



3rd October, 2007

Mr. Doug Simpson
Market Operations Specialist,
Alberta Electric System Operator
2500, 330 – 5th Ave. SW
Calgary, AB T2P 0L4

Re: ATCO Power's Comments on the Congestion Management Plan

Dear Doug,

We appreciate the opportunity to comment on AESO's proposed congestion management protocol. Dealing with congestion in a uniform price market has been a long standing challenge and prior to providing specific comment on this proposal, I think it worthwhile to step back and consider the broader context.

Alberta has to date, not elected to implement locational pricing. The result has been that our uniform price auction almost always produces infeasible dispatches and out-of-market actions are required. These actions can be parsed into three categories:

- 1) How do we get the needed downstream generation to run that wasn't picked in the auction?
- 2) How do we turn off the excess upstream generation that was picked in the auction but is not required? and,
- 3) How do we set the uniform pool price?

The issues are complex and interrelated: how we set pool price will impact on the volume of surplus in-merit up-stream generation and how we dispatch off excess up-stream generation can influence pool price, compensation issues raise questions of access rights, etc. They reach across a number of discussions; Article 11, TMR Price Reconstitution, the Transmission Policy and questions of who pays for transmission and/or congestion.

At the moment, there doesn't appear to be a consistent framework for addressing congestion. I have attempted to lay out what I believe is a rational, internally consistent approach as the basis for our comments.

ATCO's View on Congestion Management in Alberta

Principles:

- 1) **In a uniform price market, Pool Price should be set at the intersection of all load and supply, regardless of congestion.** A caveat is that load and supply that is not entitled to firm access can be constrained off when the system is incapable of serving them.
- 2) **Loads and generators with DTS and STS contracts are entitled to access** and to the extent that they cannot be served, interruption should be on a non-discriminatory basis.
- 3) **Congestion should be managed on a consistent basis across the system.** Payments mechanisms for TMR may reasonably vary to reflect different circumstances however the market rules should be consistent.

- 4) **To the extent that locational signals are to be sent to generators, it should be via a mechanism that is outside of the energy market.** We should recognise that a uniform price market is not intended to signal congestion and live with it. Trying to get it to do so creates mayhem. Locational signals can be sent via other mechanisms such as loss factors and transmission tariffs. (Note: That is not to suggest that I'm advocating for the uniform price market – just trying to stay consistent with the current paradigm).
- 5) **The cost of congestion should be weighed against the cost of congestion relief.** The Transmission Policy places the bulk of the transmission costs (i.e. the cost to relieve congestion) directly with load. That being the case, it is sensible to also place the costs of congestion with load so that a rational comparison of the two can be made.

Basic Mechanism

- 1) **Getting the needed downstream generation to run:** Adjusting the dispatch from the one produced by the uniform price market to a feasible one requires out-of-market actions in the form of supplementary payments. There are a range of payment options available depending on the circumstance.
- 2) **Dispatching down the excess upstream generation:** In-merit generators that would otherwise be entitled to run but are nevertheless constrained off should be compensated for their opportunity costs. We have previously proposed the use of a Dispatch Down Service (DDS) to accomplish a voluntary reduction and continue to believe that this is the most appropriate approach. Failing that we would recommend a non-discriminatory curtailment approach such as pro-rata or random selection within the upstream area.
- 3) **Setting the Pool Price:** Our view is that the Pool Price should to the greatest degree possible, be unaffected by congestion. This can be accomplished by ensuring that the marginal block is not dispatched off in either the DDS or random curtailment approaches above. Pro-rata curtailment should be immune to the issue.

Issues

- 1) **Is the TMR Price Reconstitution Cap Needed?** The bases for this cap were (a) as an interim market power mitigant and (b) to protect load from the full cost of reconstitution.

Significant discussion has taken place on market power mitigation in the interim and it is our view that this crude approach should in almost all circumstances, be replaced by market monitoring. In those limited cases where monopoly suppliers are able to predict they will be needed, we would accept that this approach or (preferably) one based on "Consistent Offers" would still be appropriate.

We find the argument that load should be protected from the cost of price reconstitution to be unprincipled.

- 2) **Who should bear constrained off payments?** It is perhaps instructive to first consider how congestion would have been treated in a regulated environment. In that case, consumers would have borne the incremental costs of running the more expensive downstream generator but would still have borne the fixed costs of the upstream generator that was turned down. In a market environment, we rely on competition to determine equivalents for these cost components but we should recognise that fixed cost recovery for constrained off generation remains a component of congestion cost. It is our view that load should bear all of the cost of congestion (not just the constrained on payments) and that this would facilitate proper comparison to the cost of congestion relief.
- 3) **Should Imports be able to provide TMR and if so how?** It is our view that downstream imports should be able to provide TMR and that this might be facilitated by the T-2 market. In the event that congestion is forecasted to occur, we would propose that the AESO notify

importers and request a “pay-as-bid” TMR offer price from them which could be compared against other supply options. In the event that the importer’s offer was the most attractive, it would be accepted and dispatched.

ATCO would only support this approach if the import offer remained a TMR offer throughout the delivery hour (on the basis that it otherwise would not have occurred) and if Pool Price was reconstituted.

- 4) **How should Generation Access be administered?** In some respects, I view this as the overbooked flight situation. The airline has a choice between selling extra tickets and managing possible overbookings or cutting off ticket sales. In the end, they strike a balance between both.

Existing generators with STS contracts have tickets. It is important for them to be able to rely on being able to get their product to market. Aside from having contributed to the cost of system upgrades and thus expecting to have implicit access rights, it would be an unacceptable risk to bear if a new, lower marginal cost competitor locating next door could effectively consume your ability to access the system.

New generators seeking to access the system could either be given tickets (in which case if there isn’t enough space, the resulting congestion must be managed via the congestion management protocol) or told they have to wait. The decision between the two should depend on the advantages of a “full plane” versus the probability of congestion and the associated costs of managing it. Again, having load bear the cost of congestion, will allow an appropriate tradeoff to occur.

STS contracts with caveats (standby tickets that include provisions for RAS participation) are also feasible alternatives.

Comments on AESO Proposal

- 1) **Mechanism for setting Pool Price:** As noted above, it is our view that the Pool Price should be set at the intersection of all load and all supply. The current proposal would artificially inflate the price (in much the same way as it is currently artificially depressed). We do not support either. We urge the AESO to revisit the TMR Price Reconstitution Cap.

There are additional complications.

- Setting the Pool Price based on a TMR offer will exacerbate market power concerns.
- Relying on the TMR offer to incent (price taking) imports to provide TMR is a risky approach in that excess imports may well displace the TMR supplier’s offer, creating a price collapse followed by the import retreating from the market. We believe the approach suggested above would prove to be more stable.
- Elevating the Pool Price artificially inflates the volume of excess in-merit upstream generation that has to be constrained off.
- Finally, for what it’s worth, it is curious to note that this approach is directly prohibited by the Transmission Policy.

- 2) **Paying out-of-merit downstream generators:** We are not opposed to the AESO accepting generators’ energy market offers on a pay-as-bid basis as one mechanism for compensating TMR suppliers. We hasten to add that we believe the AESO should generally contract to ensure that foreseen needs are reliably met.
- 3) **Constraining off in-merit upstream generators:** We do not support the reverse merit order approach for the reasons noted above and instead propose DDS paid by load or failing that, non-

discriminatory curtailment (pro-rata or rotating). We acknowledge that this would also be counter to the Transmission Policy.

Doug, I realise that this is a lengthy diatribe but feel that it's important to establish a consistent framework for dealing with this issue rather than layering on further uncertainty. I'd be happy to discuss the approach or any aspects of it further.

Sincerely,

A handwritten signature in black ink, appearing to be 'CF' or similar initials, written in a cursive style.

Carl Fuchshuber,
ATCO Power Ltd.