

Market Rule Amendment Proposal

PART 1 – MARKET RULE INFORMATION

Identification No.: M		MR-00362-R00				
Subject:	Renewable Integration - Forecasting					
Title:	Centralized Forecasting – Cost Recovery					
Nature of Proposal:				☐ Deletion		
Chapter:	9, 11		Appendix:			
Sections:	Ch 9, sections 1.1.2.16 (new), 4.7G (new), 4.7G.1 (new), 4.8.1.16 (new), 6.3.17, 6.11.5, Ch 11 Definitions					
Sub-sections proposed for amending:						

PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing		Version Date
1.0	Draft for Technical Panel	review	March 15, 2011
2.0	Publish for Stakeholder R	March 24, 2011	
3.0	Submitted for Technical	April 12, 2011	
4.0	Resubmitted for Technica	May 11, 2011	
5.0	Recommended by Techni IESO Board Approval	May 17, 2011	
6.0	Approved by IESO Board		June 16, 2011
Approved Ame	ndment Publication Date:	June 16, 2011	
Approved Ame	ndment Effective Date:	July 8, 2011	

PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

Summary

It is proposed to amend the market rules to allow the IESO to recover costs associated with forecasting services relating to variable generation as a procured service charge to consumers, and to pay the forecasting service provider(s) through the IESO's existing settlements process.

This proposal is based on the "SE-91 Renewable Integration Final Design Principles" – Principles 1 and 3" as part of SE-91 Renewable Integration (http://www.ieso.ca/imoweb/pubs/consult/se91/se91-20110309-Final_Design_Principles.pdf).

Background

Centralized forecasting will replace the existing decentralized forecasting approach and as a result, market participants with variable generation will no longer be required to submit energy forecasts for their facilities. Instead, those market participants will be responsible for providing site specific data that will be used as inputs to variable generation forecasts provided by a third party service provider.

The settlement of those forecasting charges will follow the IESO's existing physical market invoicing process and timelines. Costs paid to the forecasting service provider(s) will be treated as procured service charges and recovered from consumers through a non-hourly charge to be invoiced each month as part of their regular IESO invoice. Similarly, payments due to the forecasting service provider(s) will be made two business days after the market participant payment date.

Discussion

The IESO must have the mechanism in place to recover costs associated with forecasting services in order to sign a contract with the selected forecasting vendor(s). Once a vendor is selected, forecasting models can be initialized and coordinated with the static and dynamic data requirements for variable generation.

Chapter 9

Amend the market rules in sections 1.1.2.16 (new), 4.7G (new), 4.7G.1 (new), 4.8.1.16 (new), 6.3.17, and 6.11.5 to allow for the settlement of forecasting charges through the IESO's existing physical market invoicing timelines:

- Section 1.1.2.16 adds forecasting costs to the list of charges billable to market participants.
- Sections 4.7G, 4.7G.1allows the IESO to contract for forecasting services relating to variable generation.

PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

- Section 4.8.1.16 (new) allows the IESO, at the end of each billing period, to recover costs for forecasting services from market participants on a pro-rata basis from consumers.
- Section 6.3.17 adds the forecast service provider(s) to the list of entities with which the IESO will initiate electronic funds transfers for each billing cycle.
- Section 6.11.5 allows the IESO to borrow funds, if necessary (i.e. upon payment default of an invoice by a market participant) in order to pay the forecasting entity.

Chapter 11

It is proposed to add a defined term for:

- "Forecasting entity," meaning the entity or entities contracted by the IESO to provide forecasting services relating to variable generation.
- "Variable generation," meaning all wind and solar photovoltaic resources with an installed capacity of 5MW or greater, or all wind and solar photovoltaic resources that are directly connected to the IESO-controlled grid.
- "Variable generator," meaning a generator whose generation facility is classified as variable generation.

PART 4 - PROPOSED AMENDMENT

Chapter 9

1. Introductory Rules

- 1.1.2 This chapter sets out the respective rights and obligations of the *IESO* and of *market participants* in determining, billing for and effecting payment in respect of financial obligations arising from the *IESO-administered markets*, other provisions of the *market rules*, the *Electricity Act*, 1998 and the *Ontario Energy Board Act*, 1998, including the following:
 - 1.1.2.1 the energy forward market;
 - 1.1.2.2 the energy market;
 - 1.1.2.3 the *operating reserve market*;
 - 1.1.2.4 congestion management;

1.1.2.5	transmission rights (TRs);
1.1.2.6	the capacity reserve market (if activated by the IESO);
1.1.2.7	operating deviations;
1.1.2.8	ancillary services and reliability must-run contracts;
1.1.2.9	transmission service charges and connection charges collected by the IESO;
1.1.2.10	rural rate protection;
1.1.2.11	the IESO administration charge;
1.1.2.12	penalties and fines;
1.1.2.13	any debt retirement charge;
1.1.2.14	rebates and other payments arising from market power mitigation measures; and
1.1.2.15	the day-ahead commitment process; and-
1.1.2.16	forecasting services relating to variable generation.

4. Non-hourly Settlement Amounts

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4.7G Forecasting for Variable Generation

4.7G.1 The *IESO* may contract for forecasting services relating to *variable generation*.

4.8 Additional Non-Hourly Settlement Amounts

- 4.8.1 The *IESO* shall, at the end of each *energy market billing period*, recover from *market participants*, on a pro-rata basis across all allocated quantities of *energy* withdrawn at all *RWMs* and *intertie metering points* during all *metering intervals* and *settlement hours* within that *energy market billing period*, the following amounts:
 - 4.8.1.1 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 5.3.4 of Chapter 4;
 - 4.8.1.2 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 5.3.4 of Chapter 5;
 - 4.8.1.4 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 8.4A.9 of Chapter 7;
 - 4.8.1.5 any costs incurred in that *energy market billing period* by the *IESO* to acquire *emergency energy* pursuant to section 2.3.3A of Chapter 5; and
 - 4.8.1.6 any reimbursement paid in that *energy market billing period* by the *IESO* pursuant to section 2.1A.9;
 - 4.8.1.7 any funds borrowed by the *IESO* and any associated interest costs incurred by the *IESO* in the preceding *energy market billing period* pursuant to section 6.14.5.2;
 - 4.8.1.8 [Intentionally left blank section deleted]
 - 4.8.1.9 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 4.7B.3;
 - 4.8.1.10 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 4.7C;
 - 4.8.1.11 any compensation paid in that *energy market billing period* by the *IESO* pursuant to section 8.2.6 of Chapter 5;
 - 4.8.1.12 any compensation paid in that *energy market billing period* by the *IESO* under section 4.7D;
 - 4.8.1.13 any compensation paid in that *energy market billing period* by the *IESO* under section 4.7E;
 - 4.8.1.14 any day-ahead *intertie offer* guarantee costs that are not recovered as a component of *hourly uplift* under section 3.9.4; and

- 4.8.1.15 any compensation for Emergency Load Reduction Program participants paid in that energy market billing period by the IESO pursuant to section 4.7F-; and
- 4.8.1.16 any compensation paid in that energy market billing period by the IESO under section 4.7G.;

Settlement Statements 6.

6.3 **Settlement Cycles**

6.3.17 The IESO shall initiate the electronic funds transfer process in accordance with the provisions of section 6.12 so as to ensure that the sums owing to each *market* participant, forecasting entity, and to each transmitter for each real-time market billing period and for each TR market billing period reach the market participant's settlement account or the transmitter's transmission services settlement account, as the case may be, no later than the close of banking business (of the bank at which the *market participant's settlement account* or the transmitter's transmission services settlement account is held) on the IESO payment date.

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6.11 **Payment of Invoices**

6.11.5 The IESO shall, on the IESO payment date specified in the SSPC or, where applicable, determined in accordance with any of sections 6.3.23, 6.3.27, and 6.3.29, determine the amounts available in the IESO settlement clearing account for distribution to market participants or the forecasting entity, and shall, if necessary, borrow funds in accordance with the provisions of section 6.14 if necessary to enable the IESO settlement clearing account to clear no later than 11:00 am on the IESO payment date.

Chapter 11

1. Definitions

forecasting entity means the entity or entities contracted by the *IESO* to provide forecasting services relating to *variable generation*;

<u>variable generation</u> means all wind and solar photovoltaic resources with an <u>installed capacity of 5MW or greater</u>, or all wind and solar photovoltaic resources that are directly connected to the *IESO-controlled grid*;

variable generator means a generator whose generation facility is classified as variable generation;

PART 5 - IESO BOARD DECISION RATIONALE

Centralized forecasting for variable generation is an essential tool for the IESO to maintain system reliability and market efficiency.