

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

Capital Power Corporation

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>Capital Power is concerned with the AESO’s interpretation of its mandate to promote a FEOC market and its interpretation of the Department of Energy (2005) Electricity Policy Framework (“policy framework”). The AESO makes a number of statements that Capital Power believes are inconsistent with the legislation and the AESO’s mandate.</p> <p>The AESO states that “...a FEOC market as articulated by Alberta’s policy and legislation does not require that price is set at a completely unfettered level in all circumstances”.</p> <p>The Electric Utilities Act (S.17) mandates the AESO to operate the power pool in a manner that supports FEOC. It also requires the AESO to promote a FEOC market for electricity (S.16). This means that the AESO is responsible for designing, implementing and facilitating a market where the fundamentals of supply and demand determine the price. The AESO should not be concerned with price outcomes and levels resulting from changes in fundamentals.</p> <p>The Discussion Paper provides that the price cap must balance a number of competing objectives which included the following two statements:</p>

		<p><i>“Small changes in the number of scarcity hours are unpredictable, largely based on the timing of forced outages. If these basically random hours have too much influence, the market signals are neither predictable nor understandable.”</i></p> <p><i>“Sustainability requires both sufficient generation and reasonable prices reflecting market economics. If prices rise too quickly in response to relatively limited instances of scarcity, the market structure will come under public pressure”.</i></p> <p>Capital Power does not agree with AESO adoption of these objectives when evaluating the price cap for a number of reasons:</p> <p>First, forced outages are a fundamental consideration for all market participants making determinations about investing or participating in Alberta’s electricity market. The fact that these legitimate reductions in supply are random does not imply that the price signal is unreliable or wrong. When determining how to participate in the electricity market, market participants consider the likelihood and frequency of forced outages rather than the exact timing. Any action taken on behalf of the AESO based on the belief that because forced outages are random they distort the price signal would be flawed and would have a negative impact on the investment signal.</p> <p>The second statement further demonstrates the AESO’s misconception of its mandate. The legislation does not support the AESO interpretation that price should not respond “too” quickly to changes in supply and demand. The AESO should not take any administrative action in an attempt to mute or smooth prices that result from changes in fundamentals; rather it should be concerned with finding better ways to facilitate the ability of the market to respond to these changes.</p>
<p>3.0 Frequency of Price Cap</p>	<p>3.1 Data and Analysis a. Frequency of price cap events</p>	

		<p>reduces the need for out of market actions? (i.e. more demand response in the short term or more investment in the long term).</p> <p>In addition Capital Power does not share the view that steps 5 through 17 of OPP 801 are not purely out of market. The examples given by the AESO, curtailing DOS and altering the Operating Reserve mix, should absolutely be considered out of market actions as they are administrative and not initiated by market participants. The use of administrative actions in any market is not ideal and market design and policy should be aimed at reducing the need for this type of action, not justifying it.</p>
4.0 Importance of Scarcity Pricing for Generator Revenues	4.1 Data and Analysis a. Relative importance of scarcity pricing for generator revenues	
	4.2 Conclusions	<p>The AESO analysis clearly demonstrates the importance of scarcity pricing in Alberta, as less than one percent of the hours contributed to nearly ten percent of the total revenue earned by industry. Continual investment in generation capacity in Alberta will be dependent on the ability of the market to ensure that the price signal accurately reflects the fundamentals. The ability of price to rise to the cap when there is scarcity in supply, and this requires that participants are free to offer anywhere between \$0 and \$1000. Price fidelity should be the primary objective of the AESO in fulfillment of its mandate.</p>
5.0 Generation Investment in Alberta	5.1 Data and Analysis a. Generation Capital Cost escalation b. Environmental costs a factor in future generation investment	
	5.2 Conclusions a. Price cap has not interfered with	Utilizing 2008 as a reference year to conclude that generator returns are

	<p>historical investment</p>	<p>at healthy levels is misleading. It is not appropriate to use the most expensive year in recent history as the benchmark, particularly when the primary driver of the price level in 2008 was KEG related transmission upgrades, events that will not likely occur again in the near term. 2008 settled at \$89.95 largely due to the high Q2 settle of \$107.58, normalizing Q2 for levels seen in previous years and removing the effects of KEG outages would result in a significantly lower yearly average price. In addition to the Q2 anomaly, AECO gas prices in the first nine months of 2008 were at near record levels. The AESO analysis does not consider the current year to date price, which is in the mid \$40 range.</p> <p>The AESO concludes that the price cap does not appear to have significantly interfered with investment in the past. However this is not the relevant question. Capital Power is disappointed that the AESO has not taken a more forward looking view of the price cap in order to ensure that in both the near and long term, the price cap will not hinder investment or otherwise have a detrimental impact on the market. Asset decisions are not based on historical prices as much as they are on future forecasts. The policy framework states that, <i>“In a competitive market, generation investment decisions are made based on expectations of future market performance”</i>. Therefore it seems more appropriate that the AESO consider the impacts of the price level on future investment.</p> <p>The AESO analysis did not consider the fundamentals particular to Alberta’s market. The AESO review of other markets revealed that the price cap in Australia is intended to capture the Value of Loss of Load, while in ERCOT the price cap is intended to reflect the Cost of New Entry. The AESO needs to carry out further analysis of these fundamentals for Alberta, as they will dictate the appropriateness of the price cap in future years rather than simply concluding that the price cap is appropriate because it hasn’t impeded the market in the past. The AESO, in concert with market participants, should develop criterion and a process for evaluating the price cap level on an annual basis to ensure</p>
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	<p>b. Peaking generation recently built and pending consistent with the price signal</p>	<p>that it continually reflects the fundamentals in Alberta and provides an accurate investments signal for sustainability and reliability.</p> <p>Finally, in this paper the AESO concluded that generation investment has kept pace with demand growth and that the average prices reached in the 2006-2008 period appear to have been sufficient to incent new generation for the 2008-2011 timeframe. It appears that the findings of this price cap review are inconsistent with the AESO reserve margin metric where the AESO forecast is predicting a reserve margin of four percent by 2012. This may be attributable to the load forecast that the AESO uses in calculating the reserve margin; it would be helpful to the market for the AESO to reconcile its internal market analysis.</p>
<p>6.0 Market Issues – Long Lead Time Energy</p>	<p>6.1 Data and Analysis</p> <p>a. LLTE responds to price cap events about 90% of the time when they persist > 1 hour</p> <p>b. LLTE is only online prior to a price cap event about 1/3 of the time</p>	
	<p>6.2 Conclusions</p> <p>a. Price cap is not a barrier for LLTE</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> <p>a. Offers at the price cap are made for a variety of reasons</p> <p>b. Price cap is not interfering with offers</p>	<p>Capital Power does not understand the relevance of this analysis. The AESO assumption that a lack of large offer volumes at the cap indicates the cap is not impeding efficient market outcomes is flawed. What is relevant is the ability of price to rise to the cap when there is scarcity in supply, and this requires that participants are free to offer anywhere</p>

		between \$0 and \$1000.
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 	As described in the Discussion Paper, Alberta has a relatively high level of price responsive load in comparison to other markets. The AESO concluded that, although, it not possible to determine whether price responsive load would potentially respond at prices higher than the cap, the price cap does not appear to be a barrier to demand response. For the loads tracked by the AESO, the price cap does not appear to be a barrier; however, these loads are not representative of average load in the province? The loads that typically respond to price excursions are those

		<p>for which electricity makes up a substantial portion of their variable costs and, as a result, these loads typically have an interruptible process allowing them to respond with relative ease and on short notice. There are very few loads in Alberta with these characteristics. Alberta also has a relatively high load factor primarily consisting of industrial load where electricity does not make up a substantial portion of their variable costs. These loads would need to experience much higher prices for electricity before they would consider reducing consumption. It is possible that the price cap is a barrier to load response for these loads.</p> <p>Capital Power encourages the AESO to consider what type of demand participation is necessary to ensure competitive market outcomes. The ability of load to respond to price in the real time market is not the only way in which load can effectively and meaningfully participate in the market. It is important to recognize that if loads do not respond in real time it does not mean they do not have the ability to participate at all. For example, both Australia and Texas have exceptionally high levels of load participation in the forward markets; in both cases, over 90% of the load has contracted bilaterally and is therefore hedged from potentially high prices in the spot market. In Alberta, loads are not precluded from entering into bilateral contracts with electric suppliers, thereby making themselves indifferent to price. In fact this is a common practice for residential consumers who sign long term contracts with retailers at fixed rates. The incentive for loads to enter into these types of contracts is highly dependent on the exposure they face in the spot market. The AESO should endeavour to determine the volume of load in the Province that has entered into competitive contracts to fully measure the impact of the price cap on this form of demand participation.</p>
10.0 Other Market Review	<ul style="list-style-type: none"> a. Australia b. ERCOT c. Netherlands 	
11.0 Conclusions	<ul style="list-style-type: none"> a. Price cap is not an barrier to the FEOC operation of the market 	<p>The AESO analysis clearly demonstrates the importance of scarcity</p>

and Next Steps		<p>pricing in Alberta and the relationship between the investment signal and the price cap. Although, Capital Power is inclined to agree that the price cap does not appear to have systematically interfered with price outcomes or investment signals in the past, Capital Power has significant concern with the AESO's justification of its recommendation to keep the price cap at the current level. In addition Capital Power is disappointed that the AESO analysis did not consider more fundamental questions related to the determination of an appropriate price cap such as the cost of new entry or the value that load places on the loss of electric service specific to Alberta. Capital Power is not convinced that the price cap has not acted as a barrier to demand participation. Capital Power encourages the AESO to consider alternative types of demand participation in the wholesale market and the subsequent impact of the price level on forward contracting.</p> <p>The AESO, in concert with market participants, should develop criterion and a process for evaluating the price cap level on an annual basis to ensure that it continually reflects the fundamentals in Alberta and provides an accurate investments signal for sustainability and reliability.</p>
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