



Market Rule Amendment Written Submission

This form is used to provide comment on a *market rule* amendment under consideration by the *IESO*. Please complete all four sections of this form and submit the completed form by email or fax to the following:

Email Address: Rule.Amendments@ieso.ca
 Fax No.: (416) 506-2847 **Attention: Market Rules Group**
Subject: Market Rule Written Submission

All information submitted in this process will be used by the *IESO* solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the *confidentiality classification* of “Public” upon receipt. You should be aware that the *IESO* intends to *publish* this written submission.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *Market Rules*.

PART 1 – SUBMITTER’S INFORMATION

Please enter your organization and contact information in full.

Name: Kevin Van Koughnett, TransAlta Corporation

(if applicable) *Market Participant /
 Metering Service Provider No.*¹: _____

Market Participant Class: _____

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PART 2 – MARKET RULE AMENDMENT REFERENCE

Type of Rule Amendment Being Commented on (please indicate with x):

Amendment Submission Proposed Rule Amendment Recommended Rule Amendment

MR Number: 00362-R01

This *Market Rule* number is located on the “Current Market Rule Amendment” web page.

Date Relevant *Amendment Submission*, Proposed or Recommended Rule Amendment Posted for Comment: May 4, 2011

¹ This number is a maximum of 12 characters and does not include any spaces or underscore.

PART 3 – COMMENTS ON RULE AMENDMENT

Provide your comments.

The imposition of new technical requirements on existing wind farms which will require significant expenditures to retrofit the facilities is unfair. To be clear these changes are technical in nature and require physical changes to an existing facility. Based on the purchased power agreements, the wind farm owner has no basis to recover the costs of such retrofits. Retroactive requirements are generally taken as repugnant whereas the imposition of requirements on new facilities allows for investor consideration and contractual language to deal with such requirements. Retroactive imposition of requirements is considered a taking or confiscation of value.

Under FERC docket RM10-11 regarding the Integration of Variable Energy Resources the stated position of the American Wind Energy Association (AWEA) makes this clear:

“The Commission also asked about whether data reporting requirements should apply retroactively to wind plants that are already operational. We would be amenable to allowing the data reporting requirements to be applied retroactively to data that is already being collected by wind plants deployed in the recent past, such as those that became operational after the year 2005. This is due to the fact that retroactive data reporting requirements have already been imposed by many TSPs and due to the very small costs involved in reporting data that is already being collected, compared to the magnitude of the benefits. The requirement should not extend further into the past as imposing the requirement on some older plants may impose larger costs. In addition, we should clarify that there should be no requirement for the retroactive installation of equipment like met towers, due to the significant costs involved, as the retroactive requirement would be limited to reporting data that is already being collected. The requirement for data provision could be incorporated into the Open Access Transmission Tariff (“OATT”) instead of into the LGIA, as this is a more appropriate place for a retroactive requirement. We should make clear that this does not contradict the wind industry’s continued strong and universal opposition to retroactively imposing any type of interconnection standard or other requirement on signed LGIAs.” (FERC RM10-11-000 March 31, 2011 page 23)

TransAlta has two wind farms in Ontario each roughly 200 MW in size for a combined 400 MW. Our investment in these facilities is material and is in the order of \$1 billion. These facilities are subject to purchase power agreements which are based on the interconnection and operational requirements in place at the time such agreements were made. The imposition of retroactive requirements is not only unfair but undermines investor confidence in undertaking such large investments in the future.

TransAlta’s Melancthon 200 MW Wind Farm can not comply with certain of the data collection requirements proposed for wind dynamic data as shown in Attachment A. There is no existing meteorological tower at the wind farm and to require it to meet the requirements would cause TransAlta to undertake the following:

- Acquire/lease land at the wind farm to install a permanent 80 m meteorological tower(s)
- Permit the tower(s) as required for municipal and aviation requirements
- Purchase suitable meteorological tower(s) and required instrumentation
- Purchase the needed modules to modify the wind farm scada system to add the meteorological tower(s). This may require complete replacement of the GE WindControl system.

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- Design information technology solution to prepare data
- Install the above, configure and test

The estimated cost of the above is estimated at \$250,000 per met tower. If the wind farm scada system is required to be replaced this would add an estimated \$500,000. In addition there would be ongoing operational costs to maintain the equipment. For example, it is usual to replace all meteorological tower sensors every three years.

Assuming two meteorological towers and scada replacement, the cost at Melancthon would be approximately \$1 million.

The estimated time to comply with the requirements if not exempted would be at least 12 months from approval.

TransAlta could comply with the dynamic data requirements if we were exempted from the meteorological tower requirements. We can provide the nacelle based met data for wind speed and direction, and could provide the other information from sensors located at the wind farm substation. The estimated time to comply with this would be six months or less.

We do not understand why the nacelle based information is not preferred given it is located at each generation source and must be maintained as it is part of the operational control system for each wind turbine. Meteorological tower data is redundant to the nacelle data and provision of the nacelle data should be sufficient.

We would suggest the wording be such that a facility can provide nacelle-based data or meteorological-tower-based data but not be required to provide both.

We are also concerned with the wording regarding the location of the meteorological towers in that it says they shall be located based on the criteria cited. Who makes the assessment of suitability to those criteria? The wind farm owner is faced with the situation where the IESO could, based on the current wording, require the owner to re-locate their existing meteorological towers. The existing meteorological tower could also not be at hub height, for example, use of a 60 m tower at a wind farm with a 80 m hub height. Would the IESO in this instance require a new 80 m tower or would they grant an exemption of the 60 m tower as being sufficient. This issue has other ramifications as the historical data would be from the 60 m tower and this data would be used by the wind forecaster to train their forecast models.

It should not be assumed that wind farms with existing meteorological towers that such towers will meet the requirements or meet the performance standard. The meteorological towers which are installed for wind resource assessment and/or for power curve warranty verification are usually temporary meteorological towers. Temporary towers are likely not at hub height and the typical installation is 60 m or less. Meteorological towers which are permanent and which for hub height are expensive. A permanent tower, for example, will be climbable which would enable next day problem remediation of a defective device in order to meet the performance standard.

The IESO should also allow other devices than meteorological towers to provide data collections such as sodar and lidar. The focus should be on the purpose and quality of the data and not specifying its source.

For clarity, TransAlta would provide the appropriate static data and historical data for our wind

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farms at Melancthon and Wolfe Island. This would allow the forecaster to create the conversion algorithms from essentially wind speed to power output and to perform statistical analysis as required. We would also provide nacelle-based dynamic data from as many turbines as the IESO may wish.

TransAlta request that the Market Rule be amended to consider the above concerns or provide an exemption from the requirements to achieve a similar effect.

PART 4 – EXTERNAL CONSULTATION MEETING

If you believe that a special meeting of stakeholders would be necessary/desirable to discuss the issues raised by the rule amendment, please complete the following information:

External Stakeholdering meeting necessary/desirable (please indicate with x): X

Reason(s) why you believe a meeting is necessary/desirable:

TransAlta is prepared to meet with the IESO to discuss our concerns. We think our concerns will not be dissimilar to other stakeholders and a meeting to discuss these matters would be productive. There are fundamental principles involved with the approach advocated in the proposed market rule and the appropriateness of imposition of retroactive requirements requires discussion.