



THE POWER OF POSSIBILITY

**January 19, 2005  
AESO Stakeholder Conference – Calgary, Alberta  
Question and Answers**

Below are questions with AESO responses for the following presentation topics from the Jan. 19 AESO Stakeholder Conference. The questions and responses from the remaining presentations will be posted by the end of the week.

1. AESO 2006 GTA Preview – Rates and Terms and Conditions, John Martin
2. Generator Contribution Policy, Ed Hucman
3. Transmission Losses, Rob Baker
4. Interconnection Process Redesign Update, Rene Baillargeon
5. Compliance Monitoring and Enforcement, Darin Lowther
6. Direct Assigns, Fred Ritter

**Topics: AESO 2006 GTA Preview – Rates and Terms and Conditions & Generator Contribution Policy  
Presenters: John Martin & Ed Hucman**

Stakeholder Question/Comment	AESO Response
1. Please explain the logic for assuming there is a 1:1 relationship between the costs allocated to STS customers and the costs that are passed onto DTS customers through energy sales.	STS charges flow through to generators as a variable charge. Generators are generally expected to include the variable charge into their bid price when they offer electricity into the power pool.
2. Will customers be allowed to purchase transformers for existing connections at N.B.V. of the transformer?	The AESO expects the proposed Primary Service Credit would apply when customers purchase transformers for new connections only. However, purchase of transformers is a matter a customer could raise with the TFO who currently owns it.
3. Since the demand ratchet term is being reduced to 2 years, will the “contracted” term be reduced as well?	No, the contract terms will remain the same (5 yrs) to allow for system planning.

Stakeholder Question/Comment	AESO Response
<p>4. "Modified Cost Causation Results" Slide            What was the rationale to split the "Bulk" demand / energy costs equally rather than as determined by the cost of service study?            That is, why use something less than the full amount?</p>	<p>"Demand" drives costs for the Bulk System, but that demand is not the same as the demand which is metered at the customer site. The sum of all demands metered at customer sites is greater than the demand on the Bulk System due to customers' diversity overall. Therefore, it is appropriate to reduce the share of the Bulk System classified as demand to reflect this diversity.</p>
<p>5. Costs wholly charged to loads. Your slide includes DFO's, direct connect customers and exporters. How are exporters to be charged for the transmission system?</p>	<p>The Transmission Regulation states costs are to be recovered from load customers and exporters, but the information in the presentation related to load customers only. The import and export tariffs have not yet been finalized. Currently they are based on the STS tariff which is an opportunity rates, and therefore would go to zero with the elimination of all STS costs except losses. The AESO will continue consultation with stakeholders to develop a firm tariff for its 2007 tariff application.</p>
<p>6. For applications that are currently in the system i.e. at the "needs document" stage - what capital rules will apply? We are both a generator and load.</p>	<p>Customers who execute their System Access Service Agreement (SAS) after January 1, 2006 would have the new capital rules apply (in whatever form approved by the EUB). Under the proposed capital rules the SAS would be signed after the need is approved, but before construction begins.</p>
<p>7. Do customer costs include substation costs?</p>	<p>In the cost causation study, customer costs include the costs of point of delivery substation as well as any radial lines serving only that point of delivery. Substations would not be included if they are not part of the local interconnection associated with a</p>

Stakeholder Question/Comment	AESO Response
	point of delivery.
8. In the 2006 tariff, does a direct connect customer still have to provide a 5-year notice to reduce the contract capacity? If so, why were changes to the 5-year ratchet justified and why not use this same logic for the notice period?	Yes, the 5-year notice period still applies to allow the AESO to effectively plan the transmission system. The ratchet requirements were reduced to provide operational flexibility to customers.
9. The impact of higher, applied for 2006 rates appears to be mitigated by a lower energy cost. The forecast energy cost for 2006 appears to be partly driven by lower gas prices. What are the assumptions behind the 2006 gas price forecast?	The 2006 natural gas price forecast was derived from a consensus of sources that include the NGX and NYMEX forward curves as of November 18, 2004, the most recent Chenery Dobson Survey of Hydrocarbon Price Forecasts (July 2004), and the Ross Smith Energy Group's natural gas price forecast (September 2004).
10. If STS charges are now to be paid by load, and know that generators are currently unable to recover their variable costs, I can not believe the pool price will drop to \$41.20 How many \$/MWh have come off the pool price to account the removal of STS charges in the pool price?	\$4.36, calculated by taking the amount of 2006 forecast costs (other than losses) that would have been allocated to STS customers under the current allocation methodology, and dividing that amount by the forecast STS energy supply.
11. Will loss charges still apply to DOS customers in 2006?	Yes, in accordance with the Transmission Regulation the cost of losses will be recovered from generators, importers, and all interruptible or opportunity service customers (DOS as well as opportunity import and export).
12. If some DTS customers are eligible for a waiver of the contribution requirement, how can it be said that the requirement	The calculation is applied consistently and then the waiver is applied. However, the AESO is proposing the waiver for

Stakeholder Question/Comment	AESO Response
<p>is “applied consistently to all load”.</p>	<p>multiple-user points of delivery (PODs)-to address distinctions relating to the principles underlying its customer contribution policy.</p> <p>As regulated utilities with a right and obligation to serve, owners of distribution facilities coordinate with the AESO in planning transmission and distribution facilities to arrive at the most effective solution to end-user electricity needs at the lowest overall cost, regardless of any local investment limitations imposed by the AESO customer contribution policy.</p> <p>No effective economic signal or siting discipline can be imposed on a distribution utility in respect of transmission projects where that project is caused by increasing load from multiple end-use customers. The distribution utility has little if any influence over the amount, timing, or location of end-user load growth.</p>
<p>13. Explain the application of Load Contribution Policy for dual use (load + generation) using the “load first” principle.</p>	<p>If a facility includes both load and generation, first the load policy will be applied and then the generation policy. When applying the load policy, the cost of the standard facilities which would be required to serve the load will be determined. The amount of investment available will be based on the MW of DTS contract capacity and contract term, up to the cost of the standard facilities required to serve the load.</p> <p>Any additional costs associated with serving the generation will not be eligible for investment.</p>
<p>14. Did the AESO assume that a reduction of wires costs allocated to STS customers would produce a corresponding reduction in energy prices independently or in response to direction from the DOE?</p>	<p>Yes, the AESO assumed a reduction of wires costs allocated STS customers would produce a corresponding reduction in energy prices independently, without any direction from the DOE to do so. The reduction was also included in the pool price</p>

Stakeholder Question/Comment	AESO Response
	forecast purchased by the AESO from EDC Associates Ltd.
<p>15. (Slide 3 – pg.6 DTS &amp; Total Bill Impact) The 2005 to 2006 comparative appears to rely on energy price declining from \$54/mwh to \$41/mwh. What would the result be if there was no decline? i.e. the 2006 heat rate stays at the 2004&amp;2005 8.8 value, and the Jan.18<sup>th</sup> NGX closing price \$6.30/gj is used?</p>	<p>The bill impact comparisons were actually based on the same pool price. For the comparison, the AESO's 2005 interim rates and the 2006 proposed rates were multiplied by the same billing parameters, including pool price.</p> <p>The only adjustment was that bills on the 2005 rates increased the \$41.20 forecast pool price by \$4.36 (the amount of STS costs which will be shifted to DTS customers in 2006) for a total of \$45.56. The shift of costs from STS to DTS results in about a 10% reduction in pool price, as seen in the energy components of the bill impact comparisons.</p>
<p>16. SW is wire based generation. Is zonal factor based on installed capacity or coincident lower available capacity?</p>	<p>The inputs to the Zonal factor are STS contract capacities of existing and committed generation projects compared to the aggregate non-coincident peak load forecast for a 5 year period for each zone.</p> <p>The STS contract values may more may not reflect installed or coincident lower available capacity.</p>
<p>17. Are you prepared to waive the contribution for industrial customers (t-connect) who cannot respond to siting signals? Please explain.</p>	<p>No. Although some industrial customers may not be able to respond easily to pricing signals, they do not have the same obligation to serve as distribution utilities. Please refer to the response in #12.</p>

<p>18. What is the purpose of a customer contribution beyond sending a siting signal? (eg. Well above average cost not related to distance to system grid) Isn't this a fairness issue also?</p>	<p>One of the primary purposes of a contribution policy is to ensure fairness in that an individual customer should not impose unreasonable costs on an averaged, shared system which assumes a certain level of homogeneity among customers. On average, revenues should equal costs and projects with costs that fall far outside that average should contribute toward their interconnection costs.</p> <p>The AESO's contribution policy establishes a maximum investment level. If a customer's costs exceed this maximum they can then make an economic choice in relation to their project.</p>
<p>19. Generator Contributions – Regarding the 5 year forecast, will you average the STS contract capacity relative to aggregate non-coincident peak load for 5 years in the 5 year forecast? Please define aggregate non-coincident peak load.</p>	<p>No, the AESO will utilize the STS contract capacities of both existing and committed generation projects expected to interconnect to the system over the same forecast period. Aggregate non-coincident peak load, is the sum of each POD's peak load on a non-coincident basis for each defined zone.</p>
<p>20. Generation Interconnection Costs – How did you arrive at the \$10,000/mw and range of 0-\$40,000/mw zonal costs? Are they a reflection of your associated transmission congestion relief costs?</p>	<p>The \$10,000 / MW and the \$0- \$40, 000 values were outlined in Section 17 of the Transmission Regulation. No, it is not a reflection of the associated transmission congestion relief costs.</p>
<p>21. Does the 2006 pool price estimate assume 100% removal of STS charges except for losses? How do you propose to measure the pool price reduction due to the STS change?</p>	<p>The 2006 EDC pool price forecast assumptions does include the removal of the STS (approximately \$4.00 reduction). The AESO does not propose to measure the pool price reduction due to the STS change through out the year.</p>
<p>22. Load Contribution Policy – slide quote- "...Must not be feasible to serve load through existing capacity at existing substations..." Does 'existing capacity' allow for n-1 contingency?</p>	<p>The AESO's reliability criteria establishes a minimum standard based on a radial supply arrangement, including transmission circuit and single transformer — essentially an "n – 0" contingency criteria.</p> <p>Additional criteria apply to points of delivery serving many end-</p>

	use customers, to determine under what circumstance it is appropriate to provide a second transmission circuit or transformer — essentially an “n – 1” contingency criteria.
23. To avoid confusion, would the AESO consider referring to variable charges as “usage” instead of energy which refers to the commodity itself?	The AESO will consider using the term “usage” in the context of the transmission tariff, and “energy” when referring to the commodity itself, as it may avoid confusion.
24. Sunday, Jan.16, 2005 – Price +\$997.00 December 2004 – 5 hours at \$0.00 How can it be contended that the hourly merit order would have changed in 2006 to accommodate STS change – i.e. \$994.00 and \$3.00? And if these hours wouldn't be different then why believe the hourly market is sufficiently efficient for the remaining 8755 hours?	The reduction in the pool price in 2006 forecast is not assumed to occur as a \$4 decrease in every hour as the forecast is an average. Some hours will likely reflect a larger decrease and some and some hours will be less. Also, there will always be minimums and maximums (outliers) in pool price; however, most hours will not be at such extremes.
25. Load Contribution – What does ‘feasible to serve load through existing capacity at existing substations’ mean? What if a new substation is the more economic choice?	Feasibility to serve load through existing capacity at an existing substation means that if a substation has sufficient capacity or can be economically enhanced to have sufficient capacity, then it would be used. If a new substation was a more economic choice, then that approach would be taken. Feasibility includes both technical and economic feasibility.
26. With the proposed changes to the DTS ratchet (24 months) and a contribution policy (load first) – Will the 60 month exit notice provision be reduced?	No, please refer to the responses to #3 and #8.

**Presentation Title: Transmission Loss Factors**  
**Speaker Name: Rob Baker**

Stakeholder Question/Comment	AESO Response
<p>1. Will export and import loss factors be symmetric? (I.e. if the export loss factor is 10% would the import loss factor be -10%?) If not, why not?</p>	<p>Export loss factors are currently assigned to opportunity Export Service (ES) only. The loss factors will be calculated on a marginal basis. Import loss factors will be limited to the loss factor envelope as described in the Transmission Regulation 19(2)(f). This is to prevent the possibility of an import receiving a loss credit which exceeds that of a generator at the Alberta border. Therefore import and export loss factors will not be symmetrical.</p>
<p>2. Will the same principles be applied to import/export service as interconnection transactions (I.e. imports treated like generation and exports treated as load?) This is critically important to merchant lines.</p>	<p>In the case of merchant transmission lines the answer is yes. The AESO will use a set of tables with increments of power to establish loss factors based on the merchant lines transaction level.</p>
<p>3. Will the export/import loss factors be based on marginal methodology?</p>	<p>Yes. Transmission losses for generators supplying firm load will be calculated and used as a benchmark. Then generator losses (benchmark) and the inter-tie transaction losses will be calculated together. The difference in total system losses will be the losses associated with the inter-tie transaction.</p>
<p>4. Please respond to the question of whether there is double counting of losses on exports (losses paid by generators, then paid again on the margin under the export tariff)?</p>	<p>The AESO is reviewing options in the proposed methodology which will limit the potential for double counting. However until Alberta's market structure is changed it is impossible to determine the exact losses associated with a specific export transaction.</p>
<p>5. How will loss factors will be calculated for tie-lines?</p>	<p>The AESO is proposing to use the Load Area Adjustment 50% Corrected Matrix methodology to calculate transmission loss</p>

Stakeholder Question/Comment	AESO Response
	<p>factors. Opportunity import and export service loss factors will be calculated as marginal losses as per Section 22(2) of the Transmission Regulation. Opportunity import loss factors will be subject to compression to comply with Section 19 (2) (f) of the Transmission Regulation. Opportunity export loss factors will not be constrained by the loss factor envelope.</p>
<p>6. Will tie-lines be treated as generators, loads, or in some other way?</p>	<p>Tie-lines will be treated as loads for firm export service when it is available and as generators for firm import service. Opportunity service will be treated as described in the previous question.</p>
<p>7. Do loads pay for losses, or are all losses paid for by generators?</p>	<p>Generators pay for losses associated with firm load. Demand Opportunity Service (DOS) pays for its full cost of losses. Opportunity exports pay for their full cost of losses and opportunity imports pay for their costs of loss constrained by the loss factor envelope described in Section 19 (2) (f).</p>
<p>8. Will tie-line loss factors be subject to the same rules that the Alberta Department of Energy has imposed for generator loss factors?</p>	<p>The rules for firm transactions across tie-lines will be the same as imposed for generator loss factors. Opportunity transactions will be governed by Section 22 (2) of the Transmission Regulation.</p>

**Presentation Topic: Interconnection Process Redesign Update**

**Speaker: Rene Baillargeon**

Stakeholder Question/Comment	AESO Response
<p>1. There does not seem to be recognition of the potential for “light handed review” by the AESO of a project and TFO and DFO project proposals which are inflated (two entities motivated to have a different rate base) How will AESO ensure they are not abdicating responsibility in this area?</p>	<p>Assessments involved at the AESO may appear to be “light handed” or abdicated; however we remain accountable for our mandate as set out in the Act. The Interconnection Redesign will provide a mandate to develop guidelines to control the process further. A key piece in this is acknowledging the difference in approach between DFO’s and TFO’s.</p>
<p>2. What stops a TFO from dictating the process (my way or the highway) and gold plating their work?</p>	<p>AESO acknowledges the concern. However Transmission is still a regulated area of the industry. The AEUB is responsible for all cost oversight and to test the prudence of all information. AESO’s role in criteria, guidelines and standards development will also help to ensure ‘gold plating’ does not occur.</p>
<p>3. It appears that the AESO is still looking at a single application versus a joint application, and we think this is something which needs to be reviewed.</p>	<p>The AESO will propose a meeting with the EUB to discuss this matter and come to a collective agreement. Mechanics to facilitate (within) the redesign are important points to note when this meeting is called.</p>

**Presentation Topic: Compliance Monitoring and Enforcement**

**Speaker: Darin Lowther**

Stakeholder Question/Comment <sup>1</sup>	AESO Response
<p>1. Is there the possibility to post compliance items you have a concern about before further steps are taken?</p>	<p>In cases where the AESO has a compliance-related concern with a particular market participant, the AESO proposes to address the issue one-on-one with that particular market participant, as opposed to posting the concern on the AESO website.</p> <p>In cases where the AESO has a widespread concern with respect to compliance, the AESO proposes to communicate this concern on the AESO website. An example of such a posting is the letter to market participants posted to the website on January 21, 2005 regarding Total Declared Energy submissions (see link below).</p> <p><a href="#">Total Declared Energy Submissions Letter to Market Participants</a></p>
<p>2. In some cases will we need to make rule changes as a result of the way rules are interpreted and defined?</p>	<p>As a result of compliance-related investigations, one of the possible outcomes may be a recommendation to initiate a proposed change in ISO rules. This is identified in section 12.4.4(h) of the draft compliance rules that were issued on January 21, 2005.</p>
<p>3. When you were presenting I got a different flavour than the discussion paper about the compliance process e.g. parties should have the right to know something is wrong before imposing financial penalties – clarifying number of failures before administrative sanctions</p>	<p>In most cases, the intent of the AESO is to provide market participants that are the subject of a compliance-related investigation, the opportunity to meet with the AESO and also make written representations regarding any allegations. Exceptions would be limited to circumstances where advising a participant in advance might unduly impact an investigation. In <b>all</b> cases, the market participant will have an opportunity to meet</p>

<sup>1</sup> Please note questions are verbatim as stated on question cards at the Stakeholder Conference.

Stakeholder Question/Comment <sup>1</sup>	AESO Response
	<p>with the AESO and make written representations prior to a sanction being issued by the AESO.</p> <p>The intent of the AESO is to encourage compliance with ISO rules, as opposed to imposing sanctions. As such, we propose to make parties aware of our concerns throughout the compliance process. If parties believe that additional language is required as part of the draft compliance rules in order to clarify this intent, the AESO encourages parties to submit draft language prior to February 4, 2005.</p>
<p>4. Would unequal treatment by the AESO, for instance voltage control requests being to select generators, though obligations are equal for all generators, be considered a mitigating factor?</p>	<p>The AESO has established operating policies and procedures regarding voltage control. These policies and procedures state that voltage control is expected to be a cooperative effort between the system controller who is responsible for the overall reliability of the AIES and the coordination of voltage control, and the transmission facility operators and the generation facility operators who are responsible for their equipment. Each of these parties is expected to comply with their responsibilities as established in the AESO's operating policies and procedures.</p> <p>The AESO does not anticipate that compliance with voltage control operating policies and procedures will cause a market participant to be unable to comply with an ISO rule. However, to the extent that a market participant identifies specific circumstances where compliance with voltage control policies and procedures, including directives from the system control with respect to voltage control, cause the market participant to be unable to comply with an ISO rule, the market participant is encouraged to bring this to the attention of the AESO as a mitigating factor.</p>

**Presentation Topic: Direct Assigns**

**Presenter: Fred Ritter**

Stakeholder Question/Comment	AESO Response
<p>1. S.14 and visibility for customer cost projects: Where is the engineering and project management cost visibility?</p>	<p>Section 14 of the DOE Regulations requires the AESO, in making rules, to provide for the competitive tender by a TFO with respect to the construction costs of the transmission facility, including materials and equipment. The AESO's interpretation is that engineering and design costs are excluded from this requirement. The AESO is working with stakeholders to develop rules regarding the preparation of cost estimates as required by Section 13 of the DOE Regulations. The AESO is also working with stakeholders to change the interconnection process which will facilitate a more direct interaction between the Customer and the TFO regarding interconnection issues, including concerns for engineering and project management costs.</p>
<p>2. How will the AESO ensure that transmission costs are reasonable and are applied consistently throughout the industry?</p>	<p>The AESO acknowledges, and shares, stakeholder concerns regarding transmission costs. The AESO's objective is to provide access to the transmission system in the most economic manner while satisfying the Customer with timely and reliable service. The interconnection process redesign will enable more direct interaction with the TFO by the Customer to enable issues, such as costs, be addressed. The AESO will continue to review interconnection costs to ensure cost reasonableness of the interconnection proposals put forward to the EUB. The EUB is the ultimate authority to approve final project costs which the TFO is permitted to apply to its rate base.</p>



THE POWER OF POSSIBILITY

3. If the customer is dissatisfied with the TFO what is their recourse?

(Note: The response to this question is on the basis that the Customer has a concern with the TFO's Facilities Application.) If the customer is not satisfied in dealing with the TFO the recourse is for the dissatisfied party to file a complaint with the EUB under the terms of the dispute resolution process. This dispute resolution mechanism applies to all Customer/TFO relationships and Customer/AESO relationships.