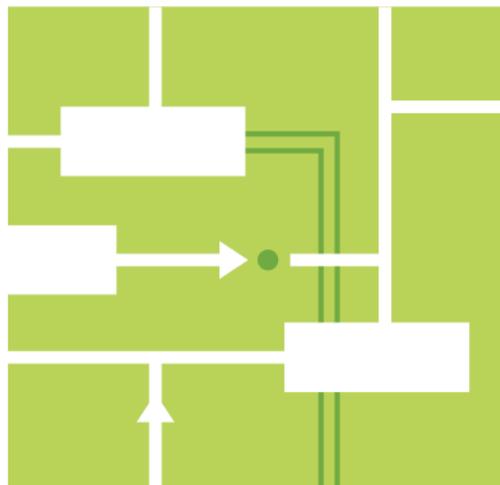
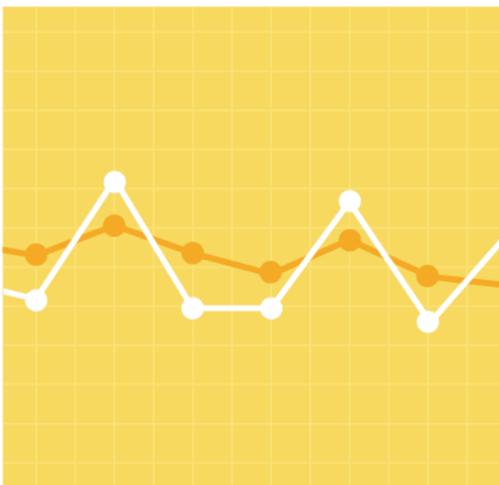




User Guide for the Forward Capacity Market Reconfiguration Auction

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Monthly Market Operations

ISO-NE PUBLIC



Important Notice

- This User Guide is provided as a service to facilitate participation in Reconfiguration Auctions. ISO New England's (The ISO) administration of the Reconfiguration Auction is governed by the Transmission, Markets and Services Tariff (the "Tariff") as filed with the Federal Energy Regulatory Commission. The ISO endeavors to ensure that the information in this User Guide is accurate, but in the event of any inconsistency between this User Guide and the Tariff, the Tariff shall govern. Furthermore, this User Guide does not address all of the issues and requirements associated with participation in the Reconfiguration Auction. For these reasons, it is important that any party participating in a Reconfiguration Auction carefully review the relevant portions of the Tariff.
- Recommendations and suggestions made in the User Guide do not constitute advice to participants.
- Each participant is responsible for assessing the reliability and relevance of any information provided in the User Guide and/or in the Auction System.

Preface

Purpose

This User guide is designed to serve as the reference document for participating in Reconfiguration Auctions (RA) associated with the Forward Capacity Market (FCM) in ISO New England (ISO-NE). This document introduces the functionality and the structure of the application, and in most instances screen captures have been used to illustrate the explanations.

Assumptions

The RA participant should have a comprehensive understanding of the ISO-NE Market Rule, manuals, and other governing documents in order to properly use this User Guide in the conduct of the RA so that the RA participant may complete his or her desired business transactions.

Change Summary

Revision	Date	Comments
Version 1.0	May 20, 2009	Initial release
Version 1.1	April 19, 2012	Changed Max Offer quantity for Resource ID 1888 from 100 to 200 (Page 29)
Version 2.0	July 3, 2018	Periodic Update
Version 2.1	April 30, 2019	Periodic Update

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Introduction

The Reconfiguration Auctions (RA) in the Forward Capacity Market are designed to allow resources to transact Capacity Supply Obligation (CSO) for the given period. The Annual Reconfiguration Auction (ARA) is also designed to provide the ISO with the ability to price the value of demand for capacity based on projected electricity demand.

Reconfiguration auction utilize a static double auction to clear supply offers and demand bids for each Capacity Zone and external interface included in the auction. Each auction will be modeled with the zones and interfaces defined for a respective Capacity Commitment Period (CCP). Bids or offers may be rejected based on financial assurance or reliability impact.

Supply Offers and Demand Bids

Supply Offers are used for qualified resources to take on an obligation.

- Supply offers are limited by the resource's qualified capacity minus the CSO for the respective auction period.

Demand Bids are for resources that intend to shed CSO. Resources can submit a bid for any portion of the CSO.

- Demand bids are limited by the Resource CSO for the respective auction period.

Accessing the Forward Capacity Tracking System (FCTS) User Interface

Figure 1: SMD Application Applications Home Page

The screenshot shows the SMD Applications Home Page. At the top left is the ISO New England logo. The main header is 'SMD Applications Home Page' with a breadcrumb trail 'Market System → SMD Applications Home Page'. The page is organized into a grid of application buttons. A sidebar on the left contains 'Informational Links' (Transmission System Information, Satellite Information, LCC Vision Learning) and 'External Systems' (JESS at NYISO). The main grid contains 20 buttons arranged in two columns. The 'Forward Capacity Tracking System' button is highlighted with a red border.

Informational Links	Internal Transactions	External Transactions
Transmission System Information	Bids & Offers (Registered Users)	Customer and Asset Management System
Satellite Information	Financial Transmission Rights (Registered Users)	Forward Reserve Market Auction
LCC Vision Learning	Submit Meter Reading	CROW Outage Scheduler
External Systems	Submit Peak Contribution	Forward Reserve Assignment
JESS at NYISO	Submit Monthly Regional Network Load	Forward Capacity Tracking System
	Financial Assurance Management	Forward Capacity Market Reconfiguration Auction & ARTs
	Forward Capacity Market CSO Bilateral Contracts	Supplemental Availability Designation
	Demand Resource Market User Interface	DR Audit and Testing Tool
	Claimed Capability Auditing Tool	NX Application (NX-9, NX-12D and One-Line Diagrams)
	Energy Efficiency Measure Database	Ask ISO
	Dynamic Data Management System	

The **Forward Capacity Tracking System (FCTS)** provides the user with the ability to view the bid and offer limits.

Figure 2: Forward Capacity Tracking System

The screenshot displays the Forward Capacity Tracking System interface. At the top, there is a navigation bar with four tabs: "Commitment Period", "Project", "Monitored CPS", and "FCM Calendar". The "Commitment Period" tab is active. Below the navigation bar, the interface is divided into two main sections. On the left is a "Commitment Period" sidebar menu with a list of items: "CP 2014-15", "CP 2015-16", "CP 2016-17", "CP 2017-18", "CP 2018-19", "Resource Summary", "RA/Bilateral Qualification Summary", "Resource Position Summary" (highlighted with a green box), "Proposal Summary", "Self-Supply", "FCA", "New Qualification", "Existing Qualification", "Existing Capacity Summary", "Challenge Summary", "De-List Bid Summary", and "Non-Price Retirement Summary". On the right is the "Customer Events" section, which contains a table with two columns: "Create Date" and "Event". The table is currently empty, displaying the text "Nothing found to display."

Resource information for each CCP can be accessed by selecting the **Resource Position Summary** tab in the corresponding CCP.

Figure 3: FCTS – Resource Position Summary Screen

Forward Capacity Tracking System (FCTS)

Welcome to ISO New England's Forward Capacity Tracking System
 You are logged in as Test_User, FCTS Test Customer 3 for The Electric Company

Commitment Period

Project

Monitored CPS

FCM Calendar

Commitment Period

- CP 2010-11
- CP 2011-12
- CP 2012-13
- CP 2013-14
- CP 2014-15
- CP 2015-16
- CP 2016-17
- CP 2017-18
- CP 2018-19
- Resource Summary
- RA/Bilateral Qualification Summary
- Resource Position Summary
- Proposal Summary
- Self-Supply
- FCA
- New Qualification
- Existing Qualification
- Existing Capacity Summary
- Challenge Summary
- De-List Bid Summary
- Non-Price Retirement Summary

Resource Position Summary Filter

Qualification Status Current Information (September 2018)

8 items found, displaying all items.

FCM Participation Type	ID	Name	Load Zone	Max Supply Offer MW	Max Demand Bid MW	Qualified Capacity MW
FCM Participating Resource	12	Generic EE Program	.Z.SEMASS	22.000	77.000	99.000
FCM Participating Resource	3	Generic Nuclear	.Z.WCMASS	0.000	100.000	100.000
FCM Participating Resource	8	Generic Power Plant	.Z.WCMASS	0.000	8.000	7.000
FCM Participating Resource	5	Other Generic PV	.Z.WCMASS	2.000	0.000	2.000

8 items found, displaying all items.

Export to: [CSV](#)

The **Max Supply Offer and Demand Bids** provide resource level maximum values the participant will be able to enter for the specific resource for the corresponding period.

To view more detail for the resource, click on the **ID or Name** columns.

Figure 4: Resource Information Screen, Position Tab

Commitment Period
Project
Monitored CPS
FCM Calendar

Resource Information

Name: Generic EE Program

Load Zone: .Z.SEMASS

Resource Type: Demand Resource

Resource ID: 12

Lead Participant (ID): The Electric Company (3)

Search Search Results

FCM Participation Type: FCM Participating Resource

Basic Info
Existing Qualification
Non-Price Retirement
New Qualification
MW Proration
RA/Bilateral Qualification
Position
Monitored CPS

Period: CP 2010-11 | CP 2011-12 | CP 2012-13 | CP 2013-14 | CP 2014-15 | CP 2015-16 | CP 2016-17 | CP 2017-18 | CP 2018-19 | CP 2019-20 | CP 2020-21 | CP 2021-22

Current Information
 Published Data
 ARA1 Bilateral Period 1

Monthly Determination

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Qualified Capacity	99.000	99.000	99.000	99.000								
Obligation Source												
FCA Obligation	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000
TOTAL MW	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000	77.000
Max Supply Offer MW	22.000	22.000	22.000	22.000								
Max Demand Bid MW	77.000	77.000	77.000	77.000								

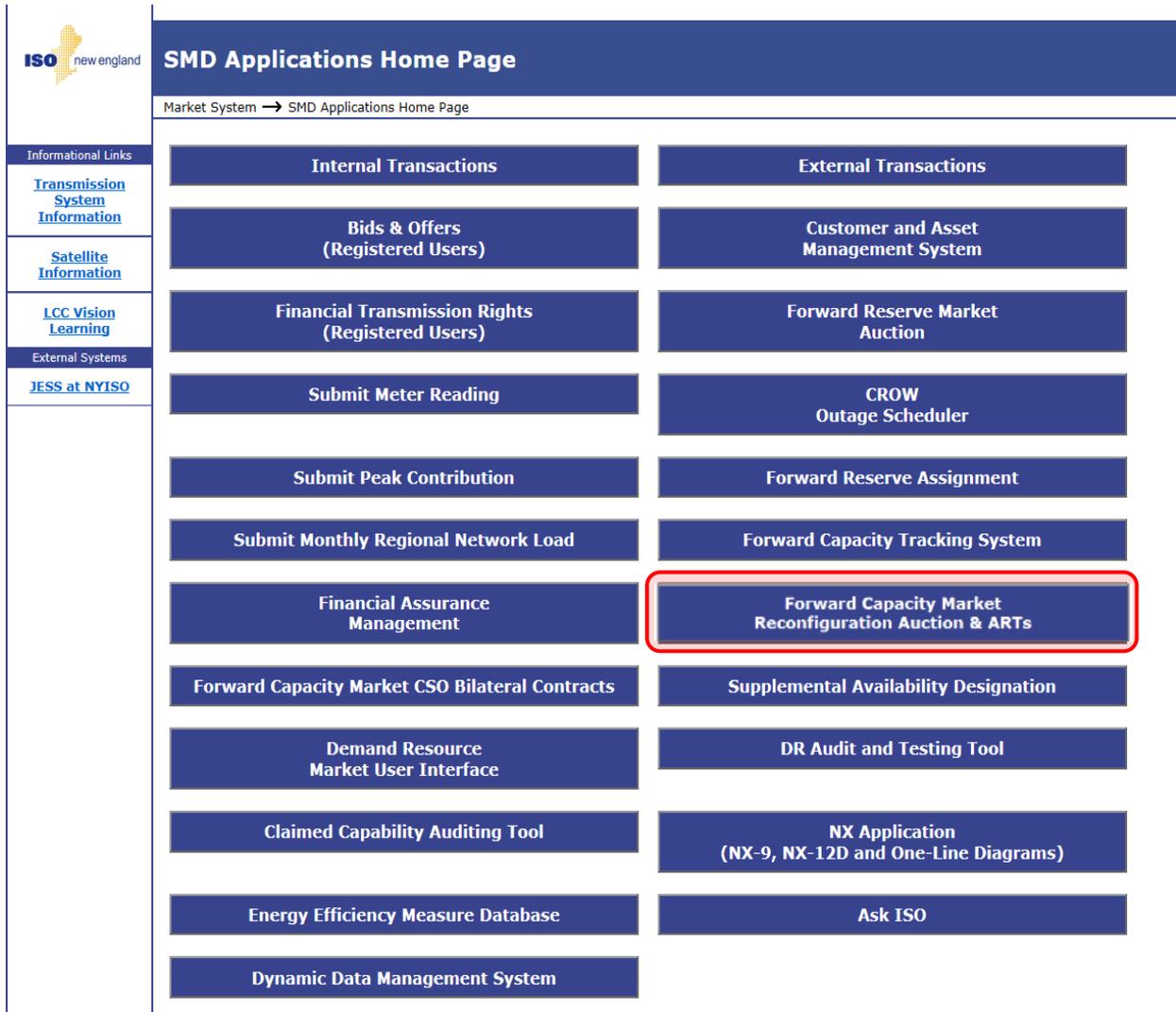
The CCP can be selected by clicking the **Period** on the top of the screen. The data from a specific auction can be selected by using the **Published Data radio button and dropdown menu.**

The **Current Information** radio button displays the most recent data.

After clicking the ID or Name in the Resource Position Tab and selecting the CCP, the Resource Information Position provides the **Qualified Capacity**, **CSO Obligation**, and **Max Supply Offer & Max Demand Bid.**

Accessing the FCM Reconfiguration Auctions Bidding User Interface

Figure 5: SMD Application Applications Home Page



The **Forward Capacity Market Reconfiguration Auction & ARTs** User Interface provides the ability for the user to submit a supply offer and/or a demand bid.

A digital certificate is required to access the system. The company's security administrator must request one of the following roles based on the individuals expected activities:

- *FCM Reconfiguration Auction Bidding/External Viewer – Read only access to FCM RA application allows user to review auction data.*
- *FCM Reconfiguration Auction Bidding/External Maintainer – Read/write access to FCM RA application allows user to submit bids and offers.*

Screen Definitions

Figure 6: Reconfiguration Auction Resource Summary

Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCTS Test Customer 3
for The Electric Company

FCM Reconfiguration Auction Bidding

Resource Summary Filter

Bidding Window

Opening 07/21/2018 00:00:00 Closing 07/22/2018 11:00:00

8 items found, displaying all items.

ID	Name	Type	Capacity Zone/Interface	Eligible	Max Demand Bid MW	Submitted Demand Bid MW	Action	Max Supply Offer MW	Submitted Supply Offer MW	Action
12	Generic EE Program	Demand Resource	SEMA-RI	Y	77.000		Add New Demand Bid	22.000		Add New Supply Offer
3	Generic Nuclear	Generator	Rest-of-Pool	Y	100.000		Add New Demand Bid	0.000		
8	Generic Power Plant	Generator	Rest-of-Pool	Y	8.000		Add New Demand Bid	0.000		
5	Other Generic PV	Generator	Rest-of-Pool	Y	0.000			0.000		

8 items found, displaying all items.

Export to: CSV

On clicking **Forward Capacity Market Reconfiguration Auction** button, user will be shown the Resource Summary of the current reconfiguration auction. If no auction is open, the UI will state that instead.

The Resource Summary Screen has the following functionality and information:

- **Auction Selection** – Navigate between current and previous auctions.
- **Bidding Window** – provides opening and closing date and time for the current reconfiguration auction.
- **Filter** – navigates the user to the filter screen.
- **Resource ID and Name** – navigates user to the resource information screen of the specific resource.
- **Resource Type and Capacity Zone/Interface and Eligible** – information about zones, types, and eligibility for each resource for the selected auction.
- **Add New Demand Bid** or **Add New Supply Offer** buttons - navigates the user to the applicable Resource Supply or Demand Addition Screen.
- **Max Demand Bid MW and Max Supply Offer MW** – provides user maximum amount which can be submitted in a bid or offer for a specific resource for the given period.
- **Submitted Demand Bid MW and Submitted Supply Offer MW** – display the MW value submitted for a bid or offer. Value only displayed after a bid or offer has been submitted for a specific resource for the given period.
- **Export to CSV** button – exports table to excel.

Figure 7: Resource Information Screen

The screenshot shows the 'Resource Information' screen for a resource named 'Generic EE Program' (Resource ID 12). The screen is divided into several sections:

- Navigation:** A sidebar on the left shows 'Current Auction' (CP 2018-19-September 2018) and 'Prior Auctions'.
- Resource Details:**
 - Resource Name: Generic EE Program
 - Capacity Zone: SEMA-RI
 - Resource ID: 12
 - Type: Demand Resource
 - Lead Participant(ID): The Electric Company (3)
 - Sub-Type: On-Peak Demand Resource
- Demand Bid Section:**
 - Buttons: 'Update' (orange) and 'Delete' (green).
 - Maximum Demand Bid MW: 77,000
 - Table:
- Supply Offer Section:**
 - Buttons: 'Update' (orange) and 'Delete' (green).
 - Maximum Supply Offer MW: 22,000
 - Table:

Demand Bid Table:

Segment	Price \$/KWm	MW
1	5,000	3,000
2	4,000	4,000
3	2,000	10,000
4	1,500	10,000
5	1,000	50,000
TOTAL		77,000

Supply Offer Table:

Segment	Price \$/KWm	MW
1	6,000	9,000
2	7,000	5,000
3	10,000	3,000
4	15,000	2,000
5	20,000	1,000
TOTAL		20,000

The Resource Information Screen provides bid/offer information along with some general information about the specific resource.

Information about the current bids/offers, along with the maximum available MW for that resource to bid/offer is presented. If no bid has been put in yet for the resource, these boxes display available MW and the **Add** button. If bids have been submitted, the bids will be displayed along with the **Update** and **Delete** buttons.

Filter/Filter Results: The **Filter** button will return the user to the filter screen. The **Filter Results** will return the user to a filtered version of the Resource Summary screen.

Figure 8: Resource Demand Bid Addition Screen

Resource Demand Bid Update Cancel

Resource Name Generic EE Program Resource ID 12 Auction September 2018

Maximum Demand Bid MW 77.000

Segment	Price \$/KWm	MW
1	5.000	3.000
2	4.000	4.000
3	2.000	10.000
4	1.500	10.000
5	1.000	50.000
TOTAL		77.000

Submit

Resource Demand Bid screen allows the user to submit up to five price/MW segments. For all Monthly RAs and ARAs before CCP 20-21, the maximum price allowed is \$50.000/kW-Month. For ARAs 2020-2021 and beyond, the maximum price allowed is the corresponding CCP FCA starting price. Prices and MW may be entered with up to three decimal places.

Demand Bid prices must be submitted in descending order.

The **Cancel** button cancels the demand bid and returns the user to the Resource Information screen.

Submit button submits the bid into the system and returns the user to the Resource Information screen.

If a mandatory ISO Demand Bid is submitted for the resource, then the bid will be shown in this view and only four demand bid segments will be available for user submittal.

Figure 9: Resource Supply Offer Addition Screen

Resource Supply Offer Update

Resource Name Generic EE Program Resource ID 12 Auction September 2018

Maximum Supply Offer MW 22.000

Segment	Price \$/KWm	MW
1	6.999	9.000
2	7.000	5.000
3	7.001	3.099
4	15.000	2.000
5	20.000	0.901
TOTAL		20.000

The Resource Supply Offer Screen is identical to the Resource Demand Bid screen, except that the information displayed is for the given resource’s supply offer.

Supply Offers prices must be submitted in ascending order.

Figure 10: Resource Information Screen Success

Current Auction

▶ CP 2018-19-September 2018

Prior Auctions

Resource Information

Filter

Filter Results

Message

- Successfully submitted Supply Offer for resource Generic EE Program (12)

Resource Name: Generic EE Program Resource ID: 12 Lead Participant(ID): The Electric Company (3)

Capacity Zone: SEMA-RI Type: Demand Resource Sub-Type: On-Peak Demand Resource

Demand Bid

Update Delete

Maximum Demand Bid MW: 77.000

Segment	Price \$/KWm	MW
1	5.000	3.000
2	4.000	4.000
3	2.000	10.000
4	1.500	10.000
5	1.000	50.000
TOTAL		77.000

Supply Offer

Update Delete

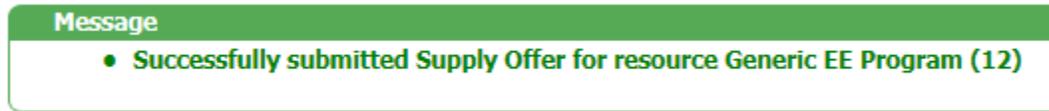
Maximum Supply Offer MW: 22.000

Segment	Price \$/KWm	MW
1	6.000	9.000
2	7.000	5.000
3	10.000	3.000
4	15.000	2.000
5	20.000	1.000
TOTAL		20.000

If there were no issues putting in the bids/offers, a green **Success Message** will appear. If there are issues, a red **Error Message** will appear.

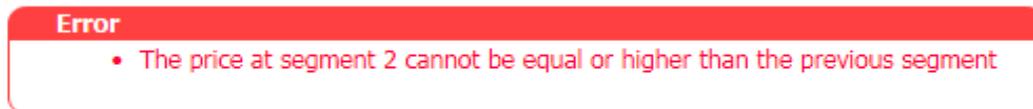
The lowest supply offer price must be higher than the highest demand bid price.

Figure 11: Example of a Success Message



Success messages (displayed in green text) are provided to notify the user that the action taken was successful.

Figure 12: Example of an Error Message



Error messages (displayed in red text) are provided to ensure that input and contract parameters are not violated.

Bid and Offer Examples

Figure 13: FCM Resource Summary Screen

FCM Reconfiguration Auction Bidding
Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCTS Test Customer 4
for Generic Electric Company

Current Auction

▶ CP 2018-19-September 2018

Prior Auctions

Resource Summary Filter

Bidding Window

Opening 07/21/2018 00:00:00 Closing 07/22/2018 11:00:00

2 items found, displaying all items.

ID	Name	Type	Capacity Zone/Interface	Eligible	Max Demand Bid MW	Submitted Demand Bid MW	Action	Max Supply Offer MW	Submitted Supply Offer MW	Action
4	Generic Peaker	Generator	Rest-of-Pool	Y	7.000		Add New Demand Bid	1.000		Add New Supply Offer
10	Some PV	Generator	Rest-of-Pool	Y	8.800		Add New Demand Bid	0.000		

2 items found, displaying all items.

Export to: CSV

During the open window of a reconfiguration auction, the home screen of Forward Capacity Market Reconfiguration Auction application in SMD applications should be the Resource Summary Tab for the participant.

Clicking the **Resource ID or Name** for the resource you wish to put bids/offers in for will bring you to the Resource Information screen for that resource.

The **Max Demand Bid** and **Max Supply Offer** for each resource for the period will be given.

Submitted Demand Bid and **Submitted Supply Offer** cannot exceed the maximum for each resource.

Figure 14: Resource Information Screen before Demand Bid Addition

FCM Reconfiguration Auction Bidding

Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCTS Test Customer 4
for Generic Electric Company

Current Auction
CP 2018-19-September 2018
Prior Auctions

Resource Information

Resource Name Generic Peaker
Capacity Zone Rest-of-Pool
Resource ID 4
Type Generator
Lead Participant(ID) Generic Electric Company (7)
Sub-Type Non Intermittent

Filter Filter Results

Demand Bid
Maximum Demand Bid MW 7.000
Add

Supply Offer
Maximum Supply Offer MW 1.000
Add

Resource Information Screen contains about submitted bids/offers and resource's qualified capacity.

Clicking the **Add** button in the **Demand Bid** box will open the Resource Demand Bid Addition Screen.

Figure 15: Resource Demand Bid Addition Screen

FCM Reconfiguration Auction Bidding

Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCTS Test Customer 4
for Generic Electric Company

Resource Demand Bid Addition Cancel

Resource Name Generic Peaker Resource ID 4 Auction September 2018

Maximum Demand Bid MW 7.000

Segment	Price \$/KWm	MW
1	5	4
2	1	3
3		
4		
5		
TOTAL		7.000

Submit

Enter values for the Price/MW pairs for the Demand bid.

Remember that this screen is to submit bids shed of CSO for the given commitment period (annual or monthly), and that Demand Bid prices must be in descending order.

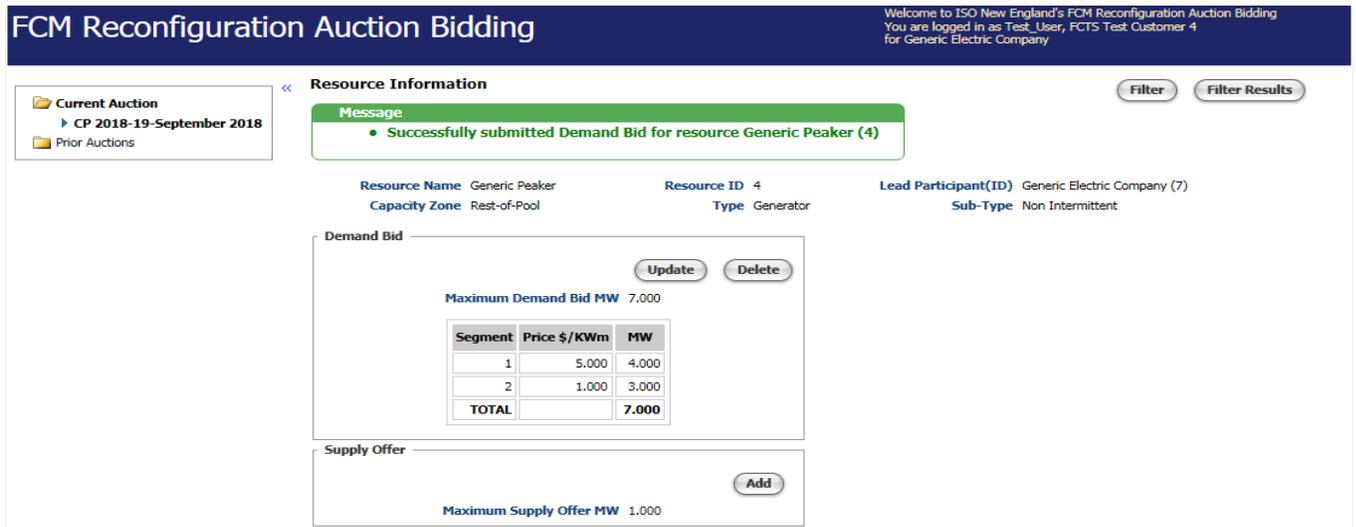
Input the desired price(s) in \$/kW-Month.

Input the MW value. Up to five price and MW pairs can be added. Values are not cumulative (the **TOTAL** row at the bottom shows cumulative value).

Total MW value cannot be greater than **Maximum Demand Bid MW.**

Once values are entered, click the **Submit** button at the bottom.

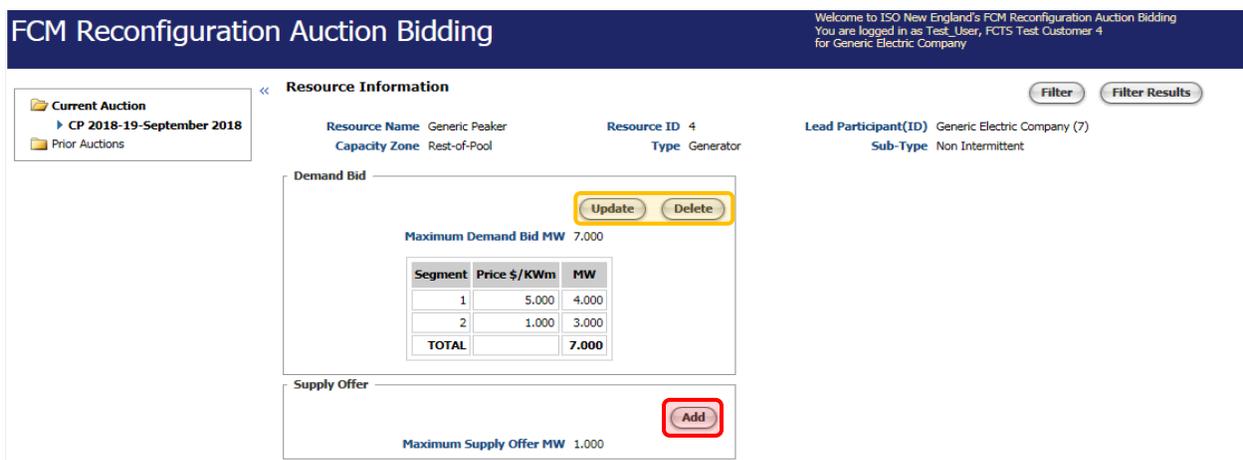
Figure 16: Resource Information (Demand Bid Addition Success Message)



Once submitted, if there is no issue, a green validation message should appear.

If there is an issue with the submittal, a red error message will be displayed.

Figure 17: Resource Information before Supply Offer Addition



Demand bids can be **Updated** or **Deleted** at any time during an open auction window by clicking the respective buttons.

Clicking the **Add** button will bring you to the Resource Supply Offer Addition screen.

Figure 18: Resource Supply Offer Addition

FCM Reconfiguration Auction Bidding

Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCTS Test Customer 4
for Generic Electric Company

Resource Supply Offer Addition Cancel

Resource Name: Generic Peaker Resource ID: 4 Auction: September 2018

Maximum Supply Offer MW: 1.000

Segment	Price \$/KWm	MW
1	10	0.1
2	5	0.5
3	4	0.4
4		
5		
TOTAL		1.000

Submit

Enter values for the Price/MW pairs for the Supply offer.

Remember that this screen is to offer to acquire CSO for the given commitment period. Supply offer bid prices must be in ascending order.

Input the desired price(s) in \$/kW-Month. Up to five price and MW pairs can be added, which must be in ascending order

Input the MW value. Values are not cumulative (the **TOTAL** row at the bottom shows cumulative value). Total MW value cannot be greater than **Maximum Supply Offer MW.**

Once values are entered, click the **Submit** button at the bottom.

Figure 19: Resource Information (Supply Offer Addition Success Message)

Welcome to ISO New England's FCM Reconfiguration Auction Bidding
You are logged in as Test_User, FCIS Test Customer 4
for Generic Electric Company

FCM Reconfiguration Auction Bidding

Current Auction

- ▶ CP 2018-19-September 2018
- ▶ Prior Auctions

Resource Information
Filter
Filter Results

Message

- Successfully submitted Supply Offer for resource Generic Peaker (4)

Resource Name: Generic Peaker
Capacity Zone: Rest-of-Pool

Resource ID: 4
Type: Generator

Lead Participant(ID): Generic Electric Company (7)
Sub-Type: Non Intermittent

Demand Bid

Update
Delete

Maximum Demand Bid MW: 7.000

Segment	Price \$/KWh	MW
1	5.000	4.000
2	1.000	3.000
TOTAL		7.000

Supply Offer

Update
Delete

Maximum Supply Offer MW: 1.000

Segment	Price \$/KWh	MW
1	10.000	0.100
2	5.000	0.500
3	4.000	0.400
TOTAL		1.000

Once a supply offer is submitted, if there is no issue, a green validation message should appear.

If any issues have been made, a red error message detailing the error will be displayed.

You may Update or Delete the supply offers for a resource at any time during an open auction window.