

---

# End-to-End Testing: Test Scenario 5 – Settlement Mitigation: Make Whole Payment

Version 2.0  
January 31, 2025



# Table of Contents

<b>1. Introduction</b>	<b>2</b>
<b>2. Scenario Description</b>	<b>2</b>
<b>3. What is out of scope for this test scenario?</b>	<b>2</b>
<b>4. Impacted Participation Types</b>	<b>2</b>
<b>5. Key Dates for Market Participants</b>	<b>3</b>
<b>6. Test Case(s) under Test Scenario 2</b>	<b>4</b>
<b>Additional Resources</b>	<b>10</b>

# 1. Introduction

This document provides an overview of **Test Scenario 5: Settlement Mitigation: Make Whole Payment** under the End-to-End Testing phase of the Market Renewal Program.

This document includes the following information:

- a short description of the test scenario as it relates to Market Rules Chapter 0.9 s.5.1 & Appendix 9.4 and Market Manual Part 0.5.5 s.4.4,
- out of scope items and activities during this test execution,
- the resource and participation types that are recommended to execute this test scenario,
- key dates for impacted Market Participants, and
- the test cases along with the steps that users will execute to verify this test scenario.

## 2. Scenario Description

Market Participants can test the impacts of the mitigation of GOG and non-GOG make whole payments on their resource operation and settlement statements. Market Participants are to coordinate with the IESO through email for this test phase. The IESO will place constraints into the system on the desired resources while the market participants artificially increase their offer prices, resulting in mitigation of the make whole payments. This scenario can be tested in both the day-ahead and pre-dispatch time frames.

Market Participants will verify the results of this scenario through the settlement results and operational reports.

## 3. What is out of scope for this test scenario?

There are no out of scope steps in the execution of this test scenario.

## 4. Impacted Participation Types

This test scenario is recommended for the following participation types:

- Dispatchable Generators and,

- Dispatchable Electricity Storage Participants as a Load and as a Generator.

## 5. Key Dates for Market Participants

This scenario will be simulated under Week 3 and Week 4 of the End-to-End Testing Phase:

- This scenario will be simulated anywhere between **February 3, 2025** to **February 5, 2025** for Normal Demand and between **February 11, 2025** to **February 14, 2025** for High Demand.
- Market Participants will notice the impact of this test scenario on the preliminary settlement statements and data files that are generated 6 business days after the trade date, and final settlement statements and data files that are generated 5 business days after the preliminary statement is issued.
- **An example:** Market Participants will notice the impact of this test scenario on the preliminary settlement statements and data files that are generated on **February 12, 2025**, and final settlement statements and data files that are generated on **February 20, 2025** for the **February 4, 2025** trade date. Market Participants can provide alternative measurement data from **February 13, 2025 to February 14, 2025** for this test scenario.

## 6. Test Case(s) under Test Scenario 5

### Prerequisites:

1. Reference Level values need to exist in Online IESO Sandbox for the selected Quick Start (QS) resource.
2. Valid login credentials for EMI/MIM, Online IESO, IESO Confidential Reports site, Dispatch Services.
3. Market Participant has provided the following details to the IESO 1 business day in advance of trade date for RT-only constraints (2 business days if to be included in DAM):
  - Resource to be constrained with reliability constraint (REL, DARCMT, PDRMCT)
  - What timeframe will the constraints be applicable for (DAM and/or RT)
  - Dispatch date and time
4. If the "RTEM" data is being submitted by the following resource types: Non-Quick Start (NQS) Other, Combustion Turbine (CT) Pseudo-Unit (PSU), Steam Turbine (ST) PSU, CT Non-PSU, ST Non-PSU, then the Daily Dispatch Data (DDD) for the corresponding participant, delivery date, and resource or associate physical resource must already be present in the system.

### **Test Case S5-TC01 | All eligible resources are able to verify MWP (Make-Whole Payment) impact on Settlement statement for Energy offer for a Quick Start (QS) Resource in DAM time frame.**

Test Step #	Test Step Description	Test Step Expected Result
1	MP submits energy offer (RTEM data) dispatch data for a QS resource through EMI or MIM in DAM during the RT_INITIAL window Note: Offer prices must be higher than the reference level plus the applicable conduct threshold.	EMI/MIM submission is processed successfully

Test Step #	Test Step Description	Test Step Expected Result
2	After the DAM Run is completed, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files > private > DAScheduledEnergy2 > {MP_Name} Then, open the latest xxxxDAScheduledEnergy2xxxx.xml report that is generated after the DA_RESTRICTED window (i.e., after the DAM completion).	MP able to verify in the report that there is an energy schedule for the commitment hours.
3	In the IESO Confidential Sandbox Reports Site, MP is able to download the preliminary and final settlement statements along with the data files, for the affected trade date of this test case.	MP is able to download the preliminary and final settlement statements and associated data files from the IESO Confidential Sandbox Reports Site.
4	Review those settlement statements for applicable charges and calculations.	All applicable charges/payments are present in the settlement statements. Note:  If any Make Whole Payment is mitigated for settlement impact, the corresponding reference levels will be made available in settlement data file.
5	Review settlement statements for any charges and calculations that are not applicable for this type of resource(s).	Non-applicable charges/payments should not be present in the settlement statements.
6	Review settlement statements for calculation accuracy.	Charges/payments are calculated accurately.

**Test Case S5-TC02 | All eligible resources are able to verify MWP (Make-Whole Payment) impact on Settlement statement for Energy offer for a Quick Start Resource in PD time frame**

Test Step #	Test Step Description	Test Step Expected Result
1	MP submits energy offer (RTEM data) dispatch data for a QS resource through EMI or MIM in DAM during the RT_INITIAL window Note:	EMI/MIM submission is processed successfully

Offer prices must be higher than the reference level plus the applicable conduct threshold.

2	<p>After the RT Runs for the relevant hour are completed, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files &gt; private &gt;ENGYOPRVRealtimeDispatch&gt; {MP_Name} Then, open the latest xxxENGYOPRVRealtimeDispatchxxx.xml.xml report that is generated.</p>	<p>MP is able to verify in the report that the dispatch for the relevant hours is as expected</p>
3	<p>After the RT Runs of the relevant hour are completed, open the corresponding Real Time 5-Min Energy LMP Report that is located in the RealtimeEnergyLMP folder of the IESO Public Sandbox Reports Site</p>	<p>MP able to verify in the report that the RT LMP price is generated as expected</p>
4	<p>In the IESO Confidential Sandbox Reports Site, MP is able to download the preliminary and final settlement statements along with the data files for the affected trade date of this test case.</p>	<p>MP is able to download the preliminary and final settlement statements and associated data files from the IESO Confidential Sandbox Reports Site.</p>
5	<p>Review those settlement statements for applicable charges and calculations.</p>	<p>All applicable charges/payments are present in the settlement statements. Note:  If any Make Whole Payment is mitigated for settlement impact, the corresponding reference levels will be made available in settlement data file.</p>
6	<p>Review settlement statements for any charges and calculations that are not applicable for this type of resource(s).</p>	<p>Non-applicable charges/payments should not be present in the settlement statements.</p>
7	<p>Review settlement statements for calculation accuracy.</p>	<p>Charges/payments are calculated accurately.</p>

**Test Case S5-TC03 | All eligible resources are able to verify MWP (Make-Whole Payment) impact on Settlement statement for Energy offer for a Non-Quick Start (NQS) Resource in DAM time frame**

Test Step #	Test Step Description	Test Step Expected Result
1	<p>MP submits energy offers (RTEM data) dispatch data for a NQS resource through EMI or MIM in DAM during the RT_INITIAL window</p> <p>Note: Offer prices must be higher than the reference level plus the applicable conduct threshold.</p>	<p>EMI/MIM submission is processed successfully.</p>
2	<p>After the DAM Run is completed, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files &gt; private &gt; DACommit2 &gt; {MP_Name}</p> <p>Then, open the latest xxxxxDACommit2.xml report that is generated after the DA_RESTRICTED window (i.e., after the DAM completion)</p> <p>Note: MP will receive a start-up notification through Dispatch Services 30 minutes prior to the start-up time for the DAM commitment scheduled. MP to approve it</p>	<p>MP able to verify in the report that there is DARCMT (Day-Ahead Reliability Commitment) for the commitment hours.</p>
3	<p>After the DAM Run is completed, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files &gt; private &gt; DAScheduledEnergy2 &gt; {MP_Name}</p> <p>Then, open the latest xxxxxDAScheduledEnergy2xxxx.xml report that is generated after the DA_RESTRICTED window (i.e., after the DAM completion)</p>	<p>MP able to verify in the report that there is an energy schedule for the commitment hours</p>
4	<p>In the IESO Confidential Sandbox Reports Site, MP is able to download the preliminary and final settlement statements along with the data files, for the affected trade date of this test case.</p>	<p>MP is able to download the preliminary and final settlement statements and associated data files from the IESO Confidential Sandbox Reports Site.</p>

5	Review those settlement statements for applicable charges and calculations.	All applicable charges/payments are present in the settlement statements. Note:  If any Make Whole Payment is mitigated for settlement impact, the corresponding reference levels will be made available in settlement data file.
6	Review settlement statements for any charges and calculations that are not applicable for this type of resource(s).	Non-applicable charges/payments should not be present in the settlement statements.
7	Review settlement statements for calculation accuracy.	Charges/payments are calculated accurately.

**Test Case S5-TC04 | All eligible resources are able to verify MWP (Make-Whole Payment) impact on Settlement statement for Energy offer for a Non-Quick Start (NQS) Resource in PD time frame**

Test Step #	Test Step Description	Test Step Expected Result
1	MP submits energy offer (RTEM data) dispatch data for a NQS resource through EMI or MIM in DAM during the RT_INITIAL window  Note: Offer prices must be higher than the reference level plus the applicable conduct threshold.	EMI/MIM submission is processed successfully
2	After the PD commitment is scheduled, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files > private > PDCommitments > {MP_Name} Then, open the latest xxxPDCommitmentsxxx.xml.xml report that was generated	MP able to verify in the report that there is a PDRCMT (Pre-Dispatch Reliability Commitment) for the commitment hours.

Note: MP will receive a start-up notification through Dispatch Services once the PD commitment is scheduled, MP to approve it.

3	<p>After the RT Runs for the relevant hour are completed, navigate to the following path on the IESO Confidential Sandbox Reports Site: Your Files &gt; private &gt;ENGYOPRVRealtimeDispatch&gt; {MP_Name} Then, open the latest xxxENGYOPRVRealtimeDispatchxxx.xml.xml report that is generated</p>	<p>MP able to verify in the report that the dispatch for the relevant hours is as expected.</p>
4	<p>After the RT Runs of the relevant hour are completed, open the corresponding Real-Time 5-Min Energy LMP Report that is located in the RealtimeEnergyLMP folder of the IESO Public Sandbox Reports Site</p>	<p>MP able to verify the report that RT LMP is generated as expected</p>
5	<p>In the IESO Confidential Sandbox Reports Site, MP is able to download the preliminary and final settlement statements along with the data files, for the affected trade date of this test case.</p>	<p>MP is able to download the preliminary and final settlement statements and associated data files from the IESO Confidential Sandbox Reports Site.</p>
6	<p>Review those settlement statements for applicable charges and calculations.</p>	<p>All applicable charges/payments are present in the settlement statements. Note:  If any Make Whole Payment is mitigated for settlement impact, the corresponding reference levels will be made available in settlement data file.</p>
7	<p>Review settlement statements for any charges and calculations that are not applicable for this type of resource(s).</p>	<p>Non-applicable charges/payments should not be present in the settlement statements.</p>
8	<p>Review settlement statements for calculation accuracy.</p>	<p>Charges/payments are calculated accurately.</p>



## Additional Resources

- [Market Rules Chapter 0.9 Settlements and Billing](#)
- [Market Manual 0.5.5- IESO Administered Markets Settlement Amounts](#)

---

**Independent Electricity  
System Operator**

1600-120 Adelaide Street West  
Toronto, Ontario M5H 1T1

Phone: 905.403.6900

Toll-free: 1.888.448.7777

E-mail: [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)

**ieso.ca**

 [@IESO\\_Tweets](https://twitter.com/IESO_Tweets)

 [linkedin.com/company/IESO](https://www.linkedin.com/company/IESO)