AESO Discussion Paper – Alberta Demand Response Initiatives
Stakeholder Comment Matrix
Comments provided by the ADC – Alberta Direct Connect Consumers Association
Nov 17th, 2009

Section	Subsection	Stakeholder Response
2.0 Demand Response Policy and Background	**2.3 Demand Response Principles** **a. Remove Barriers** **b. Symmetric Rules** **c. Product Design** **d. Price Fidelity**	The purpose of demand response in general is to create efficiencies in the power system. The Provincial Energy Strategy lists one of its key outcomes as "Wise Energy Use" and notes that we need to "integrate the demand side in our thinking". We need to find a way that does this without load having to behave like a generator in order to participate. It would be helpful to think about what we want to accomplish with demand response in light of the above desired Provincial Energy Strategy outcome and identify any necessary policy changes to enable.
3.0 Energy Market Initiatives	**3.2 Barriers to more DR in the Energy Market** **a. Are the barriers identified actually barriers?** **b. Are there missing barriers?**	The design of the Alberta electricity market does not support demand response beyond the existing ~200MW of price responsive load. The only loads that can participate and realize any cost avoidance are those that can respond in a short time. It is difficult to make the decision to curtail load if it takes longer than an hour to react to a price signal. Most loads would be categorized in this fashion.
3.3 Options to Increase DR in the Energy Market	**3.3 Options to Increase DR in the Energy Market** **a. Other options beyond those identified in sections 3.3.1 through 3.3.4?**	In the absence of any market policy changes, it seems that there is no further DR options within the context of the Alberta electricity market. We need to do some further work on mechanisms to promote energy efficiency. We ask the AESO to consider what their role

		would be in this area.
	3.3.1 Price Certainty **a. Payments to bids on the margin** **b. Altering settlement rules** **c. New products** **d. Others to add?**	There may be some benefit to setting up a pilot program to further explore the impact of payments to bids on the margin and a reduced settlement interval with the loads that are currently price responsive.
	3.3.2 Insufficient Incentive **a. Pay loads for the benefits they create** **b. Pay loads the energy price** **c. Allow bids >$1000/MWh** **d. Others to add?**	Price responsive load will migrate to the product or service where they can realize the greatest value for their capabilities. Having price responsive load is seemingly valuable to other load customers as it dampens price volatility. What mechanism could be supported to allow other load consumers to pay interruptible loads to continue to participate in the market? In the cases of the interruptible load that has exited the Alberta market, having them remain would have meant that they continue to contribute to the Alberta economy and to the transmission costs. Them leaving places a greater burden on remaining load.
	3.3.3 Aggregation and Baseline Methodology	
	3.3.4 Signals Beyond the Spot Energy Price	
4.0 Reliability Product Initiatives	**4.2 Barriers to more DR participation in Reliability Products** **a. Are the barriers identified actually barriers?** **b. Are there missing barriers?**	Barriers to participation are: a. Technical requirements – can be in the areas of communications – (SCADA), time to respond and recover b. Contract risks – liability c. Credit requirements d. Price determination – difficult to know what the product is worth. Most evident in LSS, LSSi, wind following. e. Asset substitution could be considered as a means to get further participation.
	4.3.1 New Products	a. Ramping product. The ADC members with interruptible

	a. Ramping (wind following) product **b. Voluntary load curtailment** **c. Transmission must run (TMR)**	load are interested in working collaboratively with the AESO in developing the ramping products. b. To the extent voluntary load curtailment would increase the market price beyond the cap in an opp 801 event, and the market faced an exposure to that price, the cost to consumers would be more than the benefit to the curtailed load. This doesn't seem to make financial sense. c. For TMR, the AESO should be considering load as a potential congestion mitigating strategy, especially if the congestion can be managed with an infrequent number of interruptions. The value of this needs to be weighed against a transmission infrastructure solution.
	4.3.2 Aggregators	
	4.3.3 Technical Standards **a. Supplemental Reserves** **b. Spinning Reserves**	a. For supplemental reserves, it would be worthwhile exploring alternate means to comply with the 15 min recovery time. For example, if a site was not able to recover in 15 minutes - say they needed a half hour, could they substitute another load to take their place until they were able to be armed again? The substitute asset would only need to be able to demonstrate they can interrupt in 10 minutes. b. We encourage the AESO to support the WECC review of load providing spinning reserves. The spinning reserves market is valuable and would benefit from further competition.
5.0 Other Products	**5.1 Generator Outage Coordination and Rescheduling**	
	5.2 Long Lead Time Energy	
	5.3 Dispatch Down Service	
	5.4 Load Shed Service	We encourage the AESO to advance the LSSi program as quickly as practical. We would also encourage the use of a pilot program

		to test the various potential procurement methods. Because this product is armable, the pricing mechanism needs to be reflective of the exposure to pool prices – either through a load factor requirement as in the LSS product or by having it indexed to pool price.
6 Conclusions and Next Steps		The DR effort may be enhanced by expanding it into the context of the transmission tariffs for Load (DTS). For example tariff development for interruptible loads that don't require firm service. It would be worthwhile to meet jointly with the DoE on the DR paper and conduct a gap analysis of what the PES envisioned for demand participation. This would include identifying where policy changes are necessary. Once identified, an action plan could be developed to implement programs perhaps outside of the AESO mandate (i.e. energy efficiency) to achieve potential efficiencies that only demand participation can yield.