# **Energy Market Interface**

Submitting, Revising and Cancelling Operating Reserve Offers IESO Training
June 2024





#### AN IESO TRAINING PUBLICATION

This training manual has been prepared to assist in the IESO training of market participants and has been compiled from extracts from the market rules or documents posted on the web site of Ontario's Independent Electricity System Operator. Users of this training manual are reminded that they remain responsible for complying with all of their obligations under the market rules and associated policies, standards and procedures relating to the subject matter of this training manual, even if such obligations are not specifically referred to herein. While every effort has been made to ensure the provisions of this training manual are accurate and up to date, users must be aware that the specific provisions of the market rules or particular document shall govern.

The Independent Electricity System Operator Station A, Box 4474
Toronto, Ontario M5W 4E5

Customer Relations: Tel: (905) 403-6900

Toll Free 1-888-448-7777

Website: www.ieso.ca

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### 1. Introduction

The purpose of this guide is to provide detailed instructions on submitting, cancelling, and revising *operating reserve offers* using the energy market interface (EMI). An *operating reserve offer* may be submitted only if a corresponding *energy bid/offer* has also been submitted.

This guide is mainly aimed at *market participants* who submit *operating reserve offers* in the *physical market*, including *dispatchable* generators, *dispatchable loads*, importers, and exporters.

Participants in Ontario's *physical markets* use EMI to do the following actions:

- Submit, review and revise *energy* and *operating reserve bids* and *offers*
- Submit, review and revise *energy* and *operating reserve* import *offers* and export *bids*
- Submit, review and revise schedules and forecasts
- Submit, review and revise daily dispatch data
- Submit, review and revise forebay dispatch data
- Receive market messages related to submissions made

### 2. Accessing EMI

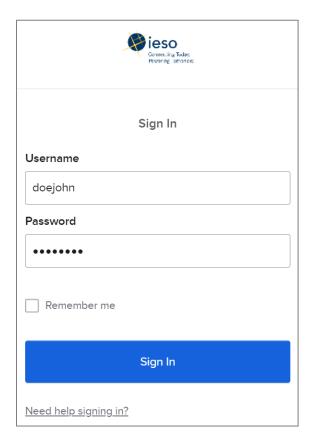
The energy market interface (EMI) is the *market participant* interface with Ontario's *physical markets*. The EMI is used for:

- Participating in the *day-ahead market*, *real-time market* and *operating reserve market*: submitting, reviewing and revising *dispatch data*
- Participating in inter-jurisdictional energy trading: submitting, reviewing and revising import offers and export bids

Note: To access EMI, a user needs to be assigned to a dispatch data viewer or dispatch data submitter contact role. In order for a dispatch data submitter to submit bids and offers in EMI, an applicant representative of the organization needs to create a user-resource relationship in Online IESO. Additionally, an active gateway account is required.

To access the EMI, complete the following steps:

- 1. Open the EMI URL (<a href="https://emi.ieso.ca">https://emi.ieso.ca</a>) or open the IESO Gateway URL (<a href="https://gateway.ieso.ca">https://gateway.ieso.ca</a>) and navigate to EMI.
- 2. Enter your IESO Gateway Username, Password and click **Sign In**.



The EMI main page displaying the current **Market Status** will appear (shown below). The **Market Status** display continually updates and displays the current status for each of the physical markets.

Screenshot to be included after WebService update

### 3. Operating Reserve Offers

*Dispatchable* generators and *dispatchable loads* may offer *operating reserve* for any or all hours of the day. If you have more than one registered facility, *operating reserve offers* are submitted separately for each facility.

For generators, *operating reserve offers* may be submitted only if a corresponding *energy offer* has also been submitted.

For loads, *operating reserve offers* may be submitted only if a corresponding *energy bid* has also been submitted.

For imports and exports, 10-minute non-spinning and 30-minute *operating reserve offers* may be submitted if a corresponding import *offer* or export *bid* has also been submitted. In addition, the interconnection agreement with the neighbouring jurisdiction must permit the importer/exporter to offer *operating reserve* into the Ontario market.

#### 3.1 Preparing Operating Reserve Offers

The following instructions apply to preparing an *operating reserve offer* using the EMI. See Section 4, Revising and Cancelling Operating Reserve Offers, for information on revising or cancelling a previously submitted *offer*.

For submission timeline information for operating reserve offers, see MM 4.1 s.7.

To submit an *operating reserve offer*, complete the following steps:

1. Select Operating Reserve (OPRES) under Markets from the menu on the left side of the EMI.

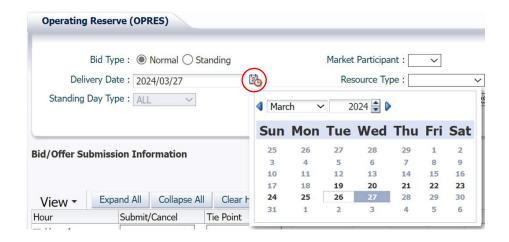
Screenshot to be included after WebService update

2. Select the **Bid Type** as either **Normal** or **Standing**. In EMI, **Normal** refers to initial *offers*.



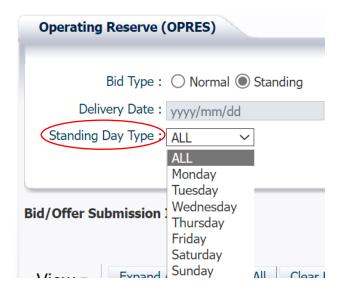
3. If you are submitting a **Normal** *offer*, select the **Delivery Date**. For standing *offers*, the **Delivery Date** field is not required and is therefore not selectable.

The **Delivery Date** defaults to the current *dispatch day*. If your *offer* is for the next *dispatch day*, click the calendar icon and select the appropriate date from the calendar.



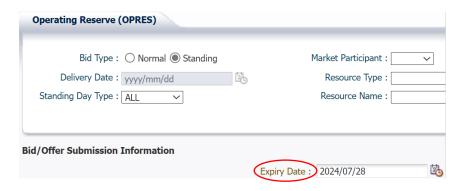
If you select the **Delivery Date** after having already selected the **Resource Type**, and **Resource Name**, you may have to select the correct **Resource Type** and **Resource Name** again. EMI changes the resource type and resource name lists based on the delivery date.

4. If you are submitting a standing *offer*, select the **Standing Day Type**. If your standing *offer* is for all days of the week, select **ALL**. Otherwise, select the day of the week to which the standing *offer* applies.



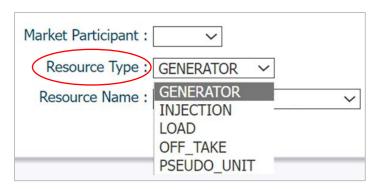
If you wish, you may include an **Expiry Date** with a standing *offer*. The **Expiry Date** is the last date the *offer* will be valid for.

For example, if you enter an **Expiry Date** of July 28, the last time your standing *offer* will be converted to a normal *offer* is at 6:00 am EPT on July 27 and will be considered effective for the trade day of July 28.



5. Click the drop-down next to **Market Participant** to see a list of the *market participants* on whose behalf you are authorized to enter *operating reserve offers*.

Choose the **Market Participant** for which you wish to enter an *operating reserve offer* then click the drop-down next to **Resource Type** and select accordingly.



6. Click the drop-down next to **Resource Name** and select the facility for which you are submitting an *offer*.



The **Resource Name** is the unique reference for a facility used when submitting bids and offers. It is also called the *delivery point* and is used as the point of settlement for Ontario's *physical markets*.

7. Select the applicable **Reserve Class** based on the resource you are submitting for.

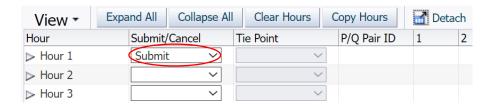


8. Proceed to Section 3.2, Submitting Operating Reserve Offer Information, to complete the empty *offer* form, or see Section 4.1, Retrieving Your Operating Reserve Offer, if you have previously submitted an *offer* and would like to populate the screen with *dispatch data* from that existing *operating reserve offer*.

#### 3.2 Submitting Operating Reserve Offer Information

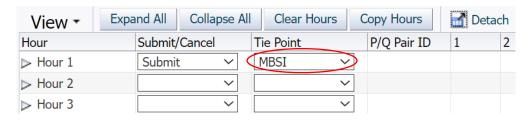
To enter your *operating reserve offer* information, complete the following steps:

1. Select **Submit** from the drop-down next to the **Hour** number for the hour that you are submitting an *operating reserve offer*.

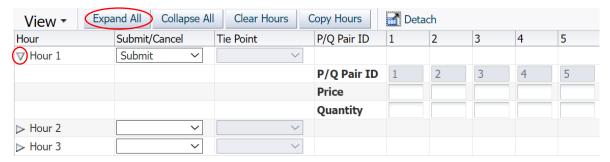


The market software tools use the "hour ending" convention. In other words, Hour 1 is the first hour of the day, which is the hour that starts at midnight and ends at 1:00 am. Hours 10-11 are the hours from 9:00 am to 11:00 am. Hours 1-24 are the hours from midnight one day through midnight the next day. Eastern Standard Time is used year-round.

2. Select a **Tie Point** from the drop-down, as applicable. Refer to MM 4.1 s.4.1.1 for more information.



3. Click the triangle next to the **Hour** number to expand the submission section, enabling you to enter up to 5 *price-quantity pairs* for each hour, or click **Expand All** to reveal the submission section for every hour. Clicking **Collapse All** will hide the submission section for all hours.



- 4. In the **P/Q Pair ID** section, enter:
  - a. **Price** in dollars and cents, up to two decimal places, for each hourly *offer*. For example, \$10 dollars may be entered as 10.00 or 10.0 or 10.
  - b. **Quantity** in megawatts (MW), up to one decimal place, for each hourly *offer*.
- 5. If applicable, enter your **Reserve Load Point** for the hour(s) with corresponding *operating reserve offers*. Refer to MM 4.1 s.3.1.4 for more information.



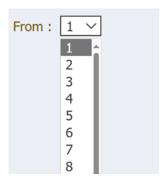
### 3.3 Entering the Same Offer for Multiple Hours

An efficient way to copy the information from a chosen hour to other selected hours is by using the **Copy Hours** button. Therefore, if you submit the same hourly *operating reserve offer* information for multiple hours in a day, complete the steps below.

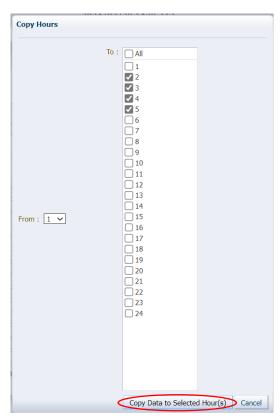
1. Click **Copy Hours** after completing your *operating reserve price-quantity pairs* and other *operating reserve dispatch data* for a single hour.



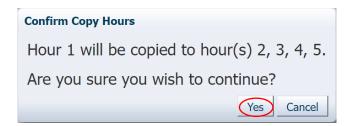
2. In the drop-down next to **From**, select the hour you wish to copy.



3. Select the hours you wish to copy the *operating reserve offers* to, or select **All**, then click **Copy Data to Selected Hour(s)**.



4. Confirm your selection then click Yes to proceed.



The *operating reserve price-quantity pairs* and other *operating reserve dispatch data* are copied to the hours selected.



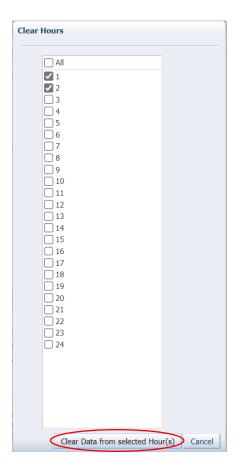
#### 3.4 Clearing Data from Multiple Hours

Rather than deleting each *operating reserve price-quantity pair* and other *operating reserve dispatch data* for any hour(s) or all hours, you can easily delete all *operating reserve offers* using the **Clear Hours** button.

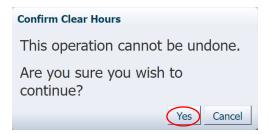
1. Click **Clear Hours** to remove all *operating reserve offer* data for any hour(s) or all hours.



2. Select the hours you wish to clear *operating reserve offers* for, or select **All**, then click **Clear Data from selected Hour(s)**.



3. Click **Yes** to proceed.



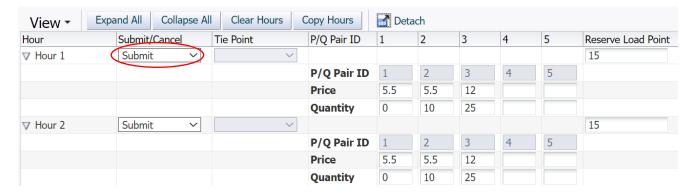
The *operating reserve price-quantity pairs* and other *operating reserve dispatch data* are cleared from the hours selected.

### 3.5 Submitting Your Operating Reserve Offer

Once you have finished entering your *operating reserve offer* data you are ready to submit your *offer* to the IESO. Complete the following steps to submit your *operating reserve offer*:

1. Verify that the *operating reserve offer* information is correct and complete.

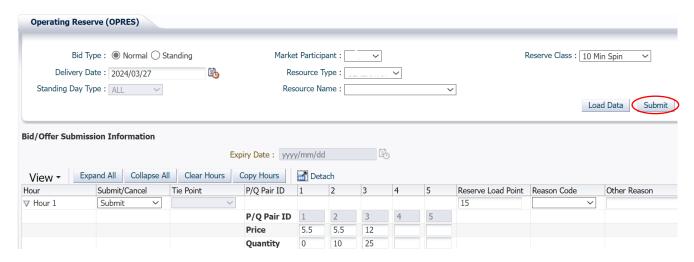
2. Select **Submit** from the drop-down next to the **Hour** number for the hours that you are submitting as part of your *operating reserve offer*.



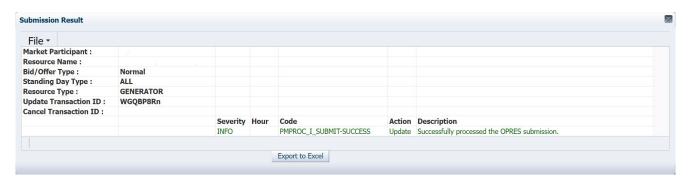
Otherwise, you may see the following error message when attempting to submit your *operating* reserve offer to the IESO:



3. Click **Submit** to send your *operating reserve offer* to the IESO.

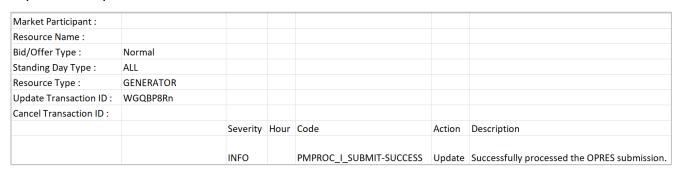


4. You will receive a pop-up within a few moments of submitting your operating reserve offer, displaying the status of your offer. Review the **Submission Result** screen to ensure that your offers for all hours have been successfully updated and applied. Please note that while not applicable to **Normal** offers, **Standing Day Type** will return **ALL** in the output file due to default settings.



 Click Export to Excel to produce a spreadsheet of the Submission Result screen, or take a screen print for your records and/or record the Update Transaction ID number. The Submission Result screen cannot be retrieved again.

A sample Excel export is included below:



### Revising and Cancelling Operating Reserve Offers

Operating reserve offers may be revised provided the changes follow the rules for revised offers. See Market Rules Chapter 7 and Market Manual 4.1 for more information regarding submitting revised offers or cancelling offers.

Keep in mind that if you have an *operating reserve offer* associated with your *energy offer*, you must cancel the *operating reserve offer* before the system will allow you to cancel your *energy offer*.

#### 4.1 Retrieving Your Operating Reserve Offer

The easiest way to revise or cancel your *operating reserve offers* is to first retrieve the *offers*. To retrieve your *operating reserve offers*, complete the following steps:

1. Select Operating Reserve (OPRES) under Markets from the menu on the left side of the EMI.

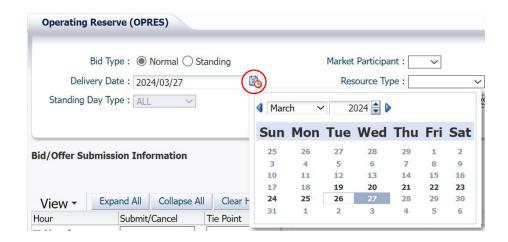
Screenshot to be included after Webservice update

2. Select the **Bid Type** as either **Normal** or **Standing**. In EMI, **Normal** refers to initial *offers*.

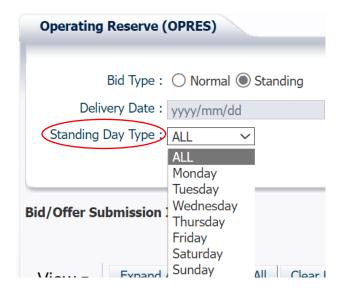


3. If you are revising a **Normal** *offer*, select the **Delivery Date** of the *operating reserve offer* you wish to retrieve. For standing *offers*, the **Delivery Date** field is not required and is therefore not selectable.

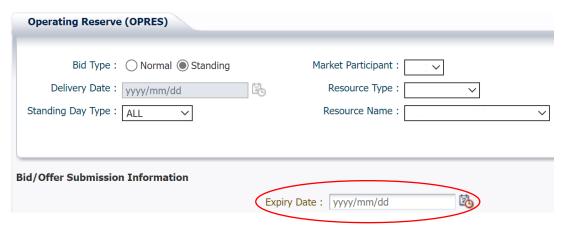
The **Delivery Date** defaults to the current *dispatch day*. If your *operating reserve offer* is for the next *dispatch day*, click the calendar icon and select the appropriate date from the calendar.



4. If you are retrieving a standing *operating reserve offer*, select the **Standing Day Type**. If your standing *operating reserve offer* is for all days of the week, select **ALL**. Otherwise, select the day of the week to which the standing *offer* applies.

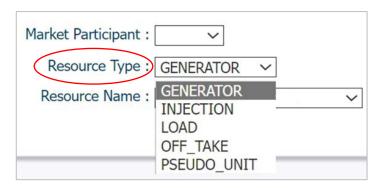


Note that if you have previously retrieved data for another resource on this screen, you will need to clear the **Expiry Date** field or input the matching **Expiry Date** for the resource you are retrieving data for.

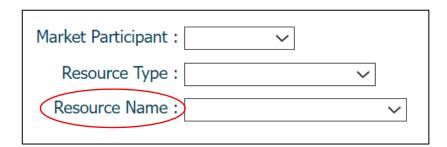


5. Click the drop-down next to **Market Participant** to see a list of the *market participants* on whose behalf you are authorized to enter *operating reserve offers*.

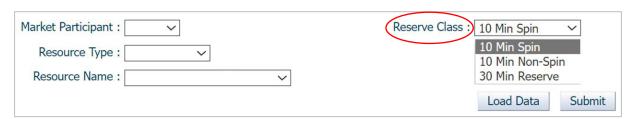
Choose the **Market Participant** for which you wish to retrieve an *operating reserve offer* then click the drop-down next to **Resource Type** and select accordingly.



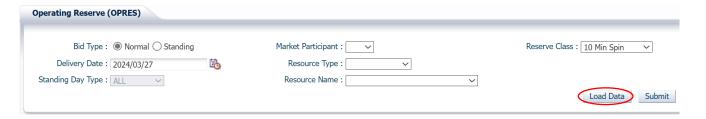
6. Click the drop-down next to **Resource Name** and select the facility for which you are retrieving an *offer*.



7. Select the applicable **Reserve Class** based on the resource you are retrieving *operating reserve offer* data for.



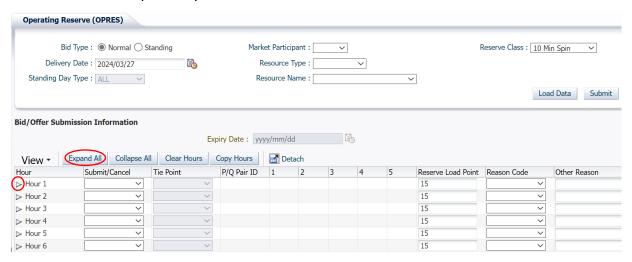
8. Click **Load Data** to populate the screen with the data from the *operating reserve offer* you are retrieving.



#### 4.2 Revising Your Operating Reserve Offer

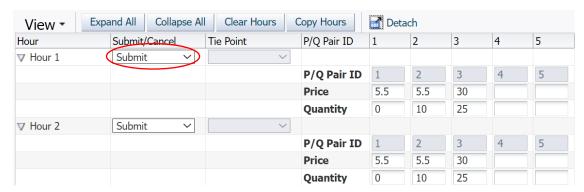
Once you have retrieved your *operating reserve offer*, you can revise the data as necessary. Below is an example of what you will see after clicking **Load Data** to retrieve your *offer*.

Click **Expand All** to see the submission section for every hour. Alternatively, click the triangle next to the **Hour** number to expand any individual hours.



To revise your *operating reserve offer*, follow these steps:

- 1. Ensure the **Delivery Date** represents the *dispatch day* of the *operating reserve offer* you wish to revise.
- 2. Select **Submit** from the drop-down next to the hour number for the hours that you are revising.



If you wish to revise a portion of your *offer* and cancel a portion of your *offer*, you can do so in the same submission. Simply select **Cancel** for those hours that you are cancelling and follow the steps outlined in Section 4.3, Cancelling Your Offer.

- 3. Edit the *operating reserve price-quantity pairs* and other *operating reserve dispatch data* as required.
- 4. Select the appropriate **Reason Code** from the drop-down.



The following table defines the various reason codes available.

**Table 1 | Reason Codes for Revising Operating Reserve Offers**<sup>1</sup>

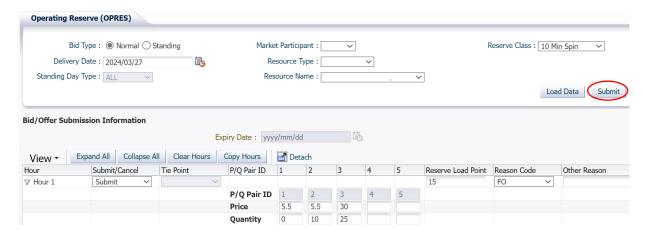
Reason Code	Description	
FO	Forced Outage	
FD	Forced Derating	
FO-ST	Forced Outage on Steam Turbine of Pseudo-unit	
ERPO	Early Return from <i>Planned Outage</i>	
LRPO	Late Return from Planned Outage	
WITHDRAW	Withdrawal from a commitment for equipment issues and failure	
OTHER	Complete the <b>Other Reason</b> field	

If you select **OTHER**, you must also complete the **Other Reason** field. This is a free text field which allows you to enter a reason in your own words using up to 128 characters.

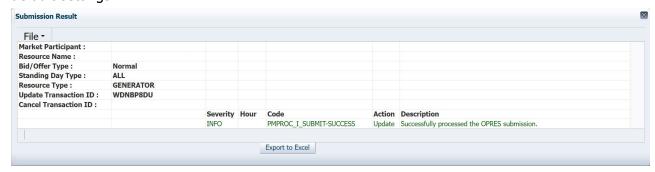
5. Repeat this process for each hour requiring a reason.

<sup>&</sup>lt;sup>1</sup> Refer to MM 4.1 Appendix B for the conditions under which a reason code is required, and additional information and requirements for each condition.

6. Click **Submit** to send your revised *operating reserve offers* to the IESO.

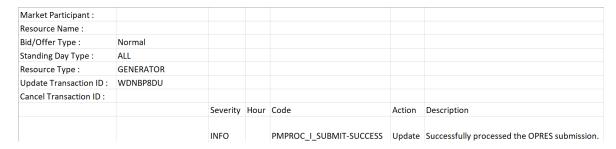


7. You will receive a pop-up within a few moments of submitting your operating reserve offer, displaying the status of your offer. Review the **Submission Result** screen to ensure that your offers for all hours have been successfully updated and applied. Please note that while not applicable to **Normal** offers, **Standing Day Type** will return **ALL** in the output file due to default settings.



8. Click **Export to Excel** to produce a spreadsheet of the **Submission Result** screen, or take a screen print for your records and/or record the **Update Transaction ID** number. The **Submission Result** screen cannot be retrieved again.

A sample Excel export is included below:

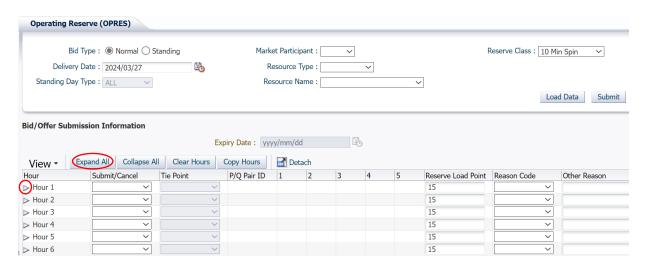


9. Review your day-ahead, pre-dispatch and 5-minute reports, as applicable, to see which of your *offers* have been scheduled.

#### 4.3 Cancelling Your Operating Reserve Offer

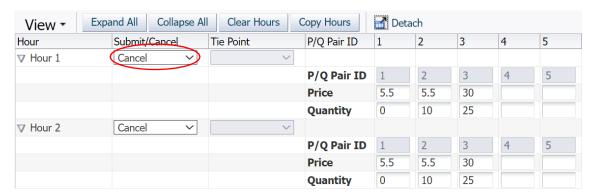
Once you have retrieved your *operating reserve offer*, you can cancel the data as necessary. Below is an example of what you will see after clicking **Load Data** to retrieve your *operating reserve offer*.

Click **Expand All** to see the *operating reserve price-quantity pairs* and other *operating reserve dispatch data* for every hour. Alternatively, click the triangle next to the **Hour** number to expand any individual hours.



To cancel your *operating reserve offer*, follow these steps:

- 1. Ensure the **Delivery Date** represents the date of the *offer* you wish to cancel.
- Select Cancel from the drop-down next to the hour number for the hours that you are cancelling.
  Use Copy Hours after selecting Cancel for one hour to copy that selection for every hour if you
  plan to cancel the entire offer.



If you wish to cancel a portion of your *offer* and revise a portion of your *offer*, you can do so in the same submission. Simply select **Submit** for those hours that you are revising and follow the steps outlined in Section 4.2, Revising Your Offer.

3. Select the appropriate **Reason Code** using the drop-down.



The following table defines the various reason codes available.

**Table 2 | Reason Codes for Cancelling Operating Reserve Offers<sup>2</sup>** 

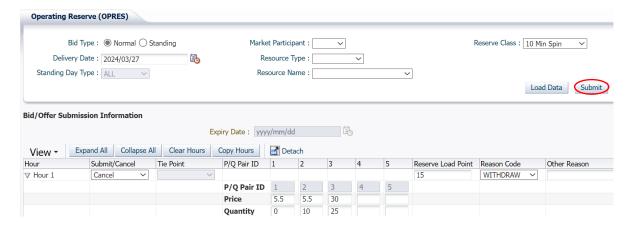
Reason Code	Description	
FO	Forced Outage	
FD	Forced Derating	
FO-ST	Forced Outage on Steam Turbine of Pseudo-unit	
ERPO	Early Return from Planned Outage	
LRPO	Late Return from Planned Outage	
WITHDRAW	Withdrawal from a commitment for equipment issues and failure	
OTHER	Complete the <b>Other Reason</b> field	

If you select **OTHER**, you must also complete the **Other Reason** field. This is a free text field which allows you to type in the reason in your own words using up to 128 characters.

4. Repeat this process for each hour requiring a reason.

<sup>2</sup> Refer to MM 4.1 Appendix B for the conditions under which a reason code is required, and additional information and requirements for each condition.

5. Click **Submit** to send your cancelled *operating reserve offer* to the IESO.

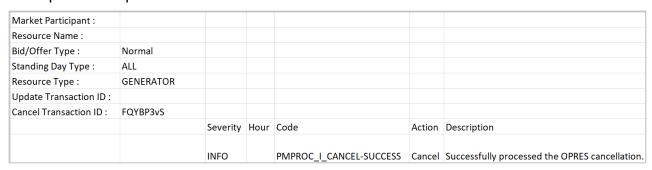


6. You will receive a pop-up within a few moments of submitting your cancelled *offer* displaying the status of your *offer*. Review the **Submission Result** screen to ensure that your *offers* for all applicable hours have been successfully cancelled. Please note that while not applicable to **Normal** *offers*, **Standing Day Type** will return **ALL** in the output file due to default settings.



 Click Export to Excel to produce a spreadsheet of the Submission Result screen, or take a screen print for your records and/or record the Cancel Transaction ID number. The Submission Result screen cannot be retrieved again.

A sample Excel export is included below:



8. Review your day-ahead, pre-dispatch and 5-minute reports, as applicable, to see which of your *offers* have been scheduled.

## References

Document Title	Document ID			
Introduction to Ontario's Physical Markets				
Market Rules Chapter 7 System Operations and Physical Markets	MDP_RUL_0002_07			
Market Manual 4: Market Operations, Part 4.1: Submitting Dispatch Data in the Physical Markets	MDP_PRO_0027			

## **Related Documents**

Document Title	Document ID
Energy Market Interface - Submitting, Revising and Cancelling Energy Offers	
Energy Market Interface - Submitting, Revising and Cancelling Energy Bids	
Energy Market Interface - Submitting, Revising and Cancelling Import Offers and Export Bids	
Energy Market Interface - Submitting, Revising and Cancelling Schedules and Forecasts	
Energy Market Interface – Submitting and Revising Daily Dispatch Data	
Energy Market Interface – Submitting and Revising Forebay Dispatch Data	

### **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: <a href="mailto:customer.relations@ieso.ca">customer.relations@ieso.ca</a>

#### ieso.ca

@IESO\_Tweets

in <u>linkedin.com/company/IESO</u>

