

Customer and Asset Management System (CAMS)
User Guide for Demand Asset and
Demand Resource Maintenance

Version 2.0

2018

ISO New England Inc.



About this user guide

The Customer and Asset Management System (CAMS) User Guide for Demand Asset and Demand Resource Maintenance is grouped into independent sections arranged by topic and user role. This guide is not intended to be read from beginning to end.

You may:

- Select a topic from the <u>How to:</u> list on page 9.
- Start with an <u>Overview</u> on page 11.



Select a

CAUTION

- Company names and any numerical values are fictitious and not to be associated with any actual market customer.
- Though we strive to maintain this guide current, the screen shots in this guide may not fully reflect the current production environment.

Change Summary

Revision	Date	Comments
Version 1.0	November 6, 2012	Initial release
Version 1.1	October 23, 2013	Screen shots updated for 2013 CAMS upgrade; removed the Index section.
Version 2.0	June 1, 2018 Rewritten for new Demand Response Reg system implemented as a result of Price Responsive Demand.	

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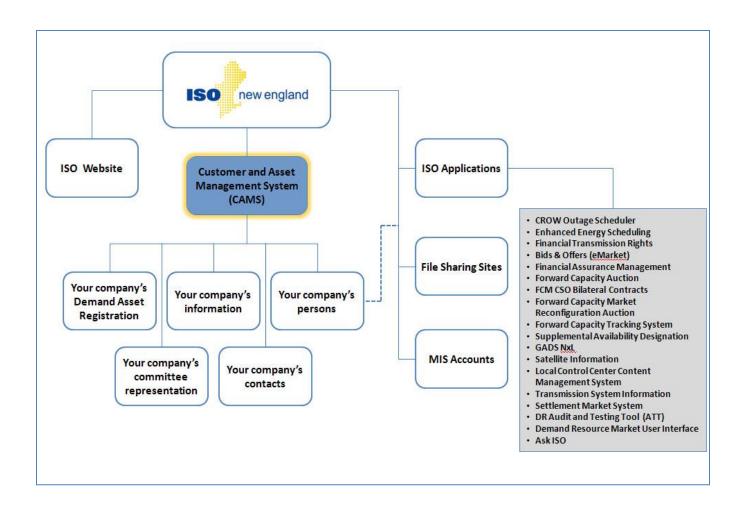
1 What is CAMS?

The Customer and Asset Management System (CAMS) is ISO New England's administrative database of record. It stores, maintains and manages all customer data and facilitates the registration of demand assets and resources.

CAMS is available to customers as an internet-based tool for:

- Managing your company, persons, and affiliates information (see the CAMS User Guide for Company and Affiliate Maintenance).
- Managing your demand assets (see "<u>Manage your Demand Response</u> Resources and Demand Assets" on page 17). Managing your demand resources (see "<u>Manage your demand resources</u>" on page 75).

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2 How to:

2.1 Get started



This section applies to the following CAMS roles:

✓ All roles

This section covers the following topics:

- Overview
- Accessing CAMS
- CAMS user interface

2.1.1 Overview

2.1.1.1 CAMS Security Administrators

- To use CAMS, a company must first designate at least one individual to be a CAMS Security Administrator (SA).
- Designating an SA is normally completed during the membership application process to ISO New England.
- An SA is responsible for assigning roles in CAMS and issuing digital certificates to users. For details see the "Manage your company's persons" section in the CAMS User Guide for Company and Affiliate Maintenance.
 - o For details on the SA role see "Security Administrator" on page 89.
 - o For details on all roles in CAMS see <u>Table 1: CAMS Roles and Permissions</u> on page 99.

2.1.1.2 CAMS Persons and Roles

- Users are known in CAMS as "Persons".
- To access CAMS, a person must first be entered into the CAMS database by an SA. See "Adding persons to CAMS" in the CAMS User Guide for Company and Affiliate Maintenance.
- The person must then be assigned at least one role and issued a digital certificate by the company's SA.
 - o A *role* is a defined set of allowable activities in CAMS or another ISO New England application.
 - A *digital certificate* is an electronic key to the ISO New England websites that host CAMS and other applications. A person cannot access any ISO application without a digital certificate.
 - Digital certificates are automatically issued the first time a person is assigned a role or is given access to an ISO application or file share group that requires a certificate.
 - For details on assigning roles and issuing digital certificates by Security Administrators, see "Manage your company's persons" in the CAMS User Guide for Company and Affiliate Maintenance.
 - Digital certificates must be renewed annually.
 - For further details including issuing, renewing and installing digital certificates, see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA.
- For details on all CAMS roles see <u>Table 1: CAMS Roles and Permissions</u> on page 99.
- For details on roles in other ISO applications see <u>Table 2: Relevant ISO Applications and Groups</u> on page 103.

2.1.1.3 CAMS Frequently Asked Questions

• See the "Customer and Asset and Management System (CAMS)" section on ISO New England's website FAQ page, located at https://www.iso-ne.com/participate/support/faq.

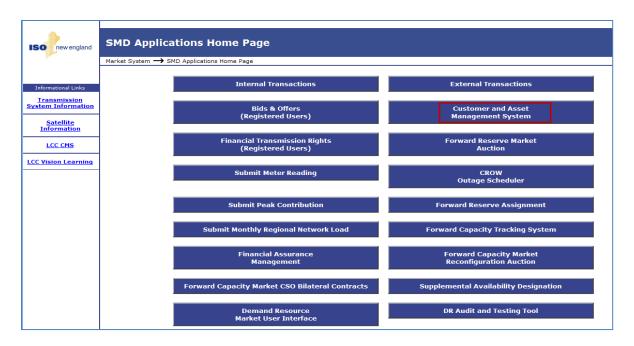
2.1.1.4 ISO New England Glossary and Acronyms

- For a full list of ISO New England terms and acronyms, see the Glossary and Acronyms listing on ISO New England's website at:
- https://www.iso-ne.com/participate/support/glossary-acronyms.

2.1.2 Accessing CAMS

I have a CAMS role and have installed my digital certificate. How do I access CAMS?

- 1. Navigate to the ISO New England SMD Applications Home Page at: http://smd.iso-ne.com/
- 2. Click "Customer and Asset Management System":



3. The CAMS homepage displays:



4. See the "How to:" list on page 9 for details on the task you want to perform.

I do not have a CAMS role or have not installed a digital certificate. How do I access CAMS?

To get a CAMS role and digital certificate:

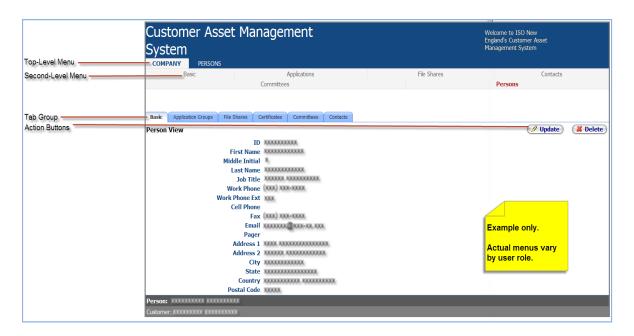
- 1. Contact your company's CAMS Security Administrator (SA) to request access to CAMS.
 - a. To learn who at your company is an SA, contact ISO New England Customer Support at (413) 540-4220 or via e-mail at custserv@iso-ne.com.
- 2. Your SA will assign you at least one specific role in CAMS.
- 3. See the section on page 81 for details of each CAMS role.
- 4. Your SA will issue you a digital certificate if you do not already have one.
- 5. ISO New England will email you instructions for installing the certificate on your computer.
 - a. See "Install your Digital Certificate" in the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA.
 - b. You will need the "PIN #" or "Pickup Password" from your SA to complete the installation process.
- 6. After you have installed your digital certificate, go to the "Accessing CAMS" section on page 13.



IMPORTANT

It may take up to two hours for the system to implement a new CAMS role.

2.1.3 CAMS user interface



- The CAMS interface uses a hierarchical menu structure.
 - o Click on a *top-level menu* to reveal a second-level menu options.
 - o Click a *second-level menu* option to reveal more choices or *tab groups*, depending on the task you want to perform.
 - o Action buttons appear as needed.
- All menu selections are based on your individual user role or roles in CAMS.
- Menus and functionality that do not pertain to your role(s) will not be displayed.
- For details on the different CAMS roles, see the Relevant CAMS Roles section on page 81.

When I try to open CAMS in a second browser tab I get an error. Is there a problem?

You can only have one session of CAMS running per browser instance. Open a second instance of the browser (not a tab) if you want to run another session of CAMS simultaneously.

Why does CAMS sometimes log me out?

For security reasons, your CAMS session will timeout after a period of inactivity. Close and launch the browser again to log back in.

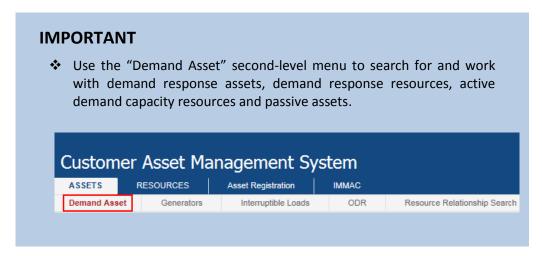
2.2 Manage your Demand Response Resources and Demand Assets

This section applies to the following CAMS roles:

- ✓ External Demand Asset Maintainer
- ✓ External Demand Asset Viewer
- ✓ External Host Participant Viewer
- ✓ External Meter Reader Viewer
- ✓ This section covers the following topics:
- ✓ Overview of demand asset
- ✓ Enrolling an
- ✓ Re-mapping a DRR to a
- ✓ <u>Unmapping a demand asset from a demand resource</u>
- ✓ <u>Update an asset</u> Retire an asset
- ✓ Retire a demand resource
- **√**
- ✓ Search for demand asset
- ✓ Error! Reference source not found. <u>Create Service Notes</u>

This section of the guide explains the process for enrolling an active or passive demand asset and mapping the demand assets to demand resources. The registration and mapping process is managed in the Customer and Asset Management System (CAMS). To access CAMS, see "Accessing CAMS" on page 12.





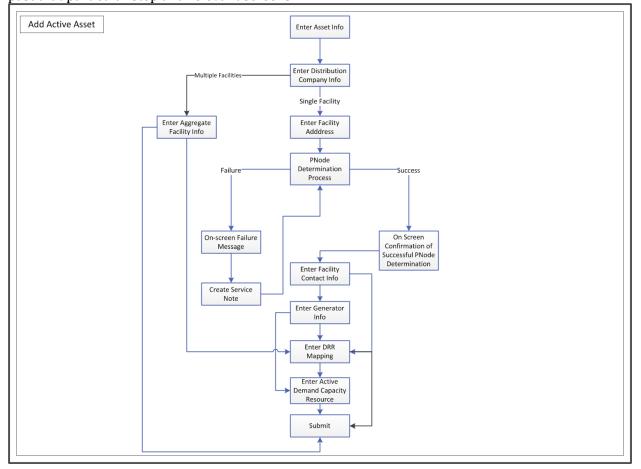
2.2.1 Overview of demand asset

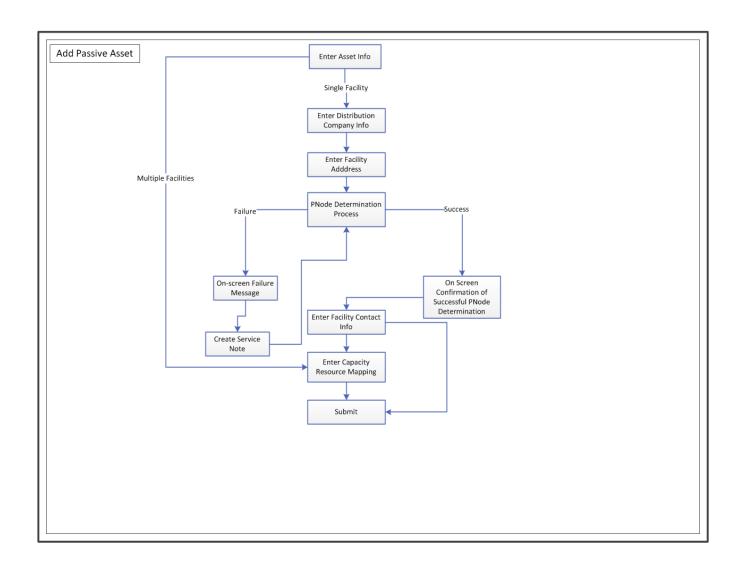
2.2.1.1 Demand asset registration process

The purpose of registration is to identify demand assets, their location and characteristics so they, as properly registered assets, can participate in the ISO New England-administered markets.

The Lead Market Participant of a demand asset initiates the registration process in CAMS. Some steps in the registration process depicted above may not be needed for a given asset depending on the type of registration. For example, some assets require the submission of generation information if a generator exists at the facility. Where no generation exists at the facility, the registration process advances

past that particular step and relevant screens.





Timeline for the asset registration process

IMPORTANT: New enrollments that are submitted for approval any later than T-12 prior to the model cut deadline are considered late registrations and are not required to be approved by ISO prior to the T-7 deadline. Any registrations submitted after 12:00 p.m. one business day prior to the T-7 deadline will NOT be approved and will not be in the model for the following month. Please plan new enrollment submittals accordingly.

- Lead Market Participants must allow ISO New England seven full business days to review registration submittals for new demand assets.
- Monthly communication check-out process begins seven calendar days prior to the first of the following month.
- Demand Response Assets and/or Demand Response Resources that do not satisfy the requirements for inclusion in the monthly communication model until after the beginning of the monthly checkout process will not be included in the communication model for that month, and will continue to be excluded from future models until all requirements are met.

2.2.1.2 The Communication Front End/RTU Model timelines (applies to active demand response only)

The following tasks must be completed seven days before the requested operational date.

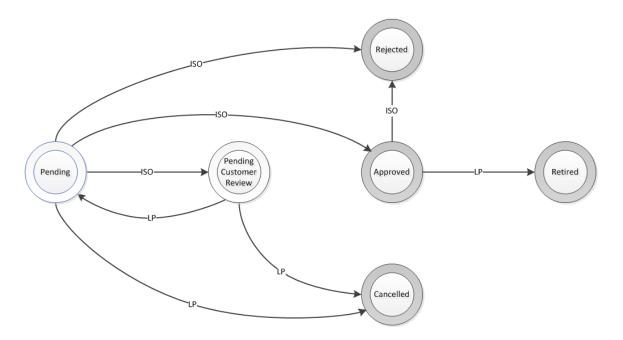
- 1. Asset Approval:
 - ISO New England has seven business days to complete its review of a complete initial registration. If additional customer information is required to complete ISO review of the registration, the ISO New England will have an additional seven business days to complete its review upon receipt of any additional required information.
- 2. Telemetry Installed and Operational:
 - Lead Market Participants are responsible for certifying meters are installed and operational. If this certification is not made, the asset will not become operational and will not contribute to the performance of the Demand Response Resource it is mapped to.
- 3. Mapping the Demand Response Asset to a Demand Response Resource:
 - Lead Market Participants are responsible for mapping new demand response assets to a demand response resource in CAMS. See "Re-mapping a DRR to a" on page 46.

- Mapping the demand response resource to a Demand Designated Entity (DDE):
 - Lead Market Participants are responsible for mapping new demand response resources to their selected DDE in CAMS. See
 "<u>Update a Demand Designated Entity (DDE)</u>" on page 78.
- Mapping the Demand Response Resource (DRR) to the Remote Terminal Unit (RTU):
 - DDEs are responsible for mapping new demand response resources to an RTU. See"Updating a Remote Terminal Unit" for a Resource on page. Note that the Lead Market Participant must map the demand response resource to the appropriate DDE before the DRR to RTU mapping can take place.
- Building a baseline:
 - o Unadjusted baseline (UBL) is calculated for each DRA every day.
 - o Non-holiday weekdays baseline is calculated as a ten day average taken from the past 30 non-holiday weekdays. Most recent non-performance days are used first, then dispatch days, then curtailment days if needed.
 - o Baseline methodology is extended to two additional day types: Saturday and Sunday/Holiday. Baseline is calculated as a 5 day average with a maximum lookback of 42 calendar days.
 - Baseline adjustment period shortened to 3 intervals that ended prior to the dispatch instruction, unless they were part of a prior dispatch.
 - Baseline is not required for DRA to get into the monthly model, but it will not contribute to performance of DRR until at least one baseline for a day type is built.

2.2.1.3 Considerations for mapping a demand asset to a demand resource

- Effective date of mappings is on monthly boundaries.
- Demand Response assets and are mapped to demand response resources and optionally, to Active Demand Capacity Resources in the same Aggregation Zone.
- On-Peak and Seasonal Peak Assets are mapped to capacity resources in the same Load Zone.

Asset State Chart



2.2.1.4 How does a demand response asset reach the "Approved state?

A demand response asset must meet the following requirements in order to achieve the "Approved" state:

- 1. A recent utility bill (within 6 months of the registration date) must be provided.
- 2. The asset's meters must be installed and operational (verified by setting the "Telemetry Installed and Operational" flag to "Yes"
- 3. For Active Demand Response Assets, a PNode must be assigned. For assets where the Maximum Interruptible Capacity (MIC) is greater than 1 MW, the PNode must be verified by the Distribution Company and proof of verification must be uploaded to service notes.
- 4. The demand response asset must be mapped to a demand response resource.
- 5. The demand response asset is not operational or contributing to the demand response resource until the "Approved" status is met.

2.2.1.5 How does a demand response asset become "operational" for a day type?

- 1) The Demand Response Resource must have a baseline for the operating day type. Operating day types are:
 - Non-holiday weekday
 - Saturday
 - Sunday/holiday
- 2) The Demand Response Resource must not be on curtailment for the operating day.

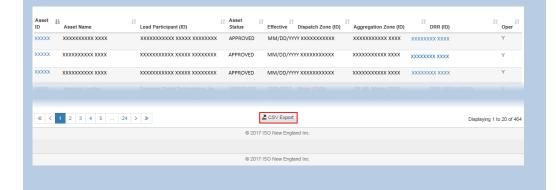
2.2.1.6 How does a demand response resource become "operational" and included in the monthly communication model?

- 1. The Demand Response Resource must have at least one approved demand response asset with telemetry verified as installed and operational mapped to it.
 - 2. The Demand Response Resource must be mapped to a DDE and RTU.



IMPORTANT

To view a list of demand response assets as of the selected date, click the "CSV Export" button at the bottom of the asset "Search Results" screen. This will help you verify which asset(s) are approved and operational, and thereby included in the monthly communication model.



2.2.2 Enrolling an Asset

This section covers the following types of asset registration:

• Active Demand Response Assets

• Passive Assets See the "Enrolling a passive asset" section on page 39)

2.2.2.1 Active Demand Response Asset

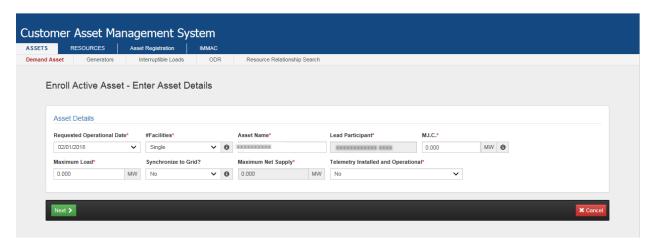
- 1) Role that can perform this task:
 - External Demand Asset Maintainer
- 1) Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2) Click the "Assets" top-level menu bar:



3) Click the "Demand Asset" second-level menu bar. Click "Enroll Active:



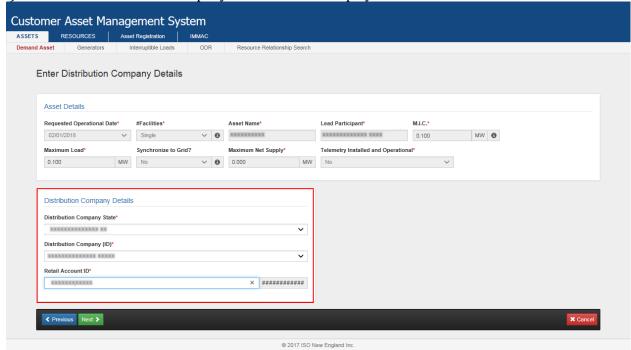
4) The "Enroll Active Asset" screen displays:



- 5) For "Requested Operational Date" select a future date that is the first date of the month.
- 6) For "Facilities" select:
 - "Single" when the asset is comprised of one physical location (screen shots will use this type for example purposes only)
- 7) "Multiple" when the asset is comprised of more than one physical location.
- 8) For "Asset Name" enter the name of the asset (must be 30 characters or less).
- 9) For "M. I. C." Enter the Maximum Interruptible Capacity in MW for the asset. MIC must be greater than or equal to 0.010 MW and should be less than or equal to the sum of the Maximum Load and Maximum Net Supply.
- 10) For "Maximum Load" enter the value in MW. Must not exceed 125% of the maximum load on the supplied utility bill.
- 11) For Synchronize to Grid?" select:
 - "Yes" if there is a Generator at the facility that can synchronize to the grid.
 - "No" if there is no generation at the facility or generation cannot synchronize to the grid.

- 12) For "Maximum Net Supply" enter the value in MW of the allowed pushback per the generator(s) interconnection agreement
- 13) For "Telemetry Installed and Operational" select:
 - "Yes" if all meters are installed, tested and are in working order
 - "No" if meters are not installed, tested and in working order
- 14) Click the "Next" button. If the Facility type is "Multiple, skip to step 43.

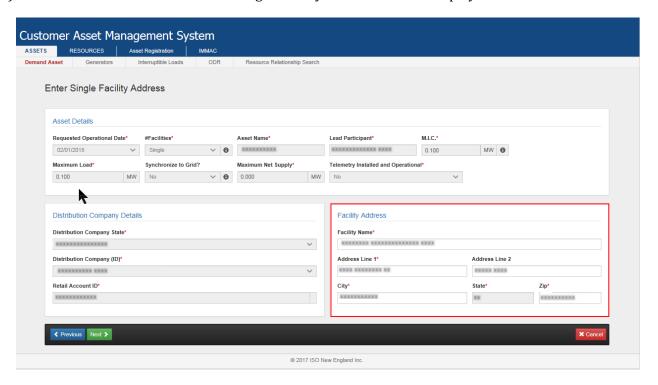
15) The "Enter Distribution Company Details" screen displays:



16) From the drop-down boxes select the state where the asset receives its electrical service and the name of the distribution company

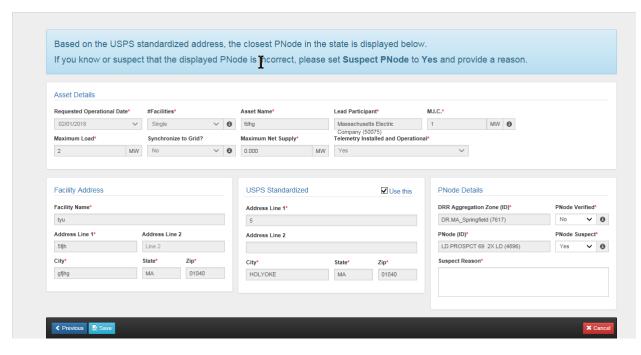
providing that service.

- 17) Enter the "Retail Account ID" number. You can find this number on your distribution company utility bill. The correct format for the number will be displayed to the right of the text box after you select a distribution company.
- 18) Click the "Next" button. The "Enter Single Facility Address" screen displays:



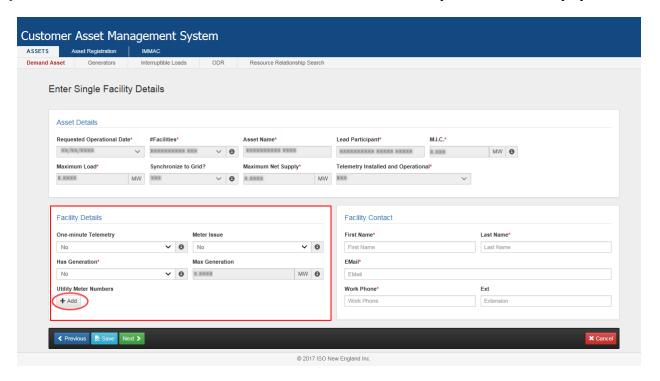
- 19) "Facility" is the physical location of the asset.
 - a) Registration information must be specific to the service address and not a billing address.
 - b) The data entered here is used to determine facility location (latitude and longitude) and closest pricing node or PNode (geographically).

c) Enter new facility details and click "Next" to standardize the address and trigger the pricing node determination process.



- 20) The geocoding service identifies the closest pricing node (PNode) location in the state.
- 21) If the USPS address standardization was not successful, uncheck the box
- 22) For "PNode Verified" select:
 - "Yes" if the PNode has been verified by the distribution company for assets with a MIC of 1 MW or greater. For those assets with MIC under 1 MW, select "Yes" if the PNode is not suspect.
 - "No"
- 23) If the PNode and the location were successfully determined, select "No" in PNode suspect (skip to step 25).

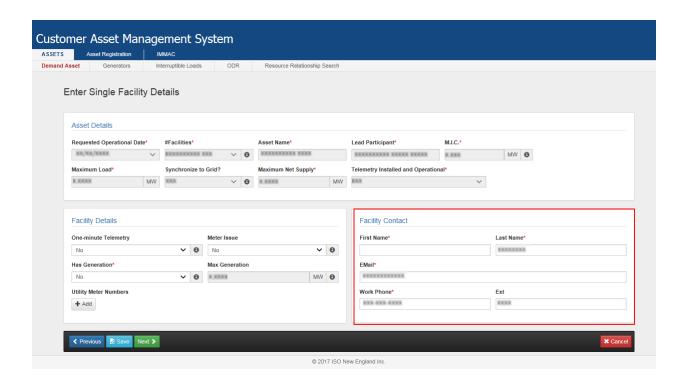
- 24) If you know or suspect the displayed PNode is incorrect, select "Yes" in "PNode Suspect" and enter a reason and the correct PNode, if known, in the "Suspect Reason" box that appears. The registration will be returned to ISO for review and the PNode will be updated accordingly.
- 25) PNode must be determined before the asset can be approved.
- 26) When all information is verified, click the "Next" button. The "Facility Details screen displays.



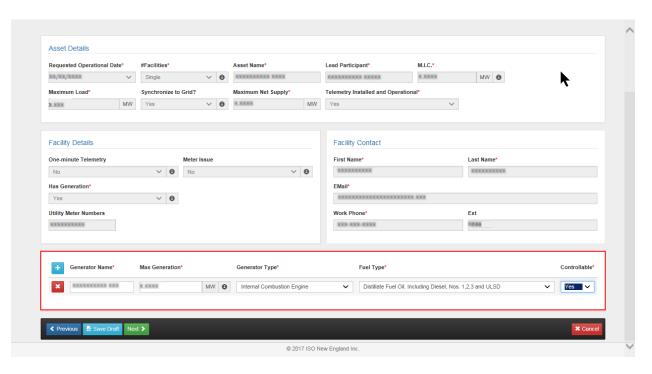
27) For "One-minute Telemetry" select:

- "Yes" if the Asset is capable of providing one-minute telemetry
- "No" if the asset is not capable of providing one-minute telemetry

- 28) For "Meter Issue" select:
 - "Yes" if there is an issue with the meter. Note the asset will not become operational if there is a meter issue.
 - "No" if there are no meter issues
- 29) For "Has Generation" select:
 - "Yes" if there is generation at the facility
 - "No" if there is no generation at the facility
- 30) Enter "Max Generation" in MW, including both generation and electrical storage, for the generator(s) located at the facility (if applicable).
- 31) Click the "+ Add" to enter a utility meter number. If there are multiple meter numbers, click the plus sign to add more.
- 32) Continue to the "Facility Contact" section.

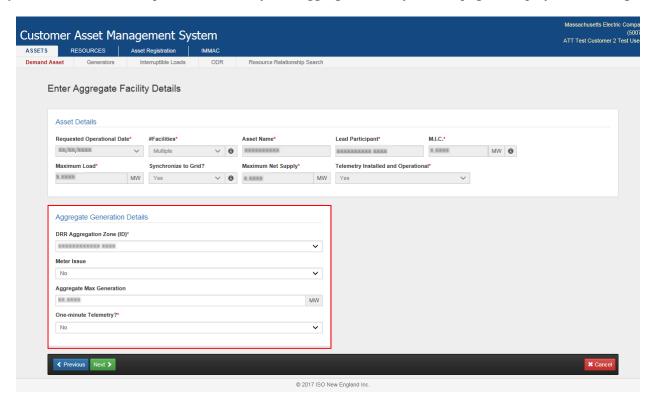


- 33) Enter the "First Name", "Last Name", and "Email" of the facility contact.
- 34) Enter the "Work Phone in the format" ###-###.
- 35) If applicable, enter an "Extension".
- 36) Click the "Next" button. If the facility has Generation, the "Generator Details" screen is displayed.



- 37) Enter the "Generator Name".
- 38) Enter the "Max Generation" in MW. This is the nameplate rating of the generator
- 39) Select "Generator Type" from the list.
- 40) Select "Fuel Type" from the list. Fuel type should correspond with generator type.
- 41) For "Controllable" select
 - "Yes" if the generator is controllable
 - "No" if it is not controllable

- 42) Select the plus sign to add additional generators if there are multiple generators at the facility (including electrical storage).
- 43) Click the "Next" button.
- 44) For assets with "Multiple" locations only, the Aggregate Facility Details page is displayed. For "Single" location assets, skip to step 48.



- 45) Select a value for "DRR Aggregation Zone" from the drop-down list.
- 46) Select a value for "Meter Issue":
 - 2) "Yes" if there is a meter issue. Note if there is a meter issue, the asset will not become operational.

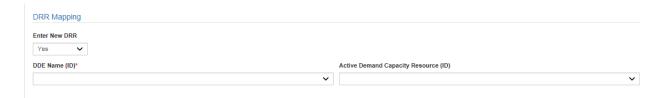
- 3) "No" if there is no meter issue
- 47) Enter "Aggregate Max Generation" in MW if applicable.
- 48) Select a value for "One Minute Telemetry":
 - 4) "Yes" if the aggregate facilities can provide one minute telemetry
 - 5) "No" if aggregate facilities cannot provide one minute telemetry
- 49) Click "Next" to continue.



IMPORTANT

- ❖ An aggregate registration that has multiple facilities requires you to submit individual asset location information to the ISO. Please request a template for the required information via Ask ISO.
 - The completed template should be attached to a Service Note.
 - See the "<u>Create Service Notes</u>" section on page 71.

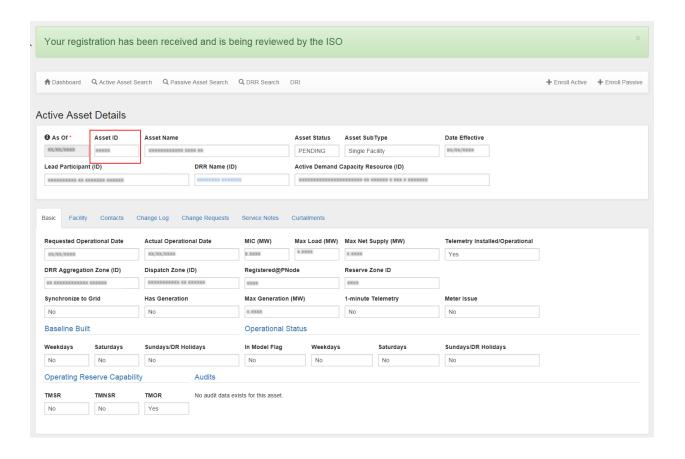
50) The "DRR Mapping" screen is displayed.



51) For "Enter New DRR" select:

- "Yes" to create a new DRR (only create a new DRR if existing DRR(s) have assets totaling 1 MW of MIC or the asset MIC is 5 MW or greater).
- "No" to select an existing DRR from the list.
- 52) Select "DDE Name (ID)" from the list.
- 53) Select "Active Capacity Demand Resource (ID)" from the list (optional).
- 54) Click "Submit" button to complete the registration.

A success message will display and the registration will be sent to ISO for review. The asset ID of the new asset can be found as shown below:



2.2.2.2 Register Passive Demand Response Asset

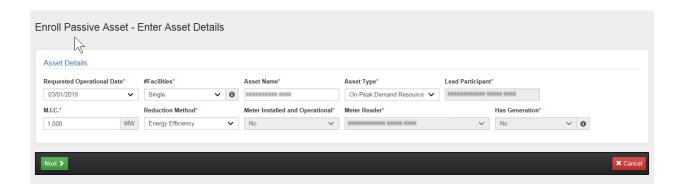
Roles that can perform this task:

- o External Demand Asset Maintainer
- 1) Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2) Click the "Assets" top-level menu bar:



3) Click the "Demand Asset" second-level menu bar. Click "Enroll Passive:

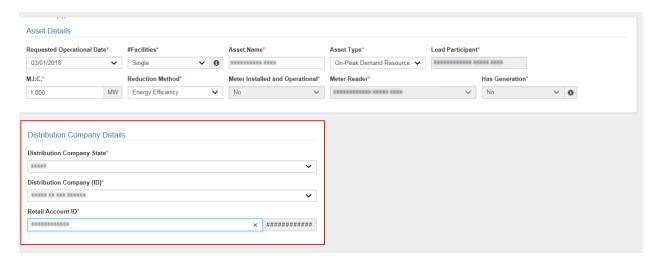




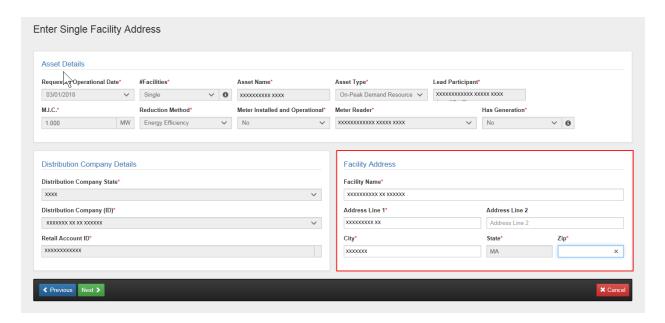
- 1) For "Requested Operational Date" select a future date that is the first date of the month.
- 2) For "Facilities" select:
 - "Single" when the asset is comprised of one physical location (screen shots will use this type for example purposes only). A recent utility bill (within 6 months of registration) is required for single facilities.
- 3) "Multiple" when the asset is comprised of more than one physical location See Communicating Multiple Facility details to the ISO on page 36
- 4) For "Asset Name" enter the name of the asset (30 characters or less).
- 5) For "Asset Type" select:
 - On-Peak Demand Response
 - Seasonal Peak Demand Resource
- 6) For "M.I.C" enter the value of Maximum Interruptible Capacity in MW.
- 7) For "Reduction Method" select:
 - "Distributed Generation
 - Load Management
 - Energy Efficiency
- 8) For "Meter Installed and Operational" select:
 - "Yes" if all meters are installed, tested and are in working order
 - "No" if meters are not installed, tested and in working order
- 8) For "Has Generation"

- "Yes" if there is generation at the facility
- "No" if there is no generation at the facility

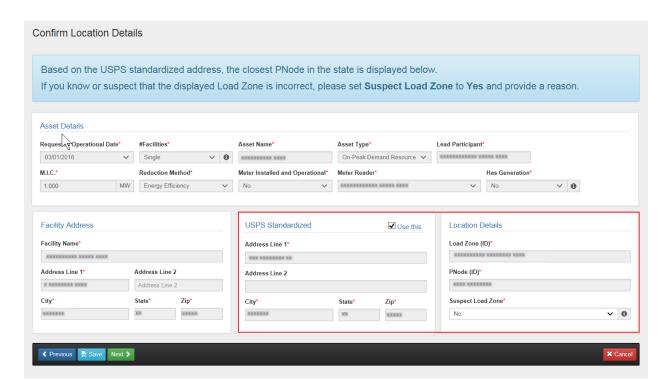
Click the "Next" button. If the Facility type is "Multiple, skip to step 23 to enter Capacity Resource mapping. If the Facility type is "Single", continue below.



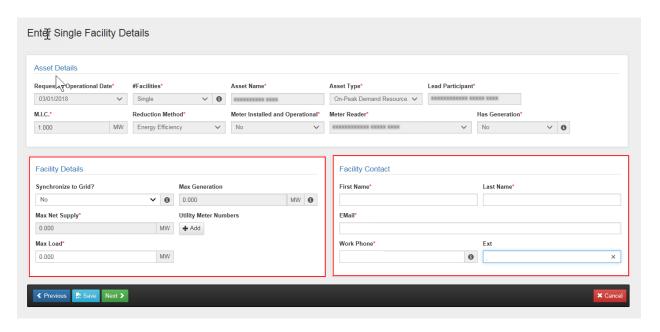
- 9) From the drop-down boxes select the state where the asset receives its electrical service and the name of the distribution company providing that service.
- 10) Enter the "Retail Account ID" number. You can find this number on your distribution company utility bill. The correct format for the number will be displayed to the right of the text box after you select a distribution company.
- 11) Click the "Next" button. The "Enter Single Facility Address" screen displays:



- 12) "Facility" is the physical location of the asset.
 - a) Registration information must be specific to the service address and not a billing address.
 - b) The data entered here is used to determine facility location (latitude and longitude) and closest pricing node or PNode (geographically).
 - c) Enter new facility details and click "Next" to standardize the address and trigger the pricing node determination process.



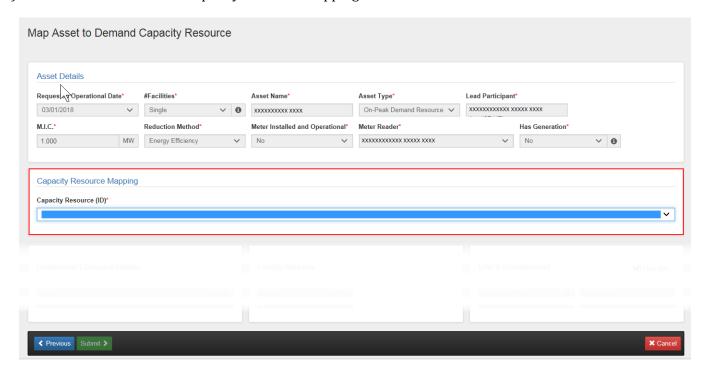
- 13) The geocoding service identifies the closest pricing node (PNode) location in the state.
- 14) If the USPS address standardization was not successful, uncheck the box
- 15) If the PNode and the location were successfully determined, select "No" in PNode suspect (skip to step 25).
- 16) If you know or suspect the displayed PNode is incorrect, select "Yes" in "PNode Suspect" and enter a reason and the correct PNode, if known, in the "Suspect Reason" box that appears. The registration will be returned to ISO for review and the PNode will be updated accordingly.
- 17) PNode must be determined before the asset can be approved.



18) For Synchronize to Grid?" select:

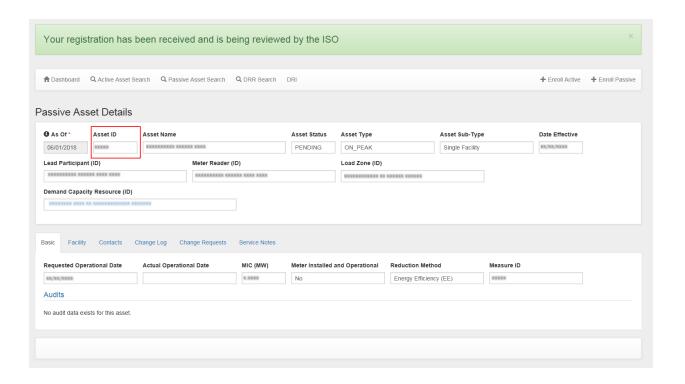
- "Yes" if there is a Generator at the facility that can synchronize to the grid.
- "No" if generation cannot synchronize to the grid.
- 19) Enter "Max Generation" in MW, including both generation and electrical storage, for the generator(s) located at the facility.
- 20) Enter "Max Net Supply" in MW (if generation at the facility can push back).

- 21) Click the "+ Add" to enter a utility meter number. If there are multiple meter numbers, click the plus sign to add more.
- 22) Enter "Max Load" in MW.
- 23) Click "Next" to continue to Capacity Resource Mapping.



- 24) Select the Capacity Resource from the list.
- 25) Click "Submit" button to complete the registration.

A success message will display and the registration will be sent to ISO for review. The asset ID of the new asset can be found as shown below:

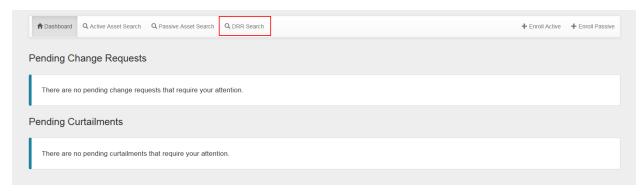


2.2.3 Re-mapping a DRR to a ADCR

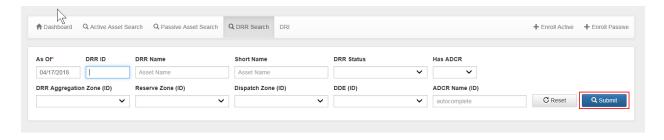
- 9) Role that can perform this task:
 - a. External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Click the "Assets" top-level menu bar:



Click the "Demand Asset" second-level menu bar. Select DRR Search



3. Enter the search criteria and click "Submit" button:

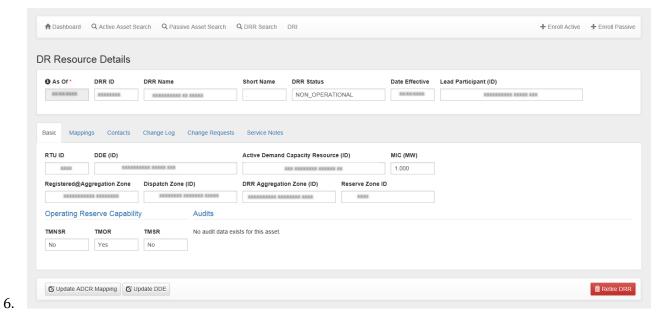


4. Search results are displayed below the search criteria:

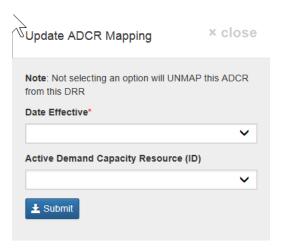


Click an individual DRR ID to view the full record and have access to mapping options.

5. The "DR Resource Details" screen displays:



- 7. Click the "Update ADCR mapping" button.
- 8. The "Update ADCR Mapping" screen displays:



- 9. Select "Date Effective" from the list. The "Date Effective" must be the first of a month.
- 10. Select "Active Demand Capacity Resource ID" to which the asset is to be mapped.

- 11. The resources available are:
 - Only those of the same demand resource type as the asset
 - Only those that belong to your company as Lead Market Participant and are at the same Aggregation Zone
- 12. Click the "Submit" button to send to ISO for review and approval

2.2.4 Unmapping a DRR from an ADCR

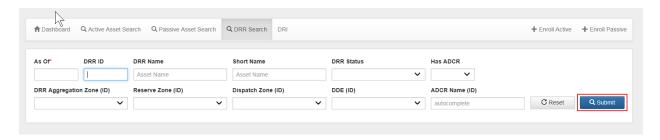
- Role that can perform this task:
 - o External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Click the "Assets" top-level menu bar:



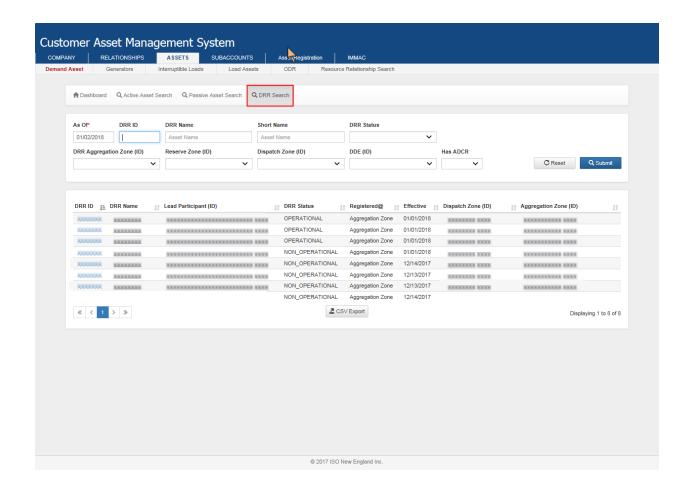
3. Click the "Demand Asset" second-level menu bar. Select the "DRR search" button



4. Enter the search criteria and click "Submit" button:

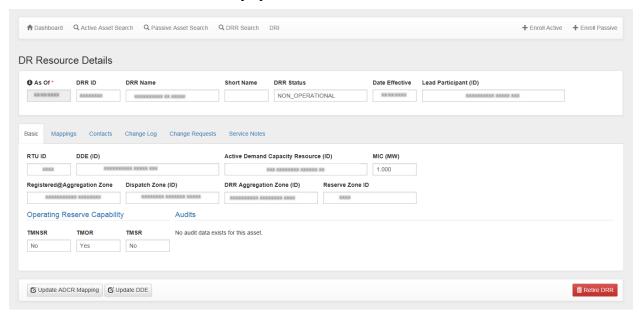


 $5. \quad Search\ results\ are\ displayed\ below\ the\ search\ criteria:$

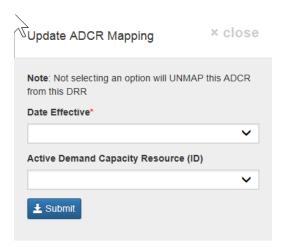


6. Click an individual DRR ID to view the full record and have access to mapping options.

7. The "DR Resource Details" screen displays:



- 8. Click the "Update ADCR Mapping" button.
- 9. he "Update ADCR Mapping" screen displays:

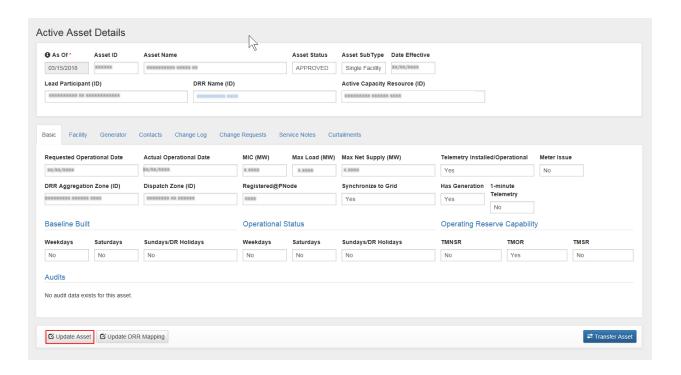


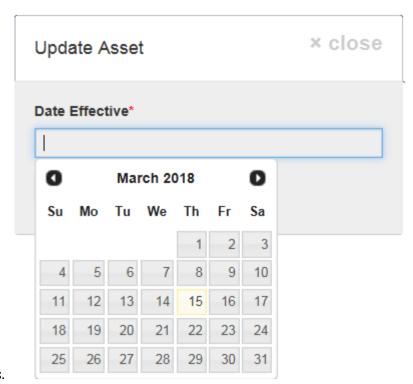
- 10. Select "Date Effective" from the list. The "Date Effective" must be the first of a month.
- 11. Do not select "Active Demand Capacity Resource ID".
- 12. Click "Submit" to send to ISO for review and approval

2.2.5 Update an asset

- Role that can perform this task:
 - External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.

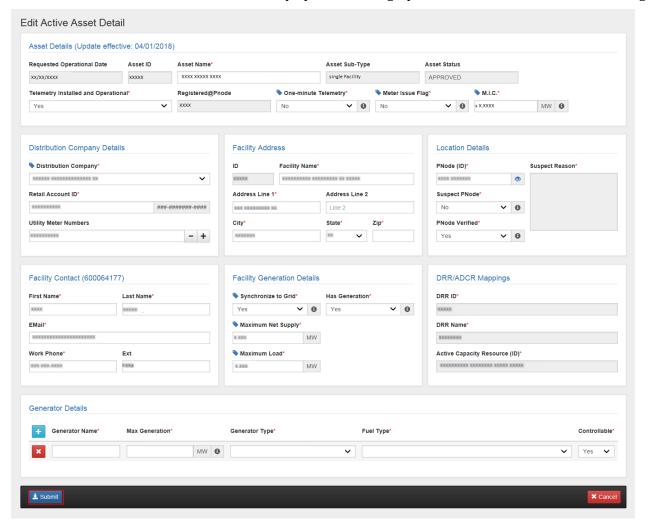
Search for the asset you want to update See "Search for an Asset" on page 64. The "Active/Passive Asset Details" screen displays:



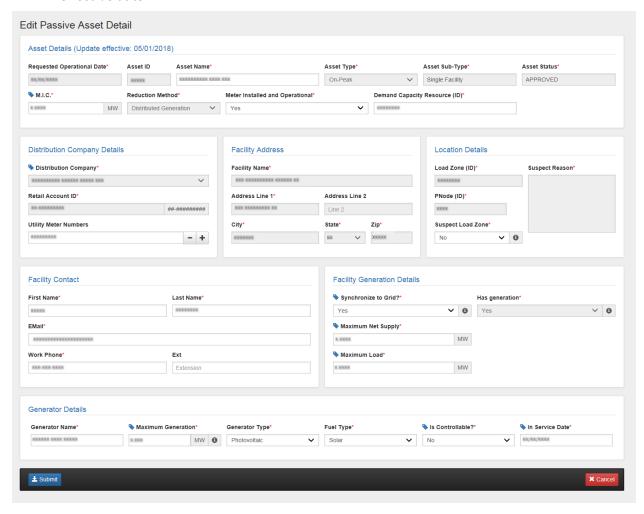


Click "Update Asset" and enter the "Date Effective" of the changes.

2. The "Edit Active Asset Detail" screen displays. Items not greyed out are the ones that can be changed for the chosen effective date:



3. For a Passive Asset, the Edit Passive Asset Detail displays. Items not greyed out are the ones that can be changed for the chosen effective date:



4. Update the information and click the "Submit" button to send to ISO for review and approval.

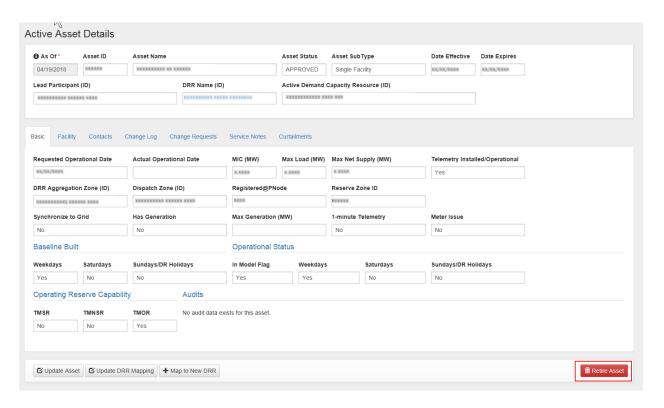


IMPORTANT

Some changes will require ISO New England approval. If additional information is needed for the approval, ISO New England will post a service note.

2.2.6 Retire an asset

- Role that can perform this task:
 - o External Demand Asset Maintainer
- 5. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 6. Search for the asset you want to update See "Search for an Asset" on page 64.
- 7. The "Active/Passive Asset Details" screen displays:



8. Click "Retire Asset" and enter the "Date Effective" of the retirement that is the first day of a future month.

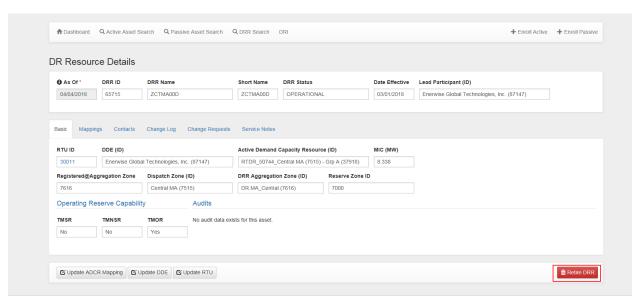


IMPORTANT

• Once an asset is retired, the retirement is permanent and cannot be reversed.

2.2.7 Retire a Demand Response Resource

- Role that can perform this task:
 - External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the asset you want to update See "Search for a DRR" on page 76.
- 3. All DRAs associated with the DRR must be retired or remapped before the DRR will be allowed to retire.
- 4. On the "DR Resource Detail" screen click "Retire DRR":



5. Enter the "Date Effective" of the retirement that is the first day of a future month and click "Submit":





IMPORTANT

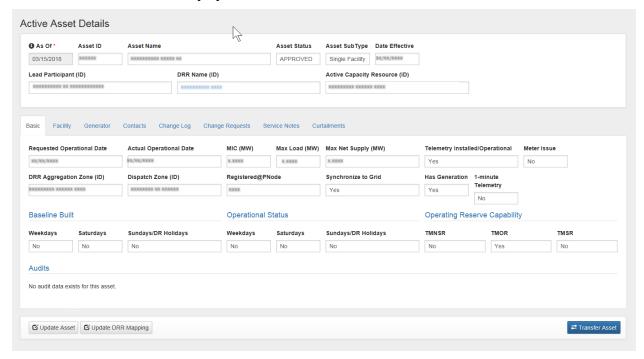
• Once a DRR is retired, the retirement is permanent and cannot be reversed.

2.2.8 View assets

To view an asset

- Roles that can perform this task:
 - o External Demand Asset Maintainer
 - o External Demand Asset Viewer
 - o External Host Participant Viewer
 - o External Meter Reader Viewer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the asset you want to view. See "Search for an Asset" on page 64.

3. The "Asset Details" screen displays:



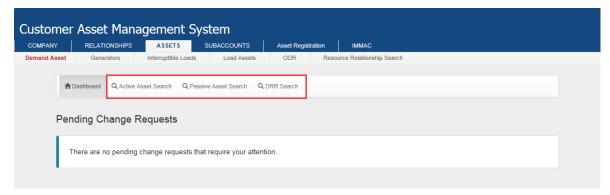
2.2.9. Search for an asset

Roles that can perform this task:

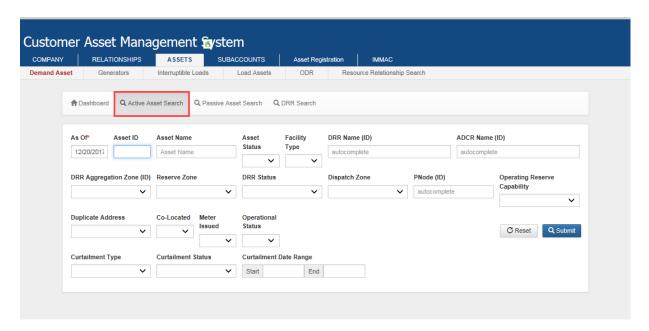
- o External Demand Asset Maintainer
- o External Demand Asset Viewer
- o External Host Participant Viewer
- o External Meter Reader Viewer
- 13. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 14. Click the "Assets" top-level menu bar:



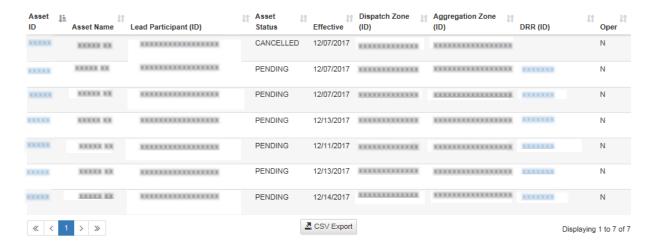
15. Click the "Demand Asset" second-level menu bar. Select the "Active Asset Search", "Passive Asset Search", or "DRR Search" button.



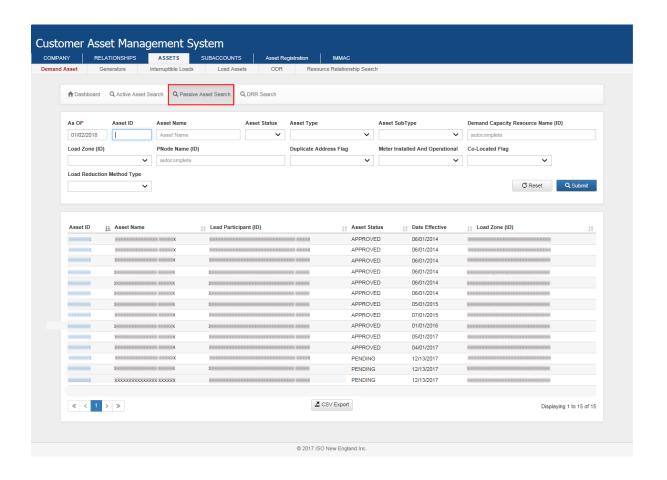
16. Enter the search criteria and click "Submit" button:



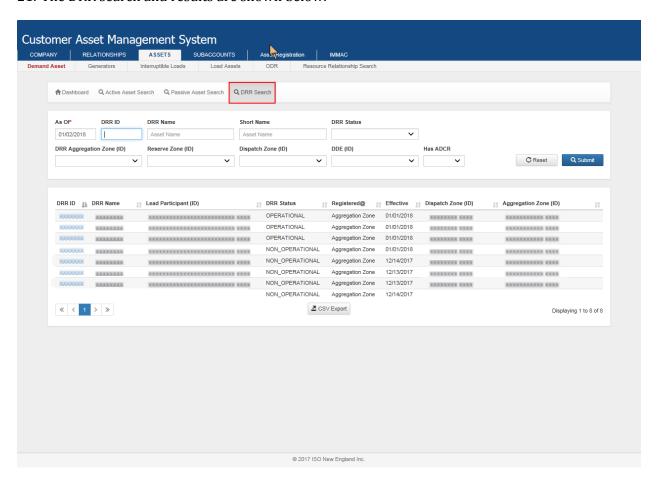
17. Search results are displayed below the search criteria:



- 18. Click an individual asset ID or DRR ID to view the full record.
- 19. The Passive asset search and results are shown below.



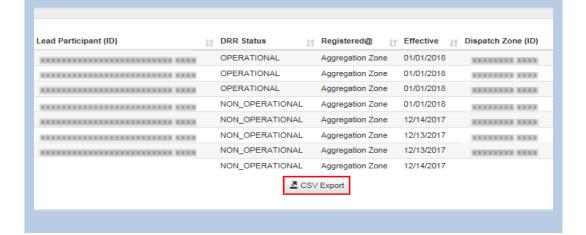
21. The DRR search and results are shown below.





IMPORTANT

❖ To view a list of all attributes and mappings of assets as of the selected date, click on the "Export to: CSV" button at the bottom of the "Search Results" screen. This will help verify the asset's readiness to be included in the monthly model that supports the Communication Front End/RTU.



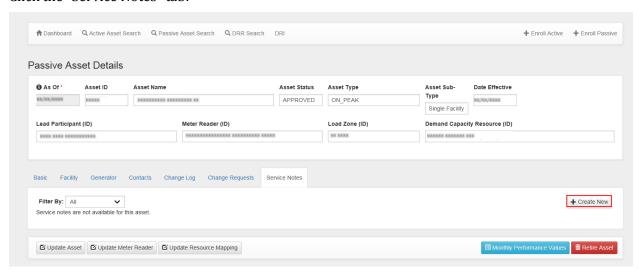
2.3 Create Service Notes

- Roles that can perform this task:
 - o External Demand Asset Maintainer
 - External Demand Asset Viewer
 - o External Host Participant Viewer
 - o External Meter Reader Viewer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Click the "Assets" top-level menu bar:

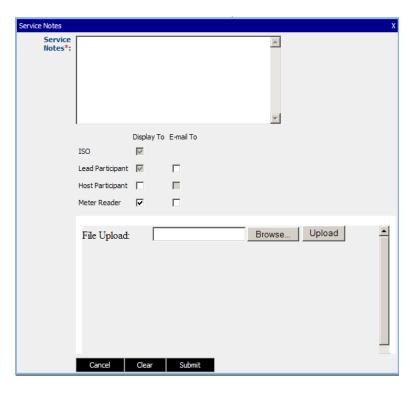


Click the "Demand Asset" second-level menu bar. Search for the demand asset for which you want to create a service note. See "Search for an Asset" on page 64.

3. Click the "Service Notes" tab:



- 4. Click the "+ Create New" button.
- 5. Fill out the form and click the "Submit" button.

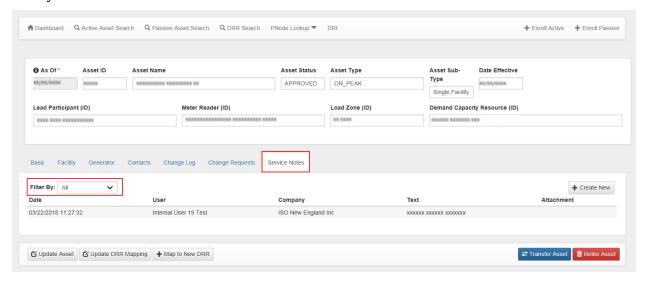


- 6. You may choose to have the note displayed only in CAMS or emailed.
- 7. You can upload a file to submit any supporting documentation.



IMPORTANT

- 1) Selecting a user to whom the service note is directed sends an e-mail message to the user informing them a service note is entered for their review.
- 2) The "File Upload" allows the user to add and upload multiple files attached to a post with a maximum size of 2 MB per file.
- 8. View your service notes in the asset view screen on the "Service Notes" tab:



9. Filter the notes you want to view by using the "Filter" drop-down box.

2.4 Manage your demand resources

This section applies to the following CAMS roles:

- ✓ External Resource Maintainer
- ✓ External Resource Viewer

This section covers the following topics:

- Search for a
- Viewing resources
- Update a Demand Designated Entity (DDE)
- Update a Remote Terminal Unit (RTU) for a Resource

What are the considerations for mapping resources to an RTU?

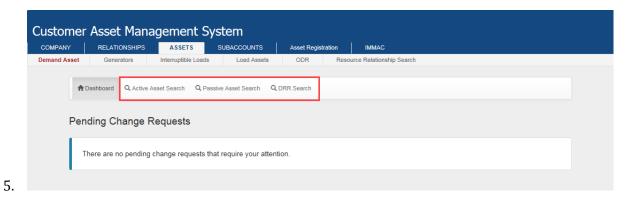
- DDEs can only assign an RTU to a demand response resource where they have been designated as the DDE by a Lead Market Participant.
- RTU must be assigned to a demand response resource in order to be included in the ISO CFE/RTU communications model.
- RTU assignments do not apply to On-Peak and Seasonal Peak Resources.
- RTU assignments change infrequently.
- The RTU assignment effective data must be the first of a month.

2.4.1 Search for a DRR

- Roles that can perform this task:
 - External Resource Maintainer
 - o External Resource Viewer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Click the "Assets" top-level menu bar.



- 3. Click the "Demand Asset" second-level menu bar.
- 4. Click the "DRR Search third-level menu bar.



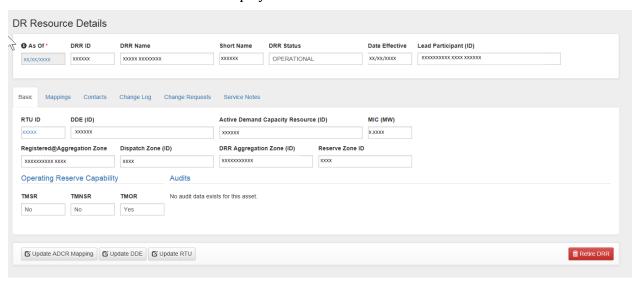
- 6. The "DRR Search" screen displays:
- 7. Enter your search criteria.

- 8. Click "Submit". The system returns results that match the criteria you entered.
- 9. Click the "DRR ID" to view the full resource record.

2.4.2 **Viewing resources**

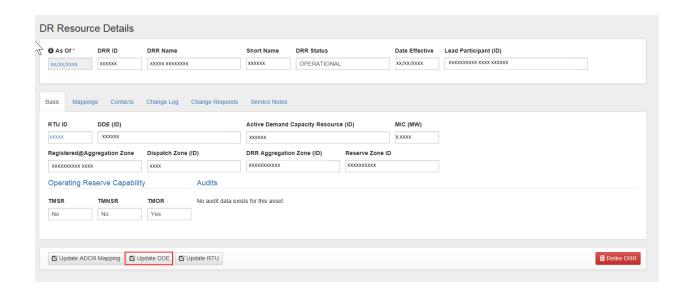
- Roles that can perform this task:
 - o External Demand Asset Maintainer
 - o External Demand Asset Viewer
 - o External Resource Maintainer
 - o External Resource Viewer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the resource to be viewed. See "Search for a" on page 76.

3. The "DR Resource Details" screen displays:

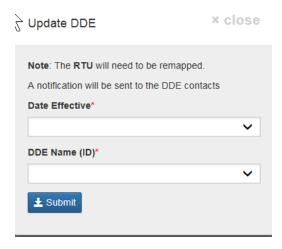


2.4.3 **Update a Demand Designated Entity (DDE) for a Resource.**

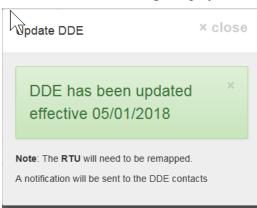
- Role that can perform this task:
 - o External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the resource to be mapped. See "Search for a" on page 76.
- 3. On the "DR Resource Detail" screen click "Update DDE":



4. The "Update DDE" screen displays:



- 5. Select an effective date and the DDE Name. Effective date must be the first day of a future month.
- 6. Click the "Submit" button.
- 7. The confirmation message displays:

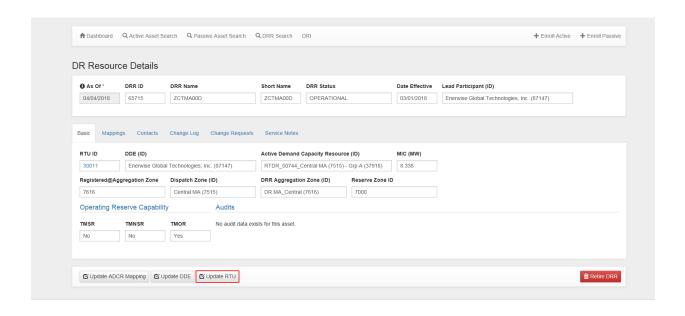


2.4.4 Update a Remote Terminal Unit (RTU) for a resource

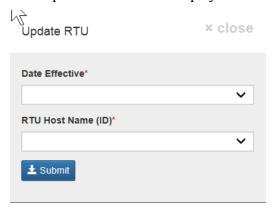


IMPORTANT

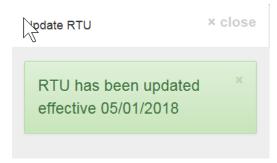
- Only companies that are a Demand Designated Entity (DDE) have access to RTU information in CAMS.
- Role that can perform this task:
 - o External RTU Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the resource to be mapped. See "Search for a" on page 76.
- 3. On the "DR Resource Detail" screen click "Update RTU":



4. The "Update RTU" screen displays:



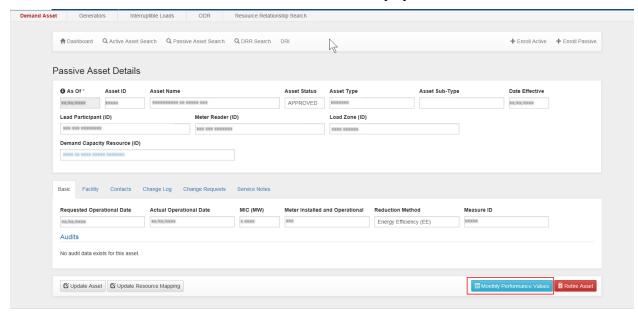
- 5. Select an effective date and the RTU Host Name. Effective date must be the first day of a future month.
- 6. Click the "Submit" button.
- 7. The confirmation message displays:



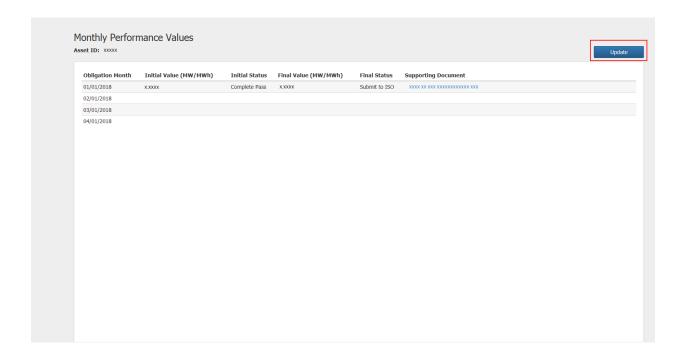
2.5 Update monthly performance values

- Role that can perform this task:
 - External Demand Asset Maintainer

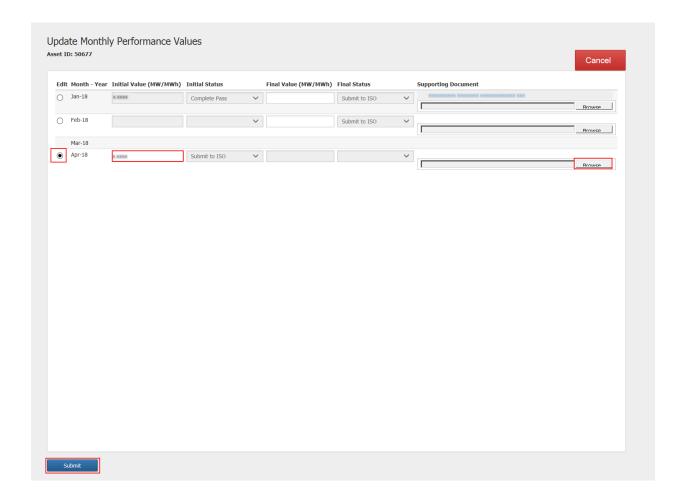
- Performance values are only entered for Passive Assets with a Reduction Method of "Energy Efficiency".
 - 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
 - 2. Search for the asset you want to update See "Search for an Asset" on page 64.
 - 3. Click the Asset ID. The "Passive Asset Details" screen displays.



4. Click "Monthly Performance Values". The Monthly Performance Values screen displays:

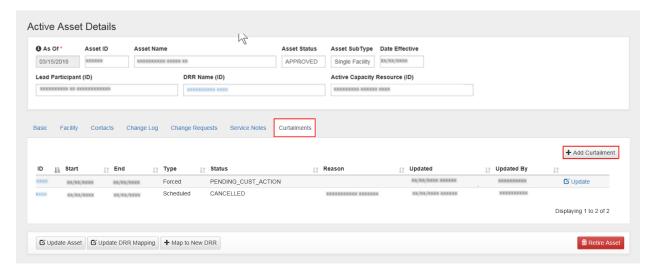


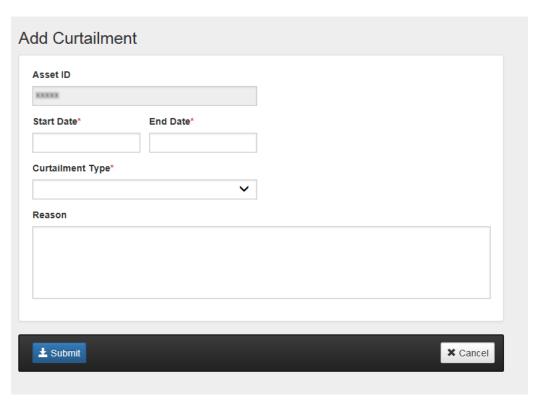
- 5. The Update Monthly Performance Values screen is displayed. Click "Update" and select the Obligation Month to edit.
- 6. Enter the Initial "Performance Value" in MW.
- 7. "Initial Status" defaults to "Submit to ISO."
- 8. Click "Browse and attach the Supporting Documentation. Click "Submit."



2.6 Enter a Curtailment

- Role that can perform this task:
 - o External Demand Asset Maintainer
- 1. Launch the CAMS interface. See the "Accessing CAMS" section on page 12.
- 2. Search for the asset you want to update See "Search for an Asset" on page 64.
- 3. Click the Asset ID. The "Active/Passive Asset Details" screen displays.
- 4. Click the "Curtailments" tab.
- 5. Click "Add Curtailment".





Select the Start Date and End Date of the curtailment.

- 6. Select "Curtailment Type":
 - a. "Forced" when the curtailment is due to an unexpected situation.
 - b. "Scheduled" when the curtailment is planned.
- 7. A "Reason" must be entered.
- 8. Click "Submit" to add the Curtailment.
- 9. Forced curtailments must be approved by the ISO. Scheduled curtailments are automatically scheduled unless the facility has used all allotted curtailment days.

3 Relevant CAMS Roles

3.1 Security Administrator

- A Security Administrator (SA) is a person authorized by your company to manage users in CAMS.
- The SA is responsible for creating users in CAMS, granting users access rights to ISO New England's Standard Market Design (SMD) Applications, and managing committee assignments, contacts, file shares and MIS accounts.
 - o For additional information, see the following sections in this user guide:
 - "Get Started" (page 9)
 - "Issue a digital certificate to a person at your company" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company must have at least one SA to use CAMS.
- Designation of an SA is normally completed as part of a company's membership application process to ISO New England.
- If your company does not have an SA, or would like to designate another SA, complete, <u>notarize</u> and return the *ISO New England Security Administrator Signatory Page* located on the ISO website at http://www.iso-ne.com/support/custsvc/forms/index.html.
 - The form must be signed by a company officer and notarized. Incomplete forms will not be processed. The original form, including notary stamp or seal, must be mailed to the following address:

Customer Support ISO New England One Sullivan Rd Holyoke, MA 01040

3.2 External Customer Maintainer

An External Customer Maintainer has read/write access to your company's general information stored in CAMS.

- For companies that are a Demand Designated Entity (DDE), the External RTU Maintainer manages the RTU-to-Demand Resource mappings. This role does not have access to any "persons" information.
 - o For additional information see the following sections in this user guide:
 - "Get Started" (page 9)
 - DDE companies only: "Manage your Demand Resources and Demand Assets"
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Customer Maintainers.
- Only a Security Administrator may assign the External Customer Maintainer role to a person.

3.3 External Customer Viewer

- An External Customer Viewer has read-only access to the company's general information stored in CAMS. This role does not have access to any "persons" information.
 - o For additional information see the following sections in this user guide:
 - "Get Started" (page 9)
 - DDE Companies only: "Manage your Demand Resources and Demand Assets
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Customer Maintainers.
- Only a Security Administrator may assign the External Customer Maintainer role to a person.

3.4 External Resource Maintainer

- An External Resource Maintainer is responsible for managing the company's demand resource information and resource mappings.
 - $\circ\quad$ For additional information see the following section in this user guide:

- "Get Started" (page 9)
- "Manage your Demand Resources and Demand Assets"
- "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Resource Maintainers.
- Only a Security Administrator may assign the External Resource Maintainer role to a person.

3.5 External Resource Viewer

- An External Resource Viewer has read-only access to the company's demand resource information in CAMS.
 - o For additional information see the following sections in this user guide:
 - "Get Started" (page 9)
 - "Manage your Demand Resources and Demand Assets"
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Resource Viewers.
- Only a Security Administrator may assign the External Resource Viewer role to a person.

3.6 External Demand Asset Maintainer

- An External Demand Asset Maintainer is responsible for managing the company's demand assets in CAMS, including:
 - o Creating and maintaining asset information
 - o Mapping assets to resources
- For additional information see the following sections in this user guide:
 - o "Get Started" (page 9)
 - "Manage your Demand Resources and Demand Assets"

- "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Demand Asset Maintainers.
- Only a Security Administrator may assign the External Demand Asset Maintainer role to a person.

3.7 External Demand Asset Viewer

- An External Demand Asset Viewer has read-only access to the company's demand asset information.
 - o For additional information see the following section in this user guide:
 - "Get Started" (page 9)
 - "Manage your Demand Resources and Demand Assets"
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Demand Asset Viewers.
- Only a Security Administrator may assign the External Demand Asset Viewer role to a person.

3.8 External Host Participant Viewer

- An External Host Participant Viewer has read-only access to information and mappings for all demand assets that have been registered within the Host Participant's metering domain.
 - See the following section in this user guide:
 - "Get Started" (page 9)
 - "Manage your Demand Resources and Demand Assets"
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Host Participant Viewers.
- Only a Security Administrator may assign the External Host Participant Viewer role to a person.

3.9 External Meter Reader Viewer

- An External Meter Reader Viewer has read-only access to information and mappings for demand assets assigned to the company.
 - o The role grants the user access to CAMS metering information for demand assets to which the company has been assigned.
- This role should not be confused with the "LRP Meter Reader" contact type, which provides the user with email correspondence, notifications and service notes about any demand assets that are assigned to the company.
 - o For additional information see the following section in this user guide:
 - "Get Started" (page 9)
 - "Manage your Demand Resources and Demand Assets"
 - "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA)
- A company may have multiple External Meter Reader Viewers.
- Only a Security Administrator may assign the External Meter Reader Viewer role to a person.

4 Customer Support

4.1 ISO New England Glossary and Acronyms

http://www.iso-ne.com/support/training/glossary/

Baseline Telemetry System, 100 committee, 91 Communications Front End, 100 contacts, 91 Demand Asset, 24, 28, 41, 48, 52, 57, 61, 63, 65, 66, 73, 79, 85, 89, 93, 94, 103, 104, 117 Demand Designated Entity, 24, 80, 92, 107

Demand Resource, 24, 52, 77, 92, 93, 100, 102, 103, 106, 107, 112 Demand Resources, 8, 24, 92, 93, 94, 95, 101, 102, 103, 104, 106, 107, 108 digital certificate, 12, 13, 14, 15, 91, 92, 93, 94, 95, 98, 101, 102, 103, 104, 116 Facility, 31, 44 file share, 12, 105 file shares, 91 HOST PARTICIPANT, 65, 66, 73, 94, 103, 115 LEAD MARKET PARTICIPANT, 77 MEASURE, 76, 117 MIS accounts, 91 On-Peak, 24, 77 persons, 12, 101, 102 PIN #/PICKUP PASSWORD, 15 Pnode, 31, 32, 44, 45 Real-Time Demand Response, 24, 28, 29, 41, 42 REMOTE TERMINAL UNIT, 100 Seasonal Peak, 24, 77 Service Notes, 73, 76 Settlement Market System, 100, 106, 111

4.2 By Internet



http://www.iso-ne.com/support/index.html

4.3 By Telephone



During Regular Business Hours, Monday through Friday: 7:30 A.M. to 5:30 P.M. Eastern Time: **(413) 540-4220**

Days of Operation

The Customer Support Hotline is **NOT** staffed on the following days:

- New Year's Day
- Martin Luther King Day
- Presidents Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day After Thanksgiving
- Christmas Eve Afternoon (12:00 to 17:30)
- Christmas Day

For emergency inquiries by pager:

(877) 226-4814

4.4 By Email



custserv@iso-ne.com

4.5 Ask ISO



Ask ISO is available to market participants who have a valid digital certificate and who have been assigned the role of "Ask ISO / External User" by their Security Administrator. Ask ISO is located at https://smd.iso-ne.com/.

See "Granting a person access to CAMS or another ISO application" in CAMS User Guide for Company and Affiliate Maintenance.

5 Links

5.1 ISO New England Home Page

http://www.iso-ne.com/index.html

5.2 ISO New England Training Page

http://www.iso-ne.com/support/training/index.html

5.3 ISO New England FAQ Page

http://www.iso-ne.com/support/fag/index.html

5.4 SMD Site for ISO Applications

https://smd.iso-ne.com/

5.5 SMD Site for ISO Sandbox Applications

https://sandboxsmd.iso-ne.com/

6 Appendix

6.1 Appendix 1: Other systems needed to manage demand assets and resources

- Communications Front End (CFE)/Remote Terminal Unit (RTU), which provides:
 - o Five-minute telemetered data (in real-time)
 - Dispatch instructions
 - o Demand Response availability information
- Demand Resource Market User Interface (DRMUI), which provides:
 - o Five-minute meter data for initial baseline calculation
 - Five-minute meter data corrections
 - Demand resource availability information
- Settlement Market System (SMS), which provides:
 - o Hourly facility meter data for facilities that are capable of pushing back power to the grid
 - o Hourly generation output for passive Distributed Generation (DG)
- DR Auditing and Testing Tool (A&TT), which:
 - o Tracks demand resource audit requests and corresponding audit results
 - o Supports business processes and workflows associated with demand resources and demand assets
 - o Keeps the users informed by providing transparency and timely delivery of DR performance information

7 Reference Tables

7.1 Table 1: CAMS Roles and Permissions

CAMS Role	Activities Allowed	Pertinent Sections in User Guide
Security Administrator		 "Manage your company's persons" (see the CAMS User Guide for Company and Affiliate Maintenance).
	 Create users and assign roles in CAMS and in other ISO New England applications Issue, re-issue, renew and reject digital certificates 	 "Issue a digital certificate to a person at your company" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA).
	 Enter and maintain company's person information 	 "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA).
		• "Get Started" (page 9).
External Customer Maintainer		 "Manage your company's information" (see the CAMS User Guide for Company and Affiliate Maintenance).
	 Enter and maintain company and Affiliate information. 	 "Manage Affiliate and Minimum Eligibility Criteria" (see the CAMS User Guide for Company and Affiliate Maintenance).
	 View Demand Response Resource (DRR) to RTU (DDE companies only) 	 "Manage your Demand Resources and Demand Assets" (page 17 and 75).
		 "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA).

CAMS Role	Activities Allowed	Pertinent Sections in User Guide
		• "Get Started" (page 9).
External Customer Viewer	View only access to company and Affiliate information	 "Manage your company's information (see the CAMS User Guide for Company and Affiliate Maintenance). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Person Maintainer	 Enter and maintain company's person information Can NOT add a person Can NOT assign user roles or perform any digital certificate functions 	 "Manage your company's persons" (see the CAMS User Guide for Company and Affiliate Maintenance) "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Person Viewer	Read-only access to person information	 "Manage your company's persons" (see the CAMS User Guide for Company and Affiliate Maintenance) "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Resource Maintainer	 Map DRRs to Demand Response Capactity Resources View DRRs and Demand Response Capactiy 	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by

CAMS Role	Activities Allowed	Pertinent Sections in User Guide
	Resource information	contacting ISO New England Customer Support or your SA). • "Get Started" (page 9).
External Resource Viewer	Read-only access to DRRs and Demand Response Capactiy Resource mappings and information	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Demand Asset Maintainer	 Enroll Demand Assets Map Demand Assets to DRRS Map DRRs to Demand Response Capactiy Resources View Demand Asset, DRR and Demand Response Capactity information. 	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Demand Asset Viewer	Read-only access to Demand Asset, DRR and Demand Response Capacity Resource information and mappings	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External Host Participant Viewer	Read-only access to Demand Asset, DRR, Demand Response Capacity Resource information and mappings for all Demand Assets and Resources in the Host Participant's	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by

CAMS Role	Activities Allowed	Pertinent Sections in User Guide
	territory.	contacting ISO New England Customer Support or your SA). • "Get Started" (page 9).
External Meter Reader Viewer	Read-only access to Demand Asset mappings and information for all assets assigned to the company.	 "Manage your Demand Resources and Demand Assets" (page 17 and 75). "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).
External RTU Maintainer	 View Dispatch Locations, Contacts and RTUs View Demand Asset, DRR, Demand Response Capacity Resource information and mappings Manage RTUs Map DRR to RTU 	 "Update a Remote Terminal Unit (RTU) for a Resource" (page 81) "Install your digital certificate" (see the CAMS User Guide for Digital Certificates which is available by contacting ISO New England Customer Support or your SA). "Get Started" (page 9).

7.2 Table 2: Relevant ISO Applications and Groups

(For a full list, please refer to the CAMS User Guide for Company and Affiliate Maintenance)

Application or Group	Description	For details on available roles and URLs see:
Customer and Asset Management System	The Customer and Asset Management System (CAMS) is ISO New England's system of record for asset and customer data, the management of customer file share and application access.	Table 1: CAMS Roles and Permissions
Bids & Offers	The Bids & Offers (eMarket) application is used to submit bids and offers to the Day-Ahead Energy Market and Real-Time Energy Markets.	Table 4: Bids and Offers (eMarket) Roles
Financial Assurance Management	The Financial Assurance Management (FAM) application maintains each customer's financial position, including requirements for financial assurance and market obligations.	Table 7: Other Relevant Application Roles
Forward Capacity Auction	The Forward Capacity Auction application is for Lead Participants of qualified capacity resources to participate in the Forward Capacity Auction (FCA) for specific Capacity Commitment Periods.	Table 7: Other Relevant Application Roles
Forward Capacity Market CSO Bilateral Contracts	Forward Capacity Market CSO Bilateral Contracts application is for Lead Participants of qualified capacity resources to transfer or acquire Capacity Supply Obligation for specific Forward Capacity Market (FCM) Capacity Commitment Periods.	Table 7: Other Relevant Application Roles
Forward Capacity Market Reconfiguration Auction	Forward Capacity Market Reconfiguration Auction application is for Lead Participants with resources having qualified MW in the Forward Capacity Auction (FCA) for specific Capacity Commitment Periods to participate in the Forward Capacity Market Reconfiguration Auctions.	Table 7: Other Relevant Application Roles
Forward Capacity Tracking System	The Forward Capacity Tracking System is for Participants to manage resource data related to the Forward Capacity Market (FCM).	Table 7: Other Relevant Application Roles
Supplemental Availability Designation	The Supplemental Availability Designation user interface is for Lead Participants to designate resources as Supplemental Capacity Resources in the Forward Capacity Market.	Table 7: Other Relevant Application Roles

Application or Group	Description	For details on available roles and URLs see:
Settlement Market System (SMS) applications include:	Each of these unique applications is used to submit data for the settlement of various markets.	Table 5: Relevant Settlement Market System (SMS) Applications and Roles
—Internal Transactions		
—Submit Meter Reading		
—Submit Peak Contribution		
—Submit Network Load		
—Forward Reserve Market		
Auction		
—Forward Reserve Assignment		
Demand Resource Market User Interface	The Demand Resource Market User Interface (DR MUI) is used to submit availability and telemetry data for DRRs .	Table 3: Demand Resource Market User Interface Roles
DR Audit and Testing Tool	The DR Audit and Testing Tool is used for the submittal, scheduling and maintenance of Demand Resource seasonal audits.	Table 6: Demand Response Audit and Testing Tool Roles
Ask ISO	Ask ISO is a user interface for market participants to submit questions, requests and registration forms, (all classified as Issues in Ask ISO) directly to Customer Support.	Table 7: Other Relevant Application Roles

7.3 Table 3: Demand Resource Market User Interface Roles

Web Location	Application Group	Role	Description
ISO New England SMD Applications Home Page	Demand Response MUI	DDE Read Write Role	Read/write access to the DR MUI for Demand Designated Entity (DDE) user to submit and query data for their Demand Resources.
https://smd.iso-ne.com/		DDE Read Only Role	Read-only access to the DR MUI for DDE user to query data for their Demand Resources.
		Meter Reader Read Write	Read/write access to the DR MUI for Meter Reader to submit telemetry corrections for their Demand Resources.
		Meter Reader Read Only	Read-only access to the DR MUI for Meter Reader to query asset telemetry for their Demand Resources.
		DR Lead Participant Read Write	Read/write access to the DR MUI for Lead Participant user to submit and query data for their Demand Resources.
		DR Lead Participant Read Only	Read-only access to the DR MUI for Lead Participant user to query data for their Demand Resources.
ISO New England SMD Applications Sandbox Home Page: https://sandboxsmd.iso-ne.com/	SandBox Demand Response MUI	DDE Read Write Role	Read/write access to the Sandbox DR MUI for Demand Designated Entity (DDE) user to submit and query data for their Demand Resources without any settlement implications.
		DDE Read Only Role	Read-only access to the Sandbox DR MUI for Demand Designated Entity (DDE) user to query data for their Demand Resources without any settlement implications.
		Meter Reader Read Write	Read/write access to the Sandbox DR MUI for Meter Reader to submit telemetry corrections for their Demand Resources without any settlement implications.
		Meter Reader	Read-only access to the Sandbox DR MUI for Meter Reader to query asset

Web Location	Application Group	Role	Description
		Read Only	telemetry for their Demand Resources without any settlement implications.
		DR Lead Participant Read Write	Read/write access to the Sandbox DR MUI for Lead Participant user to submit and query data for their Demand Resources without any settlement implications.
		DR Lead Participant Read Only	Read-only access to the Sandbox DR MUI for Lead Participant user to query data for their Demand Resources without any settlement implications.

7.4 Table 4: Bids and Offers (eMarket) Roles

Web Location	Application Group	Role	Description
ISO New England SMD Applications Home Page	eMarket	LRP Read/Write	Read/write access to the eMarket application allows user to submit or modify their company's bid in the Day-Ahead Load Response Program.
https://smd.iso-ne.com/		LRP Read Only	Read-only access to the eMarket application for user to view their company's bid data in the Day-Ahead Load Response Program.
		ARD Read/Write	Read/write access to the eMarket application allows user to submit or modify their company's Asset Related Demand bid data.
		ARD Read Only	Read-only access to the eMarket application for user to view their company's Asset Related Demand bid data.
		Generation Read/Write	Read/write access to the eMarket application allows Lead Participant user to submit or modify their company's Generation Resource's bid data for the Day-Ahead Energy Market.
		Generation Read Only	Read-only access to the eMarket application allows Lead Participant user to view their Generation Resource's bid data for the Day-Ahead Energy Market.
		Demand Read/Write	Read/write access to the eMarket application allows user to submit or modify Demand offers and Inc/Dec offers into the Day-Ahead Energy Market.
		Demand Read Only	Read-only access to the eMarket application allows user to view their company's Demand offers and Increment/Decrement offer data in the Day-Ahead Energy Market.
ISO New England SMD Applications Sandbox Home Page: https://sandboxsmd.iso-ne.com/	eMarket Sandbox	LRP Read/Write	Read/write access to the eMarket Sandbox application allows user submit offers in the Day-Ahead Load Response Program without any settlement implications.
		LRP Read Only	Read-only access to the eMarket Sandbox application allows user to view their company's offers in the Day-Ahead Load Response Program without any settlement implications.

Web Location	Application Group	Role	Description
		ARD Read/Write	Read/write access to the eMarket Sandbox application allows user to submit or modify their company's Asset Related Demand bid data without any settlement implications.
		ARD Read Only	Read-only access to the eMarket Sandbox application for user to view their company's Asset Related Demand bid data without any settlement implications.
		Generation Read/Write	Read/write access to the eMarket Sandbox application allows Lead Participant to submit or modify their company's Generation Resource bid data without any settlement implications.
		Generation Read Only	Read-only access to the eMarket Sandbox application allows Lead Participant to view their Generation Resource bid data without any settlement implications.
		Demand Read/Write	Read/write access to the eMarket Sandbox application allows user to submit Demand Bids, Inc/Dec Bids, and Load Response Offer data without any settlement implications.
		Demand Read Only	Read-only access to the eMarket Sandbox application for user to view their Demand offers and Inc/Dec offer data without any settlement implications.

7.5 Table 5: Relevant Settlement Market System (SMS) Applications and Roles

(For a full list please refer to the CAMS User Guide for Company and Affiliate Maintenance)

Name	Web Location	Applicatio n Group	Role	Description
Internal Transactions	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	SMS	Contract	Read/write access to the Internal Transactions SMS application for submittal of internal bilateral transactions to the Day-Ahead Energy Market and Real-Time Energy Market.
Submit Meter Reading Submit Peak Contributions	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	SMS	Metering and Daily Tag	Two roles are combined for read/write access to the Submit Meter Reading SMS application for submittal of daily meter readings, and the Submit Peak Contribution SMS application for submittal of monthly peak load contribution data.
Forward Reserve Assignment	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	SMS	Submitter	Read/write access to submit DRRs for Forward Reserve Obligation Assignments

7.6 Table 6: Demand Response Audit and Testing Tool Roles

Web Location	Application Group	Role	Description
ISO New England SMD Applications Home Page	DR Audit and Testing Tool	LP Maintainer	Read/write access allows Lead Participant to assign users who can view, submit and edit audit requests and review asset results information.
https://smd.iso-ne.com/		LP Read Only	Read-only access allows users to view the relevant audit requests and asset results data.
		DDE Read Only	Read-only access allows the DDE of a Demand Resource to view pertinent audit requests and results information in support of their role as the DDE for a resource.

7.7 Table 7: Other Relevant Application Roles

(For a full list please refer to the CAMS User Guide for Company and Affiliate Maintenance)

Name	Web Location	Application Group	Role	Description
Financial Assurance Management	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	Financial Assurance Management	Credit and Financial Assurance Viewer	Read-only access to FAM for customers to review their company's financial position.
Forward Capacity Auction	PowerAuctions website	Forward Capacity Auction	Authorized Individual	Read/write access to the Forward Capacity Auction application allows Lead Participants of qualified capacity resources to participate in the FCA.
Forward Capacity Market CSO Bilateral Contracts	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Bilateral Contract UI	External Maintainer	Read/write access to the Forward Capacity Market CSO Bilateral Contracts application allows user to submit or view bilateral contracts transferring Capacity Supply Obligations (CSO) for specific FCM Capacity Commitment Periods.
Forward Capacity Market CSO Bilateral Contracts	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Bilateral Contract UI	External Viewer	Read-only access to the Forward Capacity Market CSO Bilateral Contracts application for users to review their company's bilateral contract information for specific FCM Capacity Commitment Periods.
Forward Capacity Reconfiguration Auction	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Reconfiguration Auction Bidding	External Maintainer	Read/write access to the Forward Capacity Market Reconfiguration Auction application allows user to submit bids and offers in the Forward Capacity Reconfiguration Auction process.
Forward Capacity Reconfiguration Auction	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Reconfiguration Auction Bidding	External Viewer	Read-only access to the Forward Capacity Market Reconfiguration Auction application allows user to review their company's Forward

Name	Web Location	Application Group	Role	Description
				Capacity Reconfiguration Auction data.
Forward Capacity Tracking System	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	Forward Capacity Tracking System	External Forward Capacity Maintainer	Read/write access to the Forward Capacity Tracking System application allows user to enter and modify their company's resource data related to the FCM.
Forward Capacity Tracking System	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	Forward Capacity Tracking System	External Forward Capacity Viewer	Read-only access to the Forward Capacity Tracking System application allows user to review their company's resource data related to the FCM.
Supplemental Availability Designation	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Supplemental Availability Designation UI	External Maintainer	Read/write access to the Supplemental Availability Designation user interface for the Lead Participant user to submit, update or deleted their resource's designation as a Supplemental Capacity Resource.
Supplemental Availability Designation	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	FCM Supplemental Availability Designation UI	External Viewer	Read-only access to the Supplemental Availability Designation user interface for the Lead Participant user to view the Supplemental Capacity Resource designations for their resources.
Ask ISO	ISO New England SMD Applications Home Page https://smd.iso-ne.com/	Ask ISO	External User	Read/write access to Ask ISO allows the user to submit Issues to Customer Support through the Ask ISO user interface. The view is limited to the issues the user submitted, not all issues for the company.

7.8 Table 8: Relevant Contact Types

(For a full list, please refer to the CAMS User Guide for Company and Affiliate Maintenance)

Contact Type	Description		
Day-Ahead Market Demand Bid	Person(s) at your company ISO New England will contact regarding your demand bids. • Note: This contact person(s) should be available 365-days a year during normal business hours.		
DR Audit and Testing General Contacts	Representatives of the Lead Participant at your company authorized to receive correspondence and information related to seasonal Demand Response audits and/or events. • Note: This contact will receive automated emails from the Audit and Testing Tool regarding audits of your company's resources.		
DR Data Quality Contacts	Representatives of the Lead Participant at your company authorized to receive correspondence and information relating to data quality issues, information or notices.		
Emergency IT Contact	ISO New England internal use only.		
Host Participant	ISO New England internal use only.		
Responsible For Asset Registration Form Submittal	Person(s) at your company that are authorized to receive Demand Assets and DRRs correspondence.		
	Note: This contact will receive automated emails from the Customer and Asset Management System (CAMS) regarding Demand Assets and Demand Resources.		
Market Monitoring and Mitigation Contact	Person(s) at your company authorized to address any market monitoring mitigation issues.		

Security Administrator (SA) Person(s) at your company who will receive all Security Administrator emails from ISO New England related to setting up digital certificates. • Note: this contact is set up at the start of the membership application process. It must be kept current. • Note: adding this contact type to a person in CAMS does not make that person a Security Administrator. This contact type only receives emails regarding digital

certificate matters at your company. To assign the SA role to a person see the

"Getting Started" overview on page 9.

7.9 Table 9: Demand Asset Status Actions

Asset Status	Actions Available to Lead Participant		
Pending	Update Asset		
Pending Customer Review	Update Asset		
Approved	Update Asset		
Rejected	None		
Cancelled	None		
Retired	None		