With respect to the unpredictability of random events, the discussion paper (p. 5) quotes the policy framework, which states that the market must provide signals that are "predictable and understandable." The</p>
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<p>3.0 Frequency of Price Cap Events and Out of Market Actions</p>	<p>3.1 Data and Analysis</p> <ul style="list-style-type: none"> a. Frequency of price cap events increasing b. OPP 801 Discussion c. Summary of price cap event causes 	
	<p>3.2 Conclusions</p>	

<p>4.0 Importance of Scarcity Pricing for Generator Revenues</p>	<p>4.1 Data and Analysis a. Relative importance of scarcity pricing for generator revenues</p>	
	<p>4.2 Conclusions</p>	
<p>5.0 Generation Investment in Alberta</p>	<p>5.1 Data and Analysis a. Generation Capital Cost escalation b. Environmental costs a factor in future generation investment</p>	
	<p>5.2 Conclusions a. Price cap has not interfered with historical investment b. Peaking generation recently built and pending consistent with the price signal c. Off peak prices will be as important as scarcity prices for attracting new baseload in a carbon constrained world</p>	<p>The AESO’s conclusion (p. 15) that “the price cap does not appear to be the key barrier in developing new baseload generation” in a carbon-constrained world is inconsistent with its statement that “not all costs can be passed into the market in off peak hours.” Clearly, if generators cannot recover their costs in hours when the price cap is not binding, they must do so when the price cap is binding, which means that the price cap <u>is</u> a significant issue. Its significance will only increase as more renewable generation (which is frequently priced at \$0/MWh) comes onto the system, creating more surplus hours in which generators cannot recover their carbon (and other) costs.</p> <p>The statement (p. 15) that “[t]he largest driver of the uneconomic results for baseload generation in Table 4 is the large number of hours potential baseload units would have operated at a loss in 2008” appears to be based on the unrealistic assumption (p. 14) that “there is no impact to the spot market price based on the addition of a new unit and/or the addition of carbon costs.” ENMAX cautions that, generally, the assumption that one variable (e.g., the level of the price cap or the cost of carbon) can be tweaked while everything else remains the same often leads to incorrect conclusions. The results of the AESO’s analysis throughout the discussion paper must therefore be used with caution.</p>

<p>6.0 Market Issues – Long Lead Time Energy</p>	<p>6.1 Data and Analysis</p> <ul style="list-style-type: none"> a. LLTE responds to price cap events about 90% of the time when they persist > 1 hour b. LLTE is only online prior to a price cap event about 1/3 of the time 	
	<p>6.2 Conclusions</p> <ul style="list-style-type: none"> a. Price cap is not a barrier for LLTE 	<p>With respect to LLTE, ENMAX notes that there are other drivers for the response of generators to price-cap events, including a desire on the part of generators to ensure reliability of supply to loads, the fact that they'll likely be forced into the market anyway based on LLTE rules, and a concern over possible fines and penalties based on an interpretation that a failure to deliver energy constitutes a violation of market rules.</p>
<p>7.0 Market Issues – Generation Offers and the Price Cap</p>	<p>7.1 Data and Analysis</p>	
	<p>7.2 Conclusions</p> <ul style="list-style-type: none"> a. Offers at the price cap are made for a variety of reasons b. Price cap is not interfering with offers 	<p>The AESO states that “[v]ery little peaking, coal or non LLT gas fired generation is priced at or near the price cap.” ENMAX notes that generators do not rely solely on their own offer prices to recover their costs, as is obvious in the case of all generators that offer their capacity at \$0/MWh. Therefore, cost-recovery conclusions should not be drawn based on offer prices alone.</p> <p>The AESO states (p. 17) that its analysis “does not strongly support the position that the price cap is interfering with generation offers.” However, the AESO also notes, on the same page, that “passing costs through to the market in off peak hours may be a difficult problem for future investment.” Clearly, and as already noted, costs that cannot be</p>

		passed on during off-peak hours must be passed on during other hours, including when the price cap is binding.
8.0 Market Issues – Intertie Utilization	8.1 Data and Analysis <ul style="list-style-type: none"> a. BC tie is well utilized during hours where price settles above \$900/MWh b. Shorter events show less tie utilization on average c. SK intertie less well utilized than BC during price cap events 	
	8.2 Conclusions <ul style="list-style-type: none"> a. Intertie utilization not limited by the price cap b. T-2 offer timeframe limits ability of the tie to respond to short term price cap events 	
9.0 Market Issues – Price Responsive Load	9.1 Data and Analysis <ul style="list-style-type: none"> a. 100 MW to 300 MW of load typically respond to price in the real-time market b. The majority of the existing price responsive load reduces consumption prior to price reaching the cap 	
	9.2 Conclusions <ul style="list-style-type: none"> a. Price cap is not a barrier to existing price responsive load 	The AESO states that, for the loads it actively tracks, the price does not appear to be a barrier to demand response. This statement is essentially a tautology: obviously the price cap is not a barrier to loads that curtail at prices below the cap, and loads that would curtail above the cap are not tracked by the AESO. What should have been noted is that, when the price reaches the cap, thousands of megawatts of electricity are still being consumed. Among other things, this means that: (a) the

		fundamental feature of Alberta’s market design, that being that price is established at the intersection of the supply and demand curves, has been violated; and (b) loads are being charged less for electricity than either its true market-determined cost or its load-determined value.
10.0 Other Market Review	<ul style="list-style-type: none"> a. Australia b. ERCOT c. Netherlands 	ENMAX notes again that we cannot tweak one variable and expect all others to remain unchanged. The AESO appears to have captured this idea in its assessment of other markets. Key among the features of these other markets appears to be the financially binding nature of both load and generator obligations, including the voluntary binding that occurs through commercial contracts. By transferring price risk from loads to generators by capping prices and reducing loads’ incentive to either sign forward contracts or develop price-response capabilities, Alberta may be increasing generators’ cost of capital. This is another example of one variable affecting others.
11.0 Conclusions and Next Steps	a. Price cap is not an barrier to the FEOC operation of the market	ENMAX supports further work on the price cap issue, including the investigation of alternatives to the existing, fixed, \$1000/MWh price cap.