

#### PART 1 - MARKET RULE INFORMATION

| Identification No.: M               |  | MR-00316-R00 |           |          |  |
|-------------------------------------|--|--------------|-----------|----------|--|
| Subject:                            | Day-Ahead Commitment Process                   |              |           |          |  |
| Title:                              | Minimum Generation Block Run-Time - Definition |              |           |          |  |
| Nature of Proposal:                 |  | Alteration   | Deletion  | Addition |  |
| Chapter:                            | 11   |              | Appendix: |          |  |
| Sections:                           | Definitions                                    |              |           |          |  |
| Sub-sections proposed for amending: |  |              |           |          |  |

| Version                              | Reason for Issuing        |                    | Version Date |
|--------------------------------------|---------------------------|--------------------|--------------|
| 1.0                                  | Draft for Technical Panel | review             | 06 April 06  |
| 2.0                                  | Publish for Stakeholder F | Review and Comment | 11 April 06  |
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| 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

It is proposed to amend the market rules to define a minimum generation block run-time for generation facilities. This definition is necessary to ensure that the IESO applies constraints to generation facilities during the day-ahead commitment process that accurately reflect the capability of the facility.

Application of accurate constraints and the subsequent identification and commitment of other resources would ensure that day-ahead commitments and the resulting guarantee payments are made on criteria that are consistent with the intent of the DACP.

#### Background

Recent amendments to the Market Rules allow for the implementation of the pre-dispatch scheduling and commitment component of the Day-Ahead Commitment Process (DACP). Following a review of DACP procedures, the IESO has determined that some DACP processes were developed using an incorrect definition of generation facility minimum run time. This resulted from an error in late 2004, when the IESO did not update the published market rule documents to include an approved amendment, MR-00260. This approved amendment changed the definition of minimum run-time in order to facilitate the real-time spare generation on-line settlement processes.

The DACP market rules obligate the IESO to constrain a generation facility to its minimum loading point for its minimum run-time if the generator chooses to accept the day-ahead generation cost guarantee. The correct definition of minimum run-time is "the time period specified by the market participant, for which a generation facility, having synchronized to the IESO-controlled grid must run in accordance with the technical requirements of the facility". DACP processes were developed using an outdated definition of minimum run-time. This earlier version defined minimum run-time as "the time period specified by the market participant, for which a generation facility <u>having reached its minimum loading point</u> must run in accordance with the technical requirements of the facility".

By applying a constraint to the generation facility to operate at its minimum loading point beginning at the time of synchronization, the time required for the generation facility to achieve the minimum loading point is ignored. The time to ramp from synchronization to minimum loading point can be significant (e.g. one to two hours). As a result, a generation facility would receive dispatch instructions (i.e. operate at minimum loading point) which are impossible to comply with during the facility's ramp-up. In addition, all pre-dispatch schedules following the application of such constraints will be determined on the generation facility immediately moving to its minimum loading point upon synchronization. The resulting day-ahead schedule for the generation facility would over-state the energy production from the facility and would potentially prevent other required generation facilities or imports from being scheduled and committed in the DACP.

The primary objective of the DACP is to provide greater assurance that sufficient resources are committed day-ahead to meet forecast reliability needs in real-time. By applying constraints that are

not achievable and over-state the capabilities of generation facilities, the IESO could possibly undercommit other resources. This result would be contrary to the primary objective of the day-ahead commitment process.

The IESO has corrected the published market rules document to include the correct definition of minimum run-time.

#### Discussion

The market rules should be amended to allow the IESO to apply constraints to generators for the minimum period of time that they must run after reaching their minimum loading point in order to meet the technical requirements of the facility. It is proposed to define this time period as a generator's "minimum generation block run-time." By applying constraints on this basis, the IESO will be operating in a manner consistent with the procedures communicated to stakeholders throughout the development of the DACP.

#### PART 4 – PROPOSED AMENDMENT

 1.1.1.241
 minimum generation block run-time means the minimum period specified by the market participant, for which a generation facility having reached its minimum loading point must run in accordance with the technical requirements of the facility.

## PART 5 – IESO BOARD DECISION RATIONALE



#### PART 1 - MARKET RULE INFORMATION

| Identificatio                       | on No.:   | MR-00316-R01 |        |           |  |          |
|-------------------------------------|---|--------------|--------|-----------|--|----------|
| Subject:                            | Day-Ahead Commitment Process  |              |        |           |  |          |
| Title:                              | Minimum Generation Block Run-Time – Generation Facility Registration Data |              |        |           |  |          |
| Nature of Proposal:                 |   |              |        | Deletion  |  | Addition |
| Chapter:                            | 7   |              |        | Appendix: |  |          |
| Sections:                           | 2.2   |              |        |           |  |          |
| Sub-sections proposed for amending: |   |              | 2.2.6B |           |  |          |

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- 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 obligate market participants to provide the minimum generation block run-time data as facility registration data.

These amendments are required to ensure that day-ahead commitments and the resulting guarantee payments are made on criteria that are consistent with the intent of the DACP.

#### Background

Please refer to MR-00316-R00 attached.

#### Discussion

It is proposed to obligate generators to submit their minimum generation block run-time to the IESO. This information should be provided to the IESO as registration data. The requirement to submit this information as registration data is appropriate, given that the minimum generation block run-time is determined by the design characteristics of the facility. This data is static, and does not vary from day to day. This amendment is proposed for Chapter 7, 2.2.6B. The provision of this data will enable the IESO to schedule and commit generators in a manner consistent with the design of the DACP. This will be consistent with the procedures communicated to stakeholders throughout the development of the DACP.

#### PART 4 – PROPOSED AMENDMENT

2.2.6B A registered market participant for a dispatchable generation facility shall submit to the *IESO* the minimum loading point, minimum generation block run-time and the minimum run-time for the generation facility if the minimum loading point for the facility is greater than zero MW and if the minimum generation block run-time and minimum run-time for the facility are greater than one hour.

#### PART 5 - IESO BOARD DECISION RATIONALE

# PART 5 – IESO BOARD DECISION RATIONALE



#### PART 1 - MARKET RULE INFORMATION

| Identification No.: M               |         | MR-00316-R02   |            |           |  |          |
|-------------------------------------|---------|--|------------|-----------|--|----------|
| Subject:                            | Day-Ahe | y-Ahead Commitment Process   |            |           |  |          |
| Title:                              |         | Minimum Generation Block Run-Time – Eligibility for Day-Ahead Generation Cost<br>Guarantee |            |           |  |          |
| Nature of Proposal:                 |         | Alteration   | Alteration |           |  | Addition |
| Chapter:                            | : 7     |  |            | Appendix: |  |          |
| Sections:                           | 2.2     |  |            |           |  |          |
| Sub-sections proposed for amending: |         |  | 2.2.C.1.4  |           |  |          |

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- 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 better reflect the design principles of the day-ahead commitment process (DACP), by including the provision of minimum generation block run-time as one of the criteria for eligibility for the day-ahead generation cost guarantee.

These amendments are required to ensure that day-ahead commitments and the resulting guarantee payments are made on criteria that are consistent with the intent of the DACP.

#### Background

Please refer to MR-00316-R00 attached.

#### Discussion

It is proposed to include the provision of minimum generation block run-time to the IESO as one of the criteria for eligibility for the day-ahead generation cost guarantee. This amendment is proposed for Chapter 7, 2.C.1.4. The provision of this data will enable the IESO to schedule and commit generator facilities in a manner consistent with the design of the DACP. This will be consistent with the procedures communicated to stakeholders throughout the development of the DACP.

## PART 4 – PROPOSED AMENDMENT

# 2.2C Generation Facility Eligibility for the Day-Ahead Generation Cost Guarantee

- 2.2C.1 A *registered market participant* for a *generation facility* shall be eligible for the guarantee of certain elements of the *facility's* costs, calculated in accordance with section 4.7D of Chapter 9, provided the following criteria are met:
  - 2.2C.1.1 the *facility* is not a *quick-start facility*;
  - 2.2C.1.2 the *facility* is a dispatchable *generation facility*;
  - 2.2C.1.3 the *facility* is located within Ontario; and

2.2C.1.4 the *registered market participant* has, according to the timelines and in the form specified in the applicable *market manual*, submitted to the *IESO* the following information for the *generation facility*: the *combined guaranteed costs*; the *minimum run-time*; the *minimum loading point*; the *minimum generation block run-time* and any incremental operating and maintenance costs associated with the *facility* start-up and *minimum run-time* for that *facility* as determined in the *pre-dispatch of record* and the *IESO* accepts the data as reasonable.

## PART 5 – IESO BOARD DECISION RATIONALE



#### PART 1 - MARKET RULE INFORMATION

| Identification No.: MR-00316-R03 |  |                 |            |            |  |          |
|----------------------------------|--|-----------------|------------|------------|--|----------|
| Subject:                         | Day-Ahead Commitment Process   |                 |            |            |  |          |
| Title:                           | Minimum Generation Block Run-Time - Pre-Dispatch Scheduling and Commitment |                 |            |            |  |          |
| Nature of Proposal:              |  |                 |            | Deletion   |  | Addition |
| Chapter:                         | 7  |                 |            | Appendix:  |  |          |
| Sections:                        | 5.8  |                 |            |            |  |          |
| Sub-section                      | s proposed   | l for amending: | 5.8.2, 5.8 | 3.3. 5.8.5 |  |          |

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- 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 better reflect the design principles of the day-ahead commitment process (DACP), by replacing references to minimum run-time with minimum generation block run-time. By making these changes, the rules will accurately reflect the time periods in which day-ahead commitments are made under the DACP. It is also proposed that the IESO should be obligated to apply constraints to generators accepting the day-ahead generation cost guarantee beginning in the first hour in which they are expected to achieve their minimum loading point.

These amendments are required to ensure that day-ahead commitments and the resulting guarantee payments are made on criteria that are consistent with the intent of the DACP.

#### Background

Please refer to MR-00316-R00 attached.

#### Discussion

It is proposed to amend Chapter 7, 5.8 of the market rules by replacing references to minimum run-time with minimum generation block run-time. Additionally, it is proposed that 5.8.3 should be revised to obligate the IESO to apply constraints to generators accepting the day-ahead generation cost guarantee beginning in the first hour in which they are expected to achieve their minimum loading point. Such constraints will then continue for the generator's minimum generation block run-time. This will be consistent with the procedures communicated to stakeholders throughout the development of the DACP.

PART 4 – PROPOSED AMENDMENT

# 5.8 The Day-Ahead Commitment Pre-Dispatch Scheduling Process

- 5.8.1 The *IESO* shall determine *pre-dispatch schedules*, without considering export *bids*, for the *dispatch hours* of the next *dispatch day* each hour starting from 11:00 EST, until the constrained schedules from the *pre-dispatch of record* are *published* under section 5.8.2.
- 5.8.2 The *IESO* shall release the constrained schedules and associated projections of *market schedules* and *publish market prices* determined from the *pre-dispatch of record* no later than 15:00 EST in accordance with section 5.5.
- 5.8.3 With the *registered market participant's* consent, the *IESO* may, in order to maintain the reliable operation of the *IESO-controlled grid* on the next *dispatch day*, during the time period from 11:00 EST to the release of the constrained schedules from the *pre-dispatch of record*, manually apply a constraint to a *generation facility* that submitted *offers* into the day-ahead commitment process to ensure that the scheduled output from that *facility* in the constrained schedule resulting from the *pre-dispatch of record* will meet or exceed its *minimum loading point* for at least its *minimum generation block run-time*. *minimum run-time* Such constraints shall commenceing on the first scheduled hour of operation on the next dispatch day in whichfor that *facility* is expected to achieve its *minimum loading point*. Subject to section 5.8.6, when the *IESO* manually applies these constraints to the *pre-dispatch of record*, the identical constraints will be respected in future iterations of the *pre-dispatch schedule* and in the *real-time schedule*.
- 5.8.4 A registered market participant whose facility is eligible under section 2.2.C for the day-ahead generation cost guarantee and whose facility is included in the constrained schedule from the pre-dispatch of record and is scheduled for at least its <u>minimum generation block run-time</u> <u>minimum run-time</u> at no less than its minimum loading point, will accept the guarantee for its facility unless the registered market participant declines the guarantee by so notifying the IESO in accordance with the applicable market manual. The registered market participant shall provide this notification to the IESO by 15:15 EST of the pre-dispatch day.
- 5.8.5 Subject to section 5.8.6 the *IESO* shall ensure that the scheduled output from a *facility* that was included in the constrained schedule from the *pre-dispatch of record* for which the *registered market participant* has accepted the day-ahead cost guarantee under section 5.8.4, will meet or exceed its *minimum loading point* for the *minimum generation block run-timeminimum run-time* in future iterations of the *pre-dispatch schedule* and in the *real-time schedule*.

## PART 5 – IESO BOARD DECISION RATIONALE

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