

# **Market Rule Amendment Proposal**

### PART 1 – MARKET RULE INFORMATION

Identification No.: MR-00305-R00							
Subject:	Day-Ahe	Day-Ahead Commitment Process (DACP) Reliability Guarantees					
Title:	DACP S	DACP Settlement Variables and Data					
Nature of Proposal:		Alteration	Alteration			Addition	
Chapter:	9			Appendix:			
Sections:	3.1						
Sub-sections proposed for amending:		3.1.2A (r	new); 3.1.2B (ne	w)			

### PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing	Version Date
1.0	Draft for Technical Panel Review	2 Dec 05
2.0	Incorporate Technical Panel and IESO Comments; Submit for Technical Panel Review	9 Dec 05
3.0	Publish for Stakeholder Review and Comment	14 Dec 05
Approved Amer	ndment Publication Date:	
Approved Amer	ndment Effective Date:	

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**

The MR-00305 market rule amendments specify the settlement activities for the determination of reliability guarantee payments and related settlement amounts for the day-ahead commitment process (DACP).

This amendment, MR-00305-R00, specifies the IESO obligations to determine and carry forward to the settlement process the information and data necessary to determine DACP reliability guarantees and other related settlement amounts. The required information and data includes constrained schedule quantities of imports committed in the DACP, import offers into the pre-dispatch of record process as well as information regarding IESO de-commitments and certain import transactions.

These IESO obligations are necessary to ensure transparent, accurate and timely determination of the relevant settlement amounts.

This amendment also proposes that all references to the IMO to in chapter 9 be changed to IESO, to align this chapter of the market rules with the corporation name change under Bill 100.

#### **Background**

The objective of the DACP is to provide incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-Ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-Q00.pdf.

### **Discussion**

This amendment would obligate the IESO to determine the following information related to the DACP:

- Constrained schedules and offers for import transactions scheduled in the pre-dispatch of record (used in day-ahead intertie offer guarantee calculations). Refer to proposed section 3.1.2A.
- Generation facilities, and their constrained schedules, that elected to receive a day-ahead generator cost guarantee (used in day-ahead generation cost guarantee calculations). Refer to sections 3.1.2A

and 3.1.2B.1.

- IESO de-commitments of generation facilities that that elected to receive a day-ahead generator cost guarantee (used in day-ahead generation cost guarantee calculations and Fuel Cost Compensation Amount), Refer to section 3.1.2B.2.
- Bona fide and legitimate import failures (i.e. transactions exempted from day-ahead import failure charge calculations). Refer to section 3.1.2B.3.
- Financially-binding status of day-ahead import transactions (used in intertie offer guarantee offset calculations). Refer to section 3.1.2B.4.

All of this information is necessary to determine the applicable settlement amounts. Other necessary information is provided by market participants and market rules regarding the submission of that information are detailed in other DACP market rules.

### PART 4 – PROPOSED AMENDMENT

## 3.1 Hourly Settlement Variables and Data

- 3.1.1 The <u>IMO-IESO</u> shall determine hourly *settlement amounts* for the *hourly markets* using the hourly price and quantity variables and data described in this section 3.1.
- 3.1.2 The <u>IMO-IESO</u> shall determine <u>energy forward market</u> prices and quantities as provided in Chapter 8, and shall provide the following data from the <u>energy forward market</u> directly to the <u>settlement process:</u>

 $FMQS_{k,h}$  = energy forward market quantity cleared (positive if offer and negative

if bid), in MWh, by market participant k in settlement hour h

FMP<sub>h</sub> = energy forward market price, in \$/MWh, in settlement hour h

### **Day-Ahead Commitment Process Variables, Data and Information**

3.1.2A The *IESO* shall determine the following day-ahead pre-dispatch prices and quantities from the *pre-dispatch of record*, and provide them directly to the *settlement process:* 

pre-dispatch of record constrained quantity scheduled for injection

<u>PDR\_DQSI\_k,h</u> = by market participant 'k' for an import transaction at intertie metering point 'i' during metering interval 't' of settlement hour 'h'

pre-dispatch of record constrained quantity scheduled for injection

PDR DOSI<sub>k h</sub>  $\frac{m.t}{}$  = by market participant 'k' at delivery point 'm' during metering

interval 't' of settlement hour 'h'

<u>PDR\_BE\_k,h</u>  $\equiv$  <u>energy offers</u> submitted into the <u>pre-dispatch of record</u>, represented

as an n by 2 matrix of *price-quantity pairs* for each *market* participant 'k' for each intertie metering point 'i' for eachduring metering interval 't' of settlement hour 'h'

- The *IESO* shall provide directly to the *settlement process*: 3.1.2B
  - 3.1.2B.1 information to identify *market participants* which elected to receive a day-ahead generation cost guarantee for their generation facility;
  - 3.1.2B.2 information to identify any event in which the *IESO* de-commits a generation facility between the release and publication of the predispatch schedules from the pre-dispatch of record and the end of its scheduled minimum run-time where the market participant has elected to receive a day-ahead generation cost guarantee for that *facility*;
  - exemptions from the day-ahead import failure charge described in section 3.8B, for any applicable import transactions scheduled in the pre-dispatch of record where such exemptions have been determined in accordance with chapter 7, section 7.5.8B; and
  - 3.1.2B.4 the financially-binding status of any import transactions in the constrained schedule from the *pre-dispatch of record* that the *market* participant has demonstrated to the satisfaction of the IESO in accordance with the applicable market manual.

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



# **Market Rule Amendment Proposal**

<b>PART 1 – M</b>	[ARKET]	RULE INFORMATIO	ON		
Identification	on No.:	MR-00305-R01			
Subject:	Day-Al	head Commitment	Process (D	ACP) Reliabili	ity Guarantees
Title:	DACP	Intertie Offer Guai	rantees, Ad	djustments and	Offsets
Nature of P	roposal:			☐ Deletion	Addition
Chapter:	9			Appendix:	
Sections:	3.8A				
Sub-section	s propose	ed for amending:	Various		
PART 2 – Pi		L HISTORY – PLEA	SE REFER	то MR-0030	5-R00 Version Date
version	Kea	ason for issuing			version Date
Approved A	mendme	ent Publication Date:			
Approved A	mendme	ent Effective Date:			

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**

This amendment specifies the conditions and calculation of the following settlement amounts:

- Day-ahead intertie offer guarantee;
- Adjustments and offsets to real-time and day-ahead intertie offer guarantee settlement amounts as a result of implied wheel-through transactions.

These guarantee payments, adjustments and offsets are intended to provide incentives for import transactions that are scheduled in the DACP to flow in real-time.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-Q00.pdf.

#### **Discussion**

The proposed day-ahead intertie offer guarantee (DA\_IOG) has the same features as the existing real-time intertie offer guarantee (RT\_IOG) with the following differences:

- The DA\_IOG is based on the constrained schedule quantities from the pre-dispatch of record, while the RT\_IOG is based on the market schedule in the hour-ahead pre-dispatch. This distinction is made as it is the constrained schedule from the pre-dispatch of record that is the "reliability" schedule, and the intent of the DA\_IOG is to satisfy reliability needs.
- The DA\_IOG is calculated based on the minimum of the day-ahead scheduled quantity and the real-time quantity that flowed. This ensures that the guarantee only covers the quantities that actually flowed i.e. the market pays the guarantee on what was delivered.

It is also proposed that if an import transaction is eligible for both the RT IOG and the DA IOG, the

participant would receive the greater of the two IOG payments. An import transaction could be eligible for both as the participant is required to offer in 'real-time' an import transaction that is scheduled in the pre-dispatch of record and is eligible for the DA\_IOG. That single transaction may then, as a result of changing market conditions, become eligible for the RT\_IOG. Receiving the larger of the two guarantee payments is intended to be a further incentive for the import to flow in real-time.

The proposed adjustments and offsets (sections 3.8A.3 and 3.8A.4) are intended to reduce the DA\_IOG payments for import transactions that are not secured in neighbouring markets and where the participant then arranges an export from Ontario to effect a "wheel-through" transaction. Such market behaviours pose no financial risk to the importer and the Ontario market should not be providing guarantees for those import transactions.

In section 3.8A.3 it is proposed to clarify that some of the criteria for determining whether a "wheel-through" transaction are matters of "fact" rather than requiring a determination by the IESO market assessment unit (MAU). Therefore it is proposed that only the criteria specified in section 3.8A.3.2 would be subject to MAU determination, as the other criteria are matters of "fact".

It is also proposed to make clarification changes in these sections to distinguish between the DA\_IOG and RT\_IOG to identify clearly the energy market prices (EMP) that are being used, and to add subtitles to facilitate reader understanding.

### PART 4 – PROPOSED AMENDMENT

# 3.8A Hourly Settlement Amounts for Intertie Offer Guarantees

- 3.8A.1 The *market prices* determined by the *real-time market schedule* provided by the *IMO-IESO* used for the *settlement* of a *boundary entity* associated with an *intertie metering point* will sometimes deviate from:
  - in the case of a import transaction not scheduled in the constrained schedule from the pre-dispatch of record, its accepted offer prices in the pre-dispatch market schedule (the "projected market schedule") in ways that, based on the real-time dispatch process, imply a change to market participant \_k's\_ net operating profits relative to the operating profits implied by the pre-dispatch market schedule for that boundary entity; or
  - in the case of an import transaction scheduled in the constrained schedule from the *pre-dispatch of record*, its accepted *offer* prices in the constrained schedule in the *pre-dispatch of record* in ways that, based on the *real-time dispatch process*, imply a change to *market participant* 'k's' net operating profits relative to the operating profits implied by the constrained schedule in the *pre-dispatch of record* for that *boundary entity*.

-When this occurs but subject to section 3.8A.3, *market participant* 'k' associated with that *boundary entity* for *settlement hour* 'h' shall receive as compensation:

- 3.8A.1.1 in the case of a import transaction not scheduled in the pre-dispatch of record, a real-timean intertie offer guarantee (RT\_IOG) settlement credit for his the import of energy into the IMOIESO-administered markets equal to the cumulative losses resulting from a negative change in implied operating profits over the course of each settlement hour, resulting from such settlement, calculated in accordance with section 3.8A.2; or
- 3.8A.1.2 in the case of an import transaction scheduled in the *pre-dispatch of record*, the larger of a real-time *intertie offer* guarantee settlement credit (RT\_IOG) or a day-ahead *intertie offer* guarantee settlement credit (DA\_IOG) for the import of *energy* into the *IESO-administered markets* equal to the cumulative losses resulting from a negative change in implied operating profits over the course of each *settlement hour*, resulting from such *settlement*, calculated in accordance with section 3.8A.2 or 3.8A.2A as the case may be.

### **Real-Time Intertie Offer Guarantee**

3.8A.2 The <u>real-time hourly-intertie offer</u> guarantee *settlement* credit for *market* participant <u>'k'</u> for *settlement hour* <u>'h'</u> ("<u>RT\_IOG\_k,h</u>") shall be determined by the following equation:

Let 'BE' be a matrix of n *price-quantity pairs* offered by *market participant* 'k'k to supply *energy* from a particular *boundary entity* associated with an *intertie metering point* in the *HOIESO*-administered markets, during settlement hour 'h'h

Let OP(P,Q,B) be a profit function of Price (P), Quantity (Q) and an  $n \times \underline{by} 2$  matrix (B) of *price-quantity pairs*:

$$OP(P,Q,B) = P \cdot Q - \sum_{i=1}^{s^*} P_i \cdot (Q_i - Q_{i-1}) - (Q - Q_{s^*}) \cdot P_{s^*+1}$$

Where:

s\* is the highest indexed row of B such that  $Q_{s*} \le Q \le Q_n$  and where,  $Q_0=0$ 

B is matrix BE (see above)

Using the terms below, let IOG be expressed as follows:

 $IOG_{k,h} = EIM_{k,h}$ 

Where:

EIM<sub>k,h</sub> represents that component of the <u>real-time</u> intertie offer guarantee settlement credit for market participant k during settlement hour h attributable to import of energy into the <u>IMOIESO</u>-administered markets at all relevant intertie metering points i in accordance with the rationale referred to in section 3.8A.1 and is calculated as follows:

$$EIM_{k,h} = \sum_{I} (-1) \bullet MIN \left[ 0, \sum_{T} OP(EMP_h^{i,t}, MQSI_{k,h}^{i,t}, BE) \right]$$

Such that:

I is the set of all relevant intertie metering points '\(\frac{1}{2}\)'

T is the set of all metering intervals 't' in settlement hour 'h'; and

EMP<sub>h</sub><sup>i,t</sup> is the real-time 5-minute *energy market price* at the applicable *intertie metering point* 'i' during *metering interval* 't' of *settlement hour* 'h'

### **Day-Ahead Intertie Offer Guarantee**

3.8A.2A The day-ahead *intertie offer* guarantee *settlement* credit for *market participant* 'k' for *settlement hour* 'h' ("DA\_IOG<sub>k,h</sub>") shall be determined by the following equation:

Let PDR\_BE<sub>k,h</sub><sup>i,t</sup> be the *offer* matrix of n *price-quantity pairs* for the eligible import transaction scheduled in the *pre-dispatch of record* for *market participant* 'k' during metering interval 't' for *settlement hour* 'h' at *intertie metering point* 'i'.

Let OP(P,Q,B) be a profit function of Price (P), Quantity (Q) and an n by 2 matrix (B) of *price-quantity pairs*:

$$OP(P, Q, B) = P \cdot Q - \sum_{i=1}^{s} P_i \cdot (Q_i - Q_{i-1}) - (Q - Q_{s^*}) \cdot P_{s^*+1}$$

Where:

s\* is the highest indexed row of B such that  $Qs* \le Q \le Qn$  and where, Q0=0

B is matrix PDR\_BE<sub>k,h</sub> (see above)

such that the day-ahead intertie offer guarantee is formulated as follows:

DA  $IOG_{k,h}$  (for all intertie metering points) =

-1 x MINIMUM of:

### Zero or

[The sum of all revenues implied by each import transaction valued at the real-time *energy market price* in the applicable *intertie zone* times the minimum of the quantity scheduled for injection in the *pre-dispatch of record* or the *real-time schedule* 

### minus

Those costs represented through the *offers* submitted by the *market participant* for the import transaction scheduled in the *pre-dispatch of record*.]]

$$DA\_IOG_{k,h} = \sum\nolimits_{I} (-1) \bullet MIN \Big[ 0, \sum\nolimits_{T} OP(EMP_h^{\ i,t}, MIN(PDR\_DQSI_{k,h}^{\ i,t}, DQSI_{k,h}^{\ i,t}), PDR\_BE_{k,h}^{\ i,t}) \Big]$$

### where:

'I' is the set of all intertie metering points 'i'.

PDR\_DQSI<sub>k,h</sub><sup>i,t</sup>: is the *pre-dispatch of record* constrained quantity scheduled for injection by *market participant* 'k' for an import transaction at *intertie metering* point 'i' during *metering interval* 't' of *settlement hour* 'h'

DQSI<sub>k,h</sub><sup>i,t</sup> is the real-time constrained quantity scheduled for injection by *market* participant 'k' at intertie metering point 'i' during metering interval 't' of settlement hour 'h'

EMP<sub>h</sub><sup>i,t</sup> is the real-time 5-minute *energy market price* at the applicable *intertie metering point* 'i' during *metering interval* 't' of *settlement hour* 'h'

### Real-Time and Day-Ahead Intertie Offer Guarantee Settlement Credit Offset

- 3.8A.3 The cumulative <u>real-time</u> hourly intertie offer guarantee settlement credits and the <u>cumulative day-ahead intertie offer guarantee settlement credits</u> payable to a market participant for any and all applicable settlement hours in the real-time energy market for energy billing period shall be adjusted by the <u>IMO-IESO</u> in accordance with section 3.8A.4 to nullify such credits where the market assessment unit has determined that:
  - 3.8A.3.1 that *market participant* has submitted one or more *energy offers* and one or more *energy bids* as contemplated by section 3.5.8.1 of Chapter 7 for the same *dispatch interval*; or
  - 3.8A.3.2 the market assessment unit has determined that the market participant has an agreement or arrangement to share the intertie offer guarantee settlement credit with one or more other market participants and they have submitted one or more energy offers and one or more energy bids as contemplated by section 3.5.8.1 of Chapter 7 for the same dispatch interval; or

- 3.8A.3.3 the *market participant* has scheduled one or more day-ahead *energy* offers in the *pre-dispatch of record* at an *intertie metering point* and where:
  - a. the import transaction scheduled in the *pre-dispatch of record* does not have a financially-binding status in the neighbouring *control* area that is the source of the transaction that has been demonstrated to the satisfaction of the *IESO* in the manner described in the applicable *market manual*;
  - b. the same import transaction is subsequently scheduled in the corresponding *metering interval* of the corresponding *settlement hour* in the *real-time market*; and
  - c. the *market participant* submits one or more real-time *energy bids* as contemplated by section 3.5.8.1 of Chapter 7 for the same *dispatch interval*;

and, in <u>all of the above-either</u> cases, at least one of such *energy offers* and one of such *energy bids* is scheduled.

\_-For certainty, any *market participant* shall have recourse to the dispute resolution provisions of section 2 of Chapter 3 if it believes that the *market assessment unit* did not have reasonable grounds for making the determination that the *market participant* had any such agreement or arrangement with another *market participant* as described in section 3.8A.3.2.

3.8A.4 This section describes the combined day-ahead and real-time *intertie offer* guarantee offer settlement credit offset ("IOG Offset") process. Any adjustment made by the *HMO-IESO* under section 3.8A.3 shall be applied with respect to any export transaction in the *market schedule* for *market participant* k in each settlement hour for which market participant k is entitled to receive a real-time or day-aheadn-intertie offer guarantee settlement credit meeting the conditions set out in section 3.8A.3. The total amount offset shall be limited by the cumulative quantity of the export transactions expressed in the *market schedule* for that settlement hour and shall not exceed the total combined real-time and day-ahead intertie offer guarantee settlement credits received for the settlement hour. Where the cumulative quantity of the export transactions expressed in the *market* schedule for the settlement hour is less than the cumulative quantity of imports triggering real-time and day-ahead intertie offer guarantee settlement credits for that same settlement hour, the real-time and day-ahead intertie offer guarantee settlement credits will be offset in ascending order from the import transaction attracting the smallest real-time and day-ahead intertie offer guarantee settlement credit to the import transaction attracting the largest and only up until the point at which the total quantity of import transactions equals the total quantity of export transactions, and may be expressed as described in the general rule that follows.

The offset process described in this section shall apply to:

- real-time *intertie offer* guarantee *settlement* credits meeting the criteria of section 3.8A.3.1; or
- real-time *intertie offer* guarantee *settlement* credits or day-ahead intertie *offer* guarantee *settlement* credits meeting the criteria of section 3.8A.3.3.

For the purposes of this calculation all applicable real-time or day-ahead *intertie* offer guarantee settlement credits meeting the criteria described above, attributable to market participant 'k' for settlement hour 'h' shall be arranged in ascending order, and subject to the following decision rules:

- a. Where a day-ahead *intertie offer* guarantee *settlement* credit and a real-time *intertie offer* guarantee *settlement* credit are associated with the same import transaction, the larger of the two *settlement amounts* will be included in order to reflect the fact that *market participant* 'k' is entitled to receive the higher of these two *settlement amounts* pursuant to section 3.8A.1.;
- b. Where a day-ahead *intertie offer* guarantee *settlement* credit is associated with the import transaction, but no real-time *intertie offer* guarantee *settlement* credit was applicable, the day-ahead *intertie offer* guarantee *settlement credit* will be included;
- c. Where real-time *intertie offer* guarantee *settlement* credit is associated with the import transaction, but no day-ahead *intertie offer* guarantee *settlement* credit is applicable, the real-time *intertie offer* guarantee *settlement* credit will be included;

The ordering of these *settlement amounts* is described in terms of a general rule as follows:

Let 'MI [N,2]' be an N by 2 matrix of n pairs of import schedule quantities scheduled for injection by *market participant* 'k' in the real-time *market schedule* or the constrained schedule from the *pre-dispatch of record* in *metering interval* 't' of *settlement hour* 'h' (MQSI<sub>k,h</sub><sup>i,t</sup>, DQSI<sub>k,h</sub><sup>i,t</sup> or PDR\_DQSI<sub>k,h</sub><sup>i,t</sup> as the case may be) paired with the corresponding component of the *intertie offer* guarantee *settlement* credit (or day-ahead intertie offer guarantee as the case may be) for each *intertie metering point* 'i'.

The general rule is as follows:

Event Type	Matrix MI [Row 'n', Column 1]	Matrix MI [Row 'n', Column 2]
General Rule	MQSI <sub>k,h</sub> <sup>i,t</sup> or MIN (PDR_DQSI <sub>k,h</sub> <sup>i,t</sup> , DQSI <sub>k,h</sub> <sup>i,t</sup> ) associated with the <i>settlement</i> amount selected in column 2.	$\frac{MI[n,2] = MAX}{(IOG_{k,h}^{i,t},DA\_IOG_{k,h}^{i,t})}$ Subject to:

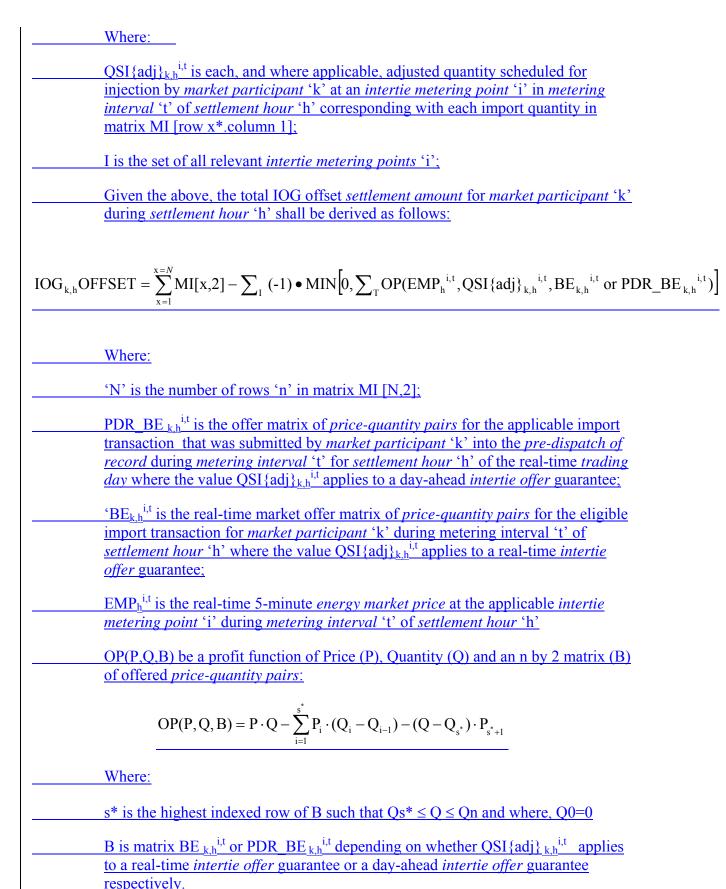
Event Type	Matrix MI [Row 'n', Column 1]	Matrix MI [Row 'n', Column 2]
		$\underline{MI[n,2]} \ge \underline{MI[n-1,2]}$

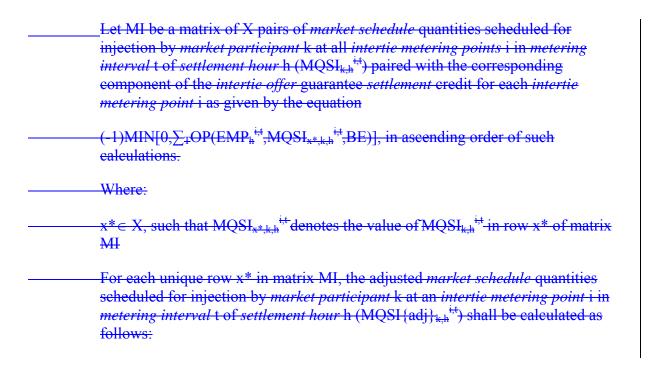
### The outcomes from the general rule are as follows:

Event Type	Matrix MI [Row 'n', Column 1]	Matrix MI [Row 'n', Column 2]
A real-time import transaction not arranged in the day-ahead commitment process meeting the criteria of section 3.8A.3.1	$\underline{MQSI}_{k,h}^{i,t}$	<u>IOG <sub>k,h</sub></u> i.t
Day-ahead import transaction with financially-binding status and a corresponding real-time import transaction with a real-time intertie offer guarantee that is greater than the day-ahead intertie offer guarantee meeting the criteria of section 3.8A.3.3	MQSI <sub>k,h</sub> <sup>it</sup>	IOG <sub>k,h</sub> i.t
Day-ahead import transaction with financially-binding status and a corresponding real-time import transaction with a real-time intertie offer guarantee that is less than the day-ahead intertie offer guarantee meeting the criteria of section 3.8A.3.3	MIN (PDR_DQSI_k,h,t,DQSI_k,h,m,t)	DA-IOG <sub>k,h</sub> <sup>i,t</sup>

For each unique row x\* in matrix MI, the adjusted import schedule quantities by market participant 'k' at an intertie metering point 'i' in metering interval 't' of settlement hour 'h' (QSI{adj}k,hi,t) shall be calculated as follows:

$$QSI\{adj\}_{k,h}^{i,t} = MIN \left[ MI[x^*,1] , MAX \left[ 0, (\sum_{x=1}^{x=x^*} MI[x^*,1] - \sum^{I} MQSW_{k,h}^{i,t}) \right] \right]$$





MQSI{adj}<sub>k,h</sub><sup>i,t</sup> is each, and where applicable, adjusted quantity scheduled for injection in the *market schedule* by *market participant* k at an *intertie metering* point i in metering interval t of settlement hour h corresponding with each quantity MQSI<sub>x\*,k,h</sub><sup>i,t</sup> in matrix MI, row x\*.;

I is the set of all relevant intertie metering points i; and,

all other variables are as defined in section 3.8A.2 such that:

$$\overline{IOG_{k,h}OFFSET} = EIM_{k,h} - \sum_{I} (-1) \bullet MIN \left[0, \sum_{T} OP(EMP_h^{i,t}, MQSI\{adj\}_{k,h}^{i,t}, BE)\right]$$

where function OP and variable EIM<sub>k-h</sub> are as defined in section 3.8A.2

3.8A.5 The cumulative IOG<sub>k,h</sub>OFFSET *settlement amounts* received from *market* participants for each real-time energy market billing period shall be distributed to market participants in accordance with section 4.8.2.3.

3.8A.6 IOG<sub>k,h</sub>OFFSET *settlement amounts* shall be aggregated or disaggregated on *settlement statements* in such manner as shall be determined by the  $\underline{IMOIESO}$ .

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



# **Market Rule Amendment Proposal**

TART I - WIARRET RULE INFURIVATION								
Identification No.: MR-00305-R02								
Subject:	Day-Ahe	ay-Ahead Commitment Process (DACP) Reliability Guarantees						
Title:	DACP In	DACP Import Failure Charges						
Nature of Proposal:			Alteration		☐ Deletion			
Chapter:	9				Appendix:			
Sections:	3.8B (new)							
Sub-section	Sub-sections proposed for amending:							
	<u> </u>							

### PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date
Approved Amer	ndment Publication Date:	
Approved Amer	ndment Effective Date:	

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**

This amendment proposes the settlement charge (the day-ahead import failure charge) that would be applied to a market participant for the failure of an import transaction scheduled through the day-ahead commitment process (DACP) and which does not flow, in whole or in part, in real-time. The amendment specifies the conditions and calculation of the day-ahead import failure charge.

The proposed charge is based on difference between the transaction offer price and the real-time energy price and times the quantity of the deviation.

This charge is intended to provide further incentive to the market participant to ensure that an import committed through the DACP flows in real-time and to provide a transparent market-based consequence to the participant if the transaction does not flow.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-Ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-Q00.pdf.

#### Discussion

The day-ahead import failure charge would apply to any import transaction scheduled in the DACP that does not flow in whole or in part consistent with the DACP schedule i.e. the participant fails to deliver. It is intended to charge the market participant based on the impact on real-time market prices of the failure to deliver and is further incentive for the participant to deliver.

The determination of the import failure charge would occur as follows:

- Determine the amount of the shortfall (if any). Refer to section 3.8B.2.
- Determine if the import transaction is exempt from the charge as the failure was caused by bona fide and legitimate reasons. Refer to section 3.8B.1.2.

• Calculate the settlement amount DA\_IFC<sub>k,h</sub> as a function of the amount of the shortfall and the implied profit function derived based on the prevailing 5-minute energy market price in Ontario and the offer prices for that import submitted into the day-ahead pre-dispatch of record. Refer to section 3.8B.2

The proposed charge formulation uses the difference between the offer price and the real-time Ontario energy price. The offer price is used as that is the guaranteed price for the import offer. The real-time Ontario energy price is used as it is the price of energy that would replace the failed import. The difference between these two prices times the quantity of the import failure is intended to reflect, to some extent, the impact to the market for the import failure.

#### PART 4 – PROPOSED AMENDMENT

### 3.8B Day Ahead Import Failure Charge

- 3.8B.1 The *IESO* shall apply the day-ahead import failure charge specified in section 3.8B.2 to a *market participant* for any quantity of *energy* scheduled for injection at an *intertie metering point* in the constrained schedule from the *pre-dispatch of record* where:
  - 3.8B.1.1 the *market participant* conducting the transaction fails either in whole or in part to schedule a corresponding *dispatch* quantity scheduled for injection in the constrained *real-time schedule* in the corresponding *metering interval* of the corresponding *settlement hour* at the same *intertie metering point;* and,
  - 3.8B.1.2 the *IESO* has not determined, nor has the *market participant*demonstrated to the satisfaction of the *IESO*, that the failure is due to bona fide and legitimate reasons as described in chapter 7, section 7.5.8B of these *market rules*.
- 3.8B.2 For all import transactions scheduled in the *pre-dispatch of record* and meeting the criteria of section 3.8B.1, the day-ahead import failure charge shall be formulated as follows:
  - Let OP(P,Q,B) be a profit function of Price (P), Quantity (Q) and an n by 2 matrix (B) of offered *price-quantity pairs*:

$$OP(P,Q,B) = P \cdot Q - \sum_{i=1}^{s^*} P_i \cdot (Q_i - Q_{i-1}) - (Q - Q_{s^*}) \cdot P_{s^*+1}$$

Where:

s\* is the highest indexed row of B such that  $Q_{s*} \le Q \le Q_n$  and where,  $Q_0=0$ 

### variables, P, Q, and B are detailed in the formulation of DA IFC<sub>k,h</sub> below,

and,

Let DA\_ISD<sub>k,h</sub><sup>i,t</sup> be the day-ahead import scheduling deviation quantity calculated for *market participant* 'k' at *intertie metering point* 'i' during *metering interval* 't' of *settlement hour* 'h' as determined by the formula:

DA import scheduling deviation quantity

MAX (day-ahead import transaction quantity – real-time import transaction quantity, 0)

 $\underline{DA} \underline{ISD}_{k,h}^{\underline{i},\underline{t}}$ 

 $= MAX (PDR_DQSI_{k,h}^{i,t} - DQSI_{k,h}^{i,t}, 0)$ 

Such that the day-ahead import failure charge for *market participant* 'k' during <u>settlement hour</u> 'h' for all <u>intertie metering points</u> 'i' may be formulated with the above components as follows:

 $\underline{DA\_IFC}_{\underline{k},\underline{h}}$ 

For all *intertie metering points* and all *metering intervals* during the *settlement hour*:

### -1 x MAXIMUM of:

[[The sum of all revenues implied by each import transaction valued at the *real-time energy market price* in the Ontario zone times the Day-Ahead Import Scheduling Deviation quantity.

Minus:

Those costs represented through the *offers* for the import transaction scheduled in the *pre-dispatch of record*]

or zero],

subject to a maximum value of the:

day-ahead import scheduling deviation quantity times the MAXIMUM of (zero or the real-time energy market price in the Ontario zone)]

$$DA\_IFC_{k,h} = \sum\nolimits_{l,T}^{l,T} (-1) \times MIN \left[ MAX \left[ 0, OP(EMP_h^{m,t}, DA\_ISD_{k,h}^{i,t}, PDR\_BE_{k,h}^{i,t}) \right], \left( MAX(0,EMP_h^{m,t}) \times DA\_ISD_{k,h}^{i,t} \right) \right]$$

where:

PDR\_BE<sub>k,h</sub><sup>i,t</sup> is the offer matrix of *price-quantity pairs* for the applicable import transaction that was submitted by *market participant* 'k' and scheduled in the *pre-dispatch of record* during *metering interval* 't' for *settlement hour* 'h' of the *real-time trading day* 

EMP<sub>h</sub><sup>m,t</sup> is the real-time 5-minute *energy market price* in the Ontario zone during *metering interval* 't' of *settlement hour* 'h'

I is the set of all intertie metering points 'i'

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



# **Market Rule Amendment Proposal**

PART 1 – MARKET RULE INFORMATION							
Identification No.: MR-00305-R03							
Subject:	Day-Ahe	Day-Ahead Commitment Process (DACP) Reliability Guarantees					
Title:	DACP H	DACP Hourly Uplift Settlement Amounts					
Nature of Proposal:			Alteration			Addition	
Chapter:	9			Appendix:			
Sections:	3.9						
Sub-sections proposed for amending:		3.9.1; 3.9.4 (new)					

### PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date	
Approved Amer	ndment Publication Date:		
Approved Amer	ndment Effective Date:		

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**

This amendment specifies that the IESO would recover the day-ahead intertie offer guarantee amount and distribute the day-ahead import failure charges as hourly uplift settlement amounts. These settlement amounts are "hour specific" and it is appropriate that they be recovered/distributed on that basis.

This amendment also allows the IESO to recover/distribute these amounts as non-hourly settlement amounts until IESO has the software capability to recover/distribute as hourly settlement amounts.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-O00.pdf.

#### **Discussion**

Both the day-ahead intertie offer guarantee and the day-ahead import failure charge are related to hourly transactions and as such should be recovered/distributed on an hourly basis. This amendment would obligate the IESO to do so. Refer to section 3.9.1.

Changes to IESO (and possibly market participant) systems are needed to implement hourly recovery/distribution. It is possible that those system changes will not be in place when the day-ahead commitment process comes into effect. Therefore it is also proposed to allow the IESO to recover/distribute the day-ahead intertie offer guarantee and the day-ahead import failure charge as non-hourly settlement amount. Refer to section 3.9.4. This would allow the IESO to use manual processes to recover/distribute these amounts at the end of each billing period.

### PART 4 – PROPOSED AMENDMENT

# 3.9 Hourly Uplift Settlement Amounts

3.9.1 The hourly *settlement amounts* defined by the preceding provisions of this section 3 will result in an hourly *settlement* deficit that shall be recovered from *market participants* as a whole through the *hourly uplift*. The total *hourly uplift settlement amount* for *settlement hour* 'h' ("HUSAh") shall be determined according to the following equation:

HUSA<sub>h</sub>  $\Sigma_{k}(NEMSC_{k,h}+ORSC_{k,h}+CAPRSC_{k,h}+CMSC_{k,h}+TRSC_{k,h}+RT$  $IOG_{k,h} + DA IOG_{k,h}$  +TCRF<sub>h</sub> -  $\sum_{k}$  (CRSSD<sub>k,h</sub> +  $\sum_{r}$  ORSSD<sub>k,r,h</sub> + DA IF $C_{k,h}$ ) over all 'k' market participants  $NEMSC_{k,h}$  = net energy market settlement credit for market participant 'k' in settlement hour 'h'  $ORSC_{k,h}$  = operating reserve market settlement credit for market participant 'k'k in settlement hour 'h'h  $CAPRSC_{k,h}$  = capacity reserve market settlement credit for market participant 'k'k in settlement hour h'h  $CMSC_{k,h}$  = congestion management *settlement* credit for *market* participant 'k' in settlement hour 'h'h  $TRSC_{k,h} = transmission \ rights \ settlement \ credit \ for \ market$ participant 'k'k in settlement hour 'h'k RT\_IOG<sub>k h</sub> = real-time intertie offer guarantee settlement credit for the market participant associated with that boundary entity 'k'k in settlement hour 'h'h DA  $IOG_{kh}$  = day-ahead *intertie offer* guarantee *settlement* credit for the market participant 'k' in settlement hour 'h' DA IFC<sub>k h</sub>= day-ahead import failure charge for the *market* participant 'k' in settlement hour 'h'  $TCRF_h$  = transmission charge reduction fund contribution in settlement hour 'h'h

- ORSSD<sub>k,r,h</sub> = operating reserve settlement debit for operating deviations for class r reserve for market participant 'k' in settlement hour 'h' h

  The <u>IMO-IESO</u> shall allocate hourly uplift on a pro-rata basis across all allocated
- quantities of energy withdrawn at all RWMs and at all intertie metering points during all metering intervals within each settlement hour in which an hourly uplift settlement amount accrues.

 $CRSSD_{k,h}$  = capacity reserve settlement debit for operating deviations for market participant 'k'k in settlement hour 'h'h

3.9.3 *Hourly uplift* and non-hourly *settlement amounts* shall be disaggregated on *settlement statements* in such manner as shall be determined by the *HMOIESO*.

- 3.9.4 Until such time that the *IESO* has the software capability to include the following settlement amounts:
  - the day-ahead intertie offer guarantee settlement (DA\_IOG\_k,h); or
  - the day-ahead import failure charge (DA IFC<sub>kh</sub>),

in the *hourly uplift settlement amount*, the *IESO* shall recover or distribute such settlement amounts as non-hourly settlement amounts under the provisions of section 4.8.1 or 4.8.2 respectively for an interim period of time commencing with the activation of the day-ahead commitment process.

### PART 5 - IESO BOARD DECISION RATIONALE

Insert Text Here		



# **Market Rule Amendment Proposal**

PART 1 – MARKET RULE INFORMATION								
Identificatio	ion No.: MR-00305-R04							
Subject:	Day-Ahe	Day-Ahead Commitment Process (DACP) Reliability Guarantees						
Title:	Title: Real-Time Generation Cost Guarantee Payments							
Nature of Proposal:  Alteration				☐ Deletion		Addition		
Chapter:	9			Appendix:				
Sections:	4.7B							
Sub-sections	Sub-sections proposed for amending: 4.7B.1; 4.7B.4 (new)							
PART 2 – PROPOSAL HISTORY – PLEASE REFER TO MR-00305-R00								
Version	Reas	son for Issuing			Versio	on Date		

Approved Amendment Publication Date:

Approved Amendment Effective Date:

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**

This amendment proposes to not permit a market participant to receive a real-time generation cost guarantee payment for costs already covered by a day-ahead generation cost guarantee. This ensures that the market is not providing a double guarantee for the same costs.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-O00.pdf.

### **Discussion**

It is possible that a generator may be eligible for both a day-ahead generation cost guarantee and a real-time generation cost guarantee for the same dispatch day. It is necessary to ensure that the market does not provide a double guarantee for the same start-up event and costs. This achieved through the proposed section 4.7B.4.

#### PART 4 – PROPOSED AMENDMENT

# 4.7B Real-Time Generation Cost Guarantee Payments

- 4.7B.1 The <u>IMO-IESO</u> shall determine on a <u>per-start</u> basis, for each <u>generation facility</u> that has met the eligibility criteria for the <u>real-time</u> generation cost guarantee specified in sections 2.2, 5.7 and 6.3A of Chapter 7, the following:
  - 4.7B.1.1 the sum of the following revenues earned in each *dispatch interval* during the period from synchronisation to the end of the *minimum run-time*:

- a. *energy market prices* times the sum of the applicable AQEI and any applicable *physical allocation data*, for *energy* injected up to and including the *minimum loading point*; and
- b. hourly settlement amounts for operating reserve; and
- c. any congestion management *settlement* credit payments resulting from the *facility* being constrained on in order to meet its *minimum loading point*; and
- 4.7B.1.2 the applicable *combined guaranteed costs* submitted by the *market* participant for the specified generation facility for the start to which the revenues determined in accordance with 4.7B.1.1 apply.
- 4.7B.2 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7B.1.1 is greater than or equal to the *combined guaranteed costs* referred to in section 4.7B.1.2, then no additional payments are made in respect of the eligible *generation facility* by the *HMOIESO*.
- 4.7B.3 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7B.1.1 is less than the *combined guaranteed costs* referred to in section 4.7B.1.2, then the *IMO-IESO* shall calculate that difference and shall include that amount in the form of additional payments made in respect of the eligible *generation facility*.
- 4.7B.4 A *real-time* generation cost guarantee shall not be paid for a *generation facility* with respect to costs incurred or revenues accrued by that *generation facility* for which a day-ahead generation cost guarantee applies under section 4.7D.

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



# **Market Rule Amendment Proposal**

PART 1 – MARKET RULE INFORMATION							
Identificatio	Identification No.: MR-00305-R05						
Subject:	Day-Ahe	Day-Ahead Commitment Process (DACP) Reliability Guarantees					
Title:	DACP Day-Ahead Generation Cost Guarantee Payments						
Nature of Proposal: Alteration		☐ Deletion	Addition				
Chapter:	9		Appendix:				
Sections:	s: 4.7D (new)						
Sub-sections proposed for amending:							

### PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date	
Approved Amer	ndment Publication Date:		
Approved Amer	ndment Effective Date:		

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**

This amendment specifies the conditions under which an Ontario generator would able to recover certain costs for commitments made in the DACP. The cost recovery is the day-ahead generation cost guarantee, and is generally comparable to the real-time generation cost guarantee

The costs that could be recovered in the day-ahead generation cost guarantee are the fuel and incremental operating and maintenance costs.

This guarantee is intended to keep a generator whole with respect to costs that could be incurred to meet a commitment established in the DACP, and thereby provide an incentive to generators to accept such a commitments.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-Q00.pdf.

#### Discussion

The proposed day-ahead generation cost guarantee would allow a generator to recover the following costs:

- Fuel costs associated with fuel consumed during start-up, synchronization, and running at its minimum loading point; and
- Incremental variable operating and maintenance costs;

associated with a DACP commitment for that generator.

The payment would be made if the following market revenues for the generator:

• Energy revenues for operation up to and including its minimum loading point to the end of the

minimum run-time;

- CMSC revenues for energy up to up to and including its minimum loading point to the end of the minimum run time; and
- all operating reserve revenues, including CMSC payments during the time period to the end of the minimum run-time:

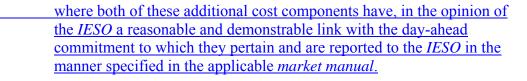
were less than the above costs. The payment would be a "top up" to the level of the incurred costs. If the revenues were equal to or greater than the above costs, no additional payment would be made.

In this way, the generator is kept whole to its costs and the market does not provide a guarantee for costs for which the generator is already compensated.

#### PART 4 – PROPOSED AMENDMENT

### 4.7D Day-Ahead Generation Cost Guarantee Payments

- 4.7D.1 The *IESO* shall determine on a *per-start* basis, for each *generation facility* that has met the criteria set out in chapter 7, sections 2.2C and 6.3B a day-ahead generation costs guarantee for the following.
  - 4.7D.1.1 the sum of the following revenues earned in each *dispatch interval*during the period from synchronisation to the end of the *minimum run-time*:
    - a. energy market prices times the sum of the applicable AQEI and any applicable physical allocation data, for energy injected up to and including the minimum loading point; and
    - b. hourly settlement amounts for operating reserve; and
    - c. any congestion management *settlement* credit payments resulting from the *facility* being constrained on in order to meet its *minimum loading point*; and
  - 4.7D.1.2 the applicable day-ahead *combined guaranteed costs* submitted by the *market participant* for the specified *generation facility* for the start to which the revenues determined in accordance with 4.7D.1.1 apply. In addition to those costs specified in the definition of *combined guaranteed cost*, day-ahead *combined guaranteed costs* may also encompass:
    - a. incremental variable operating costs; and
    - b. incremental variable maintenance costs.



- 4.7D.2 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7D.1.1 is greater than or equal to the sum of the costs referred to in section 4.7D.1.2, then the IESO shall make no additional payments in respect of the eligible *generation facility*.
- 4.7D.3 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7D.1.1 is less than the sum of the costs referred to in section 4.7D.1.2, then the *IESO* shall calculate that difference and shall include that amount in the form of additional payments made in respect of the eligible *generation facility*.

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



# **Market Rule Amendment Proposal**

PART 1 – MARKET RULE INFORMATION						
Identification No.: MR-00305-R06						
Subject:	Day-Ahe	ad	<b>Commitment Process (D</b>	ACP) Reliabili	ity Guaran	itees
Title:	Title: DACP Fuel Cost Compensation Settlement Amount					
Nature of Proposal:		Alteration	☐ Deletion			
Chapter:	9			Appendix:		
Sections: 4.7E (new)						
Sub-sections proposed for amending:						
			·			

## PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date
Approved Amer	ndment Publication Date:	
Approved Amer	ndment Effective Date:	

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**

This amendment would permit a generator to recover certain fuel costs if the generator is first committed through the DACP, accepts the day-ahead generator cost guarantee and then is subsequently de-committed by the IESO. By "de-commit" it is meant that the IESO may, to maintain the reliable operation of the IESO-controlled grid, require a generation facility that was included in the pre-dispatch schedule from the pre-dispatch of record to either desynchronize from the IESO-controlled grid or to not synchronize to the IESO-controlled grid. An example of such costs would natural gas procurement day-ahead that cannot be sold or can only be sold at a loss back to the natural gas market in real-time.

This amendment is intended to keep the generator whole for costs incurred to meet a day-ahead commitment that the generator cannot recover from the market or elsewhere.

## **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR\_00305-Q00.pdf.

#### **Discussion**

The day-ahead fuel cost compensation settlement amount would be triggered under the following circumstances:

- An eligible generation facility is scheduled in and accepts a day-ahead generation cost guarantee in the constrained schedule from the day-ahead pre-dispatch-of-record;
- The IESO subsequently de-commits the facility in the intervening time between the day-ahead predispatch-of-record and the end of the scheduled minimum run-time. By "de-commit" it is meant that the IESO may, to maintain the reliable operation of the IESO-controlled grid, require a generation facility that was included in the pre-dispatch schedule from the pre-dispatch of record to either desynchronize from the IESO-controlled grid or to not synchronize to the IESO-controlled grid.

• As a result of the above, the market participant incurs a demonstrable financial loss on fuel costs associated with operating at its minimum loading point for its minimum run-time.

Only fuel costs for facility operation at the minimum loading point for the minimum run-time are considered as that is the operation that has been committed and guaranteed by the market. It would not be appropriate for the market to provide fuel cost compensation procured for operation beyond what the market has guaranteed.

The IESO, in its determination as to whether or not the market participant incurred a financial loss, would be able to:

- Audit the costs being claimed
- Seek verification that the participant did not mitigate the loss through some action.

These IESO authorities are necessary to ensure that the market pays out only on legitimate costs incurred.

#### PART 4 – PROPOSED AMENDMENT

# 4.7E Day-Ahead Fuel Cost Compensation Settlement Amount

- 4.7E.1 In the event that the *IESO*, in order to maintain reliable operation of the *IESO*-controlled grid requires a generation facility that:
  - was included in the constrained schedule from the *pre-dispatch of record*; and
  - the registered market participant for the generation facility accepted the day-ahead generation cost guarantee;

to either desynchronize from the *IESO-controlled grid* prior to the end of its *minimum run-time* or to not synchronize to the *IESO-controlled grid*, the *market participant* may, in accordance with chapter 7, section 6.3B, claim reimbursement of financial losses related to the procurement of fuel for operation at its *minimum loading point* for its *minimum run-time* and which was not ultimately utilized by that *generation facility* in the manner specified in the applicable *market manual*.

- 4.7E.2 Where the *IESO* determines that claims made under section 4.7E.1 are valid, such compensation claims will be applied to the *market participant's settlement* statements for the last trading day of each real-time market billing period after the determination has been made.
- 4.7E.3 All claims made to the *IESO* pursuant to section 4.7E.1 may be subject to audit by the *IESO* which may obligate the *market participant* to demonstrate or otherwise make a binding declaration that the financial loss being claimed was not mitigated through the actions of:

- the market participant;
- an affiliate or subsidiary of the market participant; or
- any other party that may have a commercial relationship with the *market participant* where that commercial relationship involves compensation of any kind that is directly related to the mitigation of the financial loss being claimed.
- 4.7E.4 The cumulative *settlement amounts* payable to *market participants* for each real-time *energy market billing period* under the provisions of section 4.7E.2 shall be recovered from *market participants* in accordance with section 4.8.1.12.

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here		



Sub-sections proposed for amending:

# **Market Rule Amendment Proposal**

PART 1 – MARKET RULE INFORMATION						
Identification	ion No.: MR-00305-R07					
Subject:	Day-Ahe	Day-Ahead Commitment Process Reliability Guarantees				
Title:	DACP A	dditional Non-Hourly Settl	ement Amounts			
Nature of Proposal: Alteration		Alteration	☐ Deletion			
Chapter:	9		Appendix:			
Sections:	4.8					

4.8.1.11; 4.8.1.12; 4.8.1.13; 4.8.2.8 (all new)

# PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date
Approved Amendment Publication Date:		
Approved Amer	ndment Effective Date:	

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**

This amendment specifies the recovery and distribution of non-hourly settlement amounts related to the DACP. This amendment also allows the IESO to recover/distribute those hourly uplift settlement amounts specified in MR-00305-R03 as non-hourly settlement amounts.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/IESOweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/IESOweb/pubs/mr/MR 00305-O00.pdf.

### **Discussion**

Section 4.8.1 is amended to include the following non-hourly settlement amounts:

- Day-ahead generation cost guarantee; and
- Day-ahead fuel cost compensation amounts;

on the basis of allocated quantities of energy withdrawals for the billing period.

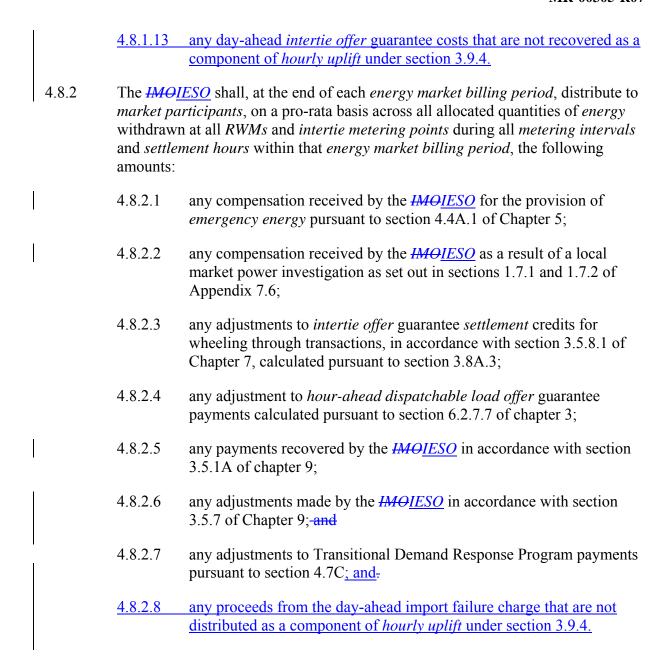
Section 4.8 is also amended to allow for day-ahead intertie cost guarantee recovery on the same basis, if the IESO is unable to recover those settlement amounts as hourly settlement amounts under section 3.9.

Section 4.8.2 is amended to allow for day-ahead intertie failure charge distribution on a non-hourly basis, if the IESO is unable to distribute those settlement amounts as hourly settlement amounts under section 3.9.

## PART 4 – PROPOSED AMENDMENT

# 4.8 Additional Non-Hourly Settlement Amounts

- 4.8.1 The <u>IMOIESO</u> shall, at the end of each <u>energy market billing period</u>, recover from <u>market participants</u>, on a pro-rata basis across all allocated quantities of <u>energy</u> withdrawn at all <u>RWMs</u> and <u>intertie metering points</u> during all <u>metering intervals</u> and <u>settlement hours</u> within that <u>energy market billing period</u>, the following amounts:
  - 4.8.1.1 any compensation paid in that *energy market billing period* by the *IMOIESO* pursuant to section 5.3.4 of Chapter 4;
  - 4.8.1.2 any compensation paid in that *energy market billing period* by the *IMOIESO* pursuant to section 5.3.4 of Chapter 5;
  - 4.8.1.3 any out-of-pocket expenses paid in that *energy market billing period* by the *HMOIESO* pursuant to section 6.7.4 of Chapter 5;
  - 4.8.1.4 any compensation paid in that *energy market billing period* by the *IMOIESO* pursuant to section 8.4A.9 of Chapter 7;
  - 4.8.1.5 any costs incurred in that *energy market billing period* by the *HMOIESO* 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 *IMOJESO* pursuant to section 2.1A.12.2(a);
  - 4.8.1.7 any funds borrowed by the <u>IMOIESO</u> and any associated interest costs incurred by the <u>IMOIESO</u> in the preceding *energy market billing* period pursuant to section 6.14.5.2;
  - 4.8.1.8 any compensation paid in that *energy market billing period* by the *IMOIESO* pursuant to section 4.7A;
  - 4.8.1.9 any compensation paid in that *energy market billing* period by the *IMOIESO* pursuant to section 4.7B.3;-and
  - 4.8.1.10 any compensation paid in that *energy market billing period* by the *IMOIESO* pursuant to section 4.7C<sub>2</sub>-
  - 4.8.1.11 any compensation paid in that *energy market billing period* by the *IESO* under section 4.7D;
  - 4.8.1.12 any compensation paid in that *energy market billing period* by the *IESO* under section 4.7E; and



### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			



Sections:

1

Sub-sections proposed for amending:

PART 1 – MARKET RULE INFORMATION

# **Market Rule Amendment Proposal**

Identification	dentification No.: MR-00305-R08					
Subject:	Day-Aho	Day-Ahead Commitment Process (DACP) Reliability Guarantees				
Title:	DACP Consequential Amendments					
Nature of Proposal:		Alteration	☐ Deletion			
Chapter:	9		Appendix:			

1.1.2.15 (new)

## PART 2 - PROPOSAL HISTORY - PLEASE REFER TO MR-00305-R00

Version	Reason for Issuing	Version Date
Approved Amer	ndment Publication Date:	
Approved Amer	ndment Effective Date:	

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**

This amendment would include the day-ahead commitment process (DACP) in the scope of the Chapter 9 market rules.

## **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-Q00.pdf.

#### **Discussion**

Section 1.1 of chapter 9 outlines the scope of the chapter 9 market rules. That scope would now include the day-ahead commitment process, during the time that the process is activated by the IESO. This qualification is necessary to identify that the DACP may not always be functioning.

#### PART 4 – PROPOSED AMENDMENT

# 1.1 Application and Purpose

- 1.1.1 This chapter applies to:
  - 1.1.1.1 the *IMO</del><u>IESO</u>; and*
  - 1.1.1.2 market participants.
- 1.1.2 This chapter sets out the respective rights and obligations of the <u>IMOIESO</u> and of market participants in determining, billing for and effecting payment in respect of financial obligations arising from the <u>IMOIESO</u>-administered markets, other

Board Act, 1998, including the following: the energy forward market; 1.1.2.1 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 *HMOIESO*); 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 **IMO**IESO; 1.1.2.10 rural rate protection; 1.1.2.11 the **IMO***IESO* administration charge; 1.1.2.12 penalties and fines; 1.1.2.13 any debt retirement charge; and 1.1.2.14 rebates and other payments arising from market power mitigation measures; and-1.1.2.15 the day-ahead commitment process while activated by the *IESO*.

provisions of the *market rules*, the <u>Electricity Act, 1998</u> and the <u>Ontario Energy</u>

## PART 5 - IESO BOARD DECISION RATIONALE

Insert Text Here		



# **Market Rule Amendment Proposal**

PART I – M	IARKET K	CULE INFORMATIC	N			
Identification	on No.: MR-00305-R09					
Subject:	Day-Ahe	Day-Ahead Commitment Process Reliability Guarantees				
Title:	DACP R	Reliability Guarant	ee Definitions			
Nature of P	roposal:		☐ Deletion	Addition		
Chapter:	11		Appendix:			
Sections:						
Sub-section	s proposed	I for amending:				
			SE REFER TO MR-00305-			
Version	Reas	son for Issuing		Version Date		
	1					
Approved A	mendmen	t Publication Date:				

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**

This amendment proposes definition for the pre-dispatch of record and a revised definition of combined generation costs. These defined terms are used extensively in the day-ahead commitment process and the real-time generation cost guarantee.

### **Background**

The objective of the DACP is to provide maximum incentives for imports scheduled in the day-ahead to flow in real-time and to ensure sufficient internal generation resources are on-line in real-time to satisfy reliability needs.

For further information on the DACP please refer to the document "IESO Reliability Measures 2006 Day-ahead Commitment Process with Reliability Guarantees" which can be found at:

http://www.ieso.ca/imoweb/pubs/consult/dayAhead/da 20051128-rm v2.0-2006.pdf

For further information on the scope of the market rules related to the DACP reliability guarantee and settlement activities, please refer to the amendment submission MR-00305-Q00 which can be found at:

http://www.ieso.ca/imoweb/pubs/mr/MR 00305-O00.pdf.

### **Discussion**

The pre-dispatch of record is the essential sub-process of the day-ahead commitment process that provides most of the necessary schedules necessary to settle the DACP settlement amounts included in this amendment. The proposed definition is intended to reflect this.

The proposed revised definition of combined guaranteed costs is intended to remove the implication that the generator must operate at exactly its minimum loading point for its minimum run-time in order to be eligible for the generation cost guarantee. The proposed definition:

- Releases the IESO and market participant from the obligation of ensuring that the submission of combined guaranteed costs correspond exactly with the facility's minimum loading point
- Does NOT change the fact that submitted combined guaranteed costs must reflect only those costs actually incurred
- Does NOT relieve the registered market participant for the generation facility from its responsibility to follow dispatch instructions

### PART 4 – PROPOSED AMENDMENT

<u>pre-dispatch of record</u> means a stage of the day-ahead commitment process where the resulting constrained schedule is used in the calculation of various day-ahead settlement amounts

combined guaranteed costs means all fuel costs incurred by a generation facility up to and including its minimum loading point, as defined in the applicable market manual, including costs incurred by a that generation facility to achieve synchronization and once synchronized with the IMOIESO-controlled grid to move to the generation facility's minimum loading point and once at its minimum loading point to stay at that point for the generation facility's specified minimum run-time;

### PART 5 – IESO BOARD DECISION RATIONALE

Insert Text Here			