
Market Trials: Daily Dispatch Data (DDD) in the Energy Market Interface (EMI) User Interface (UI)

August 7, 2024 Version 2.0

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Introduction

This document outlines the test cases to be executed in the Energy Market Interface (EMI) as part of Market Trials Phase 1. In this phase of testing, the primary objective is to confirm that certain functions of the Energy Market Interface (EMI) User Interface (UI) when submitting Daily Dispatch Data (DDD) are working as intended.

It is highly recommended that Market Participants start with the Standing Bid submission test cases and then execute test cases in the following order: Daily Dispatch Data (DDD), Real-Time Energy Market (RTEM), Forebay, Operating Reserve (OR) and Schedules.

Market Participants should submit any defects discovered during testing via qTest or in the Market Trials Issue Log Template. Doing so will contribute significantly to the overall improvement of the IESO tools. For more information about submitting defects via qTest, refer to the [Quick Take: Submission of Test Case Results and Defects in qTest](#) on the [Market Participant Testing](#) web page.

Preconditions:

1. The user has access to the IESO's EMI in the Sandbox environment (<https://emi-sandboxmrp.ieso.ca/>)
2. The user has access to IESO Gateway in the Sandbox environment (<https://gateway-sbx.ieso.ca/>)
3. The user has a valid user ID and password for EMI and IESO Gateway.
4. The user executed the test cases for EMI Connectivity Testing to validate their access. (<https://www.ieso.ca/-/media/Files/IESO/Document-Library/market-renewal/Market-Participant-Testing/Test-Cases-for-Connectivity-Testing.zip>)
5. There must be existing data available in EMI for the selected resource for any Query and Cancel requests.

Common Functional Steps

This section lists out the common functional steps when submitting DDD in EMI. This section will be referenced in the following test cases.

CFS-01: Logging into EMI

Step	User Instruction	Expected Result
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1	Log in to EMI directly through its URL (https://emi-sandboxmrp.ieso.ca/)	User is able to successfully log in to EMI
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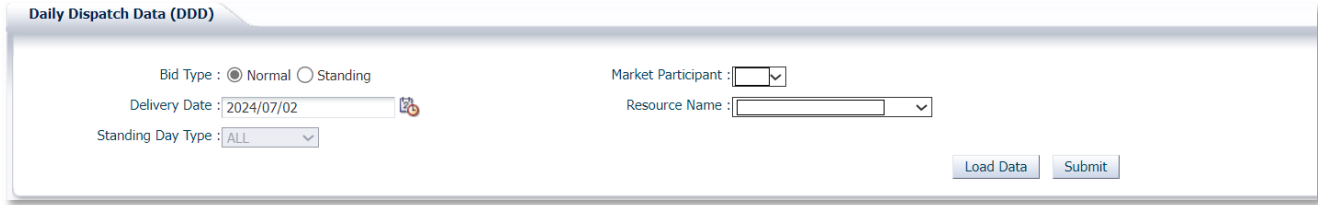
OR

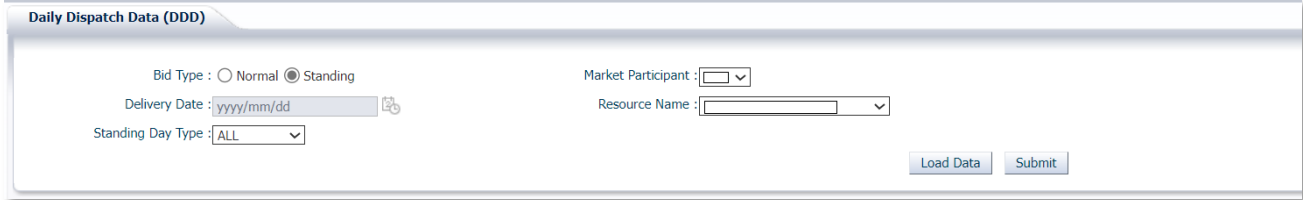
Users can click on the "Energy Market interface for MRP" tile under the IESO Sandbox Gateway dashboard (<https://gateway-sbx.ieso.ca/>).

The screenshot displays the Energy Market Interface (EMI) web application. The browser address bar shows the URL <https://weblogicapps2-sbx.ieso.ca/emi/faces/emiMainScreen.jspx>. The page title is "Energy Market Interface (EMI)" and the timestamp is "2024/01/3 10:24 EST". The user is logged in as "Sandbox | USERNAME" with an "Act as" button. The left sidebar contains "Market Information" and "Markets". The main content area is titled "Market Status" and includes a "Refresh" button and a "Detach" link. Below this is a table with the following columns: "Market Hour", "Start of Initial Window", "Start of Mandatory Window", and "Start of Closed Window". The table contains 24 rows of data, with the first 11 rows highlighted in yellow. The data shows a sequence of market hours from 2024/01/03 01 to 2024/01/04 09, with corresponding window start times.

Market Hour	Start of Initial Window	Start of Mandatory Window	Start of Closed Window
2024/01/03 01	2024/01/02 06:00	2024/01/02 22:00	2024/01/02 23:50
2024/01/03 02	2024/01/02 06:00	2024/01/02 23:00	2024/01/03 00:50
2024/01/03 03	2024/01/02 06:00	2024/01/03 00:00	2024/01/03 01:50
2024/01/03 04	2024/01/02 06:00	2024/01/03 01:00	2024/01/03 02:50
2024/01/03 05	2024/01/02 06:00	2024/01/03 02:00	2024/01/03 03:50
2024/01/03 06	2024/01/02 06:00	2024/01/03 03:00	2024/01/03 04:50
2024/01/03 07	2024/01/02 06:00	2024/01/03 04:00	2024/01/03 05:50
2024/01/03 08	2024/01/02 06:00	2024/01/03 05:00	2024/01/03 06:50
2024/01/03 09	2024/01/02 06:00	2024/01/03 06:00	2024/01/03 07:50
2024/01/03 10	2024/01/02 06:00	2024/01/03 07:00	2024/01/03 08:50
2024/01/03 11	2024/01/02 06:00	2024/01/03 08:00	2024/01/03 09:50
2024/01/03 12	2024/01/02 06:00	2024/01/03 09:00	2024/01/03 10:50
2024/01/03 13	2024/01/02 06:00	2024/01/03 10:00	2024/01/03 11:50
2024/01/03 14	2024/01/02 06:00	2024/01/03 11:00	2024/01/03 12:50
2024/01/03 15	2024/01/02 06:00	2024/01/03 12:00	2024/01/03 13:50
2024/01/03 16	2024/01/02 06:00	2024/01/03 13:00	2024/01/03 14:50
2024/01/03 17	2024/01/02 06:00	2024/01/03 14:00	2024/01/03 15:50
2024/01/03 18	2024/01/02 06:00	2024/01/03 15:00	2024/01/03 16:50
2024/01/03 19	2024/01/02 06:00	2024/01/03 16:00	2024/01/03 17:50
2024/01/03 20	2024/01/02 06:00	2024/01/03 17:00	2024/01/03 18:50
2024/01/03 21	2024/01/02 06:00	2024/01/03 18:00	2024/01/03 19:50
2024/01/03 22	2024/01/02 06:00	2024/01/03 19:00	2024/01/03 20:50
2024/01/03 23	2024/01/02 06:00	2024/01/03 20:00	2024/01/03 21:50
2024/01/03 24	2024/01/02 06:00	2024/01/03 21:00	2024/01/03 22:50
2024/01/04 01	2024/01/03 06:00	2024/01/03 22:00	2024/01/03 23:50
2024/01/04 02	2024/01/03 06:00	2024/01/03 23:00	2024/01/04 00:50
2024/01/04 03	2024/01/03 06:00	2024/01/04 00:00	2024/01/04 01:50
2024/01/04 04	2024/01/03 06:00	2024/01/04 01:00	2024/01/04 02:50
2024/01/04 05	2024/01/03 06:00	2024/01/04 02:00	2024/01/04 03:50
2024/01/04 06	2024/01/03 06:00	2024/01/04 03:00	2024/01/04 04:50
2024/01/04 07	2024/01/03 06:00	2024/01/04 04:00	2024/01/04 05:50
2024/01/04 08	2024/01/03 06:00	2024/01/04 05:00	2024/01/04 06:50
2024/01/04 09	2024/01/03 06:00	2024/01/04 06:00	2024/01/04 07:50

CFS-02: Submitting a Bid for DDD

Step	User Instruction	Expected Result
1	Select the Market Daily Dispatch Data (DDD) for day ahead initial window.	<p>The DDD submission interface is displayed.</p>  <p>The screenshot shows a vertical menu titled 'Market Information'. The menu items are: Market Status, Market Message, Markets, Real Time Energy Market (RTEM), Operating Reserve (OPRES), Schedule (SCH), Daily Dispatch Data (DDD) (highlighted in blue), Bilateral (BLT), and Forebay Dispatch Data (FDD).</p>
2	<p>For “Normal” Bid Type:</p> <p>Please enter the following mandatory fields to submit a Daily Dispatch Data submission:</p> <p>Select Bid Type: Normal</p> <p>Select Delivery Date, which a day ahead the initial window</p> <p>Select Market Participant</p>	<p>Data fields interface is displayed for the selected resource.</p>  <p>The screenshot shows the 'Daily Dispatch Data (DDD)' submission form. It includes the following fields and controls: Bid Type (radio buttons for Normal and Standing, with Normal selected), Delivery Date (text field with value 2024/07/02 and a calendar icon), Standing Day Type (dropdown menu with value ALL), Market Participant (dropdown menu), and Resource Name (dropdown menu). At the bottom right are 'Load Data' and 'Submit' buttons.</p>

Step	User Instruction	Expected Result
	Select Resource Name	
3	<p>For "Standing" Bid Type, Please enter the following mandatory fields to submit a Daily Dispatch Data submission:</p> <p>Select Bid Type: Standing</p> <p>Select Standing Day Type: ALL</p> <p>Select Market Participant</p> <p>Select Resource Name</p> <p>Set an Expiry Date</p>	<p>Data fields are displayed for the selected resource.</p> 
4	<p>For both "Normal" Bid and "Standing" Bid type:</p> <p>Enter the applicable data fields with submission data for the bid, and click on Submit.</p> <ul style="list-style-type: none"> - Minimum Loading Point - Minimum Generation Block Down Time - Minimum Generation Block Run Time 	<p>Submission for Daily Dispatch Data (DDD) to be successful. User should be able to view the submission result message "Successfully processed the DDD submissions."</p>

Step	User Instruction	Expected Result
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- | | | |
|--|---|--|
| | <ul style="list-style-type: none"> - Maximum Number of Starts per Day - Lead Time - Ramp Up Energy to MLP - Single Cycle Mode - Forbidden Regions - Reason Code - Reason Description | |
|--|---|--|

Daily Generator Data Submission Information	
Expiry Date : 2024/07/02	
Minimum Loading Point	
1-on-1 (MW) :	2-on-1 (MW) : 3-on-1 (MW) : 4-on-1 (MW) :
Minimum Generation Block Down Time (Hr):	
Hot:	Warm: Cold:
Minimum Generation Block Run Time (Hr):	
Maximum Number of Starts per Day :	
Lead Time (Hr):	
Hot:	Warm: Cold:
Ramp Up Energy to MLP:	
Ramp Hours to MLP:	1 2 3 4 5 6 7 8 9 10 11 12
Hot(MW):	
Warm(MW):	
Cold(MW):	
Single Cycle Mode :	
Forbidden Regions:	
Forbidden Region Set ID:	1 2 3 4 5
Upper Bound(MW):	
Lower Bound(MW):	
Reason Code :	
Reason Description :	

Daily Dispatch Data (DDD)	
Bid Type : <input checked="" type="radio"/> Normal <input type="radio"/> Standing	Market Participant :
Delivery Date : 2024/05/17	Resource Name :
Standing Day Type : ALL	
<input type="button" value="Load Data"/> <input type="button" value="Submit"/>	

Step	User Instruction	Expected Result
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Submission Result : Daily Display Data (DDD)

File ▾

Market Participant :

Resource Name :

Transaction ID :

Code	Action	Message
WINDOW-MAND...	Update	Field: Minimum Generation Block Run Time submission is ignored, as DA window is in Mandatory State
WINDOW-MAND...	Update	Field: Minimum Loading Point submission is ignored, as DA window is in Mandatory State
MIT-SUCCESS	Update	Successfully processed the DDD submission.

[Export to Excel](#)

CFS-03: How to query for a Bid

Step	User Instruction	Expected Result
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- | | | |
|---|--|--|
| 1 | Select the Market Daily Dispatch Data (DDD) . | The DDD submission interface is displayed. |
|---|--|--|

Market Information

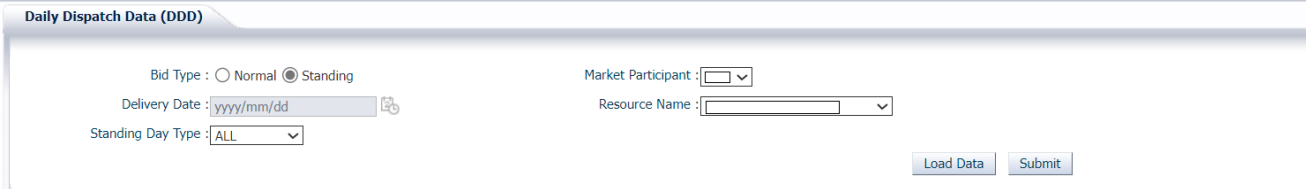
- Market Status
- Market Message
- Markets
- Real Time Energy Market (RTEM)
- Operating Reserve (OPRES)
- Schedule (SCH)
- Daily Dispatch Data (DDD)**
- Bilateral (BLT)
- Forebay Dispatch Data (FDD)

Step	User Instruction	Expected Result
2	<p>For “Normal” Bid type:</p> <p>Enter the following mandatory fields to query a Daily Dispatch Data submission:</p> <p>Select Bid Type: Normal</p> <p>Select Delivery Date</p> <p>Select Market Participant</p> <p>Select Resource Name</p> <p>Click on Load Data.</p>	<div><div><div>Daily Dispatch Data (DDD)</div><div><div><div>Bid Type : <input checked="" type="radio"/> Normal <input type="radio"/> Standing</div><div>Market Participant : <div></div></div><div>Delivery Date : 2024/07/02</div><div>Resource Name : <div></div></div><div>Standing Day Type : ALL</div></div><div><div>Load Data</div><div>Submit</div></div></div></div><p>The page displays the queried data values for the selected resource.</p><div><div>Daily Generator Data Submission Information</div><div><div>Expiry Date : 2024/07/02</div><div><div>Minimum Loading Point</div><div><div>1-on-1 (MW) : 28</div><div>2-on-1 (MW) : </div><div>3-on-1 (MW) : </div><div>4-on-1 (MW) : </div></div></div><div><div>Minimum Generation Block Down Time (Hr):</div><div><div>Hot: 1</div><div>Warm: 8</div><div>Cold: 12</div></div></div><div><div>Minimum Generation Block Run Time (Hr): 3</div><div>Maximum Number of Starts per Day : 2</div></div><div><div>Lead Time (Hr):</div><div><div>Hot: 1</div><div>Warm: 1</div><div>Cold: 1</div></div></div><div><div>Ramp Up Energy to MLP:</div><div><div>Ramp Hours to MLP: 1 2 3 4 5 6 7 8 9 10 11 12</div><div><div>Hot(MW): 4.2</div><div>Warm(MW): 4.2</div><div>Cold(MW): 4.2</div></div></div></div><div><div>Single Cycle Mode : </div><div><div>Forbidden Regions:</div><div><div>Forbidden Region Set ID: 1 2 3 4 5</div><div>Upper Bound(MW): </div><div>Lower Bound(MW): </div></div></div><div><div>Reason Code : T</div><div>Reason Description : Feb21_Fix</div></div></div></div></div></div>

Step User Instruction

Expected Result

- 3 For “Standing” Bid type:
- Enter the following mandatory fields to query a Daily Dispatch Data submission:
- Select Bid Type: Standing
- Select: Standing Day Type
- Select Market Participant
- Select Resource Name
- Click on **Load Data**.



The screenshot shows the 'Daily Dispatch Data (DDD)' form. It includes the following fields and controls:

- Bid Type:** Radio buttons for 'Normal' and 'Standing' (selected).
- Delivery Date:** A text input field with the placeholder 'yyyy/mm/dd' and a calendar icon.
- Standing Day Type:** A dropdown menu with 'ALL' selected.
- Market Participant:** A dropdown menu.
- Resource Name:** A dropdown menu.
- Buttons:** 'Load Data' and 'Submit' buttons.

The page displays the queried data values for the selected resource.



The screenshot shows the 'Daily Generator Data Submission Information' form. It includes the following fields and controls:

- Expiry Date:** A text input field with the value '5000/01/01' and a calendar icon.
- Minimum Loading Point:** Four input fields for '1-on-1 (MW)', '2-on-1 (MW)', '3-on-1 (MW)', and '4-on-1 (MW)'. The first field has the value '28'.
- Minimum Generation Block Down Time (Hr):** Three dropdown menus for 'Hot', 'Warm', and 'Cold'. The values are '1', '8', and '12' respectively.
- Minimum Generation Block Run Time (Hr):** A dropdown menu with the value '3'.
- Maximum Number of Starts per Day:** An input field with the value '2'.
- Lead Time (Hr):** Three dropdown menus for 'Hot', 'Warm', and 'Cold'. The values are '1', '1', and '1' respectively.
- Ramp Up Energy to MLP:** A table with 12 columns (1-12) and 3 rows (Hot(MW), Warm(MW), Cold(MW)). All cells contain the value '4.2'.
- Single Cycle Mode:** A dropdown menu.
- Forbidden Regions:** A table with 5 columns (1-5) and 2 rows (Upper Bound(MW), Lower Bound(MW)). All cells are empty.
- Reason Code:** A dropdown menu with the value 'T'.
- Reason Description:** A text input field with the value 'Feb21_Fix'.

Test Cases

TC01: Submit Daily Dispatch Data (DDD) for a Normal (Non-Standing) bid data successfully for an eligible resource

Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1-2, and 4 from CFS-02 from the Common Functional Steps section.	

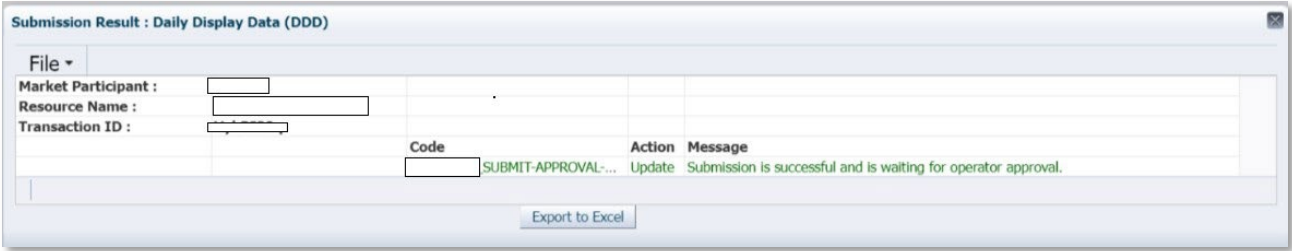
TC02: Submit Daily Dispatch Data (DDD) for Standing bid data successfully for an eligible resource

Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1,3, and 4 from CFS-02 from the Common Functional Steps section.	

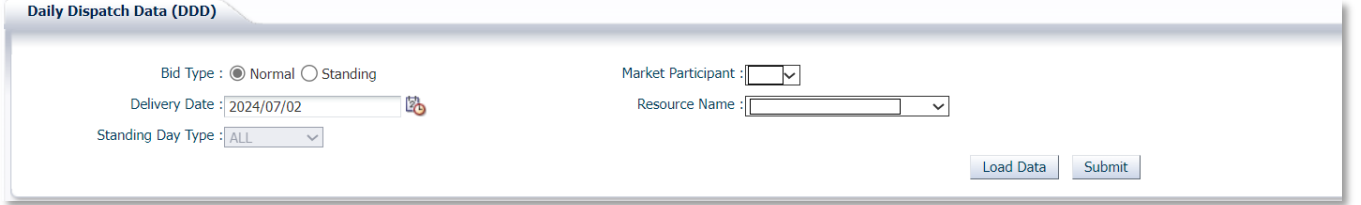
TC03: Submission of Daily Dispatch Data in the DA_RESTRICTED window: If the Day-Ahead (DA) window for the specified delivery date is in DA_RESTRICTED state and there is a change in any of the values, then the submission is subject to operator approval.

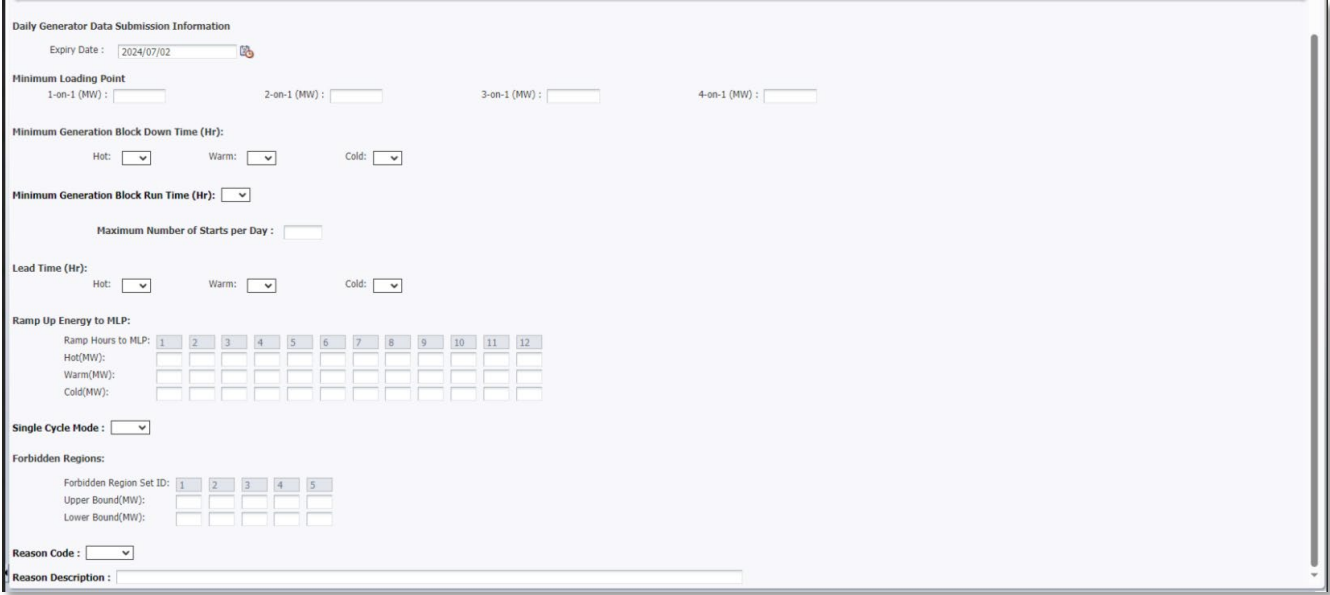
Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1-2 and 4 from CFS-02 from the Common Functional Steps section.	

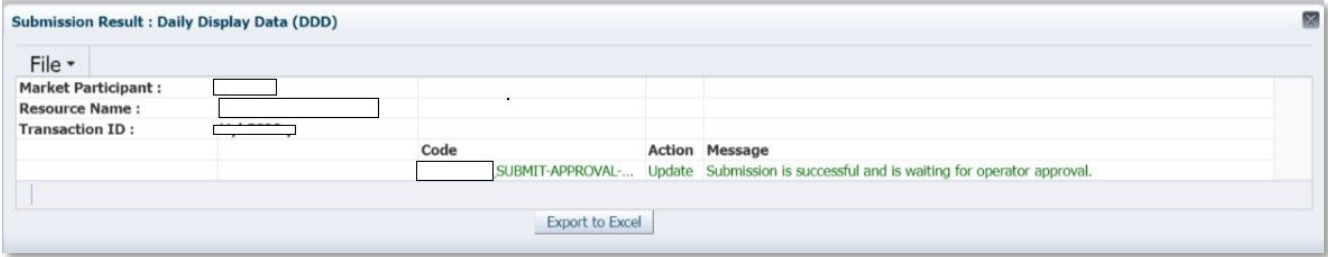
Step	User Instruction	Expected Result
3	Wait until the Delivery Date selected in Step 2 from CFS-02 from the Common Functional Steps section comes to Daily Restricted Window (DA_Restricted). Select the same Bid Type, Delivery Date, Market Participant, Resource Name as those entered in Step 2 from CFS-02 from the Common Functional Steps section, and update the rest of the form with different values for the applicable data fields (refer to Step 4 from CFS-02 from the Common Functional Steps section), then click on Submit .	The page displays a message "Submission is successful and is waiting for operator approval."



TC04: Submission of Daily Dispatch Data in the DA_MANDATORY window: Verify Daily Dispatch Data submission for a CT PSU resource, when DA window for the specified delivery date is in DA_MANDATORY state and there is a change in the single cycle mode (SCM) flag. The submission should be subject to operator approval

Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Step 1 from CFS-02 from the Common Functional Steps section.	
3	<p>Please enter the following mandatory fields to submit a Daily Dispatch Data submission:</p> <p>Select Bid Type: Normal</p> <p>Select Delivery Date, which is a day ahead the initial window</p> <p>Select Market Participant</p> <p>Select a CT PSU resource from the Resource Name list</p>	<p>Data fields are displayed for the selected resource.</p> 

Step	User Instruction	Expected Result
4	<p>Enter the applicable data fields with submission data for the bid, and click on Submit:</p> <ul style="list-style-type: none">- Minimum Loading Point (Mandatory)- Minimum Generation Block Down Time (Mandatory)- Minimum Generation Block Run Time (Mandatory)- Maximum Number of Starts per Day- Lead Time- Ramp Up Energy to MLP- Single Cycle Mode (If not present then defaulted to false)- Reason Code (Mandatory in DA_RESTRICTED or DA_MANDATORY window)- Reason Description (Mandatory if Reason Code is 'OTHER')	<p>Submission for Daily Dispatch Data (DDD) to be successful.</p> 

Step	User Instruction	Expected Result
5	Wait until the Delivery Date selected in test step 3 comes to Daily Mandatory Window (DA_MANDATORY). Select the same Bid Type, Delivery Date, Market Participant, Resource Name as those entered in test step 3. Change the value of the "Single Cycle Mode (SCM) Flag" field. Click on Submit .	<div>The page displays a message "Submission for DDD is successful and is waiting for operator approval."</div> <div></div>

TC05: Daily Dispatch Data for a Non-Standing Bid (Normal) can be successfully queried for an eligible resource

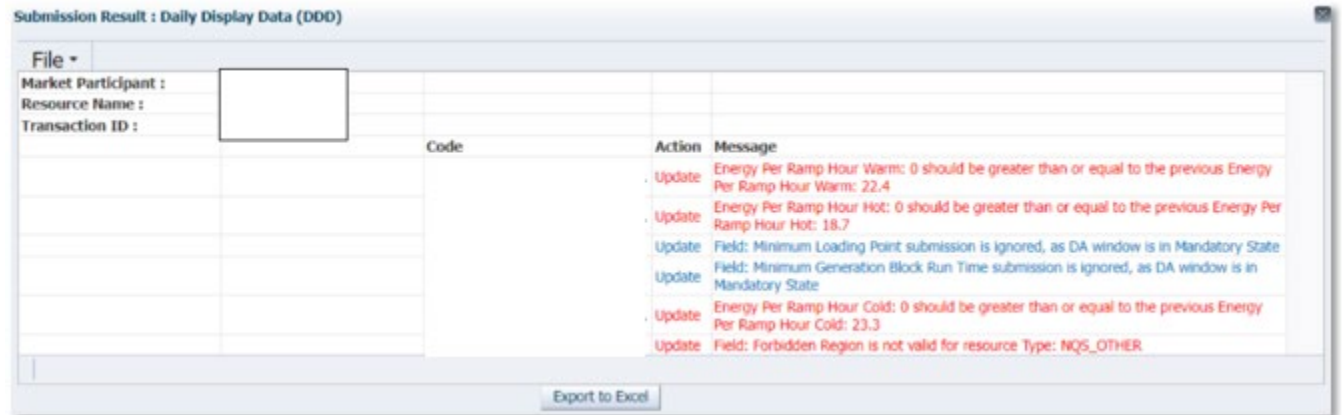
Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1-2 from CFS-03 from the Common Functional Steps section.	

TC06: Verify that Daily Dispatch Data for Standing Bid can be successfully queried for an eligible resource

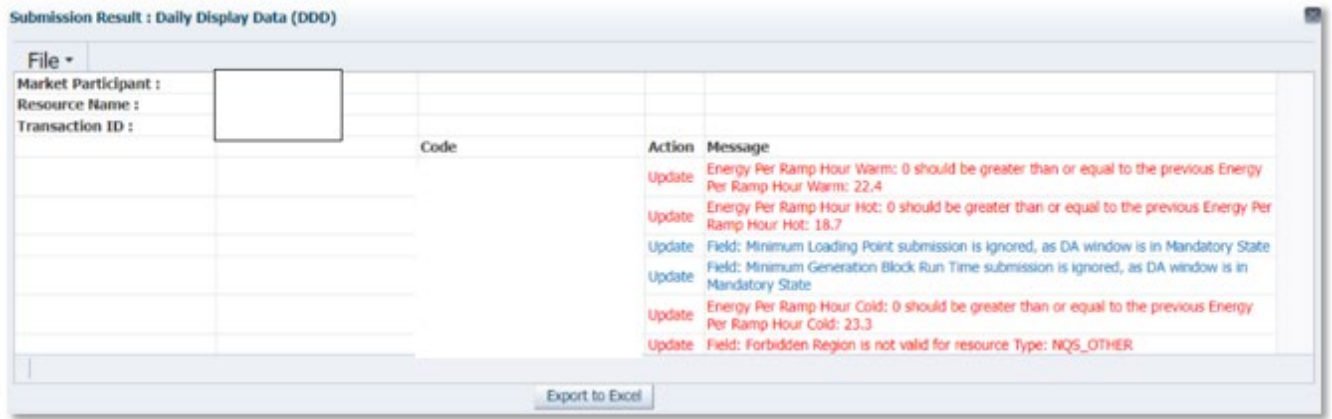
Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1 and 3 from CFS-03 from the Common Functional Steps section.	

TC07: Verify that an error message is displayed when invalid data is entered for a DDD submission for a Non-Standing (Normal) Bid for a resource

Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1-2 from CFS-02 from the Common Functional Steps section.	
3	Enter invalid data values in the applicable fields and click on Submit .	Submission fails and shows the respective error message where data validation failed for these fields.



TC08: Verify error message when invalid data is entered for a DDD submission for a Standing Bid for a resource.

Step	User Instruction	Expected Result
1	Execute Step 1 from CFS-01 from the Common Functional Steps section.	
2	Execute Steps 1 and 3 from CFS-02 from the Common Functional Steps section.	
3	Enter invalid data values in the applicable fields and click on Submit .	Submission fails and shows the respective error message where data validation failed for these fields. 



Additional Resources

- [MRP Market Trials Test Plan](#)
- Energy Market Interface/Market Information Management
 - [Submitting and Revising Daily Dispatch Data](#)
 - [Submitting, Revising and Cancelling Energy Bids](#)
 - [Submitting, Revising and Cancelling Energy Offers](#)
 - [Submitting, Revising and Cancelling Import Offers and Export](#)
 - [Submitting and Revising Forebay Dispatch Data](#)
 - [Submitting, Revising and Cancelling Operating Reserve Offers](#)
 - [Submitting, Revising and Cancelling Schedules and Forecasts](#)
- [Test Cases for Connectivity Testing \(.zip\)](#)
- [Quick Take: Submission of Test Case Results and Defects in qTest](#)

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