

Stakeholder Comment & AESO Response Form

**Wind Power Forecasting Service Cost Recovery
September 22, 2009**

Date of Request for Comment: August 27, 2009

Stakeholder Consultation Period: August 27 – September 11, 2009

1.1 – External wind power forecasting service cost, which does not include the AESO internal costs, be allocated amongst wind power facility owners as a \$/MWh charge based on production		
Stakeholder	Stakeholder Comment	AESO Response
ATCO Power	Supports AESO's recommendation.	The AESO acknowledges ATCO Power's support.
Capital Power Corporation	Supports AESO's recommendation.	The AESO acknowledges Capital Power Corporation's support.
ENMAX Energy Corporation	<p>Supports the use of a \$/MWh charge, but does not support its allocation only to wind power facility owners.</p> <p>Clearly, all market participants benefit from a reliable system. Therefore, all market participants – not just wind facility owners – should bear the costs associated with wind power forecasting. Allocating forecasting costs entirely to wind facility owners does not support the <i>fair</i> aspect of a FEOC market.</p>	<p>The AESO acknowledges ENMAX's support of the use of a \$/MWh charge.</p> <p>As for the allocation of the forecasting costs to the wind facility owners, the AESO notes that currently all generating assets, except wind generators, are obligated under the "must offer, must comply" rule to submit their offers two hours before the scheduling hour. As indicated in the Market & Operations Framework for Wind Integration in Alberta, the unique attributes of wind generation makes "must offer" difficult, if not impossible for wind generators. The Framework also established the requirement to "forecast" as a reasonable and fair alternative to "must offer", and that the ongoing costs associated with forecasting to be allocated to wind generators.</p> <p>Since the forecasting costs are alternatives to the costs of making offers incurred by the other generators, the AESO does not agree that allocating the forecasting</p>

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		<p>costs to the wind generators is unfair or contravenes FEOC principles, and hence will propose allocating the forecasting costs to the wind generators in the AESO's 2010 General Tariff Application.</p>
<p>Load Coalition (Alberta Direct Connect Consumers Association, or ADC, Industrial Power Consumers Association of Alberta or IPCAA, and Utilities Consumer Advocate or UCA)</p>	<p>Supports AESO's recommendation.</p> <p>The payment of forecasting costs does tend to equalize the must offer costs with other non-wind generators, but it does not fully address the issue of a must offer obligation on wind suppliers. The Load Coalition understands that wind generation is distinct from other forms of generation, but also recognizes that tools are available to enable wind to respond to dispatch. The Load Coalition is supportive of the AESO completing a review of the must-offer obligations for wind generators and a further unbundling of the cost of services to support their intermittent nature.</p>	<p>The AESO acknowledges the Load Coalition's support.</p> <p>The AESO may review applying the "must offer" obligation to the wind generators in the near future. If and when the "must offer" obligation is applied to wind generators the AESO will re-visit the allocation of the wind power forecasting costs. For now, the AESO considers it appropriate to allocate the costs to wind generators.</p>
<p>NaturEner Energy Canada Inc.</p>	<p>Does not support charge as a \$/MWh charge based on production.</p> <p>Each facility independent from the size, if a forecast is requested, requires its own model. The cost of wind forecasting is independent from size of production. Therefore it does not become apparent why a larger facility should carry more cost of forecasting than a smaller facility if both would incur the same cost for forecasting. The allocation of the cost per MW or per MWh work against the FEOC principle in Alberta; NaturEner would like to put forth the recommendation that the charge be calculated per facility.</p> <p>After the necessary inputs and models are set up, only general</p>	<p>A per facility charge option was considered and discussed by the Cost Recovery Working Group, and despite that this option may somewhat better aligned with cost causation, it does not accommodate sites of varying capacity and may act as a barrier to entry for small wind power facilities. The Working Group decided, and the AESO agrees, that the \$/MWh option best address the concerns with respect to cost recovery.</p> <p>The AESO also considered that an accurate forecast provide more benefit to a large wind facility, in terms of potentially reducing the production curtailment due to</p>

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	<p>maintenance and refinement of the models are required in order to increase forecast accuracy over time. Ongoing refinements will be needed for each individual wind facility to increase overall accuracy. NaturEner suggests having an incentive as such part of the fee be a type of bonus associated with the accuracy of the forecast to further promote a more reliable forecast.</p>	<p>unforeseen system impacts. Any required curtailment to maintain system reliability is applied pro-rata amongst wind power facilities and so the larger wind power facilities will get a larger share of the curtailment.</p> <p>The AESO considered the \$/MWh charge option to be a fair and equitable method of recovering the forecasting costs that does not contravene the FEOC principles.</p> <p>As for the incentive or bonus program for the wind power forecasting service, the AESO is considering including such in the wind power forecasting service contract.</p>
Powerex Corp.	<p>Supports AESO's recommendation.</p>	<p>The AESO acknowledges Powerex's support.</p>
Shell Canada Energy	<p>Supports external wind power forecasting service cost be shared by all wind generators but does not support the allocation of such cost based on production or \$/MWh charge. Recommends that a per wind farm basis be used as it is a fairer and more appropriate way to allocate costs, given that the data varies by wind farm location and not size.</p>	<p>The AESO acknowledges Shell's support in AESO's proposal to allocate the forecasting costs to wind generators.</p> <p>As for Shell's concerns regarding the proposed \$/MWh charge and proposal to use a per facility charge, please refer to AESO's response above to NaturEner Energy Canada Inc.</p>

1.2 – The cost recovery will begin in Q4 2010 and will be levelized over Q4 2010 and the subsequent 3 years

Stakeholder	Stakeholder Comment	AESO Response
ATCO Power	<p>Supports AESO's recommendation.</p>	<p>The AESO acknowledges ATCO Power's support.</p>
ENMAX Energy	<p>Supports AESO's recommendation.</p>	<p>The AESO acknowledges ENMAX's support.</p>

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Corporation		
Load Coalition (Alberta Direct Connect Consumers Association, or ADC, Industrial Power Consumers Association of Alberta or IPCAA, and Utilities Consumer Advocate or UCA)	Supports AESO's recommendation.	The AESO acknowledges the Load Coalition's support.
NaturEner Energy Canada Inc.	Suggests that the system setup costs be more spread out to cover the time period of the South System build in order to properly allocate the costs incurred including the large number of new wind generation plants.	The AESO agrees that the setup cost should be spread out in order to allocate the costs incurred among a larger amount of wind generation. The AESO proposal to levelize the costs over Q4 2010 and the subsequent 3 years is intended to achieve that same purpose.
Powerex Corp.	Supports AESO's recommendation.	The AESO acknowledges Powerex's support.

1.3 – An escalation factor of 10% to the \$/MWh rate will be applied for the above time period

Stakeholder	Stakeholder Comment	AESO Response
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ATCO Power	Supports AESO's recommendation.	The AESO acknowledges ATCO Power's support.
ENMAX Energy Corporation	Supports AESO's recommendation.	The AESO acknowledges ENMAX's support.
Load Coalition (Alberta Direct Connect Consumers Association, or ADC, Industrial Power Consumers Association of Alberta or IPCAA, and Utilities Consumer Advocate or UCA)	Supports AESO's recommendation.	The AESO acknowledges the Load Coalition's support.
NaturEner Energy Canada Inc.	Does not support an escalation factor that is applied over time. Having the majority of the work done be on the creation of the facilities initial model, a price escalation over time is not justified.	The AESO intended purpose for the escalation factor, over Q 2010 and 2011 to 2013 is to ease the effect of the charge on wind power facility owners. If applied, it will reduce the step change in the forecasting service charge but rather will have the charge to gradually increase over this period. The escalation factor proposal was first raised by the Cost Recovery Working Group and the AESO deems that this is an appropriate and reasonable proposal.
Powerex	Supports AESO's recommendation	The AESO acknowledges Powerex's support.

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Corp.		
1.4 – Variance from forecast costs and revenues will be reconciled on an annual basis, with each year’s variance being recovered through the wind power forecasting service charge in the following year		
Stakeholder	Stakeholder Comment	AESO Response
ATCO Power	Supports AESO’s recommendation.	The AESO acknowledges ATCO Power’s support.
ENMAX Energy Corporation	Supports AESO’s recommendation.	The AESO acknowledges ENMAX’s support.
Load Coalition (Alberta Direct Connect Consumers Association, or ADC, Industrial Power Consumers Association of Alberta or IPCAA, and Utilities Consumer Advocate or UCA)	Supports AESO’s recommendation.	The AESO acknowledges the Load Coalition’s support.
NaturEner Energy Canada Inc.	Supports AESO’s recommendation.	The AESO acknowledges NaturEner’s support.
Powerex	Supports AESO’s recommendation.	The AESO acknowledges Powerex’s support.

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Corp.		
2 – Aggregated wind power forecast data be made available to market participants through some reports posted on the AESO web site		
Stakeholder	Stakeholder Comment	AESO Response
ATCO Power	Supports AESO’s recommendation.	The AESO acknowledges ATCO Power’s support.
Capital Power Corporation	<p>Supports AESO’s recommendation.</p> <p>Given that the wind forecast is required for system management it should not be considered proprietary information belonging to wind generators.</p> <p>Until such time that wind facilities are subject to “must offer, must comply” the wind forecast is also a proxy for the outage records of the individual facilities. As a result, wind facility owners are subject to comply with Section 4 the Fair, Efficient, Open Competitive (FEOC) Regulation which requires that market participants shall not, directly or indirectly, use outage records to trade unless the outage record has been made available to the public by the AESO. Therefore, unless wind forecast information is made public, market participants owning wind facilities should not be allowed to trade using this information.</p> <p>To the extent that individual wind facilities would like to use outage records in this way, and until such time wind facilities are subject to “must offer, must comply”, outage records should be submitted to the AESO in accordance with Section 4 of the FEOC regulation. The AESO should reflect the wind forecast in the short term outage graph. We do not see the need for a separate graph for wind outage records and prefer to see all short term supply outage information located in one location for ease of use.</p>	<p>The AESO acknowledges Capital Power’s support.</p> <p>The AESO will consider Capital Power’s suggestion to reflect the wind forecast in the short term outage report.</p>

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<p>ENMAX Energy Corporation</p>	<p>Supports AESO's recommendation.</p> <p>ENMAX concurs with the AESO view that forecasting wind benefits all participants and that the resulting information should be made available to all participants in as near to real time as possible.</p> <p>Transparency of information serves to promote the FEOC operation of the market and provides system-wide benefits, which is why ENMAX believes the associated costs should be allocated across all market participants (both load and generation).</p>	<p>The AESO acknowledges ENMAX's support.</p> <p>The AESO considers making the aggregated wind forecast data available to all market participants is aligned with the FEOC principles and hence will commit to implement that. However, the AESO does not agree with ENMAX's proposition that the forecasting costs should be allocated to all market participants, for reasons stated in AESO's response to ENMAX's comments in Section 1.1 above.</p>
<p>Load Coalition (Alberta Direct Connect Consumers Association, or ADC, Industrial Power Consumers Association of Alberta or IPCAA, and Utilities Consumer Advocate or UCA)</p>	<p>Supports AESO's recommendation.</p> <p>Providing the forecast to a select few participants would create an un-level playing field and not reflect the fact that while the wind producers fund external forecasting costs, other AESO Customers will continue to fund internal AESO wind forecasting expenses. Generally, the Load Coalition supports the principle of sharing relevant market information to all market participants in accordance with FEOC principles.</p>	<p>The AESO acknowledges the Load Coalition's support.</p>
<p>Powerex Corp.</p>	<p>Supports AESO's recommendation.</p> <p>Powerex wishes to ensure that the AESO intends to release the aggregated wind power forecast data prior to the real-time operation of the market. Receiving this information only in real-time may</p>	<p>The AESO acknowledges Powerex's support.</p> <p>The AESO intends to release the aggregated wind power forecast data prior to real time operation, subject to tool and system capability.</p>

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	<p>negatively impact the reliable operation of the market. As well, Powerex agrees that the availability of the aggregate wind forecast data to all market participants is integral to compliance with the Fair Efficient and Openly Competitive regulation. Finally, Powerex wishes to confirm that the detailed wind forecast data provided by the AESO to wind farm facilities is restricted to that facility's units only.</p> <p>Additionally, Powerex would like to use this opportunity to request the AESO consider providing real-time unit availability data for wind facilities. As increased amounts of wind begin to come on-line, robust information of both forecasted and currently available generation will become more and more imperative for the efficient and reliable operation of the energy market.</p>	<p>The AESO confirms that the forecast data to be provided a wind farm facility will be restricted to the facility's forecast data, and not that of any other wind farm facilities.</p> <p>The AESO will consider Powerex's request to provide real time wind power facility unit availability data.</p>
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