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# Energy Market Interface

Submitting, Revising and Cancelling Schedules and Forecasts

May 2023

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## **AN IESO TRAINING PUBLICATION**

This guide 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 guide 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 guide, even if such obligations are not specifically referred to herein. While the IESO makes reasonable efforts to ensure that the provisions of this guide are accurate and up to date, users must be aware that the specific provisions of the Market Rules and applicable Market Manual govern the rights and obligations of market participants and the IESO.

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# 1. Introduction

The purpose of this guide is to provide detailed instructions on submitting, cancelling, and revising schedules and forecasts using the Energy Market Interface (**EMI**).

This guide is mainly aimed at market participants who are **self-scheduling, intermittent, and transitional scheduling generators** in the physical market.

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

- Submit, review and revise bids and offers
- Submit, review and revise import offers and export bids
- Submit, review and revise schedules and forecasts
- Receive market notices issued by the IESO
- Submit, review and revise physical bilateral contract data

## 1.1 Terms

Whenever possible, this document uses terms as defined in the market rules and market manuals. To avoid confusion, we are including a few definitions:

### 1.1.1 Dispatch

The dispatch day is the actual day you are injecting or withdrawing energy. It is also referred to as the trade day or trading day. The dispatch day is defined in the market rules as “a period from midnight EST to the following midnight EST”. In **EMI**, the dispatch day is called the Delivery Date.

### 1.1.2 Pre-dispatch Day

The pre-dispatch day is defined in the market rules as the day immediately prior to the dispatch day. For example, if the dispatch day is Tuesday, the pre-dispatch day is Monday.

### 1.1.3 Standing Bid/Offer

A bid/offer you expect to be the same from day to day, or week to week. For example, you may submit a bid/offer that is the same for every Wednesday. If you enter it as a standing bid/offer, you only have to submit it once. The system will then ensure that an Initial or Daily bid/offer is submitted for every Wednesday thereafter as per your submitted information.

### 1.1.4 Initial (or Daily) Bid/Offer

A bid/offer you submit for any or all hours of one day. In this document we refer to bids or offers submitted from 6:00 am on the pre-dispatch day up until ten minutes prior to the dispatch hour as “daily” bids or offers. If you change your daily bid/offer, you must follow revision rules, and your changed bid/offer is sometimes referred to as your “revised” offer.

The **EMI** designation for daily bids/offers is Normal bids/offers.

**Note:** Restrictions apply to bids/offers submitted after two (2) hours prior to the dispatch hour. See Appendix A: Revising and Cancelling Schedules and Forecasts Rules for more information.

### **1.1.5 Tie Point ID and Tie Line ID**

The **EMI** uses the term **Tie Point ID**, which is the same as your **Tie Line ID**.

### **1.1.6 Day-Ahead Commitment Process (DACP)**

The Day-Ahead Commitment Process has specific timeline requirements for submitting and revising dispatch data. For complete details on DACP timelines, please refer to the DACP Market Manuals available on the [Market Rules and Manuals Library](#) web page.

## 2. Accessing EMI

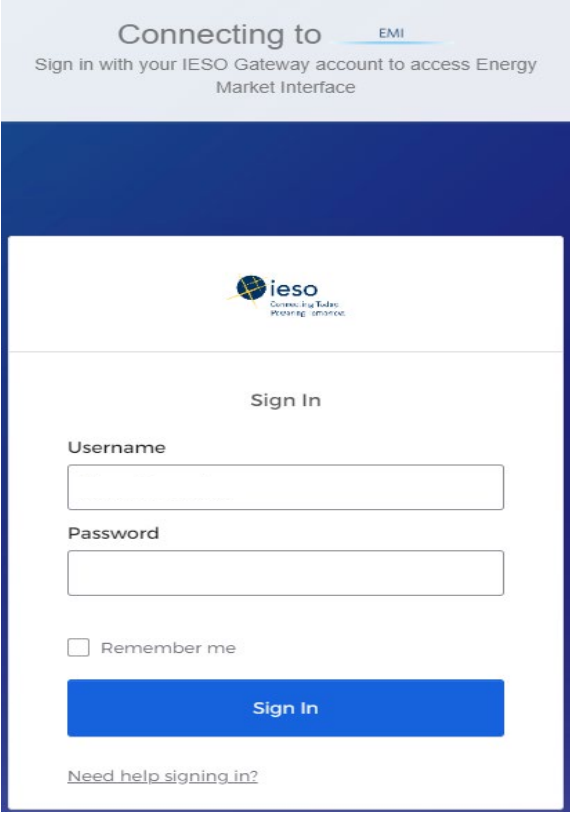
The Energy Market Interface (**EMI**) is the market participant interface with Ontario's physical energy markets. The **EMI** is used for:

- Participating in the Real-time Energy and Operating Reserve Markets: Submitting, reviewing and revising dispatch data (i.e., offers, bids, schedules, forecasts)
- Participating in inter-jurisdictional energy trading: submitting, reviewing and revising import offers and export bids
- Submitting, reviewing and revising physical bilateral contract data

**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 offer in EMI, an Applicant Representative of organizations 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/>)
2. Enter your IESO [gateway](#) **User Account Name** and **Password**. Click **Sign In**.



The screenshot shows the IESO EMI Sign In page. At the top, it says "Connecting to EMI" and "Sign in with your IESO Gateway account to access Energy Market Interface". Below this is the IESO logo with the tagline "Connecting Today. Powering Tomorrow." The main heading is "Sign In". There are two input fields: "Username" and "Password". Below the password field is a checkbox labeled "Remember me". At the bottom is a blue "Sign In" button. A link "Need help signing in?" is located at the very bottom of the form area.

**Result:** 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 financial and physical markets.

Energy Market Interface (EMI) 2016/04/1 15:48 EST QA |

Market Information  
 Market Status  
 Market Message  
 Markets  
 Real Time Energy Market (RTEM)  
 Operating Reserve (OPRES)  
 Schedule (SCH)  
 Daily Generation Data (DGD)  
 Bilateral (BLT)

Market Status  
 Generated : 2016/04/01 14:24:22  
 \* Past windows are greyed out. Current window is highlighted in Yellow.

Market Hour	Start of Initial Window	Start of Mandatory Window	Start of Closed Window
2016/04/01 00	2016/03/31 06:00	2016/03/31 22:00	2016/03/31 23:50
2016/04/01 01	2016/03/31 06:00	2016/03/31 23:00	2016/04/01 00:50
2016/04/01 02	2016/03/31 06:00	2016/04/01 00:00	2016/04/01 01:50
2016/04/01 03	2016/03/31 06:00	2016/04/01 01:00	2016/04/01 02:50
2016/04/01 04	2016/03/31 06:00	2016/04/01 02:00	2016/04/01 03:50
2016/04/01 05	2016/03/31 06:00	2016/04/01 03:00	2016/04/01 04:50
2016/04/01 06	2016/03/31 06:00	2016/04/01 04:00	2016/04/01 05:50
2016/04/01 07	2016/03/31 06:00	2016/04/01 05:00	2016/04/01 06:50
2016/04/01 08	2016/03/31 06:00	2016/04/01 06:00	2016/04/01 07:50
2016/04/01 09	2016/03/31 06:00	2016/04/01 07:00	2016/04/01 08:50
2016/04/01 10	2016/03/31 06:00	2016/04/01 08:00	2016/04/01 09:50
2016/04/01 11	2016/03/31 06:00	2016/04/01 09:00	2016/04/01 10:50
2016/04/01 12	2016/03/31 06:00	2016/04/01 10:00	2016/04/01 11:50
2016/04/01 13	2016/03/31 06:00	2016/04/01 11:00	2016/04/01 12:50
2016/04/01 14	2016/03/31 06:00	2016/04/01 12:00	2016/04/01 13:50
2016/04/01 15	2016/03/31 06:00	2016/04/01 13:00	2016/04/01 14:50
2016/04/01 16	2016/03/31 06:00	2016/04/01 14:00	2016/04/01 15:50
2016/04/01 17	2016/03/31 06:00	2016/04/01 15:00	2016/04/01 16:50
2016/04/01 18	2016/03/31 06:00	2016/04/01 16:00	2016/04/01 17:50
2016/04/01 19	2016/03/31 06:00	2016/04/01 17:00	2016/04/01 18:50
2016/04/01 20	2016/03/31 06:00	2016/04/01 18:00	2016/04/01 19:50
2016/04/01 21	2016/03/31 06:00	2016/04/01 19:00	2016/04/01 20:50
2016/04/01 22	2016/03/31 06:00	2016/04/01 20:00	2016/04/01 21:50
2016/04/01 23	2016/03/31 06:00	2016/04/01 21:00	2016/04/01 22:50
2016/04/02 00	2016/04/01 06:00	2016/04/01 22:00	2016/04/01 23:50
2016/04/02 01	2016/04/01 06:00	2016/04/01 23:00	2016/04/02 00:50
2016/04/02 02	2016/04/01 06:00	2016/04/02 00:00	2016/04/02 01:50
2016/04/02 03	2016/04/01 06:00	2016/04/02 01:00	2016/04/02 02:50
2016/04/02 04	2016/04/01 06:00	2016/04/02 02:00	2016/04/02 03:50
2016/04/02 05	2016/04/01 06:00	2016/04/02 03:00	2016/04/02 04:50
2016/04/02 06	2016/04/01 06:00	2016/04/02 04:00	2016/04/02 05:50
2016/04/02 07	2016/04/01 06:00	2016/04/02 05:00	2016/04/02 06:50



### 3. Schedules and Forecasts for Self-Scheduling, Intermittent, and Transitional Scheduling Generators

Self-scheduling, intermittent and transitional scheduling generators do not submit offers. Instead, they participate in the market by submitting schedules or forecasts to the IESO.

Self-scheduling and transitional scheduling generators submit schedules, and intermittent generators submit **forecasts**. Transitional scheduling generators submit schedules using the “self- scheduling” category.

See Introduction to Ontario’s Physical Markets on the [IESO Training Materials](#) web page for more information.

Under the Day-Ahead Commitment Process (DACP), forecasts and schedules must be submitted by 10:00 am on the pre-dispatch day (i.e., the day before the trade day). Please refer to the DACP Market Manuals available on the [Market Rules and Manuals Library](#) web page for complete details.



### 3.1 Preparing Schedules and Forecasts

The following instructions apply to preparing a schedule or forecast using the **EMI**. See Section 4, Revising and Cancelling Schedules and Forecasts, for information on revising or cancelling a previously submitted schedule or forecast.

To submit a schedule or forecast, complete the following steps:

1. Select **Schedule (SCH)** under Markets from the menu on the left side of the **EMI**.

Market Hour	Start of Initial Window	Start of Mandatory Window	Start of Closed Window
2016/04/13 00	2016/04/12 06:00	2016/04/12 22:00	2016/04/12 23:50
2016/04/13 01	2016/04/12 06:00	2016/04/12 23:00	2016/04/13 00:50
2016/04/13 02	2016/04/12 06:00	2016/04/13 00:00	2016/04/13 01:50
2016/04/13 03	2016/04/12 06:00	2016/04/13 01:00	2016/04/13 02:50
2016/04/13 04	2016/04/12 06:00	2016/04/13 02:00	2016/04/13 03:50
2016/04/13 05	2016/04/12 06:00	2016/04/13 03:00	2016/04/13 04:50
2016/04/13 06	2016/04/12 06:00	2016/04/13 04:00	2016/04/13 05:50
2016/04/13 07	2016/04/12 06:00	2016/04/13 05:00	2016/04/13 06:50
2016/04/13 08	2016/04/12 06:00	2016/04/13 06:00	2016/04/13 07:50
2016/04/13 09	2016/04/12 06:00	2016/04/13 07:00	2016/04/13 08:50
2016/04/13 10	2016/04/12 06:00	2016/04/13 08:00	2016/04/13 09:50
2016/04/13 11	2016/04/12 06:00	2016/04/13 09:00	2016/04/13 10:50
2016/04/13 12	2016/04/12 06:00	2016/04/13 10:00	2016/04/13 11:50
2016/04/13 13	2016/04/12 06:00	2016/04/13 11:00	2016/04/13 12:50
2016/04/13 14	2016/04/12 06:00	2016/04/13 12:00	2016/04/13 13:50
2016/04/13 15	2016/04/12 06:00	2016/04/13 13:00	2016/04/13 14:50
2016/04/13 16	2016/04/12 06:00	2016/04/13 14:00	2016/04/13 15:50
2016/04/13 17	2016/04/12 06:00	2016/04/13 15:00	2016/04/13 16:50
2016/04/13 18	2016/04/12 06:00	2016/04/13 16:00	2016/04/13 17:50
2016/04/13 19	2016/04/12 06:00	2016/04/13 17:00	2016/04/13 18:50
2016/04/13 20	2016/04/12 06:00	2016/04/13 18:00	2016/04/13 19:50
2016/04/13 21	2016/04/12 06:00	2016/04/13 19:00	2016/04/13 20:50
2016/04/13 22	2016/04/12 06:00	2016/04/13 20:00	2016/04/13 21:50
2016/04/13 23	2016/04/12 06:00	2016/04/13 21:00	2016/04/13 22:50
2016/04/14 00	2016/04/13 06:00	2016/04/13 22:00	2016/04/13 23:50
2016/04/14 01	2016/04/13 06:00	2016/04/13 23:00	2016/04/14 00:50
2016/04/14 02	2016/04/13 06:00	2016/04/14 00:00	2016/04/14 01:50
2016/04/14 03	2016/04/13 06:00	2016/04/14 01:00	2016/04/14 02:50
2016/04/14 04	2016/04/13 06:00	2016/04/14 02:00	2016/04/14 03:50
2016/04/14 05	2016/04/13 06:00	2016/04/14 03:00	2016/04/14 04:50

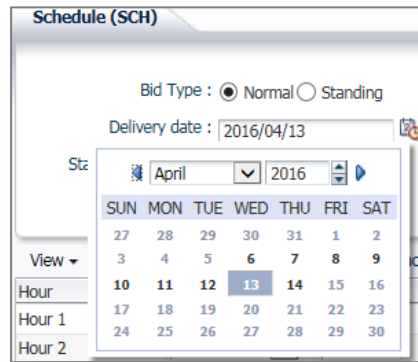
Select the **Bid Type**. If you expect your schedule or forecast to be the same from day to day, or week to week, select **Standing**. If your schedule or forecast is for a single day, select **Normal**.

2. If you are submitting a Normal schedule or forecast, select the **Delivery date**. For Standing schedules/forecasts, this field is not required and is therefore not selectable.

**Schedule (SCH)**  
 Bid Type :  Normal  Standing  
 Delivery date : 2016/04/13  
 Standing Day Type :   
 Market Participant :   
 Schedule Type :   
 Resource Name :

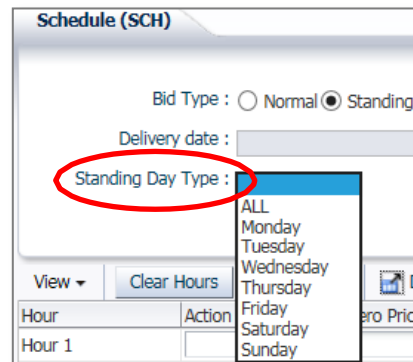
The Delivery date defaults to the current trading date. If your schedule or forecast is for the next trading date, click the Calendar icon and select the appropriate date from the calendar.

The remaining highlighted dates in the calendar are only used when submitting bilateral contract data.



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** Workspace changes the Resource Type and Resource Name lists based on the **Delivery date**.

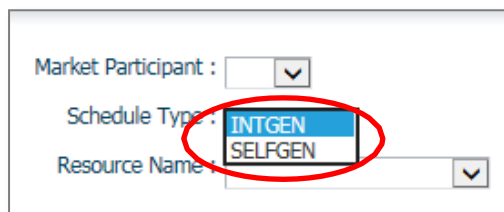
3. If you are submitting a Standing schedule or forecast, select the Standing **Day Type**. If your Standing schedule/forecast is for all days of the week, select **ALL**. Otherwise, select the day of the week to which the Standing schedule/forecast applies.



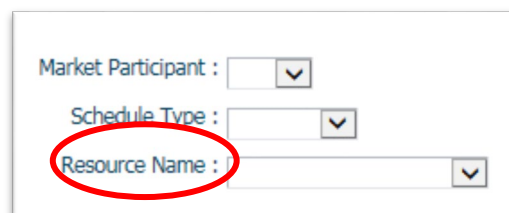
4. Click the drop down next to **Market Participant** to see a list of the market participants on whose behalf you are authorized to enter dispatch data (e.g., offers, bids, schedules, etc.).

Choose the Market Participant for which you wish to enter a schedule or forecast.

5. Click the drop-down next to **Resource Type** and select **INTGEN** (intermittent generators) or **SELFGEN** (self-scheduling generators), as required.



6. Click the drop-down next to **Resource Name** and select the facility for which you are submitting a schedule or forecast.



The **Resource Name** is the unique reference for a facility used when submitting bids, offers, schedules and forecasts. It is also called the "Delivery Point" and is used as the point of settlement for the IESO's physical markets.

**Optional Step:**

Select a date for which you have previously submitted a schedule or forecast and then click **Load Data** to populate the screen with data from that existing schedule/forecast. The data can then be modified to create a new schedule or forecast by selecting the date for which you wish to submit a new schedule/forecast.

7. Proceed to Section 3.2, Entering Schedule and Forecast Data, to complete the empty schedule/forecast form.

### 3.2 Entering Schedule and Forecast Data

To enter your schedule or forecast data, complete the following steps:

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

Hour	Action	Zero Price	Quantity
Hour 1	Submit		
Hour 2	Submit		
Hour 3	Submit		
Hour 4			
Hour 5			

The market software tools use the "hour ending" convention. I.e., 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.

2. Enter your **Zero Price** for each dispatch hour. Enter the price in dollars and cents, up to two decimal places for each offer. E.g., negative two thousand dollars may be entered as - **2000.00** or -**2000.0** or -**2000**.

The Zero Price is the value (in dollars per MW) at and below which you reasonably expect to reduce energy output to zero. You may enter a positive, negative, or zero price so long as it is not lower than a negative **Market Clearing Price (MMCP)** or higher than a positive MMCP.

View ▾	Clear Hours	Copy Hours	Detach
Hour	Action	Zero Price	Quantity
Hour 1	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 2	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 3	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 4	▾	<input type="text"/>	<input type="text"/>
Hour 5	▾	<input type="text"/>	<input type="text"/>

3. Enter the **Quantity** in **MW** (up to one decimal place) that you reasonably expect to provide for each dispatch hour.

View ▾	Clear Hours	Copy Hours	Detach
Hour	Action	Zero Price	Quantity
Hour 1	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 2	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 3	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 4	▾	<input type="text"/>	<input type="text"/>
Hour 5	▾	<input type="text"/>	<input type="text"/>

### 3.2.1 Entering the Same Zero Price and Quantity for Multiple Hours

Copy Hours is an efficient way to copy the information from a chosen hour to other selected hours. Therefore, if you submit the same zero price and quantity for multiple hours in a day, complete the steps below.

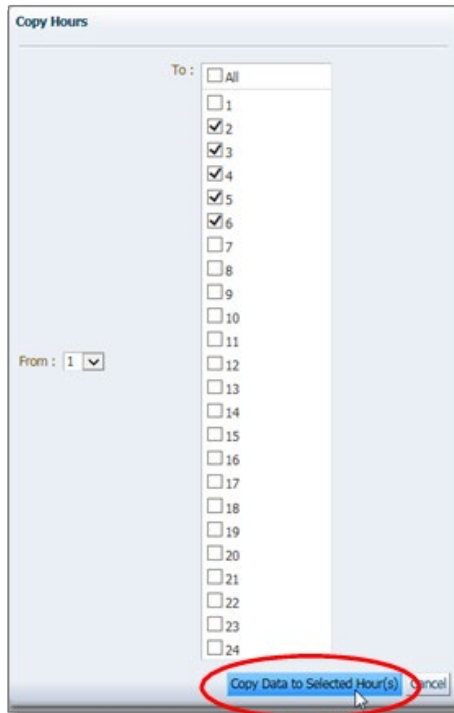
1. Click **Copy Hours** after entering the zero price and quantity for a single hour

View ▾	Clear Hours	Copy Hours	Detach
Hour	Action	Zero Price	Quantity
Hour 1	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 2	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 3	Submit ▾	<input type="text"/>	<input type="text"/>
Hour 4	▾	<input type="text"/>	<input type="text"/>
Hour 5	▾	<input type="text"/>	<input type="text"/>

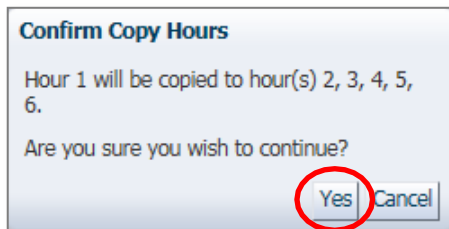
2. In the drop-down next to **From**, select the hour you wish to copy.

From :	▾
	2
	3
	4
	5
	6
	7
	8

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



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



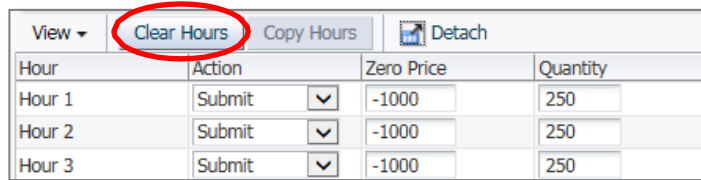
The zero price and quantity are copied to the hours selected.

Hour	Action	Zero Price	Quantity
Hour 1	Submit <input checked="" type="checkbox"/>	-1000	250
Hour 2	Submit <input checked="" type="checkbox"/>	-1000	250
Hour 3	Submit <input checked="" type="checkbox"/>	-1000	250

### 3.3 Clear Hours

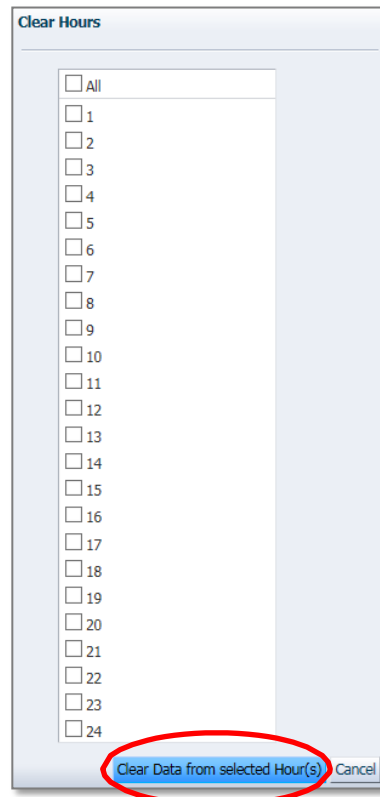
Rather than deleting each zero price and quantity for any hour(s) or all hours, you can easily delete all data using the **Clear Hours** button.

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

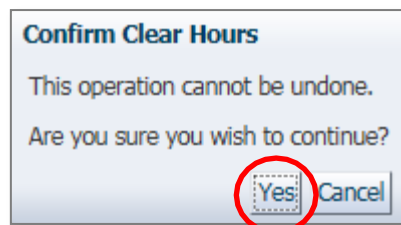


Hour	Action	Zero Price	Quantity
Hour 1	Submit	-1000	250
Hour 2	Submit	-1000	250
Hour 3	Submit	-1000	250

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



3. Click **Yes** to proceed.



The zero price and quantity are cleared from the hours selected.

### 3.4 Submitting Schedules and Forecasts

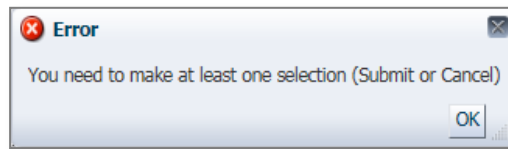
Once you have finished entering your schedule or forecast information you are ready to submit your schedule or forecast to the IESO. Complete the following steps to submit your schedule/forecast:

1. Verify that the 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 offer.

Hour	Action	Zero Price	Quantity
Hour 1	Submit	-1000	250
Hour 2	Submit	-1000	250
Hour 3	Submit	-1000	250

Otherwise, you may see the following error message when attempting to submit your schedule or forecast to the IESO:



3. Click **Submit** to send your schedule or forecast to the IESO.

4. You will receive a submission result within a few moments of submitting your schedule or forecast, displaying its status. **Review** the Submission Result screen to ensure that your schedule or forecast has been successfully submitted.

Severity	Hour	Action	Code	Description
INFO	01	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	02	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	03	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

- 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 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 :						
Daily Energy Limit :	0					
OpRes Ramp Rate :						
Update Transaction ID :	W6RQY11a					
Cancel Transaction ID :						
		Severity	Hour	Action	Code	Description
		INFO	1	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
		INFO	2	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
		INFO	3	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.



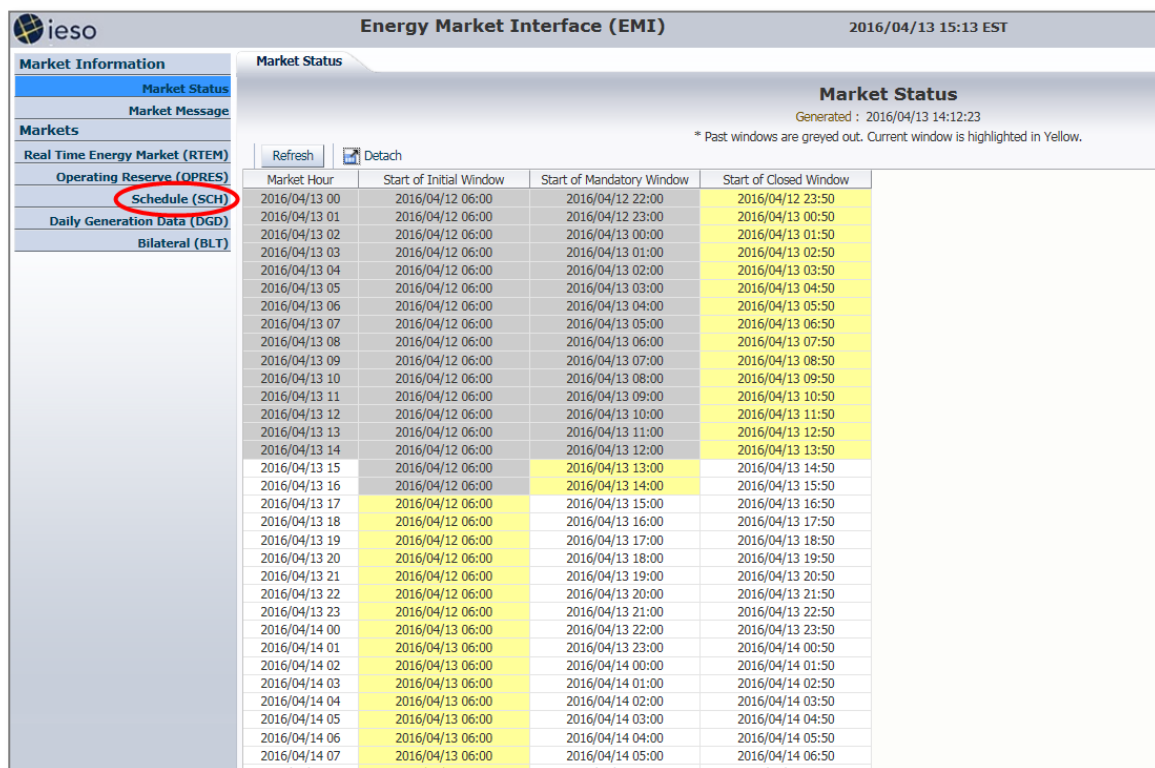
## 4. Revising and Cancelling Schedules and Forecasts

Schedules and forecasts may be revised provided the changes follow the rules for revised schedules and forecasts. See Appendix A: Revising and Cancelling Schedules and Forecasts Rules for more information regarding the rules for submitting revised schedules/forecasts or cancelling schedules/forecasts.

### 4.1 Retrieving Your Schedule or Forecast

The easiest way to revise or cancel your schedule or forecast is to first retrieve it. To retrieve your schedule or forecast, complete the following steps:

1. Select **Schedule (SCH)** under Markets from the menu on the left side of the **EMI**.



The screenshot shows the Energy Market Interface (EMI) with the Market Status table. The left-hand menu has 'Schedule (SCH)' highlighted. The table displays market status data for various hours, with columns for Market Hour, Start of Initial Window, Start of Mandatory Window, and Start of Closed Window. The current window is highlighted in yellow.

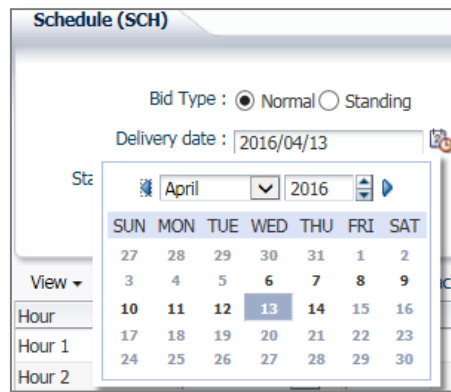
Market Hour	Start of Initial Window	Start of Mandatory Window	Start of Closed Window
2016/04/13 00	2016/04/12 06:00	2016/04/12 22:00	2016/04/12 23:50
2016/04/13 01	2016/04/12 06:00	2016/04/12 23:00	2016/04/13 00:50
2016/04/13 02	2016/04/12 06:00	2016/04/13 00:00	2016/04/13 01:50
2016/04/13 03	2016/04/12 06:00	2016/04/13 01:00	2016/04/13 02:50
2016/04/13 04	2016/04/12 06:00	2016/04/13 02:00	2016/04/13 03:50
2016/04/13 05	2016/04/12 06:00	2016/04/13 03:00	2016/04/13 04:50
2016/04/13 06	2016/04/12 06:00	2016/04/13 04:00	2016/04/13 05:50
2016/04/13 07	2016/04/12 06:00	2016/04/13 05:00	2016/04/13 06:50
2016/04/13 08	2016/04/12 06:00	2016/04/13 06:00	2016/04/13 07:50
2016/04/13 09	2016/04/12 06:00	2016/04/13 07:00	2016/04/13 08:50
2016/04/13 10	2016/04/12 06:00	2016/04/13 08:00	2016/04/13 09:50
2016/04/13 11	2016/04/12 06:00	2016/04/13 09:00	2016/04/13 10:50
2016/04/13 12	2016/04/12 06:00	2016/04/13 10:00	2016/04/13 11:50
2016/04/13 13	2016/04/12 06:00	2016/04/13 11:00	2016/04/13 12:50
2016/04/13 14	2016/04/12 06:00	2016/04/13 12:00	2016/04/13 13:50
2016/04/13 15	2016/04/12 06:00	2016/04/13 13:00	2016/04/13 14:50
2016/04/13 16	2016/04/12 06:00	2016/04/13 14:00	2016/04/13 15:50
2016/04/13 17	2016/04/12 06:00	2016/04/13 15:00	2016/04/13 16:50
2016/04/13 18	2016/04/12 06:00	2016/04/13 16:00	2016/04/13 17:50
2016/04/13 19	2016/04/12 06:00	2016/04/13 17:00	2016/04/13 18:50
2016/04/13 20	2016/04/12 06:00	2016/04/13 18:00	2016/04/13 19:50
2016/04/13 21	2016/04/12 06:00	2016/04/13 19:00	2016/04/13 20:50
2016/04/13 22	2016/04/12 06:00	2016/04/13 20:00	2016/04/13 21:50
2016/04/13 23	2016/04/12 06:00	2016/04/13 21:00	2016/04/13 22:50
2016/04/14 00	2016/04/13 06:00	2016/04/13 22:00	2016/04/13 23:50
2016/04/14 01	2016/04/13 06:00	2016/04/13 23:00	2016/04/14 00:50
2016/04/14 02	2016/04/13 06:00	2016/04/14 00:00	2016/04/14 01:50
2016/04/14 03	2016/04/13 06:00	2016/04/14 01:00	2016/04/14 02:50
2016/04/14 04	2016/04/13 06:00	2016/04/14 02:00	2016/04/14 03:50
2016/04/14 05	2016/04/13 06:00	2016/04/14 03:00	2016/04/14 04:50
2016/04/14 06	2016/04/13 06:00	2016/04/14 04:00	2016/04/14 05:50
2016/04/14 07	2016/04/13 06:00	2016/04/14 05:00	2016/04/14 06:50
2016/04/14 08	2016/04/13 06:00	2016/04/14 06:00	2016/04/14 07:50

2. Select the **Bid Type** of the schedule or forecast that you are revising



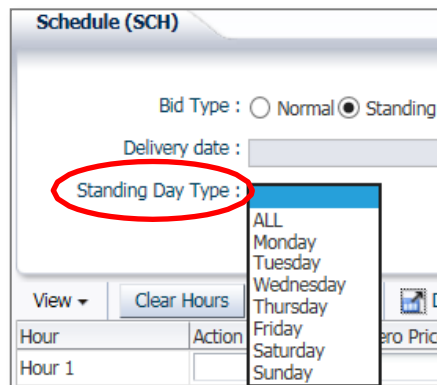
The screenshot shows the Schedule (SCH) form. The Bid Type is set to Normal (selected) and Standing. The Delivery date is 2016/04/13. The Market Participant, Schedule Type, and Resource Name fields are also visible.

- If you are retrieving a Normal schedule or forecast, select the **Delivery date** of the schedule or forecast you are revising. For Standing schedules/forecasts, this 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** Workspace changes the Resource Type and Resource Name lists based on the **Delivery date**.

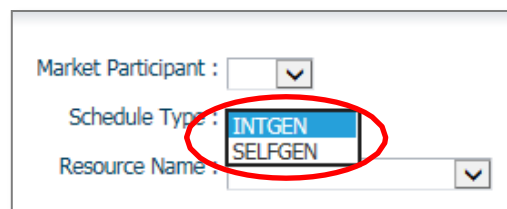
- If you are retrieving a Standing schedule or forecast, select the **Standing Day Type**. If your Standing schedule/forecast is for all days of the week, select **ALL**. Otherwise, select the appropriate day of the week to which the Standing schedule/forecast applies.



- 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 (e.g., offers, bids, schedules, etc.).

Choose the Market Participant for which you wish to retrieve a schedule or forecast.

- Click the drop-down next to **Resource Type** and select **INTGEN** (intermittent generators) or **SELFGEN** (self-scheduling generators), as required.



Click the drop-down next to **Resource Name** and select the facility for which you are retrieving a schedule or forecast.

Market Participant :  ▼

Schedule Type :  ▼

**Resource Name :**  ▼

The **Resource Name** is the unique reference for a facility used when submitting bids, offers, schedules and forecasts. It is also called the "Delivery Point" and is used as the point of settlement for the IESO's physical markets.

7. Select a date for which you have previously submitted a schedule or forecast and then click **Load Data** to populate the screen with data from that existing schedule/forecast.

**Schedule (SCH)**

Bid Type :  Normal  Standing

Market Participant :  ▼

Delivery date :

Schedule Type :  ▼

Standing Day Type :  ▼

Resource Name :  ▼

**Load Data**

## 4.2 Revising Your Schedule or Forecast

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

**Schedule (SCH)**

Bid Type :  Normal  Standing

Market Participant :  ▼

Delivery date : 2016/04/14

Schedule Type :  ▼

Standing Day Type :  ▼

Resource Name :  ▼

View ▾

Hour	Action	Zero Price	Quantity
Hour 1	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 2	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 3	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 4	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 5	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 6	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 7	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 8	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 9	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 10	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 11	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 12	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 13	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 14	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 15	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 16	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 17	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 18	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 19	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 20	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 21	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>
Hour 22	<input type="text"/> ▼	<input type="text"/>	<input type="text"/>

Ensure the **Delivery Date** represents the date of the schedule or forecast you wish to revise.

1. Select Submit from the drop-down next to the hour number for the hours that you are revising.

Hour	Action	Zero Price	Quantity
Hour 1	Submit		
Hour 2	Submit		
Hour 3	Submit		
Hour 4			
Hour 5			

**Note:** If you wish to revise a portion of your schedule/forecast and cancel a portion of your schedule/forecast, you can do so in the same submission. Simply select Cancel for those hours that you are cancelling and follow the rules outlined in Section 4.3, Cancelling Your and Appendix A: Revising and Cancelling Schedules and Forecasts Rules.

2. Edit the **Zero Price** and **Quantity**, as required.
3. Click **Submit** to send your revised schedule or forecast to the IESO.

Schedule (SCH)

Bid Type :  Normal  Standing

Market Participant :

Delivery date :

Schedule Type :

Standing Day Type :

Resource Name :

Load Data **Submit**

4. You will receive a submission result within a few moments of submitting your revised schedule or forecast, displaying its status. **Review** the Submission Result screen to ensure that your schedule or forecast has been successfully submitted.

Submission Result

File

Market Participant :

Resource Name :

Bid/Offer Type : Normal

Standing Day Type :

Daily Energy Limit : 0.0

OpRes Ramp Rate :

Update Transaction ID : WSuQY111

Cancel Transaction ID :

Severity	Hour	Action	Code	Description
INFO	01	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	02	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	03	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

Export to Excel

- Click **export** to **Excel** to produce a spreadsheet of the Submission Results screen. Or, take a screen print for your records, and/or record the Transaction ID number. The submission Result screen cannot be retrieved again.

A sample Excel export is included below:

The screenshot shows the Energy Market Interface (EMI) with a table of market status data. The table has four columns: Market Hour, Start of Initial Window, Start of Mandatory Window, and Start of Closed Window. The 'Schedule (SCH)' option is highlighted in the left-hand menu.

Market Hour	Start of Initial Window	Start of Mandatory Window	Start of Closed Window
2016/04/13 00	2016/04/12 06:00	2016/04/12 22:00	2016/04/12 23:50
2016/04/13 01	2016/04/12 06:00	2016/04/12 23:00	2016/04/13 00:50
2016/04/13 02	2016/04/12 06:00	2016/04/13 00:00	2016/04/13 01:50
2016/04/13 03	2016/04/12 06:00	2016/04/13 01:00	2016/04/13 02:50
2016/04/13 04	2016/04/12 06:00	2016/04/13 02:00	2016/04/13 03:50
2016/04/13 05	2016/04/12 06:00	2016/04/13 03:00	2016/04/13 04:50
2016/04/13 06	2016/04/12 06:00	2016/04/13 04:00	2016/04/13 05:50
2016/04/13 07	2016/04/12 06:00	2016/04/13 05:00	2016/04/13 06:50
2016/04/13 08	2016/04/12 06:00	2016/04/13 06:00	2016/04/13 07:50
2016/04/13 09	2016/04/12 06:00	2016/04/13 07:00	2016/04/13 08:50
2016/04/13 10	2016/04/12 06:00	2016/04/13 08:00	2016/04/13 09:50
2016/04/13 11	2016/04/12 06:00	2016/04/13 09:00	2016/04/13 10:50
2016/04/13 12	2016/04/12 06:00	2016/04/13 10:00	2016/04/13 11:50
2016/04/13 13	2016/04/12 06:00	2016/04/13 11:00	2016/04/13 12:50
2016/04/13 14	2016/04/12 06:00	2016/04/13 12:00	2016/04/13 13:50
2016/04/13 15	2016/04/12 06:00	2016/04/13 13:00	2016/04/13 14:50
2016/04/13 16	2016/04/12 06:00	2016/04/13 14:00	2016/04/13 15:50
2016/04/13 17	2016/04/12 06:00	2016/04/13 15:00	2016/04/13 16:50
2016/04/13 18	2016/04/12 06:00	2016/04/13 16:00	2016/04/13 17:50
2016/04/13 19	2016/04/12 06:00	2016/04/13 17:00	2016/04/13 18:50
2016/04/13 20	2016/04/12 06:00	2016/04/13 18:00	2016/04/13 19:50
2016/04/13 21	2016/04/12 06:00	2016/04/13 19:00	2016/04/13 20:50
2016/04/13 22	2016/04/12 06:00	2016/04/13 20:00	2016/04/13 21:50
2016/04/13 23	2016/04/12 06:00	2016/04/13 21:00	2016/04/13 22:50
2016/04/14 00	2016/04/13 06:00	2016/04/13 22:00	2016/04/13 23:50
2016/04/14 01	2016/04/13 06:00	2016/04/13 23:00	2016/04/14 00:50
2016/04/14 02	2016/04/13 06:00	2016/04/14 00:00	2016/04/14 01:50
2016/04/14 03	2016/04/13 06:00	2016/04/14 01:00	2016/04/14 02:50
2016/04/14 04	2016/04/13 06:00	2016/04/14 02:00	2016/04/14 03:50
2016/04/14 05	2016/04/13 06:00	2016/04/14 03:00	2016/04/14 04:50
2016/04/14 06	2016/04/13 06:00	2016/04/14 04:00	2016/04/14 05:50
2016/04/14 07	2016/04/13 06:00	2016/04/14 05:00	2016/04/14 06:50

### 4.3 Cancelling Your Schedule or Forecast

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

The screenshot shows the Schedule (SCH) form with the following fields:

- Bid Type:  Normal  Standing
- Market Participant:
- Delivery date: 2016/04/14
- Schedule Type:
- Standing Day Type:
- Resource Name:

Buttons: Load Data, Submit

Hour	Action	Zero Price	Quantity
Hour 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 3	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 4	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 5	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 6	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 7	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 8	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 9	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 10	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 11	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 12	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 13	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 14	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 15	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 16	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 17	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 18	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 19	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 20	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 21	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hour 22	<input type="text"/>	<input type="text"/>	<input type="text"/>

- Ensure the **Delivery Date** represents the date of the schedule or forecast 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.

View ▾	Clear Hours	Copy Hours	Detach
Hour	Action	Zero Price	Quantity
Hour 1	Cancel ▾		
Hour 2	Cancel ▾		
Hour 3	Cancel ▾		

**Note:** If you wish to revise a portion of your schedule or forecast and cancel a portion of your schedule or forecast, you can do so in the same submission. Simply select Submit for those hours that you are revising and follow the rules outlined in Section 4.2 Revising Your Schedule or Forecast and Appendix A: Revising and Cancelling Schedules and Forecasts Rules.

3. Click **Submit** to send your cancelled schedule or forecast to the IESO.

Schedule (SCH)

Bid Type :  Normal  Standing

Market Participant : ▾

Delivery date :

Schedule Type : ▾

Standing Day Type : ▾

Resource Name : ▾

4. You will receive a submission result within a few moments of submitting your cancelled schedule or forecast, displaying its status. **Review** the Submission Result screen to ensure that your schedule or forecast has been successfully submitted.

Submission Result

File ▾

Market Participant :

Resource Name :

Bid/Offer Type : Normal

Standing Day Type :

Daily Energy Limit : 0.0

OpRes Ramp Rate :

Update Transaction ID : WSuQY111

Cancel Transaction ID :

Severity	Hour	Action	Code	Description
INFO	01	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	02	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
INFO	03	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

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 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 :						
Daily Energy Limit :	0					
OpRes Ramp Rate :						
Update Transaction ID :	W6RQYI1a					
Cancel Transaction ID :						
		Severity	Hour	Action	Code	Description
		INFO	1	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
		INFO	2	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.
		INFO	3	Update	PM_I_SUBMIT-SUCCESS	Successfully processed the RTEM submission.

## 5. Appendix A: Revising and Cancelling Schedules and Forecasts Rules

### 5.1 Daily Schedules and Forecasts

You may revise a Daily Schedule or Forecast at any time, keeping in mind the restrictions in place for the Day-Ahead Commitment Process (DACP) and during the 2-hour mandatory window.

Refer to Market Manual 9: Day-Ahead Commitment Process, [Part 9.2, Submitting Operational and Market Data for DACP](#), for information on restrictions that apply to the submission of dispatch data during the DACP (10:00 EST to 14:00 EST).

After 14:00 EST, market participants may continue to submit dispatch data and revisions for any dispatch hour or hours in the dispatch day subject to the restrictions set out in Market Manual 9: Day-Ahead Commitment Process, Part 9.2, until two hours prior to the dispatch hour for which the dispatch data or revision is being submitted.

During the 2-hour mandatory window, if the amount you will be injecting differs from the quantity expected to be delivered by more than the greater of 2% or 10 MW, you are required to inform the IESO (call the Control Room) as soon as practical.

Refer to [Market Manual 4.2 Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets](#) for details on the mandatory window.

#### 5.1.1 After 10 minutes Before the Start of the Dispatch Hour

If the ability to materially meet your offer changes, you must notify the IESO (call the Control Room) as soon as practical. After this time, the system cannot accept changes from market participants to offers for the dispatch hour. Therefore, changes for the current dispatch hour cannot be made by revising an offer.

You must submit Revised Offers for future hours if the ability to produce is expected to continue to fall short of your current offer.

#### 5.1.2 Reliability of the IESO-controlled Grid

If the IESO determines that a revision to your offer data will not allow it to maintain the reliability of the IESO-controlled grid, the IESO may refuse to accept a revision or it may direct dispatchable generators to submit revisions.

### 5.2 Standing Schedules and Forecasts

You may revise a Standing Schedule or Forecast at any time; the new Standing Schedule or Forecast supersedes the previous submission. Be aware of when a revised Standing Schedule or Forecast will take effect.





## 6. References

- [MM 4.2 - Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets](#)
- [MM9.0 - DACP Overview](#)
- [MM9.2 - Submitting Operational and Market Data for the DACP](#)
- [IESO Gateway User Guide](#)
- [Introduction to Ontario's Physical Markets](#)
- [Online IESO Roles and Responsibilities](#)
- Energy Market Interface - [Submitting, Revising and Cancelling Energy Bids](#)
- Energy Market Interface - [Submitting, Revising and Cancelling Energy Offers](#)
- Energy Market Interface - [Submitting, Revising and Cancelling Import Offers and Export Bids](#)
- Energy Market Interface - [Submitting, Revising and Cancelling Operating Reserve Offers](#)

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