Energy Market Interface

Submitting, Revising and Cancelling Import Offers and Export Bids
IESO Training
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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 import *offers* and export *bids* using the energy market interface (EMI).

This guide is mainly aimed at *market participants* who are importers and exporters in the *physical market*.

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*
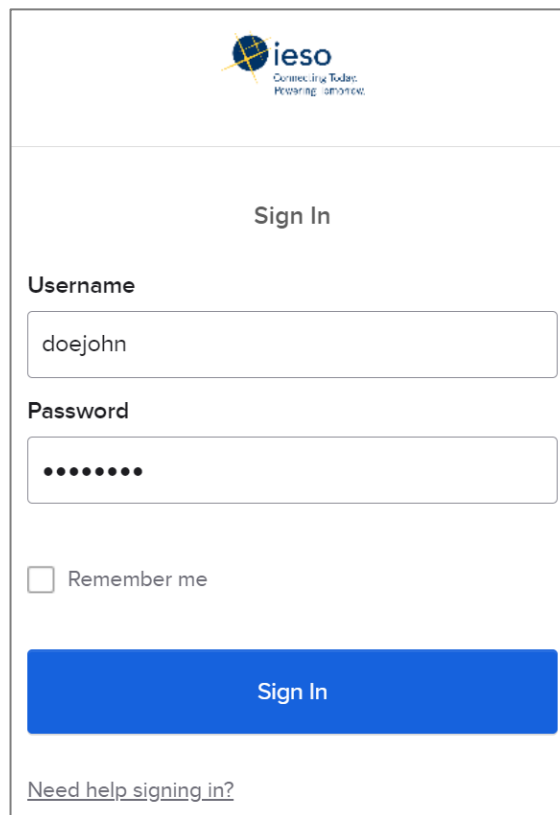- Receive market messages related to submissions made

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 (https://emi.ieso.ca) or open the IESO Gateway URL (https://gateway.ieso.ca) 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. Submitting Import Offers and Export Bids

Import *offers* and export *bids* are submitted using the EMI in much the same way that *offers* from generators and *bids* from loads are submitted. Import *offers* and export *bids* must include the following information:

- Boundary entity resource ID,

- Tie point, and

- NERC tag ID.

See *market manual* 4.1 section 4 for more information on *dispatch data* related to *boundary entity resources*.

3.1 Preparing Import Offers and Export Bids

The following instructions apply to preparing a daily import *offer*/export *bid* or a standing import *offer*/export *bid* using the EMI. See Section 4, Revising and Cancelling Import Offers and Export Bids, for information on revising or cancelling a previously submitted *offer/bid*.

For submission timeline information for import *offers* and export *bids* see MM 4.1 s.7.

To submit an initial or standing import *offer* or export *bid*, complete the following steps:

1. Select **Real Time Energy Market (RTEM)** 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/bids*.

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

4. The **Delivery Date** defaults to current the *dispatch day*. If your *offer/bid* 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.

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

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

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

6. Click the drop-down next to **Market Participant** to see a list of the *market participants* on whose behalf you are authorized to enter *dispatch data*.

   Choose the **Market Participant** for which you wish to enter an import *offer* or export *bid*.

7. Click the drop-down next to **Resource Type** and select either:

   a. **INJECTION** if you are an importer

   b. **OFF_TAKE** if you are an exporter

8. Click the drop-down next to **Resource Name** and select the *boundary entity resource* for which you are submitting an import *offer* or export *bid*. Refer to MM 4.1 s.4.1.1 for more information.

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*.

9. Proceed to Section 3.2, Submitting Dispatch Data, to complete the empty submission form, or see Section 4.1, Retrieving Your Offer/Bid, if you have previously submitted an *offer/bid* and would like to populate the screen with *dispatch data* from that existing submission.

3.2 Submitting Import Offer and Export Bid Information

To enter your *offer/bid* information, complete the following steps:

1. Daily energy ramp rate information is required to be submitted. See Section 3.2.1, Submitting Daily, Hourly and Operating Reserve Ramp Rates, to understand the different components of the ramp rates.

2. Select **Submit** from the drop-down next to the **Hour** number for the hour that you are submitting an import *offer* or export *bid*.

The market software tools use the "hour ending" convention. In other words, Hour 1 is the first hour of the day; it 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.

3. Enter your **NERC Tag ID** in the designated column for the hour that you are submitting an import *offer* or export *bid*. Refer to MM 4.1 s.4.1.3 for more information.

All transmission in Ontario is firm; the IESO recommends using 7-F (firm) when creating your NERC tag. If this is for a wheel-through, include WI at the beginning of the **NERC Tag ID** for the import leg of the transaction, and WX at the beginning of the **NERC Tag ID** for the export leg.

4. Select a Tie Point from the drop-down. Refer to MM 4.1 Appendix C for more information.

5. Click the triangle next to the **Hour** number to expand the submission section, enabling you to enter up to 20 *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.

6. Enter **Price** in dollars and cents, up to two decimal places, for each hourly *offer/bid*. For example, $10 dollars may be entered as 10.00 or 10.0 or 10.

7. Enter **Quantity** in megawatts (MW), in whole numbers (i.e., no decimal place), for each hourly *offer/bid*.

8. You may choose to include a **Capacity Transaction Flag** value by using the drop-down. If no value is selected, the default value in the submission will be **N**. Refer to MM 4.1 s.4.1.2 for more information.

3.2.1 Submitting Daily, Hourly and Operating Reserve Ramp Rates

Import *offers* and export *bids* must be accompanied by daily, hourly and *operating* reserve ramp rates. To enter ramp rates for your *offers/bids*, complete the following steps. Refer to MM 4.1 s.2.1.4 for more information.

1. Enter up to 5 daily ramp rate breakpoints, between 0.1 and 9999.9), and associated daily ramp up and daily ramp down values, between 0 and 999.9, starting with the first column.

2. For an hour that you have entered a *price-quantity pair*, enter up to 5 hourly ramp rate breakpoints, between 0.1 and 9,999.9, and associated ramp up and ramp down values, between 0 and 999.9, starting with the first column.

All ramp rate values are in MW to one decimal place. Ramp up and down MW are per minute values.

View ▼	Expand All	Collapse All	Clear Hours	Copy Hours	
Energy Ramp Rate ID	1	2	3	4	5	OR
Energy Ramp Rate ID	1	2	3	4	5	
Energy RR (Break Point)	999.9					
Energy RR(Ramp Up)	999.9					
Energy RR(Ramp Down)	999.9					

For any hour that you have submitted a *price-quantity pair*, if you plan to submit an *operating reserve offer* along with your import *offer*/export *bid*, you must submit a corresponding **OR Ramp Rate** of 999.9 or you may leave the field blank. Refer to MM 4.1 s.3.1.3 for more information.

View ▼	Expand All	Collapse All	Clear Hours	Copy Hours	Detach
Energy Ramp Rate ID	1	2	3	4	5	OR Ramp Rate (Mwh)
						999.9

3.2.2 Dispatch Data Parameters that are not Applicable

There are a number of *dispatch data* parameters that are not applicable to import *offers* or export. The input fields for the following parameters should be left blank:

- Maximum Daily Energy Limit (MWh)
- Maximum Daily Energy Reason Code
- Minimum Daily Energy Limit (MWh)
- Thermal State
- Virtual Transaction Zonal Trading Entity
- Speed No Load
- Start Up Offer (Hot)
- Start Up Offer (Warm)
- Start Up Offer (Cold)

- Min Hourly Output

- Hourly Must Run

- VG Forecast Quantity

3.3 Entering the Same Offer/Bid 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 *offer/bid* information for multiple hours in a day, complete the steps below.

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

View ▾	Expand All	Collapse All	Clear Hours	Copy Hours	Detach												
	Submit/Cancel	NERC Tag ID	Tie Point	Virtual Transaction Zonal Trading Entity	P/Q Pair ID	1	2	3	4	5	6	7	8	9	10
▽ Hour 1	Submit ▾	xxxxxxx	MBSI ▾	▾											
					P/Q Pair ID	1	2	3	4	5	6	7	8	9	10
					Price	40	40	80							
					Quantity	0	25	50							

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

From : 1 ▾
1
2
3
4
5
6
7
8

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

4. Confirm your selection then click **Yes** to proceed.

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

3.4 Clearing Data from Multiple Hours

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

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

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

3. Click **Yes** to proceed.

Confirm Clear Hours

This operation cannot be undone.

Are you sure you wish to continue?

Yes   Cancel
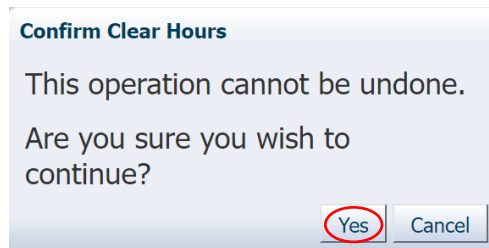
The *price-quantity pairs* and other *dispatch data*, are cleared from the hours selected.

3.5 Submitting Your Offer/Bid

Once you have finished entering your *offer/bid* data, you are ready to submit your import *offer* or export *bid* to the IESO. Complete the following steps to submit your *offer/bid*:

1. Verify that the *offer/bid* 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 import *offer* or export *bid*.

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

Error

You need to make at least one selection (Submit or Cancel)

OK

3. Click **Submit** to send your import *offer* or export *bid* to the IESO.

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

5. 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:

Market Participant :						
Resource Name :						
Bid/Offer Type :	Normal					
Standing Day Type :	ALL					
Update Transaction ID :	4IVBP7uc					
Cancel Transaction ID :						
		Severity	Hour	Action	Code	Description
		INFO		Update	PMPROC_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

4. Revising and Cancelling Import Offers and Export Bids

Initial import *offers* or export *bids* may be revised provided the changes follow the rules for revised *offers/bids*. See *Market Rules* Chapter 7 and *Market Manual* 4.1 for more information regarding submitting revised *offers/bids* or cancelling *offers/bids*.

4.1 Retrieving Your Offer/Bid

The easiest way to revise or cancel your import *offer* or export *bid* is to first retrieve the *offer/bid*. To retrieve your *offer/bid*, complete the following steps:

1. Select **Real Time Energy Market (RTEM)** under **Markets** from the menu on the left side of the EMI.

[screenshot to be included after the removal of Bilaterals]

2. Select the **Bid Type** as either **Normal** or **Standing**.

3. If you are retrieving a **Normal** *offer/bid*, select the **Delivery Date** for the *offer/bid* you with to retrieve. For standing *offers/bids*, the **Delivery Date** field is not required and is therefore not

selectable.

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 retrieving a standing *offer/bid*, select the **Standing Day Type**. If your standing *offer/bid* is for all days of the week, select **ALL**. Otherwise, select the day of the week to which the standing *offer/bid* applies.
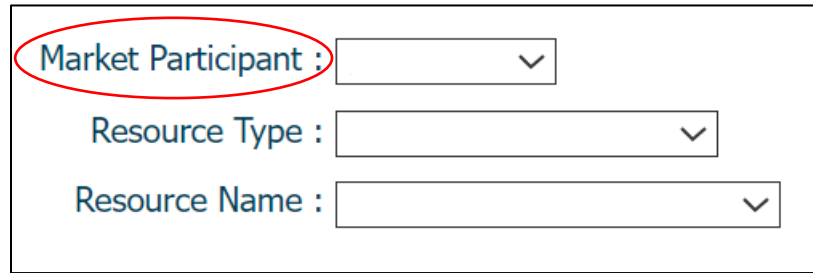

Note that if you have previously retrieved data for another resource on this screen, you will need to clear the **Expiry Date** field or input the matching **Expiry Date** for the resource you are retrieving data for.

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 *dispatch data*.
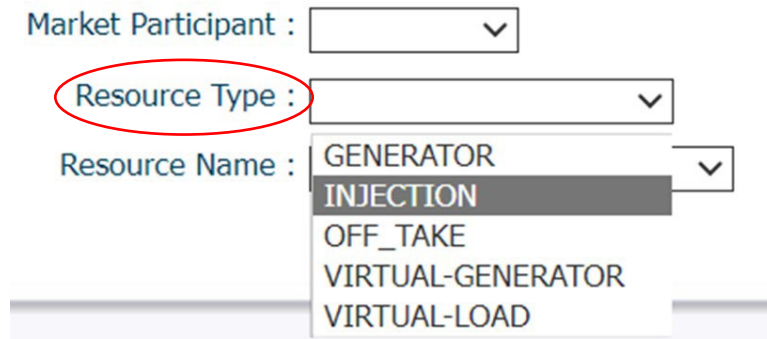
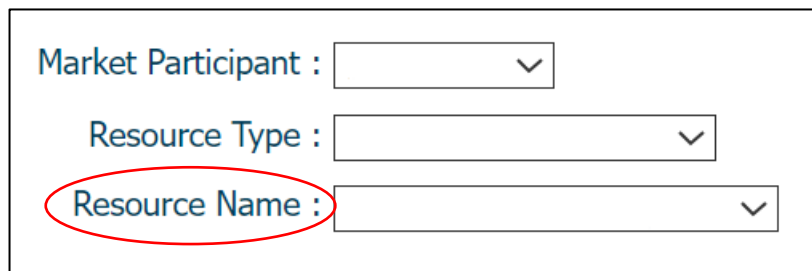Choose the **Market Participant** for which you wish to enter an import *offer* or export *bid*.

6. Click the drop-down next to **Resource Type** and select either:

   a. **INJECTION** if you are an importer.
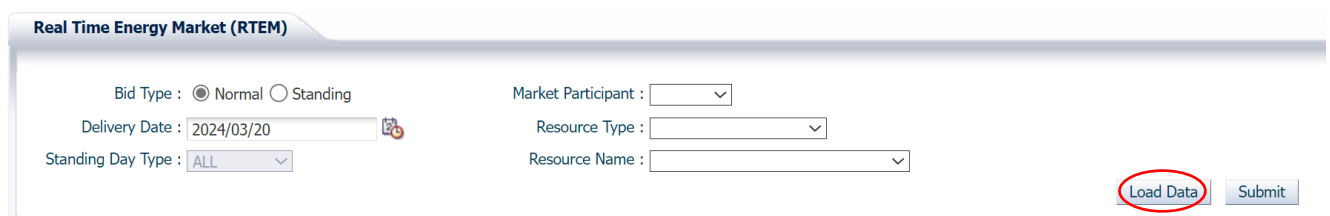
   b. **OFF_TAKE** if you are an exporter

7. Click the drop-down next to **Resource Name** and select the *boundary entity resource* for which you are submitting an import *offer* or export *bid*.

8. Click **Load Data** to populate the screen with the data from the import *offer* or export *bid* you are retrieving.

4.2 Revising Your Offer/Bid

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

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 import *offer* or export *bid*, follow these steps:

1. Ensure the **Delivery Date** represents the *dispatch day* of the *offer/bid* 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 import *offer* or export *bid* and cancel a portion of your import *offer* or export *bid*, 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/Bid.

3. Edit the *price-quantity pairs* and other *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 Offers/Bids[1]

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*
MPM-EORLI	Market Power Mitigation Energy Offer Reference Level Increase
WITHDRAW	Withdrawal from a commitment for equipment issues and failure
OTHER	Complete the **Other Reason** 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.

6. Click **Submit** to send your revised *offer/bid* to the IESO.

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[1] 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.

Real Time Energy Market (RTEM)

Bid Type : ⦿ Normal ◯ Standing	Market Participant : [▼]
Delivery Date : 2024/03/20 📅	Resource Type : [▼]
Standing Day Type : ALL ▼	Resource Name : [▼]

Load Data   **Submit**

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

Submission Result

File ▾

Market Participant :	
Resource Name :	
Bid/Offer Type :	Normal
Standing Day Type :	ALL
Update Transaction ID :	4ZzBP7qS
Cancel Transaction ID :	

		Severity	Hour	Action	Code	Description
		INFO		Update	PMPROC_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

Export to Excel

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:

Market Participant :						
Resource Name :						
Bid/Offer Type :	Normal					
Standing Day Type :	ALL					
Update Transaction ID :	4ZzBP7qS					
Cancel Transaction ID :						
		Severity	Hour	Action	Code	Description
		INFO		Update	PMPROC_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

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

4.3 Cancelling Your Offer/Bid

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

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 cancel your import *offer* or export *bid*, follow these steps:

1. Ensure the **Delivery Date** represents the date of the *offer/bid* you wish to cancel.

2. 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/bid*.

If you wish to cancel a portion of your import *offer* or export *bid* and revise a portion of your import *offer* or export *bid*, 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/Bid.

3. Select the appropriate **Reason Code** using the drop-down. The following reason code, MPM-EORLI, is not valid for cancellations, only for revisions.

The following table defines the various reason codes available.

Table 2 | Reason Codes for Cancelling Offers/Bids[2]

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 **Other Reason** 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.

5. Click **Submit** to send your cancelled *offer/bid* to the IESO.

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[2] 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. You will receive a pop-up within a few moments of submitting your cancelled *offer* or *bid*, displaying its status. Review the **Submission Result** screen to ensure that your *offers/bids* for all 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.

7. 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:

Market Participant :						
Resource Name :						
Bid/Offer Type :	Normal					
Standing Day Type :	ALL					
Update Transaction ID :						
Cancel Transaction ID :	4wbBP7qp					
		Severity	Hour	Action	Code	Description
		INFO		Cancel	PMPROC_I_CANCEL-SUCCESS	Successfully processed the RTEM cancellation.

8. Review your day-ahead, pre-dispatch and 5-minute reports, as applicable, to see which of your *offers/bids* 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 Schedules and Forecasts	
Energy Market Interface - Submitting, Revising and Cancelling Operating Reserve Offers	
Energy Market Interface – Submitting and Revising Daily Dispatch Data	
Energy Market Interface – Submitting and Revising Forebay Dispatch Data	

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