

Stakeholder Feedback and IESO Response

Market Renewal – Energy Project Implementation Market Settlements, Metering and Billing – January 29, 2024

The IESO published amendments to the Market Rules and Market Manuals to incorporate Market Settlements, Metering, and Billing changes on January 29, 2024. The IESO received written feedback from:

Evolugen by Brookfield Renewable

Ontario Power Generation

Related presentation materials and recorded sessions have been posted on the IESO [stakeholder engagement webpage](#). If interested, please visit the webpage to reference the feedback submissions directly as the below uses excerpts and/or a summary of the stakeholder feedback for the purposes of providing an IESO response.

Please contact IESO Engagement at engagement@ieso.ca if you have any questions.

Evolgen by Brookfield Renewable

Table 1 | Evolgen by Brookfield Feedback and IESO Responses

Feedback	IESO Response
<p data-bbox="181 304 812 430"><u>Market Rules, Chapter 9: Market Settlements, Market Billing and Funds Administration</u></p> <p data-bbox="181 441 812 483">On regulation services:</p> <ul data-bbox="181 483 812 1409" style="list-style-type: none"><li data-bbox="181 483 812 1113">• In either Market Rule Chapter 9 or Market Manual 5.5, we failed to locate language that indicates how regulation services will be treated and settled in the new market design. Assuming that market participants would be submitting their basepoint offers in the Day-Ahead Market with an email documenting their regulation hours and ranges, would economical generation basepoints then clear the Day-Ahead Market, and be assigned a financially binding schedule? In turn, we assume that the IESO would control the regulation setpoint in Real-Time, and thus the MW output of the units committed to provide regulation service. In this context, mechanisms need to be put in place in the Market Rule and/or Market Manual’s settlement process, or the contracts themselves, to make the market participant whole when the IESO exercises control.<li data-bbox="181 1113 812 1409">• We also note that Operating Reserves’ pricing used in the settlement process of the regulation contracts is not mentioned in the updated Manual. Please confirm if this pricing would be defined and settled via the regulation contract directly, and that its omission in the Market Manual is intentional.	<p data-bbox="812 304 1487 546">The settlement of regulation service is in accordance with regulation services agreement, and as such is intentionally not part of the Market Rules and Market Manuals. We have directed these comments to the appropriate IESO contact for these agreements.</p>

Ontario Power Generation

Table 2 | Ontario Power Generation Feedback and IESO Responses

Feedback	IESO Response
<p><u>Market Manual 5.5</u></p> <p>Section 2.1</p> <p>Section 2.1 Two Settlement System. There is no mention of the Recalculated Settlement Statements (RCSS implemented in May 2023) in the Settlement statements section - these should be mentioned in this section.</p>	<p>The IESO has made the necessary updates to resolve this concern. It will be reflected in the Final Alignment batch.</p>
<p><u>Market Manual 5.5</u></p> <p>Table 2-13</p> <p>Table 2-13: Real-Time Make-Whole Payment Settlement Amounts – This table should include the following Charge Types:</p> <ul style="list-style-type: none">• CT1908 - Real-Time Make-Whole Payment – Operating Reserve Non- Accessibility Lost Cost Reversal (RT_OLCR)• CT1909 -Real-Time Make-Whole Payment – Operating Reserve Non- Accessibility Lost Opportunity Cost Reversal (RT_OLOCRC)	<p>These charge types can be found in section 2.29 under their respective headings. More specifically, CT 1908 and CT 1909 can be found in table 2-42.</p>
<p><u>Market Manual 5.5</u></p> <p>Table 2-17</p> <p>Table 2-17: Real-Time Generator Offer Guarantee Settlement Amounts – This table should include the following Charge Type:</p> <ul style="list-style-type: none">• CT1915 - Real-Time Generator Offer Guarantee – Operating Reserve Non- Accessibility Reversal	<p>This charge type can be found in section 2.29 under its respective heading. More specifically, CT 1915 can be found in table 2-44.</p>
<p><u>Charge Types and Equations</u></p> <p>Section 2.2.2</p> <p>Section 2.2.2. Physical Market Charge Types and Equations (pg 36/401) – Typo in Charge Type CT208 “10-Minute Non-Spinning Non-Accessibility Settlement Amount”.</p>	<p>The IESO has made the necessary updates to correct this typographical error. It will be reflected in the Final Alignment batch.</p>

Charge Types and Equations

Active and Inactive Tables

The Active and Inactive IESO Charge Types and Equations Tables are confusing to use when a CT is being updated/retired for MRP, and we request the IESO to more clearly and easily identify when a CT is being updated/retired for MRP.

As an example, CT186 appears on both the active and inactive tables, and we understand that CT186 "Intertie Failure Charge Rebate" is inactive but CT186 "Intertie Failure Charge Uplift" is active. A similar scenario is CT1114 and CT1115.

The IESO has added additional information to clarify the MRP amendments. It will be reflected in the Final Alignment batch.

Charge Types and Equations

CT208

CT 208, it should be RT_QSOR(r2) instead of AQOR

The IESO has made the necessary updates to correct this typographical error. It will be reflected in the Final Alignment batch.

<p>208 MRP updated</p>	<p>10-Minute Non-Spinning Accessibility Settlement Amount (ORSCB)</p>	<p>MR Ch.9 ss.3.10.1, 3.10.5, 3.10.16</p>	<p>For dispatchable loads and non-aggregated generation resources $ORSCB_{i,t}^{d,l} = \text{Min}(0, [\text{Max}(0, TAOR_{i,t}^{d,l} - RT_QSOR_{i,t}(r_2) - AQOR_{i,t}^{d,l}) \times RT_PROG_{i,t}^{d,l}])$</p> <p>Where:</p> <p>1. For a dispatchable electricity storage resource or a non-aggregated dispatchable generation resource. a. $TAOR_{i,t}^{d,l} = \text{Max}(0, MAX_CAP_{i,t}^{d,l} - AQE_{i,t}^{d,l})$ b. $MAX_CAP_{i,t}^{d,l}$ is the maximum limit used in determining the real-time schedule in the dispatch scheduling and pricing process</p> <p>2. For a dispatchable load. a. $TAOR_{i,t}^{d,l} = \text{Max}(0, AQEW_{i,t}^{d,l} - MC_{i,t}^{d,l})$ b. $MC_{i,t}^{d,l}$ is the minimum consumption level, equal to the quantity in the price-quantity pair where the bid price is the maximum market clearing price</p> <p>For aggregated generation resources non-pseudo-units:</p>
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Charge Types and Equations

CT1900++

CT 1900+, document shows RT_MWP and the variable is RT_ELC, RT_OLC, etc (Usually the formula matches with the variable name in Charge Code, but those 19xx charge codes do not). Example below.

The IESO has updated the charge type name to ensure better alignment. It will be reflected in the Final Alignment batch.

<p>1901 MRP new</p> <p>Real-Time Make-Whole Payment - Log Cost for 10-Minute Spinning Reserve (RT_MWP)</p>	<p>Ch.9 ss.3.5.6, 3.5.9, and 3.5.10</p>	<p>Dispatchable Generation Resources not associated with a Pseudo-Unit $RT_OLC_{i,t}^{d,l} = -1 \times [OP(RT_PROG_{i,t}^{d,l}, \text{Max}(DAM_QSOR_{i,t}(r_2), RT_QSOR_{i,t}(r_2), BOR_{i,t}^{d,l})) - OP(RT_PROG_{i,t}^{d,l}, \text{Max}(RT_OR_IC_EOP_{i,t}(r_2), DAM_QSOR_{i,t}(r_2), BOR_{i,t}^{d,l})))] / 12$</p> <p>Dispatchable Generation Resources Associated with a Pseudo-Unit: Combustion Turbine $RT_OLC_{i,t}^{d,l} = -1 \times [OP(RT_PROG_{i,t}^{d,l}, \text{Max}(DAM_QSOR_{i,t}(r_2), RT_QSOR_{i,t}(r_2), RT_OR_DIPC_{i,t}^{d,l})) - OP(RT_PROG_{i,t}^{d,l}, \text{Max}(RT_OR_IC_EOP_{i,t}(r_2), DAM_QSOR_{i,t}(r_2), RT_OR_DIPC_{i,t}^{d,l})))] / 12$</p> <p>Dispatchable Generation Resources Associated with a Pseudo-Unit: Steam Turbine $RT_OLC_{i,t}^{d,l} = -1 \times [OP(RT_PROG_{i,t}^{d,l}, \text{Max}(DAM_QSOR_{i,t}(r_2), RT_QSOR_{i,t}(r_2), RT_OR_DIPC_{i,t}^{d,l})) - OP(RT_PROG_{i,t}^{d,l}, \text{Max}(RT_OR_IC_EOP_{i,t}(r_2), DAM_QSOR_{i,t}(r_2), RT_OR_DIPC_{i,t}^{d,l})))] / 12$</p>	<p>Interval Due MP TBD</p>
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