

AESO Discussion Paper – Alberta Demand Response Initiatives  
Stakeholder Comment Matrix  
**Industrial Power Consumers Association of Alberta (IPCAA)**

Section	Subsection	Stakeholder Response
<p><b>2.0 Demand Response Policy and Background</b></p>	<p><b>2.3 Demand Response Principles</b></p> <ul style="list-style-type: none"> <li>a. <b>Remove Barriers</b></li> <li>b. <b>Symmetric Rules</b></li> <li>c. <b>Product Design</b></li> <li>d. <b>Price Fidelity</b></li> </ul>	<ul style="list-style-type: none"> <li>• “Product Design should be consistent with the existing market structure...” This implies that the current market design is effective and sufficient to incent DR. IPCAA disagrees with this statement and believes the current market price signal fails on a number of fronts, including effective pricing for wind energy, DR and price elasticity in general.</li> <li>• “...all competitors should respond to the same price signal whenever possible”. This does not mean that DR support products, such as LSSI and Wind-following, should be procured using the spot market price. With regards to “economic DR” the marginal unit of DR is worth more than the marginal unit of generation (from a load perspective) because it avoids paying all generators a higher price. This added value should be recognized in order to optimize the use of both load and generation resources.</li> <li>• “The real-time energy price is the signal for loads to curtail in the energy market.” This does not recognize the added value of DR in avoiding unnecessary payments to all generators. In order to achieve some effective price elasticity, loads providing DR need to be compensated relative to the value they bring to electricity consumers.</li> <li>• Removing barriers, including loads in ancillary services markets and generally encouraging competition between resources are all areas that IPCAA agrees with.</li> </ul>

<p><b>3.0 Energy Market Initiatives</b></p>	<p><b>3.2 Barriers to more DR in the Energy Market</b></p> <p>a. Are the barriers identified actually barriers?</p> <p>b. Are there missing barriers?</p>	<ul style="list-style-type: none"> <li>• These are actual barriers faced by loads. Asserting that “generators face similar challenges” suggests that the AESO is forgetting who pays for electricity. As the buyer of the product, loads deserve a fair, efficient and openly competitive market. Such is not the case with the current design wherein generators can take advantage of short supplies, generally caused by unscheduled generator outages to push prices to maximum allowable – whereas loads are restricted from employing similar such practices. A single-sided merit order structure uses only offers to set marginal prices – a fair, and openly competitive structure would use both bids and offers to determine price, as is the case with all other transacted commodities. So long as the single-sided merit order structure is employed and all generators receive the highest price then loads only recourse is to ensure the maximum available energy is available and offered into this market. Both loads and generators should have the opportunity to address these “challenges” instead of having them dismissed as equal but opposite.</li> </ul>
<p><b>3.3 Options to Increase DR in the Energy Market</b></p>	<p><b>3.3 Options to Increase DR in the Energy Market</b></p> <p>a. Other options beyond those identified in sections 3.3.1 through 3.3.4?</p>	<ul style="list-style-type: none"> <li>• Two alternatives should be considered – a re-design of the current market to a day-ahead and imbalance structure as is employed in several other jurisdictions, or use of a three part structure that emulates day-ahead and imbalance. This structure would incorporate availability, arming and exercise payments – with competitive procurement elements to ensure lowest costs – this structure is similar to that used in jurisdiction that have had large up-takes in DR in the past five years</li> </ul>
	<p><b>3.3.1 Price Certainty</b></p> <p>a. Payments to bids on the margin</p> <p>b. Altering settlement rules</p> <p>c. New products</p> <p>d. Others to add?</p>	<ul style="list-style-type: none"> <li>• Loads are not generators – their business is not to supply energy – however, loads can be very effective at providing a range of reliability and ancillary support products to the energy market. Loads that are capable of supplying DR should not be treated as generators. The ability for loads to supply can be at even higher reliability and response time levels than</li> </ul>

		generators and accordingly require different products and different compensation mechanisms for provision of these services.
	<p><b>3.3.2 Insufficient Incentive</b></p> <ul style="list-style-type: none"> <li>a. Pay loads for the benefits they create</li> <li>b. Pay loads the energy price</li> <li>c. Allow bids &gt;\$1000/MWh</li> <li>d. Others to add?</li> </ul>	<ul style="list-style-type: none"> <li>• “Pay Loads for the System Benefit They Create.” This concept is extremely valid and should not be dismissed as “anti-FEOC” by the AESO. It is fair, efficient and openly competitive to have loads competing to provide DR products that can bring more value to the marketplace than an additional unit of generation. The system is optimized much more efficiently in this manner.</li> <li>• “Pay Loads the Energy Market Price”: The comment that “if prices fall, less generation will develop, which will lead back to higher prices” fails to recognize that DR can be used to better optimize the system. Cutting back consumption at peak times will mean that less generation needs to be built – and will bring environmental benefits. Generators may react by offering higher in other hours of the year, and not attempting to extract maximum value from the market over very few hours of the year.</li> <li>• It needs to be recognized that most instances of the requirement for DR in Alberta is not coincident with high demand, it is as a reliability product to compensate for the shortcomings from suppliers – i.e. uncertainty of wind resources and unscheduled outages from coal plants. Loads pay for these shortcomings already through higher prices as other generators capture windfall benefits from the lack of reliability of existing generator resources.</li> <li>• “Allow bids &gt; \$1,000/MWh”: this is a non-starter as a solution to encourage more DR – sufficient DR can be encouraged within the current structure and current price cap if the availability, arming, exercise model is employed.</li> </ul>
	<p><b>3.3.3 Aggregation and Baseline Methodology</b></p>	<ul style="list-style-type: none"> <li>• The AESO should take advantage of the willingness of the aggregator community to assist in identifying baseline methodologies that have proven effective in other jurisdictions. The AESO does not need to re-invent the wheel when it</li> </ul>

		comes to DR and the role of aggregators.
	<b>3.3.4 Signals Beyond the Spot Energy Price</b>	<ul style="list-style-type: none"> <li>The AESO should recognize that by not enabling load to capture the full value of DR (through savings across the entire offer stack), it is effectively managing market outcomes in favour of generators.</li> </ul>
<b>4.0 Reliability Product Initiatives</b>	<b>4.2 Barriers to more DR participation in Reliability Products</b> <ol style="list-style-type: none"> <li>Are the barriers identified actually barriers?</li> <li>Are there missing barriers?</li> </ol>	<ul style="list-style-type: none"> <li>The WECC and FERC standards on loads supplying spinning reserves should be addressed. Other jurisdictions have already addressed this.</li> </ul>
	<b>4.3.1 New Products</b> <ol style="list-style-type: none"> <li>Ramping (wind following) product</li> <li>Voluntary load curtailment</li> <li>Transmission must run (TMR)</li> </ol>	<ul style="list-style-type: none"> <li>The Wind-following product should be designed using the same platform as LSSI in order to create an effective DR standard for rules and procurement. The AESO should engage loads (via their respective associations) in the development of such a product.</li> </ul>
	<b>4.3.2 Aggregators</b>	<ul style="list-style-type: none"> <li>Aggregators can provide valuable services to the marketplace and should be enabled to participate in both economic and reliability DR markets. DR products require operational, technical and risk management. Not all loads can accommodate all three of these parameters and aggregators can provide a valuable bridge for these services.</li> </ul>
	<b>4.3.3 Technical Standards</b> <ol style="list-style-type: none"> <li>Supplemental Reserves</li> <li>Spinning Reserves</li> </ol>	
<b>5.0 Other Products</b>	<b>5.1 Generator Outage Coordination and Rescheduling</b>	<ul style="list-style-type: none"> <li>The AESO continues to expect loads to provide DR services for free (including outage coordination and the value brought by price-responsive loads). Loads should be compensated for the added reliability value they bring to the system.</li> </ul>
	<b>5.2 Long Lead Time Energy</b>	
	<b>5.3 Dispatch Down Service</b>	

	<p><b>5.4 Load Shed Service</b></p>	<ul style="list-style-type: none"> <li>• The AESO should move forward with LSSI procurement. This process has been stopped and started again too many times. There are hundreds of MWs of load available to supply this service, and IPCAA has proposed a product design and procurement process.</li> </ul>
<p><b>6 Conclusions and Next Steps</b></p>		<ul style="list-style-type: none"> <li>• The contents of this paper clearly indicate that the AESO has spent over a year in stakeholder activities on DR without listening to the views of electricity ratepayers. IPCAA firmly believes that loads have value to offer the marketplace through the effective design, development and use of DR products. The AESO appears too preoccupied with an undefined vision of FEOC to work with consumers to develop a better and more price elastic electricity system. This paper is extremely disappointing in its current form.</li> </ul>