



NAESB EIR POWERED BY OATI WEBREGISTRY USER GUIDE v3.1

NORTH AMERICAN ENERGY STANDARDS BOARD

NOVEMBER 2018

PROPRIETARY AND CONFIDENTIAL

OPEN ACCESS TECHNOLOGY INTERNATIONAL, INC.

3660 Technology Drive NE | Minneapolis, MN 55418 | Phone 763.201.2000 | Fax 763.201.5333 | www.oati.com ©2018 Open Access Technology International, Inc.

TRADE SECRET

This document and attachments contain proprietary information of Open Access Technology International, Inc., and their use is restricted to webRegistry business purposes only.

PROPRIETARY NOTICE

OATI webRegistry is a trademark and service mark of Open Access Technology International, Inc. All rights reserved.

OATI makes no claim of right to the NAESB System Requirements Document for the Electric Industry Registry (EIR) in the NAESB RFP v 1.1, dated March 19, 2008. OATI webRegistry and webHELP are proprietary solutions and deployments of OATI. All designs, formats, screens, displays, layouts, interfaces, implementation, content, and all other documentation (e.g., Quick Start User Guide, Technical Guide, training material) remain the exclusive property of OATI, and are authorized to be used only in conjunction with webRegistry Service.

Table of Contents

| 1. | Intro | oduction | . 5 |
|-----|--|--|----------------------------------|
| 2. | Dash | board and Graphical User Interface | . 6 |
| | 2.1 | Functional Buttons | . 6 |
| 3. | Enti | ty Registration | . 7 |
| | 3.1 3.2 | Application for Registration Initial Registration | |
| 4. | Enti | ties Menu | 10 |
| | 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 | Entities Entity Code-Role Purchasing-Selling Entities Regional Reliability Organizations Reliability Coordinators Transmission Service Providers Market Operators Balancing Authorities | 11 13 13 14 14 15 |
| 5. | Obje | ects Menu | 15 |
| | 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 | Control Zones Flowgates Interconnections POR/POD Points Source/Sink Points MRD Flowgates MRD Resources Pseudo-Ties | 16 17 18 19 20 20 |
| 6. | Арр | roval Menu | 21 |
| | 6.1 6.2 6.3 6.4 | Approval Configurations Approval History Approval Overrides Pending Approvals | 21 22 |
| 7. | Payr | nent Menu | 24 |
| | 7.1 | Subscription Summary | 25 |
| 8. | Audi | it Menu | 27 |
| | 8.1 | Audit Trail | 27 |
| 9. | Alar | ming Menu | 28 |
| | 9.1 9.2 9.3 | Active Alarms Alarms History Alarm Subscriptions | 28 |
| 10. | Adm | inistration Menu | 30 |
| | 10.1 | News | 30 |

| 10.2 User Configuration | |
|--|---|
| | |
| | |
| | |
| | |
| | |
| 10.3.2 Users Online | |
| 10.4 Delegation | |
| Registry Management Menu | 37 |
| 11.1 Delta Publications | 37 |
| | |
| | |
| 11.2 Publication History 11.3 Registry Download | |
| 11.2 Publication History | |
| 11.2 Publication History11.3 Registry DownloadHelp | 37 38 40 |
| 11.2 Publication History 11.3 Registry Download Help 12.1 webRegistry Online Help | |
| 11.2 Publication History11.3 Registry DownloadHelp | |
| | 10.2.2 Change Password. 10.2.3 Display Configuration. 10.3 User Management . 10.3.1 Users . 10.3.2 Users Online . 10.4 Delegation . Registry Management Menu. |

1. Introduction

The Electric Industry Registry (EIR) will serve as the central repository for information required to support commercial, scheduling, and transmission management operations in North America. The North American Energy Standards Board (NAESB) has provided the requirements for the EIR. Open Access Technology International, Inc. (OATI) has developed the webRegistry system to perform NAESB EIR functions. webRegistry is a web-based system that allows industry participants to register and maintain their company information used by industry participants in business operations. In addition, companies can register new data and modify existing data that are used in transmission and scheduling procedures.

This User Guide describes the functionality of the system and how to enter and maintain data.

2. Dashboard and Graphical User Interface

Diverse functions and buttons are available throughout the webRegistry system. The system also includes options such as filtering capabilities and Column Configuration.

2.1 Functional Buttons

Application Options:

Befresh active window. Clicking this button brings summary pages back to Page 1.

Print active window using the browser default print options.

Email OATI Help Desk.

- Us out of the webRegistry system.
- Brings up the associated Help Console page.

Summary Page Options:

Filtering Options - Use the filtering options to search for specific data to be displayed in the summary table.

Column Configuration - Use the column configuration to display or hide certain columns on summary pages and arrange the order of the columns.

Display View - Save specific filtering options and column configurations as a "View" that can be accessed at any time. Views may be named, renamed, or deleted as appropriate.

Options - Set individual settings for each display.

Export to Excel - Click on this icon to export the summary results to a .csv file type or an .xls file type, which can be used in Microsoft Excel[®] or another spreadsheet program. The .xls file type will retain formatting.

• Refreshes the current display, keeping summary pages on the current page.

3. Entity Registration

Companies will need to register their Entity in webRegistry. A registering party will need to select an entity code. An entity code is a three or four alphanumeric characters unique identifier to identify a company in the registry. It will be beneficial to have certain information readily available when registering; the company's DUNS number and 24-hour contact information including phone number and email address. In addition, registering parties will need to know the role (e.g., PSE, BA, TSP) they want to register for. Users will then need to select a separate three to six alphanumeric character identifier for the particular role to form a code role pair. Entities may register multiple code roles in the registry. Quick Start guides are available for role-specific registration. Please refer to the corresponding Quick Start Guide for a step-by-step walkthrough of the registration process.

3.1 Application for Registration

The first step in the registration process is filling out the application to register. When someone first visits the webRegistry system, they will view two links: "Registered user? Click here to login" and "Not a registered user? Click here to apply."



Electric Industry Registry

Registered user? Click here to login.

Not a registered user? Click here to apply.

Note: If you already have a digital certificate you will not need to obtain an additional digital certificate in order to access the NAESB EIR system.



OATI makes no claim of right to the NAESB System Requirements Document for the Electric Industry Registry (EIR) in the NAESB RFP v 1.1, dated March 19, 2008. OATI webRegistry and webHELP are proprietary solutions and deployments of OATI. All designs, formats, screens, displays, layouts, interfaces, implementation, content, and all other documentation (e.g., Quick Start User Guide, Technical Guide, training material) remain the exclusive property of OATI, and are authorized to be used only in conjunction with webRegistry Service.

©2018 OATI, Inc.

Registered Users can click on the first link and log into the system. Non-registered users can click on the second link and fill out the Application for Registration. The Application for Registration includes limited information about the Entity and Applicant User.

| Long Name [*] Entity Code [*] Address 1 [*] Address 2 City [*] Please select a state or province V Phone [*] | | P | First Name [*] iddle Initial Last Name [*] Title | |
|---|-----|---|--|----------|
| Address 1* Last Name* Address 2 Title Email* City* Phone* Phone* Phone* | | | Last Name* | |
| Address 2 Title City* Email* State/Province* Please select a state or province V Phone* | | | | |
| City* Email* Email* Phone* Please select a state or province V Phone* | | | Title | |
| State/Province* Please select a state or province V Phone* | _ | | THE | |
| | | | Email* | |
| | | | Phone* | |
| Zip Code* User Name* | | | | |
| Country* Please select a country V | | | | |
| plicant's Purpose | | | | * = requ |
| ease enter your reason for applying and any additional note | es. | | | |
| | | | | |

In order to complete the registration process in the NAESB EIR, you will need to obtain a digital certificate from one of the following NAESB Authorized Certificate Authorities:

GMO GlobalSign Inc. - <u>http://www.globalsign.com/digital-certificates-for-naesb/</u> OATI webCARES Certificate Authority - <u>http://www.oaticerts.com/repository/</u> SSL.com - <u>https://www.ssl.com</u>

Note: If you already have a digital certificate you will not need to obtain an additional digital certificate in order to access the NAESB EIR.

©2018 OATI, Inc.

A digital certificate from a NAESB approved Certificate Authority (CA) is required to access the Application for Registration. If the user does not have a Digital Certificate, the user can reserve an entity code for 30 days allowing the user to then obtain a certificate from an approved CA.



A digital certificate can be linked to one user account. If the certificate the user presented is already linked to a user account, a message will be displayed that the certificate has already been used in the system.



3.2 Initial Registration

Once the Application for Registration is approved, the user will receive two emails containing their user credentials. The username will be the same as the username entered on the Application for Registration. The user will be an "Applicant User" and will have limited access to webRegistry.

The Applicant User can log into the system with their login credentials and start filling out the Initial Registration. Initial Registration includes filling out the Entity Registration page and the Entity Code-Role page. Section 4 covers Entities and Entity Code-Roles in more detail.

The Entity Registration page will bring over some of the information entered in the Application for Registration. The Applicant User is to fill out the Entity Registration page and create one Entity Code-Role. Click on the "Add Entity Code-Role" button to create the Code-Role. Initial Registration is completed only when both the Entity Registration and Entity Code-Role Registration have been submitted for review. (Please Note: Both forms must be entered/submitted individually).

| Entity Registration | | | | | | | | 3 🔒 🤇 |
|---------------------------|----------------------|----------------|----------------|--------------------------|---------------|-------------|-----------|---------|
| NERC ID Entity Code | FE | | | Record ID Entity Type | Please select | one 🔽 | | |
| Entity Name | | | | | 1 | | | |
| Entity URL | ,: =, | | | | | | | |
| Entity Predecessor | Select if applicable | | \checkmark | | | | | |
| Effective Date | | 01/3000 | - | | | | | |
| Entity Code (Role) | 104/20/2012 | 01/3000 | | | | | | |
| | | | | | | | | |
| Identifiers | Locations | | Affiliates | Contac | ts | E | verything | |
| ✓ Identifiers | | | | | | | | |
| | DUNS | ype | Identifier | | | | | |
| | IDONS | \checkmark | | + | | | | |
| ✓ Locations | | | | | | | | |
| Туре | Address | | City | State | Со | untry | Postal | |
| Headquarter 🔽 123 Trainin | ng Lane | Minneapolis | | MN | United Sta | ites | 55418 | + |
| | | | | | | | | |
| ✓ Affiliates | | | | | | | | |
| | | | | | + | | | |
| | | | | | | | | |
| | | | | | | | | |
| Туре | User | Name | Phone | Fax | | E-m | | |
| 24 Hour Select if a | applicable 🔽 Jane [| Doe | 763-201-2020 | | Jane | .Doe@oati.n | et | + |
| | | | | | | | | |
| | | | | | | | | |
| | | Add Entity Cod | le-Role Submit | Close | | | ©2018 O | ATL Inc |

The Entity Code-Role Entry page is where the user enters their first Code-Role. Additional Code-Roles may be entered after the initial registration has been approved.

4. Entities Menu

The main administrative object within webRegistry is an entity. Entities may have multiple functions (or roles) in the registry. All operations allowed in webRegistry are performed by users operating as representatives of an entity that has been recognized and recorded in the system as a legitimate industry participant.

A user that has access to webRegistry must be assigned to one, and only one, entity. The scope of user functions in webRegistry (i.e., a set of user interface displays available to users, as well as actions that users are allowed to perform on those displays) is determined by the assigned user role.

4.1 Entities

Entities will be created when an application for registration is accepted. The details of an entity will be filled out during the Initial Registration process of an entity.

To locate Entities, navigate to Entities > Entities. To create a new entity, click on the "New Entity" button.

| OATI E | ntities Viewing Mode: Current Ver | sion E | ffective Date: | Today (09/28/2016) | | | | | | | | | 5 📝 🕅 🛪 - | 🖨 🔞 · |
|-----------|---|--------|-----------------------|----------------------|------------|--------------|----------------------|-------------|-----------|------------|----------|------------|------------|--------------------|
| | Entity | | | | | | Associated Entity | | | | | Effectiv | ve Date | |
| Code | Name | Туре | Entity Predecessor | URL | NERC ID | Record ID | Code (Role) | Identifiers | Locations | Affiliates | Contacts | Start | Stop | Approval Status |
| 234 | ,,,,&& | | N/A | | 3259 | 4610 | | | | | | 01/02/2013 | 01/01/2999 | Approved |
| TV | ASP Tagging Vendor | | N/A | | | | | | | | | 03/06/2012 | 01/01/3000 | Pending |
| DEC | After Dusk Energy Company | | N/A | | | | | | | | | 03/12/2014 | 01/01/3000 | Pending |
| ECC | Arkansas Electric Cooperative Corporation | TC/PSE | N/A | http://www.aecc.com | 168 | 10287 | | | | | | 04/12/2012 | 01/01/3000 | Approved |
| AE1 | BA Entity 1 | | N/A | | 100058 | 100060 | | | | | | 12/12/2012 | 01/01/3000 | Approved |
| A2 | BA Entity 2 | | N/A | | 100076 | 100078 | | | | | | 03/12/2012 | 01/01/3000 | Approved |
| AE4 | BA Entity 4 | | N/A | | | | | | | | | 03/12/2012 | 01/01/3000 | Pending |
| <u>BC</u> | Blues Company | | N/A | | | | | | | | | 08/07/2012 | 01/01/3000 | Pending |
| YOE | Bring Your Own Energy Company | TC/PSE | N/A | | 100162 | 100164 | | | | | | 03/12/2014 | 01/01/3000 | Approved |
| ACS | Carlos | | N/A | | | | | | | | | 03/23/2012 | 01/01/3000 | Pending |
| WFA | Chasing Water Falls | | N/A | www.chasingwater.com | 100043 | 100045 | | | | | | 02/20/2012 | 01/01/3000 | Approved |
| IN | Cinergy Corporation | O/SE | N/A | | 11 | 7760 | | | | | | 02/15/2012 | 01/01/3000 | Approved |
| PSE | Demo PSE Company | TC/PSE | N/A | | 100096 | 100098 | | | | | | 04/24/2012 | 01/01/3000 | Approved |
| APA | Eastern Area Power Administration | | N/A | | | | | | | | | 10/29/2014 | 01/01/3000 | Pending |
| Ι | Email Test | | N/A | | 4066 | 6472 | | | | | | 04/05/2012 | 01/01/3000 | Approved |
| <u>EC</u> | Emeraco Energy Company | | N/A | | | | | | | | | 07/09/2015 | 01/01/3000 | Pending |
| EC2 | Erika Electic Company (Numero Dos) | | N/A | | 100019 | 100021 | | | | | | 04/02/2012 | 01/01/3000 | Approved |
| 7 | Frilmin Flortric Company | | N1/A | | 100017 | 100010 | | | | | | 02/20/2012 | 01/01/2000 | Annewood |

To get to the Entity Entry page, click on the Entity Code link in the Code column. Modifications to entities can be made from this page.

4.2 Entity Code-Role

Entities may have various functional roles in the electric utility industry. The following roles are supported in webRegistry:

Operations Roles

- Reliability Coordinator (RC)
- Balancing Authority (BA)
- Market Operator (MO)
- Transmission Service Provider (TSP)

Merchant Roles

- Purchasing Selling Entity (PSE)
- Load Serving Entity implies PSE (LSE)
- Generation Serving Entity implies PSE (GSE)

Additional Roles

- Registry Administrator (Reg Admin)
- NAESB
- Application Service Provider (ASP)
- Electric Reliability Organization (ERO)
- Regional Reliability Organization (RRO)
- PKI Certification Authority (PKICA)
- Observer (OBS)

Neither Entity Code-Role nor Entity Code is unique in webRegistry. It is possible for the same entity to register several identical roles, such as several PSE desks. It is also possible for an entity to register several different roles that have the same code, such as a BA role and PSE role that may share the same code. However, the combination of an Entity Role and Entity Code will be unique in webRegistry. An Entity cannot have two (2) BA roles with the same code.

A named Entity Role (i.e., the Entity Role/Code pair) represents a unique instance of a business unit in the electric utility industry with clearly defined operational responsibilities, object ownership, and approval rights.

Users in webRegistry are assigned to entities and can view data and perform data entry/modification functions for all roles/codes assigned to their entities.

To locate an Entity Code-Role, navigate to Entities > Entity Code-Role. To create a new entity Code-Role, click on the "New Entity Code-Role" button.

| Entities Objects Adjacencies | Approval Payment | Data Models | Audit Alarming Administration | Support | | / Management | Logout | Help \ | Vindow | ages V | Va 🗞 Wed 9/28 6:05 AM E |
|-------------------------------|---------------------|-------------|--------------------------------|------------|---------------|-------------------|---------------------|--------|------------------|----------------|-------------------------|
| Om Entity Code-Role Viewing | Mode: Current Versi | on Effec | tive Date: Today (09/28/2016) | | | | | | | | i 🛛 🏹 - 🚔 🔞 🤅 |
| Entity | Code | Role | Long Name | NERC ID | Tagging ID | Balancing Area | Reliability Area | Region | Market Area | Entity Type | Interconnection |
| | <u>321T</u> | PSE | 123 test | 100095 | 100182 | | N/A | N/A | N/A | | N/A |
| | GEEK01 | PSE | The Golden Egg Energy Co | 100100 | 100215 | | N/A | MRO | N/A | GPE,LSE,PSE | N/A |
| | SUPER POWER COMP | MO | Super Power Company | 100161 | 100346 | | N/A | N/A | SUPER POWER COMP | | N/A |
| BA Entity 1 | BA01 | BA | BA Entity 1 | 100058 | 100301 | BA01 | N/A | N/A | N/A | | N/A |
| BA Entity 1 | <u>BA1</u> | BA | BA Entity 1 | 100058 | 100128 | BA1 | BYOR2 | MRO | N/A | | EASTERN INTERCONNEG |
| BA Entity 1 | BAE1 | BA | BA Entity 1 | 100058 | 100127 | BAE1 | N/A | MRO | N/A | | EASTERN INTERCONNEG |
| BA Entity 1 | METLEA | PSE | BA Entity 1 | 100058 | 1578 | | N/A | N/A | N/A | | N/A |
| BA Entity 1 | NYIS | BA | BA Entity 1 | 100058 | 635 | NYIS | N/A | N/A | N/A | | N/A |
| BA Entity 2 | BA2 | BA | BA Entity 2 | 100076 | 100154 | BA2 | N/A | MRO | N/A | | EASTERN INTERCONNEG |
| BA Entity 2 | PSE123 | PSE | BA Entity 2 | 100076 | 100155 | | N/A | MRO | N/A | GPE,LSE | N/A |
| Bring Your Own Energy Company | BYOASP | ASP | Bring Your Own Energy Company | 100162 | 100353 | | N/A | N/A | N/A | | N/A |
| Bring Your Own Energy Company | BYOB | BA | Bring Your Own Energy Company | 100162 | 100354 | BYOB | N/A | MRO | N/A | | EASTERN INTERCONNEG |
| Bring Your Own Energy Company | BYOE01 | PSE | Bring Your Own Energy Company | 100162 | 100352 | | N/A | MRO | N/A | GPE,LSE,PSE | N/A |
| Bring Your Own Energy Company | BYOE02 | PSE | Bring Your Own Energy Company | 100162 | 100357 | | N/A | MRO | N/A | GPE,LSE,PSE | N/A |
| Bring Your Own Energy Company | BYOE03 | PSE | Bring Your Own Energy Company | 100162 | 100361 | | N/A | BYORRO | N/A | GPE,LSE,PSE | N/A |
| Bring Your Own Energy Company | BYOMO | MO | Bring Your Own Energy Company | 100162 | 100355 | | N/A | N/A | BYOMO | | N/A |
| Bring Your Own Energy Company | BYOO | Observer | Bring Your Own Energy Company | 100162 | 100356 | | N/A | N/A | N/A | | N/A |
| Bring Your Own Energy Company | BYOR2 | RC | Bring Your Own Energy Company2 | 100162 | 100358 | | BYOR2 | MRO | N/A | | N/A |
| Bring Your Own Energy Company | BYORRO | RRO | Bring Your Own Energy Company | 100162 | 100359 | | N/A | BYORRO | N/A | | N/A |
| 09/28/2016 06:05:32 EST | | | Pa | ge 1 of | 3 🕨 🕨 | • | | | | | Records 1-30 of |
| | | | New Entity | Code-Role | Close | | | | C | 2018 OA | TI Inc |

Roles may be added as needed by the industry through NAESB and the ERO. OATI webRegistry will be able to support the registration of any entity role defined in the NERC Functional model, once the attributes of such role are defined.

4.3 Purchasing-Selling Entities

The Purchasing-Selling Entity (PSE) display shows users the PSEs within the system. Information provided about the PSE includes the name, NERC ID, and approval status.

To locate Purchasing-Selling Entities, navigate to Entities > Purchasing-Selling Entities. To create a new PSE, click on the "New PSE" button.

| X | | | | - | .ogout Help | | | | | | Wod 0 | /28 4:06 | 6 AM P |
|---------|---|--|--|---|--|---|---|---|---|--|---|---|---|
| | | | | | | | | | | | | | |
| Viewing | Mode: Current Version Effective I | Date: To | day (09/ | 28/2016) | | | | | | | g 🕄 😿- | | 0 |
| | | NERC | Tagging | | Reliability | | Effectiv | ve Date | Expiration | Approval | | A | cting |
| Code | Long Name | ID | ID | Туре | Region | Contacts | Start | Stop | Date | Status | Delegated | User | Enti |
| 21T | 123 test | 100095 | 100182 | | N/A | 24 Hour - Eri | 04/02/2012 | 01/01/3000 | 01/01/3000 | Pending | No | N/A | N/A |
| EEK01 | The Golden Egg Energy Co | 100100 | 100215 | GPE,LSE,PSE | MRO | 24 Hour - N | 04/16/2012 | 01/01/3000 | 01/01/3000 | Pending | No | N/A | N/A |
| CEET | Atlantic City Electric | 100098 | 100200 | GPE,LSE,PSE | MRO | 24 Hour - Jo | 01/10/2013 | 01/01/3000 | 05/01/2017 | Approved | No | N/A | N/A |
| ETLEA | BA Entity 1 | 100058 | 1578 | | N/A | 24 Hour - Eri | 12/12/2012 | 01/01/3000 | 03/03/2017 | Approved | No | N/A | N/A |
| SE123 | BA Entity 2 | 100076 | 100155 | GPE,LSE | MRO | 24 Hour - Eri | 06/09/2016 | 01/01/3000 | 03/31/2017 | Approved | No | N/A | N/A |
| SE49 | Erika's Electric Company numero quatro | | 100240 | GPE,LSE,PSE | TRRO | 24 Hour - Eri | 05/10/2012 | 01/01/3000 | 01/01/3000 | Pending | No | N/A | N/A |
| ETC1A | Cargill Energy Trading Canada, Inc | 583 | 1244 | | N/A | 24 Hour - Eri | 04/11/2012 | 01/01/3000 | 12/01/2016 | Approved | No | N/A | N/A |
| AT12 | OATI | 583 | 100331 | PSE | TRRO | 24 Hour - To | 06/11/2013 | 01/01/2020 | 12/01/2016 | Approved | No | N/A | N/A |
| PSE | OATI | 583 | 100054 | GPE,LSE | N/A | 24 Hour - Da | 02/11/2012 | 01/01/3000 | 01/31/3000 | Approved | No | N/A | N/A |
| | | | | | | | | | | | | | > |
| | | | | Page 1 of 1 | | | | | | | Re | cords 1 | 1–9 of |
| | code 1T EEK01 EET TLEA E123 E49 TC1A VT12 | Ode Long Name 11 123 test EX01 The Golden Egg Energy Co EET Atlantic City Electric ETL42 BA Entity 1 E123 BA Entity 2 E49 Enkla's Electric Company numero quatro CTL61 Cargli Energy Trading Canada, Inc YT12 OATI | Image: Constraint of the | Long Name NERC ID Tagging ID 11 123 test 100095 100182 EX01 The Golden Egg Energy Co 100100 100215 EET Atlantic City Electric 100098 100200 ELE2 BA Entity 1 100058 1578 EL22 BA Entity 2 100076 100155 E49 Erika's Electric Company numero quatro 100240 100241 TGLIA Cargli Energy Trading Canada, Inc 583 103311 | odde Long Name ID ID ID Type 11 123 test 100095 100182 EXENT The Golden Egg Energy CO 100100 100215 GPE,LSE,PSE EET Atlantic City Electric 100098 100200 GPE,LSE,PSE E123 BA Entity 1 100076 100125 GPE,LSE,PSE E124 BA Entity 2 100076 100125 GPE,LSE,PSE E123 BA Entity 2 100076 100125 GPE,LSE,PSE E124 BA Entity 2 100076 100125 GPE,LSE,PSE E123 BA Entity 2 100076 100125 GPE,LSE,PSE TICIA Cargill Energy Trading Canada, Inc 583 1244 T12 0ATI 583 100031 PSE SE OATI 583 100054 GPE,LSE | Long Name NERC ID Taging Type Type Reliability Region 1T 123 test 100095 100182 N/A EK01 The Golden Egg Energy Co 100109 100215 GPE,LSE,PSE MRO EET Atlantic City Electric 100098 100215 GPE,LSE,PSE MRO E123 BA Entity 1 100098 1578 N/A E123 BA Entity 2 100076 10155 GPE,LSE,PSE MRO E124 BE Entity 2 100076 100155 GPE,LSE,PSE MRO E123 BA Entity 2 100076 100155 GPE,LSE,PSE TRAO TIC1A Carglil Energy Trading Canada, Inc 583 1244 N/A XI12 OATI 583 100354 GPE,LSE N/A SE OATI 583 100054 GPE,LSE N/A | Image: Note of the second se | Image: Note of the second se | Nerror Tagging ID Type ID Reliability ID Reliability Region Effective Date 11 123 test 100095 100182 N/A 24 Hour - En 04/02/2012 01/01/3000 EK01 The Golden Egg Energy Co 100100 100215 GPE,LSE,PSE MRO 24 Hour - En 04/02/2012 01/01/3000 EET Atlantic City Electric 100098 100200 GPE,LSE,PSE MRO 24 Hour - En 04/02/2012 01/01/3000 EL23 BA Entity 1 100058 1578 MRO 24 Hour - En 06/09/2016 01/01/3000 EL24 BA Entity 2 100076 100155 GPE,LSE,PSE MRO 24 Hour - En 06/09/2016 01/01/3000 EL24 BA Entity 1 100076 100155 GPE,LSE,PSE TRRO 24 Hour - En 06/09/2016 01/01/3000 TCLA Carglil Energy Trading Canada, Inc 583 1244 N/A 24 Hour - En 06/11/2013 01/01/2020 Y112 OATI 583 10031 | NERC Integring Tagging ID Reliability Type Reliability Region Effective Contacts Date Expiration Date 10< | NERC tode NERC Long Name NERC ID Taging Type Reliability Region Contacts Effective Date Expiration Start Approval Start 11 122 test 100095 100182 N/A 24 Hour - N 04/16/2012 01/01/3000 01/01/3000 Pending EK01 The Golden Egg Energy Co 100009 100215 GPE,LSE,PSE MRO 24 Hour - N 04/16/2012 01/01/3000 01/01/3000 Pending EET Atlantic City Electric 100096 100205 GPE,LSE,PSE MRO 24 Hour - S 04/16/2012 01/01/3000 03/01/2017 Approved E128 BA Entity 1 100076 100155 GPE,LSE, PSE MRO 24 Hour - En 06/09/2016 01/01/3000 03/03/2017 Approved E128 BA Entity 1 100076 100155 GPE,LSE, PSE MRO 24 Hour - En 06/09/2016 01/01/3000 03/03/2017 Approved E123 BA Entity 2 100076 100155 GPE,LSE, PSE MRO 24 Hour - En 06/0 | New Code Ner Contacts Tagging 10 Type Reliability Region Contacts Effective Date Expiration Approval Status Delegated 11 123 test 100095 100182 N/A 24 Hour - N 04/02/2012 01/01/3000 Pending No EK01 The Golden Egg Energy Co 100100 100215 GPE_LSE,PSE MRO 24 Hour - N 04/02/2012 01/01/3000 Pending No EX01 The Golden Egg Energy Co 100009 100205 GPE_LSE,PSE MRO 24 Hour - N 04/02/2012 01/01/3000 Pending No ET1 Atlantic City Electric 1000098 100200 GPE_LSE,PSE MRO 24 Hour - Sen 01/01/2013 01/01/3000 03/01/2017 Approved No E123 BA Entity 1 100005 100155 GPE_LSE,PSE MRO 24 Hour - En 05/09/2012 01/01/3000 03/31/2017 Approved No E123 BA Entity 1 100006 100105 GPE_LSE MRO 24 Hour - En <td>NERC Tagging ID Type Reliability Region Effective Date Start Expiration Start Approval Start Approval Start</td> | NERC Tagging ID Type Reliability Region Effective Date Start Expiration Start Approval Start Approval Start |

4.4 Regional Reliability Organizations

The Regional Reliability Organizations (RRO) display shows users the RROs within the system. Information provided about the RRO includes the name, NERC ID, and approval status.

To locate Regional Reliability Organizations, navigate to Entities > Regional Reliability Organizations. To create a new RRO, click on the "New RRO" button.

| Entities Objects Adjacencies | | | Data Models | Audit | Alarming | Administration | n Support | Registry M | anagement | Logou | t Help | Window | | Pendir | Teo lucio | | |
|-------------------------------|-------------|------------------|----------------|------------|-----------|----------------|-------------|--------------|-----------------|-------|------------|------------|------------|----------|-----------|---------|--------|
| 👔 🎒 🖂 🕘 Reliability Coor | dinators | X | | | | | | | | | | | | | Ved 9. | | |
| Reliability Coordinators | Viev | ving Mode: Curre | ent Version E | ffective [| Date: Tod | ay (09/28/ | 2016) | | | | | | | | d 🖸 😿 - | | 0 |
| | | | | NERC | Tagging | Reliability | Reliability | | | | Effectiv | ve Date | Expiration | Approval | | Ac | cting |
| Entity | Code | Long | Name | ID | ID | Area | Region | 0 | ontacts | | Start | Stop | Date | Status | Delegated | User | Enti |
| Bring Your Own Energy Company | BYOR2 | Bring Your Own E | nergy Company2 | 100162 | 100358 | BYOR2 | MRO | 24 Hour - Ji | m Jones, (763 |) (| 03/24/2014 | 01/01/3000 | 03/31/2016 | Approved | No | N/A | N/A |
| Midwest ISO | MISO | Midwest ISO | | 2021 | 1007 | MISO | N/A | 24 Hour - M | lidwest ISO - : | t (| 02/13/2012 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| OATI | TRC | OATItrc | | 583 | 100055 | TRC | N/A | 24 Hour - D | an Smith, (12 | 3) : | 11/26/2012 | 01/01/3000 | 01/31/3000 | Approved | No | N/A | N/A |
| QuickSilver Inc | <u>QSRC</u> | QuickSilver Inc | | 100028 | 100286 | QSRC | N/A | 24 Hour - Ja | ack Quick, (34 | 3) (| 01/01/2013 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| QuickSilver Inc | <u>QUSL</u> | QuickSilver Inc | | 100028 | 100082 | QUSL | N/A | 24 Hour - Ja | ack Quick2, (3 | ŧ (| 08/27/2012 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| < | | | | | | | | | | | | | | | | | > |
| 09/28/2016 06:07:24 EST | | | | | | 1 | Page 1 of 1 | L | | | | | | | Re | cords 1 | 1–5 of |
| | | | | | | Ne | w RC Close |] | | | | | | ©2018 | OATI, I | nc. | |

4.5 Reliability Coordinators

The Reliability Coordinators (RCs) display shows users the RCs within the system. Information provided about the RC includes the name, NERC ID, and approval status.

To locate RCs, navigate to Entities > Reliability Coordinators. To create a new RC, click on the "New RC" button.

| Entities | Obje | ects Adja | cencies | Approval | Payment | Audit A | larming Administration Registry Management Logout Help Window | | | | | | | |
|----------|-----------------|-----------|------------|----------|-------------|-------------|---|------------|------------|------------|----------|-----------|----------|---------|
| 2 | 🖂 🙋 | Reliabil | ity Coordi | nators × | | | | | | | | Wed 9 | /28 4:06 | 6 AM PI |
| OATI RO | eliabilit | y Coordi | nators | Viewing | Mode: Cur | rent Versio | Effective Date: Today (09/28/2016) | | | | | d 🗾 🗙 - | · 🔒 | 0 (|
| | | Long | NERC | Tagging | Reliability | Reliability | | Effectiv | ve Date | Expiration | Approval | | | cting |
| Entity | Code | Name | ID | ID | Area | Region | Contacts | Start | Stop | Date | Status | Delegated | User | Entit |
| OATI | TRC | OATItrc | 583 | 100055 | TRC | WECC | 24 Hour - Dan Smith, (123)123-2312, (123)123-2312, daniel.smith@oati.net <br< td=""><td>11/26/2012</td><td>01/01/3000</td><td>01/31/3000</td><td>Approved</td><td>No</td><td>N/A</td><td>N/A</td></br<> | 11/26/2012 | 01/01/3000 | 01/31/3000 | Approved | No | N/A | N/A |
| | | 6.47 DOT | | | | | Page 1 of 1 | | | | | | Recor | rd 1 of |
| 09/28/20 | 016 04:0 | JU.47 PPT | | | | | Fage 1011 | | | | | | | |

4.6 Transmission Service Providers

The Transmission Service Providers (TSPs) display shows users the TSPs within the system. Information provided about the TSP includes the name, NERC ID, and approval status.

To locate TSPs, navigate to Entities > Transmission Service Providers. To create a new TSP, click on the "New TSP" button.

| Entities Objects Adjacencies | Appro | | Audit | Alarming | Administratio | n Support Registry Management Lo | gout Help | Window | | isages <mark>ig</mark> | 🗞 Wed | 9/28 6:(|)7 AM E: |
|-------------------------------|-------------|-------------------------------|--------|-------------|---------------|--|------------|------------|------------|------------------------|-----------|----------|----------|
| Om Transmission Service Pro | viders | Viewing Mode: Current Ver | sion E | ffective Da | ate: Today | (09/28/2016) | | | | | 50 🕑 i 🕅 | • 🔒 | 0 (|
| | | | NERC | Tagging | Regional | | Effecti | re Date | Expiration | Approval | | Ac | ting |
| Entity | Code | Long Name | ID | ID | Reliability | Contacts | Start | Stop | Date | Status | Delegated | User | Entity |
| Bring Your Own Energy Company | BYOT | Bring Your Own Energy Company | 100162 | 100360 | MRO | 24 Hour - Jim Jones, (763)201-2020, (7 | 03/12/2014 | 01/01/3000 | 03/31/2016 | Approved | No | N/A | N/A |
| Chasing Water Falls | <u>CWFA</u> | Chasing Water Falls | 100043 | 100108 | N/A | 24 Hour - Jack Nimble, (234)123-3456, | 02/20/2012 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| Cinergy Corporation | CINT | Cinergy Corporation | 11 | 100370 | BYORRO | 24 Hour - John Masty, (763)201-2020, (| 12/29/2014 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| Northern Lights Company INC | NOLI | Northern Lights Company | 100021 | 100066 | TRRO | 24 Hour - Mark Shark, (734)234-3443, (| 02/13/2012 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| OATI | TTSP | OATI | 583 | 100058 | N/A | 24 Hour - Dan Smith, (123)123-2312, (| 02/11/2012 | 01/01/3000 | 01/31/3000 | Approved | No | N/A | N/A |
| QuickSilver Inc | QUTP | QuickSilver Inc | 100028 | 100288 | N/A | 24 Hour - Jack Quick, (343)234-2334, (| 01/01/2013 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| South Western Company | <u>SWCO</u> | South Western Company | 100016 | 100060 | TRRO | 24 Hour - Nick Gough, (763)201-0120, | 02/12/2012 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| 09/28/2016 06:07:08 EST | | | | | | Page 1 of 1 | | | | | Re | ords 1 | L-7 of 7 |
| | | | | | Ne | w TSP Close | | | | ©20 | 18 OAT | I, In | c. |

4.7 Market Operators

The Market Operators (MOs) display shows users the MOs within the system. Information provided about the MO includes the name, NERC ID, and approval status.

To locate MOs, navigate to Entities > Market Operators. To create a new MO, click on the "New MO" button.

| Entities Objects Adjacencies | Approval Paymen | t Data Models Audit Alarm | ing Ad | Iministration | Support Registry N | Management Logo | out Help | Window | | | | | |
|-------------------------------|--------------------|-------------------------------|---------|---------------|--------------------|-----------------|------------|------------|------------|------------------------|-----------|----------|---------|
| 👔 🎒 🖂 🕘 Market Operato | rs X | | | | | | | | | ages <mark>ling</mark> | 🚳 Wed 9 | /28 6:08 | 8 AM E: |
| Market Operators Vie | wing Mode: Current | Version Effective Date: Toda | y (09/2 | B/2016) | | | | | | | d 🖸 🗙 | 1 🖨 | 0 (|
| | | | NERC | Tagging | Market | | Effecti | ve Date | Expiration | Approval | | A | cting |
| Entity | Code | Long Name | ID | ID | Area | Contacts | Start | Stop | Date | Status | Delegated | User | Entit |
| | SUPER POWER COMP | Super Power Company | 100161 | 100346 | SUPER POWER COMP | 24 Hour - Nong | 02/18/2014 | 01/01/3000 | 01/01/3000 | Pending | No | N/A | N/A |
| Bring Your Own Energy Company | BYOMO | Bring Your Own Energy Company | 100162 | 100355 | BYOMO | 24 Hour - Jim J | 03/12/2014 | 01/01/3000 | 03/31/2016 | Approved | No | N/A | N/A |
| OATI | TMO | OATI | 583 | 100056 | тмо | 24 Hour - Dan | 02/11/2012 | 01/01/3000 | 01/31/3000 | Approved | No | N/A | N/A |
| QuickSilver Inc | QUSLMO | QuickSilver Inc | 100028 | 100282 | QUSLMO | 24 Hour - Jack | 01/01/2013 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| The Power Authority | BHEPOWERAUTHORIT | The Power Authority | 100044 | 100109 | BHEPOWERAUTHORIT | 24 Hour - John | 02/18/2014 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| The Power Authority | THEPOWERAUTHORIT | The Power Authority | 100044 | 100348 | THEPOWERAUTHORIT | 24 Hour - John | 02/18/2014 | 01/01/3000 | 03/02/2016 | Approved | No | N/A | N/A |
| < | | | | | | | | | | | | | > |
| 09/28/2016 06:08:05 EST | | | | P | age 1 of 1 | | | | | | Re | cords 1 | 1–6 of |
| | | | | New | / MO Close | | | | C | 2018 (| DATI, In | c. | |

4.8 Balancing Authorities

The Balancing Authorities (BAs) display shows users the BAs within the system. Information provided about the BA includes the name, NERC ID, and approval status.

To locate BAs, navigate to Entities > Balancing Authorities. To create a new BA, click on the "New BA" button.

| Malancing Authorities | Viewi | ng Mode: Current Version Ef | fective Da | ate: Toda | y (09/28/ 3 | 2016) | | | | | E | - <u>50</u> 🛛 | 🔊 । 🔒 🤇 |) (|
|-------------------------------|-------------|-------------------------------|------------|---------------|--------------------|---------------------|-----------------------|----------------|-------------------------|----------|-------------------|-----------------|--------------------|-----|
| Entity | Code | Long Name | NERC ID | Tagging TD | Balancing Area | Reliability Area | Reliability Region | Market Area | Interconnection | Contacts | Effectiv Start | ve Date Stop | Expiration Date | Ap |
| BA Entity 1 | BA01 | BA Entity 1 | 100058 | 100301 | BA01 | N/A | N/A | N/A | N/A | | | | | Apt |
| BA Entity 1 | BA1 | BA Entity 1 | 100058 | 100128 | BA1 | BYOR2 | MRO | N/A | EASTERN INTERCONNECTION | | | | | |
| BA Entity 1 | BAE1 | BA Entity 1 | 100058 | 100127 | BAE1 | N/A | MRO | N/A | EASTERN INTERCONNECTION | | 12/12/2012 | 01/01/3000 | 03/02/2016 | Ap |
| BA Entity 1 | NYIS | BA Entity 1 | 100058 | 635 | NYIS | N/A | N/A | N/A | N/A | | 12/12/2012 | 01/01/3000 | 03/02/2016 | App |
| BA Entity 2 | BA2 | BA Entity 2 | 100076 | 100154 | BA2 | N/A | MRO | N/A | EASTERN INTERCONNECTION | | 03/12/2012 | 01/01/3000 | 03/31/2016 | Ap |
| Bring Your Own Energy Company | BYOB | Bring Your Own Energy Company | 100162 | 100354 | BYOB | N/A | MRO | N/A | EASTERN INTERCONNECTION | | 03/12/2014 | 01/01/3000 | 03/31/2016 | App |
| North Power Pool | NPP | North Power Pool | 100167 | 100376 | NPP | QUSL | TRRO | BYOMO | QUEBEC INTERCONNECTION | | 03/04/2015 | 01/01/3000 | 03/31/2016 | App |
| OATI | ERET | OATI | 583 | 100069 | ERET | MISO | TRRO | тмо | N/A | | 02/13/2012 | 01/01/3000 | 01/31/3000 | App |
| QuickSilver Inc | <u>QUBA</u> | QuickSilver Inc | 100028 | 100281 | QUBA | N/A | N/A | N/A | N/A | | 01/01/2013 | 01/01/3000 | 03/02/2016 | Ap |
| QuickSilver Inc | <u>QUSL</u> | QuickSilver Inc | 100028 | 100083 | QUSL | MISO | N/A | TMO | EASTERN INTERCONNECTION | | 07/14/2015 | 01/01/3000 | 03/02/2016 | App |
| South Western Company | <u>SWCO</u> | South Western Company | 100016 | 100059 | SWCO | TRC | TRRO | TMO | N/A | | 07/16/2015 | 01/01/3000 | 03/02/2016 | App |
| The Power Authority | TPA | The Power Authority | 100044 | 100377 | TPA | QSRC | QSRRO | QUSLMO | EASTERN INTERCONNECTION | | 03/11/2015 | 01/01/3000 | 03/02/2016 | App |
| < | | | | | | | | | | | | | | > |

5. Objects Menu

5.1 Control Zones

Control Zones (sometimes referred to as Local Balancing Authority Areas or LBAs) are subsets of balancing areas that are used by reliability tools, such as the Interchange Distribution Calculator (IDC). A Control Zone can only be registered by a BA within the territory of its operation. By default, each BA must register a Control Zone whose name is identical to the name of the parent BA. webRegistry will automatically create a matching Control Zone for each new balancing authority.

An Entity Administrator user for a BA entity code can register additional Control Zones as subsets of the balancing area, including associations with the parent balancing area.

An association of a Control Zone with source/sink points is established when a source/sink service point is defined in webRegistry.

To locate Control Zones, navigate to Objects > Control Zones. To create a new Control Zone, click on the "New Control Zone" button.

| | | oroval Payr | ment Data M | Models Aud | lit Alarmir | ng Adminis | _ | Suppor | | <u> </u> | lanagement |
|------------------|------------------------|-------------|-------------|--------------|-------------|------------|-------|-------------------------|------|----------|--------------|
| 👔 🚭 🖾 🙆 Contr | ol Zones | X | | | | | n | ding <mark>hrn</mark> i | ng 🦉 | 5 Wed 9/ | 28 6:09 AM E |
| Om Control Zones | Viewing Mode: | Current Ve | rsion Effec | tive Date: T | oday (09/ | 28/2016) | | E | 0 | 3 × - |) 🕲 🖨 |
| | Control | Balancing | Effectiv | ve Date | Approval | | A | ting | | | |
| | Zones | Area | Start | Stop | Status | Delegated | User | Entity | | | |
| | <u>444</u> | N/A | 06/12/2013 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | ALTE | N/A | 04/05/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | <u>ALTW</u> | N/A | 04/05/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | AMIL | N/A | 04/05/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BA01 | BA01 | 12/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | <u>BA1</u> | BA1 | 03/24/2014 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BA2 | BA2 | 03/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | <u>BA22</u> | BA2 | 03/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BA3 | N/A | 06/11/2013 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BAE1 | BAE1 | 12/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BAE1CZ | BAE1 | 12/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BAv2 | BA2 | 05/19/2013 | 10/31/2999 | Approved | No | N/A | N/A | | | |
| | BYOB | BYOB | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | BYOB2 | BYOB | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | <u>CSWS</u> | N/A | 04/12/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | Control Zone 1 | N/A | 02/19/2013 | 10/31/2999 | Approved | No | N/A | N/A | | | |
| | EBA | N/A | 03/30/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | EBA2 | N/A | 03/30/2012 | 01/01/3000 | Approved | No | N/A | N/A | | | |
| | EBA3 | N/A | 03/30/2012 | 01/01/3000 | Approved | No | N/A | N/A | ~ | | |
| | 09/28/2016 06:0 | 8:59 EST | | Page 1 of | 2 🕨 🖻 | Re | cords | 1–30 of 4 | 14 | | |
| | | | | | Close | | | | | ©2018 (| OATI, Inc. |

5.2 Flowgates

The Book of Flowgates (BOF) is an independent NERC system that allows users to define the composition of flowgates in the Eastern Interconnection for use in the IDC. BOF currently provides all capabilities required to create, validate, and maintain critical transmission interfaces that are monitored by Reliability Coordinators in IDC. This functionality will not be

duplicated in webRegistry. Flowgate management will continue to reside in the mission-critical BOF system.

OATI webRegistry will import the BOF data for presentation only. Each time a new BOF definition is exported to the IDC, a similar export will be provided to webRegistry.

The presentation of flowgate elements and filtering on the flowgate summary will be similar to what is currently provided in the BOF.

To locate Flowgates, navigate to Objects > Flowgates.

| Entities | Objects Approval Payment Data Models Audit | Alarming | Administration Su | upport Registry Managem | ent Logout Help | Window | | Mo | n 10/24 9:51 A | M EPT |
|-----------|---|-----------|---------------------|-------------------------|-------------------------|---------------|-----------|-----------|----------------|-------|
| | wgates | | | | | | E == | |)• 🚔 🔞 | |
| Number | Description | Туре | Rationale | Start Time | End Time | Definition | SC | CA | ТР | |
| 0 | Swing Bus Flowgate | PTDF | Data Check, Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Informational | TVA | TVA | TVA | 8BR I |
| 3 | PJM Eastern Interface | PTDF | Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЗМ | 3 MI |
| 4 | PJM Central Interface | PTDF | Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | PJM | PJM | PJM | CNA5 |
| 5 | PJM Western Interface | PTDF | Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | PJM | РЗМ | РЈМ | 01D0 |
| <u>6</u> | Branchburg-Ramapo (5018) 500 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | BRAN |
| Z | Hudson-Farragut (B-3402) 345 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | HUDS |
| 8 | Hudson-Farragut (C-3403) 345 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | HUDS |
| 2 | Waldwick-South Mahwah (J-3410) 345 kV | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | WAL |
| 10 | Waldwick-South Mahwah (K-3411) 345 kV | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | WAL |
| 11 | Linden-Goethals (A-2253) 230 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | LIND |
| 12 | Warren-Falconer 115 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | WAR |
| 13 | Erie East-South Ripley 230 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | ERIE |
| 14 | East Towanda-Hillside 230 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | E.TV |
| 15 | East Sayre-North Waverly 115 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | E.SA |
| 16 | Tiffany-Goudey 115 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | LAUR |
| 17 | Homer City-Stolle Road 345 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | ном |
| 18 | Homer City-Watercure Road 345 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | NYIS, PJM | NYIS, PJM | NYIS, PJM | ном |
| 20 | Erie West-Erie South 345 kV line | PTDF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | ERIE |
| 21 | Erie West 345/115 kV TX1 I/o Erie West-Erie South 345 kV | OTDF.LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | ERIE |
| 22 | Erie West-Erie South 345 kV I/o Homer City-Stolle Rd 345 kV | OTDF,LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | PJM | РЈМ | РЈМ | ERIE |
| 23 | Roseland-Cedar Grove F 230 kV //o Roseland-Cedar Grove B | OTDF,LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | PJM | РЈМ | РЈМ | ROSE |
| 24 | Branchburg-Readington 230 kV line 1/o Roseland-Whippany 230 | OTDF,LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | BRAN |
| 25 | Erie South-Erie East 230 kV I/o Homer City-Stolle Rd 345 kV | OTDF.LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | ERIE |
| 26 | Erie West 345/115 kV TX3 l/o Erie West-Erie South 345 kV | OTDF,LODF | Thermal | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | ERIE |
| 50 | AP South Interface | PTDF | Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | PJM | РЈМ | РЈМ | 01D0 |
| 51 | AEP-DOM I/o Baker-Broadford 765 kV | OTDF | Thermal, Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | 05KA |
| 52 | AEP-DOM I/o Broadford-Jacksons Ferry 765 kV | OTDF | Thermal, Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | 05BA |
| 53 | AEP-DOM //o Pruntytown-Mt. Storm 500 kV | OTDF | Thermal, Voltage | | 3000-01-01 06:00:00.000 | | PJM | PJM | PJM | 05BA |
| 54 | AEP-DOM I/o Culloden-Wyoming 765 kV | OTDF | Thermal, Voltage | 2011-07-28 19:21:00.000 | 3000-01-01 06:00:00.000 | Reliability | РЈМ | РЈМ | РЈМ | 05BA |
| | AEP-DOM I/o Mt. Storm-Valley 500 kV | OTDF | Thermal, Voltage | | 3000-01-01 06:00:00.000 | | PJM | PJM | PJM | 05BA |
| • | | | | | | | | | | • |
| 10/24/201 | 1 09:51:26 EPT | | Page | 1 of 60 🕨 🗰 | | | | Recor | ds 1-30 of | 1776 |
| | | | - | | | | | | OATI. | |
| | | | | Close | | | | | OATI, | mc. |

5.3 Interconnections

Three (3) synchronous interconnections will be modeled in webRegistry as base registry data and will be maintained by Registry Administrators. NAESB and ERO approvals will be required for interconnections.

To locate Interconnections, navigate to Objects > Interconnections.

| Entities Object | ts Adjacencies Approval | Payment D | ata Models | Audit Al | arming Ad | ministra | tion S | Support Registry |
|-----------------|---|------------|------------|----------|-----------|----------|----------|--------------------|
| 🖸 🚑 🖂 🙆 🛛 | Interconnections X | | | | ssag | es | V 🚳 V | Wed 9/28 6:10 AM E |
| Om Interconne | Ctions Viewing Mode: Cur Effective Date: Tod | | | | E | | × | 🔊 🔊 🖨 🖉 🐔 |
| | | Effectiv | ve Date | Approval | | Ac | ting | |
| | Interconnection | Start | Stop | Status | Delegated | User | Entity | |
| | EASTERN INTERCONNECTION | 02/14/2012 | 01/01/3000 | Approved | No | N/A | N/A | |
| | ERCOT | 02/14/2012 | 01/01/3000 | Approved | No | N/A | N/A | |
| | QUEBEC INTERCONNECTION | 02/14/2012 | 01/01/3000 | Approved | No | N/A | N/A | |
| | Test | 06/11/2013 | 01/01/3000 | Approved | No | N/A | N/A | |
| | Test Interconnection | 08/14/2012 | 01/01/3000 | Approved | No | N/A | N/A | |
| | Test2 | 06/12/2013 | 01/01/3000 | Approved | No | N/A | N/A | |
| | WESTERN INTERCONNECTION | 02/14/2012 | 01/01/3000 | Approved | No | N/A | N/A | |
| | mani interconection | 06/12/2013 | 01/01/3000 | Approved | No | N/A | N/A | |
| | test | 08/21/2013 | 01/01/3000 | Approved | No | N/A | N/A | |
| | 09/28/2016 06:10:00 EST | F | age 1 of 1 | | Re | cords 1 | L–9 of 9 | |
| | | [| Close | | | | (| 02018 OATI, Inc. |

5.4 POR/POD Points

An Entity Administrator user for a TSP entity code will be able to register POR/POD service points, including association with the parent TSP.

For each service point, users can specify the point name and role (POR, POD, or both). No approval is required for the service point registration.

To locate POR/POD points, navigate to Objects > POR/POD Points. To create a new POR/POD point, click on the "New POR/POD Point" button. Alternatively, to upload POR/POD points, click on the "POR/POD Points Upload" button.

|) 🖨 🖂 🙆 🧨 | OR/POD Points | х | | | | | | | | | | ndin | g <mark>M</mark> arnin | Wed 🗞 | 9/28 6:10 AN |
|------------|------------------|------------|---------|--------------------|----------|---------------|----------|------------|------------|--------------------|-----------|---------|------------------------|--------|--------------|
| POR/POD Po | oints Viewing Mo | de: Curren | t Versi | on Effecti | ve Date: | Today (| 09/28/2 | 2016) | | | | i: | | 3 × | - 🔒 🔞 |
| | | | | DC Tie Operator | NERC | TSP | Point | Effectiv | ve Date | Approval | | Ac | ting | ~ | |
| | Name | Туре | TSP | (BA) | ID ID | Tagging ID | ID | Start | Stop | Approval Status | Delegated | User | Entity | | |
| | BYOBPOD | POD | BYOT | | 100162 | 100360 | 100435 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPOR | POR | BYOT | | 100162 | 100360 | 100436 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPORPOD | POR/POD | BYOT | | 100162 | 100360 | 100437 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint1 | POR/POD | BYOT | | 100162 | 100360 | 100438 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint10 | POR/POD | BYOT | | 100162 | 100360 | 100447 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint2 | POR/POD | BYOT | | 100162 | 100360 | 100439 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint3 | POR/POD | BYOT | | 100162 | 100360 | 100440 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint4 | POR/POD | BYOT | | 100162 | 100360 | 100441 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint5 | POR/POD | BYOT | | 100162 | 100360 | 100442 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint6 | POR/POD | BYOT | | 100162 | 100360 | 100443 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint7 | POR/POD | BYOT | | 100162 | 100360 | 100444 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | | |
| | BYOEPoint8 | POR/POD | BYOT | | 100162 | 100360 | 100445 | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A | \sim | |
| | RVOE Dointo | | DVOT | | 100160 | 100260 | 100446 | 02/12/2014 | 01/01/2000 | Approved | No | N1/A | ×1/A > | | |
| | 09/28/2016 06:10 | :32 EST | | | | Pa | ige 1 of | 1 | | | Re | cords ' | 1–30 of 3 | 30 | |

5.5 Source/Sink Points

Source/sink and source/sink points can be registered in webRegistry by Entity Administrators of either BA or PSE entities.

Entity Administrators for PSE entities codes can register source/sink or source/sink points in webRegistry, including the associations with hosting Control Zones. The approval policy requires the corresponding BA to approve such registration.

Entity Administrators for the BA can register source/sink points in their Control Zones. When registering a source/sink point, the BA can select one or more PSE entity codes that will be allowed to use this service point as either the source or sink. No PSE approval of such registration will be required in the initial configuration of the approval policy.

After a source/sink point has been approved and registered in the system, both the PSE and the BA will be considered its dual owners. Both parties can perform modification and deactivation actions on the source/sink object. When such actions are taken by the PSE, a BA approval will be required.

Note: BA modifications or deactivations of source/sink objects require no additional approvals.

To locate Source/Sink Points, navigate to Objects > Source/Sink Points. To create a new source/sink point, click on the "New Source/Sink Point" button. Alternatively, to upload source/sink points, click on the "Source/Sink Points Upload" button.

| e/Sink Points Vie | wing Mode: Cu | rrent Version | Effect | tive Date: | Today | (09/28/ | 2016) | | | | | | 8 | E | 55 🖸 🛛 |
|-------------------|-----------------|---------------|--------|------------|--------|---------|----------|----------|---------------|------------|------------|----------|-----------|-----|--------|
| | | Control | | | NERC | Point | MRD | <u> </u> | agging Entity | | ve Date | Approval | | | ting |
| Name | Туре | Zone | BA | PSE | ID | ID | Resource | Role | Code | Start | Stop | Status | Delegated | _ | Entity |
| BA2Test | Source/Sink | | BA2 | PSE123 | 100076 | | | | | | 12/31/2999 | | No | | N/A |
| BYOE1 | Source/Sink | | BYOB | BYOE01 | 100162 | | | | | | 01/01/3000 | | No | | N/A |
| BYOE10 | Source/Sink | | BYOB | BYOE01 | 100162 | | | | | | 01/01/3000 | | No | N/A | N/A |
| BYOE11 | Source/Sink | | BYOB | BYOE01 | 100162 | | | | | | 01/01/3000 | | No | | N/A |
| BYOE12 | Source/Sink | | BYOB | BYOE01 | 100162 | | | | | | 01/01/3000 | | No | | N/A |
| BYOE13 | Source/Sink | | BYOB | BYOE01 | 100162 | | | | | | 01/01/3000 | | No | | N/A |
| BYOE2 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100272 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE3 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100273 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE4 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100274 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE5 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100275 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE6 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100276 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE7 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100277 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE8 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100278 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOE9 | Source/Sink | BYOB | BYOB | BYOE01 | 100162 | 100279 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOESOURCESin | k21 Source/Sink | BYOB2 | BYOB | BYOE01 | 100162 | 100270 | | | | 04/01/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOESource | Source | BYOB | BYOB | BYOE01 | 100162 | 100267 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| BYOESource | Source | BYOB2 | BYOB | BYOE02 | 100162 | 100268 | | | | 03/12/2014 | 01/01/3000 | Approved | No | N/A | N/A |
| Npp1 | Source/Sink | NPP | NPP | TPSE | 583 | 100291 | | | | 03/04/2015 | 01/01/3000 | Approved | No | N/A | N/A |
| Npp2 | Source/Sink | NPP | NPP | MP01 | 100166 | 100292 | | | | 03/04/2015 | 01/01/3000 | Approved | No | N/A | N/A V |
| Point1 | Source/Sink | TDA | TPA | TPSE | 583 | 100203 | | | | 00/11/0015 | 01/01/3000 | A | No | N/A | N/A |

©2018 OATI, Inc.

5.6 MRD Flowgates

OATI webRegistry will provide the ability to record Market Re-Dispatch (MRD) objects, flowgates, and resources.

ERO entity administrators will be responsible for the management of MRD data in webRegistry. No approval will be required for MRD objects.

To locate MRD Flowgates, navigate to Objects > MRD Flowgates.

5.7 MRD Resources

OATI webRegistry will provide the ability to record MRD objects, flowgates and resources, in a manner consistent with how these objects are currently modeled in the existing TSIN Registry.

ERO entity administrators will be responsible for the management of MRD data in webRegistry. No approval will be required for MRD objects.

To locate MRD Resources, navigate to Objects > MRD Resources.

5.8 Pseudo-Ties

Pseudo Tie functionality allows webRegistry Entity System Administrators to register Pseudo-Tie Transactions between Source and Sink BAs and the affected TSPs. Pseudo-Ties can only be registered by an Entity that has registered a BA or PSE role-code.

To locate Pseudo-Ties, navigate to Objects > Pseudo-Ties.

6. Approval Menu

6.1 Approval Configurations

NAESB, ERO, and BA Entity Administrator users in the webRegistry system can construct how approvals are performed, including if an approval is necessary. These users can also arrange the approval period, reminder period, and the event type of the approval.

To locate Approval Configurations, navigate to Approval > Approval Configurations. To create a new approval configuration, click on the "New Approval Configuration" button.

| OATI webRegist | ry | | | | | | | | | | | | 💧 Lor, Nong - (Nong |
|----------------|-------------------|----------|---------|-------------------|---------------|----------------|---------------|--------------------|--------------------|--------------|--------|--------|-----------------------------|
| Entities Obje | cts Adjacencies | Approval | Payment | Data Models Audit | Alarming | Administration | Support | Registry Mar | nagement | Logout | Help | Window | |
| 🖸 🚑 🖂 🕑 | Approval Configur | atio × | | | | | | | | | | | Iding Mg Wed 9/28 5:52 AM E |
| (an Approval | Configurations | | | | | | | | | | | | E 🖂 🖂 🔣 🖌 🔒 🔞 🤅 |
| | | | | Object | Event Type | Attribute | Required | Approval Period | Reminder Period | Approver | ^ | | |
| | | | | Reg Admin | New | | Yes | 5 | 3 | View | | | |
| | | | | NAESB | New | | Yes | 5 | 3 | View | | | |
| | | | | Entity | New | | Yes | 5 | 3 | View | | | |
| | | | | Applicant | New | | Yes | 5 | 3 | View | | | |
| | | | | ERO | New | | Yes | 5 | 3 | View | | | |
| | | | | RC | New | | Yes | 5 | 3 | View | | | |
| | | | | RRO | New | | Yes | 5 | 3 | View | | | |
| | | | | MO | New | | Yes | 5 | 3 | View | | | |
| | | | | ASP | New | | Yes | 5 | 3 | View | | | |
| | | | | BA | New | | Yes | 5 | 3 | View | | | |
| | | | | PKICA | New | | Yes | 5 | 3 | View | | | |
| | | | | PSE | New | | Yes | 5 | 3 | View | | | |
| | | | | TSP | New | | Yes | 5 | 3 | View | | | |
| | | | | Interconnection | | | Yes | 1 | 1 | | | | |
| | | | | Control Zone | New | | Yes | 5 | 3 | View | | | |
| | | | | POR/POD | New | | Yes | 5 | 3 | View | | | |
| | | | | Source/Sink | New | | Yes | 5 | 3 | View | | | |
| | | | | Entity | Registration | | Yes | 5 | 3 | View | | | |
| | | | | Applicant | Registration | | Yes | 5 | 3 | View | \sim | | |
| | | | | ERO | Registration | | Yes | 5 | 3 | | | | |
| | | | | 09/28/2016 05:5 | 01:43 EST | | Page 1 of | | Record | ls 1–30 of 2 | 229 | | @2019 OATL 1== |
| | | | | | | New Approval (| Configuration | Close | | | | | ©2018 OATI, Inc. |

6.2 Approval History

Approval History displays the record of submittals and approvals in webRegistry. Information provided includes the timestamp of the submittal, timestamp of the approval, and if the submittal was approved or denied. Submittals that have been approved will be highlighted in gray, while denied submittals are highlighted in red.

To locate Approval History, navigate to Approval > Approval History.

| 🔁 🎒 🖂 🙆 🗛 | oroval Histo | ry | x | | | | | | | | | | | | Wed 9 | 9/28 3:35 AM PI |
|---|-----------------|-----------|-----------------|-------------|--------------|---------------------|------------|------------|------------|------------|--------|--------|-----------|---------------------|----------|-----------------|
| Om Approval Histo | o ry Sub | mittal Ti | imestamp: This | Month (| (09/2016) | | | | | | | | | | i 🛛 🗡 | · 🔒 🞯 🤅 |
| Submit | ttal | | | | Event | | Va | lue | Effecti | ve Date | | | | Approval | | |
| Timestamp | User | Entity | Object | Name | Туре | Attribute | Old | New | Start | Stop | Object | Entity | User | Timestamp | Status | Notes |
| 09/14/2016 14:54:08 | TimC | OATI | Interconnection | TEST3 | New | | | | 09/14/2016 | 01/01/3000 | NAESB | | TimC | 09/14/2016 14:54:45 | Denied | x |
| 09/14/2016 14:54:08 | TimC | OATI | Interconnection | TEST3 | New | | | | 09/14/2016 | 01/01/3000 | ERO | NERC | MeredithS | 09/14/2016 14:54:08 | Approved | Approval |
| 09/14/2016 14:55:16 | TimC | OATI | Interconnection | test | Modification | Effective Stop Date | 01/01/3000 | 09/14/2016 | 09/14/2016 | 09/14/2016 | NAESB | | TimC | 09/14/2016 14:55:31 | Denied | x |
| 09/14/2016 14:55:16 | TimC | OATI | Interconnection | test | Modification | Effective Stop Date | 01/01/3000 | 09/14/2016 | 09/14/2016 | 09/14/2016 | ERO | | TimC | 09/14/2016 14:55:31 | Denied | x |
| 09/22/2016 12:14:43 | TimC | OATI | Interconnection | asdf123 | New | | | | 09/22/2016 | 01/01/3000 | NAESB | | TimC | 09/22/2016 12:14:53 | Denied | x |
| 09/22/2016 12:15:04 | TimC | OATI | Interconnection | Test23 | Modification | Name | Test2 | Test23 | 09/22/2016 | 01/01/3000 | NAESB | | TimC | 09/22/2016 12:15:13 | Denied | x |
| 09/14/2016 14:39:38 TimC 0ATI Product TEST New 09/14/2016 14:34:54 Denied x | | | | | | | | | | | | | | | | |
| 09/14/2016 14:39:38 | TimC | OATI | Product | TEST | New | | | | 09/14/2016 | 01/01/3000 | ERO | | TimC | 09/14/2016 14:44:54 | Denied | x |
| 09/14/2016 14:39:47 | TimC | OATI | Product | TEST | New | | | | 09/14/2016 | 01/01/3000 | NAESB | | TimC | 09/14/2016 14:45:01 | Denied | x |
| 09/14/2016 14:39:47 | TimC | OATI | Product | TEST | New | | | | 09/14/2016 | 01/01/3000 | ERO | | TimC | 09/14/2016 14:45:01 | Denied | x |
| 09/14/2016 14:41:36 | TimC | OATI | Product | TEST2 | New | | | | 09/14/2016 | 01/01/3000 | NAESB | | TimC | 09/14/2016 14:42:29 | Approved | |
| 09/14/2016 14:41:36 | TimC | OATI | Product | TEST2 | New | | | | 09/14/2016 | 01/01/3000 | ERO | | TimC | 09/14/2016 14:42:33 | Approved | |
| 09/14/2016 14:44:28 | TimC | OATI | Product | TEST2 | Modification | Product Type | 5 | 4 | 09/15/2016 | 01/01/3000 | NAESB | | TimC | 09/14/2016 14:44:39 | Approved | |
| 09/14/2016 14:44:28 | TimC | OATI | Product | TEST2 | Modification | Product Type | 5 | 4 | 09/15/2016 | 01/01/3000 | ERO | | TimC | 09/14/2016 14:44:43 | Approved | |
| 09/22/2016 12:11:47 | TimC | OATI | Product | asdf | New | | | | 09/22/2016 | 01/01/3000 | NAESB | | TimC | 09/22/2016 12:11:57 | Denied | x |
| 09/22/2016 12:12:29 | TimC | OATI | Product | TEST2 | Modification | Product Type | 4 | 5 | 09/22/2016 | 01/01/3000 | NAESB | | TimC | 09/22/2016 12:12:40 | Denied | x |
| 09/14/2016 08:46:57 | TimC | OATI | Control Zone | <u>XXX1</u> | New | | | | 09/14/2016 | 01/01/3000 | BA | XXXX | System | 09/14/2016 08:46:58 | Denied | Approver |
| 09/22/2016 12:05:42 | TimC | OATI | Control Zone | <u>XX1</u> | New | | | | 09/22/2016 | 01/01/3000 | BA | OATI | TimC | 09/22/2016 12:05:42 | Approved | Approval |
| 09/23/2016 13:41:52 | BALukasF | BAE1 | Control Zone | ZZZZ | New | | | | 09/23/2016 | 01/01/3000 | BA | BAE1 | BALukasF | 09/23/2016 13:41:52 | Approved | Approval |
| 09/28/2016 03:34:57 | PPT | | | | | | Page | 1 of 4 | ► ₩ | | | | | | Recor | ds 1-30 of 10 |
| | | | | | | | Clo | se | | | | | (| 02018 OATI. | Inc | |

6.3 Approval Overrides

The Approval Overrides display indicates to Administrative users the approval overrides allowed in the system.

To locate Approval Overrides, navigate to Approval > Approval Overrides. To create a new approval override, click on the "New Approval Override" button.

| Entities | Objects | Adjacencies | Approval | Payment | Data Models | Audit | Alarming | Administratio | n Support | Registry Management | Logout | Help |
|------------------------------|----------|------------------|----------|------------|--------------|-----------------|------------|---------------|---------------|---------------------|-------------|---------|
| 🖾 🖨 | 🕘 Арр | proval Overrides | x | | | | | | | Pendinerning | Wed 9/28 5: | 52 AM E |
| (an Appro | val Over | rides | | | | | | | | E 🗆 🖸 🔰 | × (|) 🔞 🤅 |
| | | | | | | Event | | Auto | | | | |
| | | | | Er | itity Object | Туре | Attribute | Approve | | | | |
| | | | | O/ | ATI NAESB | Modification | NERC ID | No | | | | |
| | | | | | | Modification | NERC ID | No | | | | |
| | | | | | | Modification | NERC ID | No | | | | |
| | | | | | (| | | > | | | | |
| | | | 09/28 | /2016 05:5 | 2:42 EST | P | age 1 of 1 | | Record 1 of 1 | | | |
| | | | | | New / | Approval Overri | de Close | | | ©2 | 2018 OAT | I, Inc. |

6.4 Pending Approvals

Entity Administrator users that have approval rights will be notified via a system alarm of new/pending approvals requiring action. A reminder alarm can also be generated 12 hours prior to an approval deadline for pending changes still waiting for approval.

To locate Pending Approvals, navigate to Approval > Pending Approvals. To either approve changes or deny changes, check the checkboxes and click on the "Approve Checked" or "Deny Checked" buttons, respectively.

| | | мо | | | | | | | | | | | | | | | | | | landerson, Jef |
|------------------------------------|-----------|---------------|--------------|----------------------|-------|-----------|---------------|-------------|---------------|--------------|------|------|---------|------------|------------|--------|--------|-------------------|--------|-----------------|
| 3 8 9 | Objects | Approval | Payment | Data Models Audit | Alarm | ning A | dministration | Support | Regi | stry Managen | nent | Data | Logout | Help \ | Window | | | | | |
| 한 (종) [전] | 🕑 we | ebRegistry Ne | NS X P | ending Approvals 🛛 🗙 | Sourc | e/Sink Po | ints X | | | | | | | | | | | | | Fri 2/24 12:4 |
| 0ATI Pendir | ing Appro | ovals | | | | | | | | | | | | | | | | | i. | 📰 🚾 📝 🏝 - 🚔 |
| | | | | Submit | tal | | | | | | | Val | ue | Effecti | ve Date | | Appro | | | |
| | | | Action | Timestamp | User | Entity | Object | Name | Event Type | | Old | New | Warning | Start | Stop | Object | Entity | Remaining Days | | |
| | | | Approve | 02/24/2012 12:43:42 | JeffA | OATI | POR/POD | <u>TSET</u> | New | | | | View | 02/24/2012 | 01/01/3000 | TSP | NOLI | 5 | | |
| | | | Approve 🔽 | 02/24/2012 12:44:48 | JeffA | OATI | POR/POD | TestPoint | New | | | | View | 02/24/2012 | 01/01/3000 | TSP | EEC3 | 5 | | |
| | | | Approve 🔽 | 02/24/2012 12:45:29 | JeffA | OATI | Source/Sink | TESTer | New | | | | | 02/24/2012 | 01/01/3000 | BA | EEC2 | 5 | | |
| | | | Approve 🔽 | 02/24/2012 12:45:29 | JeffA | OATI | Source/Sink | TESTer | New | | | | | 02/24/2012 | 01/01/3000 | PSE | PSEE | 5 | | |
| | | | 02/24/2012 1 | 2:45:40 EPT | | | | | | Page 1 of : | 1 | | | | | | | Records 1- | 4 of 4 | |
| Approve Checked Deny Checked Close | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | (| ©2018 OATI, |

7. Payment Menu

The webRegistry system allows users to pay their annual dues directly through the system by using a major credit card.

Annual dues are based on the number of Code-Role instances registered by a given entity in webRegistry. After the initial registration, an entity will be given a grace period of thirty days, during which it is expected to fulfill its payment obligations. If a payment has not been posted during the grace period, an entity registration may be terminated and result in terminations to existing data object registrations.

Initial Registration of a Code-Role: \$300.00 (USD)

Annual Renewal of a Code-Role: \$200.00 (USD)

Late payment charges may be assessed on payments made after the due date, where applicable.

Only Entity Administrator Users can make payments in the system on behalf of its entity.

Annual Payments are due on the first of the month of the anniversary of the first Code-Role registration. If, after paying its annual dues, an entity registers additional Code-Roles, the additional dues for this Code-Role will be adjusted and an additional prorated payment will be requested.

Entity Administrators can pay for dues on the Payment Entry display by entering customary credit card information. Upon submission of payment, webRegistry will send an email receipt to the email address provided. The Payment Log display lists the entity's payment history in the system. No other forms of payment are accepted.

| | | | Payment | Entry | | | | ? X |
|------|--------------------|----------------------|------------------|-------------------|------------|------------|---------------|------|
| | Entity PJM2 | | | | | | | ^ |
| | Entity Code Role | Subscription | Status | Remaining Days | Start | End | Amount | |
| | PJM2 (TSP) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM234 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM443 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM444 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM (TSP) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM555 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM333 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| | PJM999 (PSE) | Renewal | Payment Required | 0 | 02/01/2015 | 01/31/2016 | 200.00 | |
| Tota | I Amount 0 | | | | | | | |
| Note | 25 | | | | | | $\hat{}$ | |
| Nam | e on Credit Card 🗍 | | | | | | | |
| | Street Address | | | | | | | |
| | City | | | | | | | |
| | State | Please select one | ~ | | | | | |
| | ZipCode | | | | | | | |
| | Credit Card Type | Please Select Card T | ype 🗸 | | | | | |
| Cre | dit Card Number | | | | | | | |
| | Expiration Date | Month 🔽 / Year 🕚 | <u>-</u> | | | | | |
| | Security Code | | | | | | | |
| | • 1 | | | | | | | |
| | | | Enter | | | Q | 2018 OATI, In | c. ~ |

7.1 Subscription Summary

The Subscription Summary display shows entities a summary of their subscriptions and when payments are due.

To locate Subscription Summary, navigate to Payment > Subscription Summary. To make a payment, click on the "New Payment" button.

| | cencies Approval | Payment Au | dit Alarmin | g Administr | ration Reg | istry Managem | ent Logout | Help | Window Wed 9/28 3:43 AM PI | | | | |
|---------------------|--|---------------------|-------------|--------------|------------|---------------|-------------------|--------------------|-------------------------------|--|--|--|--|
| Subscription Summer | | | | | _ | | | E | | | | | |
| | | | Curr | ent Subscrip | tion | N | lext Payment | i | | | | | |
| | Entity | Entity Code-Role | Start | End | Status | Due Date | Remaining Days | Required Amount | | | | | |
| | PJM Interconnection | PJM2 (TSP) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM234 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM443 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM444 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM (TSP) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM555 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM333 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | PJM Interconnection | PJM999 (PSE) | 02/01/2014 | 01/31/2015 | Delinquent | 03/03/2015 | 0 | 200.00 | | | | | |
| | < | | | | | | | > | | | | | |
| | 09/28/2016 03:42:54 PPT Page 1 of 1 Records 1–8 of 8 | | | | | | | | | | | | |
| | | | New | Payment Clo | ose | | | | ©2018 OATI, Inc. | | | | |

8. Audit Menu

8.1 Audit Trail

The webRegistry system will provide a comprehensive audit trail that will allow Users to track the creation and removal of objects, changes in object attributes, and approval actions taken by users. Each event will be time stamped and the identity of the responsible user retained. Various audit trail views can be generated in the system, enabling Registry Administrators to track the object's lifecycle in the system.

In addition to the audit trail, most webRegistry summaries support the historical viewing of data objects as they were officially recorded in published registry versions. Users can select the version index in the summary display filter and view the object's version that was included in a given registry publication.

To locate the audit trail, navigate to Audit > Audit Trail.

| Entities Objects | Adjacenci | es Approval Payment | Audit Ala | rming Adn | ninistration Reg | istry Manaç | jement Log | out Help | Window | | | |
|------------------|------------|-------------------------|-----------|-----------|------------------|-------------|---------------|----------|--------|-------------|-------------|---------------------|
| 🔁 🎒 🖂 🙆 🗛 | ıdit Trail | x | | | | | | | | | | Wed 9/28 3:45 AM PI |
| 🕼 Audit Trail | Duration | Year Range (2014 - 2 | 016) | | | | | | | | E | ळ 🖾 💌 🔒 🞯 🄇 |
| | | | Modifie | d By | | | | | | | View | |
| | | Timestamp | User Name | Company | IP Address | Reason | Action | | Туре | View Object | XML | ^ |
| | | 02/28/2014 08:11:27.930 | NongL_PJM | PJM2 | 10.100.194.255 | | OUTGOING | Payment | | | View | |
| | | 02/28/2014 08:11:34.113 | NongL_PJM | PJM2 | 10.100.194.255 | | INCOMING | Payment | | | View | |
| | | 02/28/2014 08:11:58.747 | NongL_PJM | PJM2 | 10.100.194.255 | | OUTGOING | Payment | | | View | |
| | | 02/28/2014 08:12:00.740 | NongL_PJM | PJM2 | 10.100.194.255 | | INCOMING | Payment | | | View | |
| | | 02/28/2014 08:12:00.923 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4344</u> | View | |
| | | 02/28/2014 08:12:00.923 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4345</u> | View | |
| | | 02/28/2014 08:12:00.923 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4346</u> | View | |
| | | 02/28/2014 08:14:50.610 | NongL_PJM | PJM2 | 10.100.194.255 | | OUTGOING | Payment | | | View | |
| | | 02/28/2014 08:14:52.767 | NongL_PJM | PJM2 | 10.100.194.255 | | INCOMING | Payment | | | View | |
| | | 02/28/2014 08:14:52.940 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4347</u> | View | |
| | | 02/28/2014 08:14:52.940 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4348</u> | View | |
| | | 02/28/2014 08:14:52.940 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4349</u> | View | |
| | | 02/28/2014 08:14:52.940 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4350</u> | View | |
| | | 02/28/2014 08:14:52.940 | NongL_PJM | PJM2 | 10.100.194.255 | | INSERT | Payment | | <u>4351</u> | View | |
| | | 02/28/2014 08:18:43.123 | NongL_PJM | PJM2 | 10.100.194.255 | | OUTGOING | Payment | | | View | ~ |
| | 09/28 | 8/2016 03:45:10 PPT | | | | Pa | ge 1 of 1 | | | Reco | rds 1–23 of | 23 |
| | | | | | C | ose View | Selected Reco | rds | | | | ~ |

©2018 OATI, Inc.

9. Alarming Menu

OATI webRegistry provides user-designed notification management. The system issues notification alarms to Users based on their roles. Users can individually select which of the role-specific alarms they would like to receive, and in what form. webRegistry supports different forms of notification delivery, and all issued notifications are recorded in the Audit Trail.

9.1 Active Alarms

The Active Alarms display indicates unacknowledged alarms for a given user. Bulk and individual alarm acknowledgment can be performed on this display.

To locate active alarms, navigate to Alarming > Active Alarms.

| Entit | ties Objects Adjacencies | Approval Payment Data Models Audit Alarming Administration Support Registry Mar | nagement | Logout Help Wir | ndow | Pend Warnil 🚳 Wed | 9/28 5:55 AM E |
|-------|--------------------------|---|-----------|---------------------|-------------------------|-------------------|-----------------|
| OATI | Active Alarms | | | | | |)• 🖨 😰 🤇 |
| | | Unacknowledged Alarm Information | | | Notification Status | | |
| | Alarm Type | Message | Method | Acknowledge Type | Delivered On | Email/Pager | Snooze Until |
| | Publication Test Results | A test publication of the webRegistry for effective date 03/05/2015 has generated the following warnings: | Email | Manual | 03/03/2015 12:12:38 | nong.lor@oati.net | |
| | | Attribute Changes without an Effective Start Date change Modification of an object typically involves a change to the effective duration of the object (the new attributes become effective at a certain time). | Popup | Manual | Pending - Not Delivered | | |
| | | This should not normally happen and should be investigated. - 1 (Pseudo-Tie) - 2 (Pseudo-Tie) | Framework | Manual | 03/04/2015 09:16:16 | | |
| | Publication Test Results | A test publication of the webRegistry for effective date 03/06/2015 has generated the following warnings: | Email | Manual | 03/04/2015 01:02:23 | nong.lor@oati.net | |
| | | Attribute Changes without an Effective Start Date change Modification of an object typically involves a change to the effective duration of the object (the new attributes become effective at a certain time). | Popup | Manual | Pending - Not Delivered | | |
| | | This should not normally happen and should be investigated. - 1 (Pseudo-Tie) - 2 (Pseudo-Tie) | Framework | Manual | 03/04/2015 09:16:16 | | |
| | Publication Test Results | A test publication of the webRegistry for effective date 03/07/2015 has generated the following warnings: | Email | Manual | 03/05/2015 01:00:38 | nong.lor@oati.net | |
| 09/28 | 2016 05:55:05 EST | Page 1 of 1 | | | | Rec | ords 1-10 of 1 |
| | | Acknowledge Checked Acknowledge All Close | | | | ©2018 OAT | L Inc. |

9.2 Alarms History

The Alarms History displays all alarms issued by webRegistry for a given user.

To locate alarms history, navigate to Alarming > Alarms History.

| | | | | | | | | | | | | ~ |
|---------------------|---------------------------|--------------------|---------------|------------------|----------------------|----------------|------------|--------------|----------------------|---------------------------|---------------------|---------------------|
| Entities Objects | | Payment Audit | Alarming | Administration | Registry Managem | ent Logout | Help | Window | | | | |
| 😰 🎒 🖂 🙆 🗛 | arms History X | | | | | | | | | | | Wed 9/28 3:54 AM PI |
| (An Alarms History | y Acknowledged When: | Last Year (2015 | i) | | | | | | | | E 📰 🚾 🗉 | 3 🛛 - 🚔 🔞 🤇 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Acknowledged | Alarm Type | | | | | | | | | | | |
| 03/03/2015 09:10:18 | | wobRogistry, the P | loctric Induc | to, Pogisto, /FI | P) will implement an | inductor roque | octod onb: | ancomont to | provido registrati | on expiration transparent | or of code-roles on | November 18, 2014 |
| | Scheduled Registry Publi | Registry version 9 | | | · · | industry reque | steu enna | sincement to | provide registration | on expiration transparent | Ly of code-foles of | November 10, 2014. |
| | Unscheduled Registry Publ | Registry version 9 | _ | | | | | | | | | |
| | Unscheduled Registry Pub | Registry version 9 | _ | | | | | | | | | |
| | Unscheduled Registry Pub | Registry version 9 | - | | | | | | | | | |
| | Unscheduled Registry Pub | Registry version 9 | - | | | | | | | | | |
| | | | | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | - | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | - | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | - | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | - | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | _ | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | | | | | | | | | | |
| | Scheduled Registry Publi | Registry version 9 | 31_20141217 | 7_S has been pu | ublished | | | | | | | |
| 03/03/2015 09:10:18 | News | | | | | | | | | Δ | | |
| | | | | | | | | | | 4 | | |
| | | | | | | | | | | NOTO | D)' | DT 4 la |
| | | | | | | | | | | | | North . |
| < | | - | | | | | | | | | | > |
| 09/28/2016 03:54:18 | PPT | | | | Page | 1 of 5 🕨 🕨 | * | | | | | Records 1-30 of 12 |
| | | | | | Clos | e | | | | | ©2018 (| DATI, Inc. 🛛 🗸 |

9.3 Alarm Subscriptions

The Alarm Subscriptions displays a list of a given user's subscriptions. New subscriptions can be added or removed on this display.

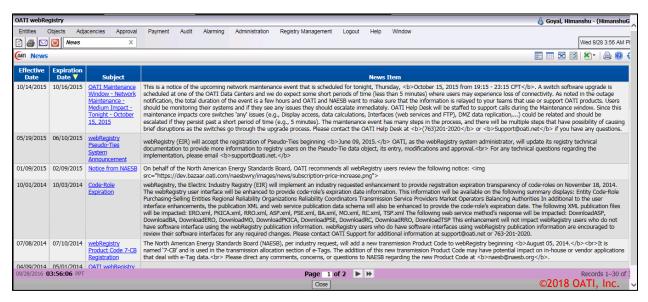
To locate alarm subscriptions, navigate to Alarming > Alarm Subscriptions. To create a new subscription, click on the "New Subscription" button.

| Enti | | Adjacencies Alarm Subscription | Approval s × | Payment | Data Models | Audit | Alarming | Administrat | tion Suppo | t Regi | stry Management | Logout | Help | Window | [| Pendir/arning 🚳 We | 1 9/28 5:5 | 55 AM E |
|-------|-----------------------|-----------------------------------|-----------------|-----------------|-----------------|-----------|------------|-----------------|--------------|------------|------------------|---------|---------------|--------|----------------------|--------------------|------------|---------|
| (OATI | Alarm Subs | criptions | | | | | | | | | | | | | | |)• 🔒 | 10 6 |
| | | | | Alarm Su | bscription In | formatio | n | | | | | | | Notifi | ication Selected | | | |
| | A | larm Type | | | Alarm D | escriptio | n | | Subscript | ion Date | Notification N | lethod | Acknow Typ | | Framework Message | Email | Pager | Soun |
| | Unschedule | ed Registry Publica | tion Alarm | n that is trigg | ered upon a su | cessful u | nscheduled | publication | 07/08/2014 1 | 6:16:00 | Email | 1 | Manual | | | nong.lor@oati.net | | |
| | Publication | Test Results | Analy | sis of a test | publication has | generated | d some war | nings. | 06/26/2014 1 | 6:07:14 | Email,Framework, | Popup I | Manual | 1 | Warning | nong.lor@oati.net | | |
| | | | | | | | | | | | | | | | | | | |
| 09/28 | 3/2016 05:55:2 | 9 EST | | | | | | | Page 1 of | 1 | | | | | | I | Records | 1-2 of |
| | | | | | | | N | lew Subscriptio | n Delete | Delete All | Close | | | | | ©2018 OA | TI, Ir | nc. |

10. Administration Menu

10.1 News

The News display is a bulletin for webRegistry users. News items are posted by Registry Administrators and NAESB users. News items can include such topics as upcoming trainings, updates to the system, or any information to be disseminated to the large group of registered industry users.



10.2 User Configuration

The User Configuration display allows users to customize user options within the webRegistry system, including page size, menu options, and password changes.

10.2.1 User Options

The User Options page allows users to set personal User Account settings to be used for their account only. Users will be able to change their password at any time, determine a menu style for navigation of the menu options, and define the page size for each summary.

The user's account information, as entered by the Company Administrator, will be displayed on this page. The password expiration date, including how many days left on the current password, will also be presented. Passwords are valid for 180 days. Users will receive email notifications prior to password expiration.

Page Size: Enter how many records to be displayed on summary pages. To decrease page load-time, use the default page size of 30 records.

Menu Style: Select whether to have menus expand automatically when the cursor hovers over them (Web) or to expand only when clicked on (Application).

Default Reason for Change: Every time a modification is made to an Entry page, the user making the modification will need to provide a "Reason for Change". This option will control which "Reason for Change" is pre-selected throughout the system.

To locate User Options, navigate to Administration > User Configuration > User Options.

| (OATI | User Options | | 🛛 🔒 🞯 🕹 |
|-------|---------------------------|--|------------------|
| | Company | 7 PJM | |
| | | HimanshuG2 | |
| | Name | e Goyal, Himanshu | |
| | Security Role | Entity Admin | |
| | Phone | 1 | |
| | Emai | l i i i i i i i i i i i i i i i i i i i | |
| | Password Expire Date | e 03/26/2017 (in 179 day(s)) | |
| | Page Size | 30 | |
| | TimeZone | Pacific Prevailing Time (PPT) | |
| | Menu Style | • • Web | |
| | | (Menus will expand automatically when cursor hovers over them) | |
| | | Application (Manus will arrand only when disked on) | |
| | Default Desses for Charge | (Menus will expand only when clicked on) | |
| | Default Reason for Change | No Derault | |
| | | | |
| | | Save Change Password Close | |
| | | | ©2018 OATI, Inc. |

10.2.2 Change Password

Users can also change their passwords through the Change Password display. To locate this display, navigate to Administration > User Configuration > Change Password. Passwords can be changed at any time, but must be changed at least every 180 days. Password criteria is listed on this display.

| Lower case letters: a-z Upper case letters: A-Z Numbers: 0-9 Special characters: `~!@\$%^()_+-=[]{};;,/<>? 3- Blank spaces are not valid character type. 4- Do not use the following special characters: Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | Passwords will contain a minimum of 8 and a maximum of 30 character Each password must contain three out of the four character types: |
|--|--|--|
| Numbers: 0-9 Special characters: `~!@\$%^()_+-=[]{};;,/<>? 3- Blank spaces are not valid character type. 4- Do not use the following special characters: Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password | | |
| Special characters: `~!@\$%^()_+-=[]{};;,/<>? 3- Blank spaces are not valid character type. 4- Do not use the following special characters: Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password | | Upper case letters: A-Z |
| 3- Blank spaces are not valid character type. 4- Do not use the following special characters: Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | |
| 4- Do not use the following special characters: Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | Special characters: `~!@\$%^()_+-=[]{};:,/<>? |
| Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | 3- Blank spaces are not valid character type. |
| 5- Be advised that you may not reuse passwords for a period of one year (365 days). 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | 4- Do not use the following special characters: |
| 6- Consecutive passwords may not be similar. Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password Enter new password | al Bar | Quote, Double Quote, Pound, Star, Ampersand, BackSlash, Vertical Bar |
| Similarity is verified by the match of any case-insensitive consecutive 3-character substring in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | year (365 days). | 5- Be advised that you may not reuse passwords for a period of one year (|
| in the new password with any case-insensitive consecutive 3-character substring in the previous pass For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | 6- Consecutive passwords may not be similar. |
| For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password Enter new password | tive 3-character substring | Similarity is verified by the match of any case-insensitive consecutive 3 |
| password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password Enter new password | racter substring in the previous passw | |
| is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* | | in the new password with any case-insensitive consecutive 3-character |
| similar to xyz456ABC#* however dissimilar to xyz456pqr#* | , , , , , , , , , , , , . | For example: |
| however dissimilar to xyz456pqr#* | | For example: password abc123DEF\$% |
| Enter old password Enter new password | | For example: password abc123DEF\$% is similar to password ABC456def#* |
| Enter new password | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* |
| Enter new password | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* |
| Enter new password | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* |
| Retype new password | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password Enter new password |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password |
| | | For example: password abc123DEF\$% is similar to password ABC456def#* similar to xyz456ABC#* however dissimilar to xyz456pqr#* Enter old password Enter new password |

10.2.3 Display Configuration

OATI webRegistry users can choose the display configuration of their preference. Display groups can be either set up as inline or pop-up.

To locate the display configuration, navigate to Administration > User Configuration > Display Configuration.

| Entities Objects Adj | acencies Approval Payment Audit Alarming | Administration Registry Management Logout | Help Windo |)W | Wed 9/28 3:57 AM PI |
|----------------------|--|---|------------|--------|---------------------|
| 🞯 Display Configura | | | | | 🖂 🖨 🔞 🤅 |
| | Display Group | Display Name | Inline | Рор-Uр | |
| | ■ Registry | | | | |
| | Entities | | | | |
| | Objects | | | | |
| | Adjacencies | | | | |
| | Approval | | | | |
| | Payment | | | | |
| | Audit | | | | |
| | Alarming | | | | |
| | Administration | | | | |
| | Registry Management | | | | |
| | Help | | | | |
| | | | | | |
| | | Iodify Check Defaults Close | | | |
| | | | | | ©2018 OATI, Inc. |

This document contains proprietary and confidential information of OATI, Inc. Do not copy or distribute without explicit permission of OATI, Inc. ©2018 Open Access Technology International, Inc.

10.3 User Management

10.3.1 Users

All users must present a valid and unique PKI-compliant security certificate to access webRegistry. Certificates may not be linked to more than one user, and generic multi-user certificates are not supported or allowed.

Users' ability to view and change data in webRegistry is derived from user roles assigned to them. The following user roles are supported in webRegistry:

- Entity Administrator
- Registry User

Entity Administrators will create new accounts for users in their entities and assign proper roles to them at creation. They will also perform payment of annual dues and have permissions to create, modify and remove the Entity's data in the system. Registry Users have permission only to view an Entity's data.

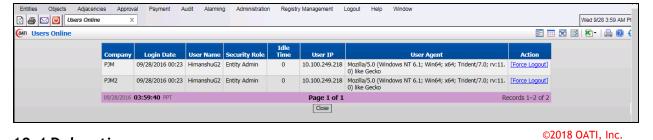
To locate users, navigate to Administration > User Management > Users.

| Entities Objects Adjacen | | yment Audit | Alarming | Administration Re | egistry | Management Log | gout Help 1 | Window | | | | |
|--------------------------|---------------------|-------------------|-----------|-------------------|---------|-------------------|---------------|------------|---------------|------------------|----------|---------------------|
| 🕼 🎒 🖂 🙆 Users | X | | | | | | | | | | | Wed 9/28 3:59 AM PI |
| @m Users Entity: PJM: | 2 (PJM Interconnec | tion) | | | | | | | | | E |) 🚾 🗾 💌 - 🗎 🙆 🔞 🤅 |
| | | | | | | | | | | | | |
| | | | | User I | ntor | nation | | Password | Syster | m Security | | |
| | | | | | | | | Expire | | | | |
| | Entity | User Name | Last Name | First Name | MI | | Phone | Date | | Credential Type | _ | |
| | PJM Interconnection | NongL PJM | Doe | Nick | | nong.lor@oati.net | (234)234-3244 | 01/05/2016 | Entity Admin | UserName/PW | Active | |
| | PJM Interconnection | PJM Reg User | User | PJM Registry User | | | (763)201-2020 | 02/23/2013 | Registry User | UserName/PW/Cert | Expired | |
| | PJM Interconnection | NongL PJMA2 | Brown | James | | nong.lor@oati.net | | 01/05/2016 | Entity Admin | UserName/PW | Active | |
| | PJM Interconnection | <u>HimanshuGo</u> | Goyal | Himanshu | | | | No Expire | OATI Support | UserName/PW | Active | |
| | PJM Interconnection | HimanshuG2 | Goyal | Himanshu | | | | 03/26/2017 | Entity Admin | UserName/PW | Active | |
| | PJM Interconnection | PJMUser | User | РЈМ | | nong.lor@oati.net | | 01/05/2016 | Entity Admin | UserName/PW/Cert | Active | |
| | PJM Interconnection | NongL PJMRO | L | N | Y | | | 08/27/2014 | Registry User | UserName/PW | Expired | |
| | 09/28/2016 03:59:15 | 5 PPT | | | | Page 1 of 1 | | | | Records | 1–7 of 7 | |
| | | | | | [| New User Close | | | | | ©2 | 018 OATI, Inc. |

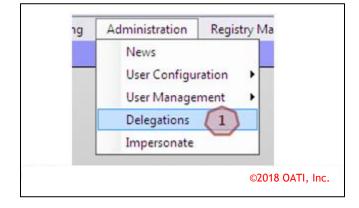
10.3.2 Users Online

Administrator Users can view who is online in the webRegistry system from their company through the Users Online display.

To locate users online, navigate to Administration > User Management > Users Online.



10.4 Delegation



To specify a delegation, navigate to Administration > Delegations. The Delegation display will open.

| legations Status: ALL Effective Da | e: Today (02/15/2012) | 1 55 🖾 🔊 · 🕼 |
|--|--|--|
| Acting Delegating EEC TPCI / 02/15/2012 12:18:33 E | ctive 02/15/2012 01/01/3000 TPCNAdmin 02/15/2012 11:51:08.267 View EnttyAdmin1 02/15/2012 12:02:21.8 | Contraction of the Contraction o |
| | | ©2018 OA |
| Click on the "Ne | w Delegation" button. The Delegation Entry page will open | • |
| | Delegation Entry | ? X |
| Delegating Entity | PSER 2 | C |
| Acting Entity | WDITAL (We Do It All Company) | |
| Comment | Please enter a comment here. | * |
| | | |
| | | - |
| Effective Date | 02/08/2012 🗰 01/01/3000 🔣 4 | |
| | 5 Enter | |
| | @301 | 8 OATI, Inc. |

The Delegating Entity will be pre-populated with the user's Entity name.

3

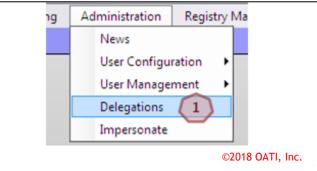
Select the company to delegate data management authority to from the Acting Entity dropdown.

Enter a comment about the delegation in this field.

By default, the Effective Start Date will be the date the form is completed. The default Effective End Date will be 01/01/3000. Dates can be modified manually, or by using the calendar button.

Click the "Enter" button to create and save the delegation.

Click the "X" to close the display. The Delegation will not be created or saved.



To remove or confirm a delegation, navigate to Administration > Delegations. The Delegations Summary page will open.

| | Entity | | | Effecti | ve Date | | Creation | | Confirmed/ | Cancelled |
|----------|-------------|--------|---------|------------|------------|-----------|-------------------------|--------------|--------------|-------------------------|
| Acting | Delegating | Status | Comment | Start | Stop | User | Timestamp | Action Notes | User | Timestamp |
| EEC | TPCN | Active | | 02/15/2012 | 01/01/3000 | TPCNAdmin | 02/15/2012 11:51:08.267 | View | EntityAdmin1 | 02/15/2012 12:02:21.830 |
| 02/15/20 | 12 12:18:33 | ERT | | | | Page | e 1 of 1 | | | Record 1 of 1 |
| | | | | | | New Delec | ation Close | | | |

Click on the "View" link under the "Action" column to take action on the delegation. The Confirm Delegation or Delete Delegation display will open depending on the available action.

| × |
|------------------|
| * |
| |
| - |
| ©2018 OATI, Inc. |
| |

This document contains proprietary and confidential information of OATI, Inc. Do not copy or distribute without explicit permission of OATI, Inc. ©2018 Open Access Technology International, Inc.

| Confirm Delegation | | | : |
|-------------------------|----------------|------------|------------------|
| Please enter notes here | | | |
| | | | |
| | Confirm | ancel | ©2018 OATI, Inc. |
| | | | |
| 7 | | | |
| | Administration | Registry N | |
| | News | | |
| 1 | User Configu | ration | |
| | User Manager | ment 🕨 | |
| | Delegations | ~ | |
| | Impersonate | 1 | |
| | ©2018 OATI | Inc. | |
| | , | | |
| | | | |

To perform the data entry for a delegating entity, navigate to Administration > Impersonate. This will bring up the Impersonate Users display with a list of users from the delegating entity.

| | | E | ntity User In | form | nation | | System | Securitry | | |
|---------------------|-----------|-----------|---------------|------|---------------|---------------|---------------|------------------------|--------|-------------|
| Entity | User Name | Last Name | First Name | MI | E-Mail | Phone | Security Role | Credential Type | Status | Action |
| PSE7 (PSE Entity 7) | PSEAdmin7 | Eells | Erika | | test@oati.net | (763)201-2020 | Entity Admin | UserName/PW | Active | Impersonate |
| 03/26/2012 11:15:14 | CPT | | | | Page 1 | of 1 | | | | Record 1 of |

Click on the "Impersonate" link for an Entity Admin user from the delegating company.



©2018 OATI, Inc.

When a user is impersonating a user, the user being impersonated will show up on the top right of the user's screen. The acting user will be able to make changes to entity, role(s) and objects belonging to the entity of the user being impersonated.

 \sim Click on the "Impersonating" link on the top right of the screen to stop impersonating the

11. Registry Management Menu

11.1 Delta Publications

The Delta Publication display shows a summary of changes for a given publication. At the time of publication, the system compares the state of each published data record with its state in the previous publication and identifies the changes.

To locate Delta Publications page, navigate to Registry Management > Delta Publications. Use the filtering options to filter for one publication, and the page will display all changes associated with the publication.

| Entities Objects Adjacen | cies Approval | Payment | Audit | Alarming | Administra | ation | Regis | stry Management L | Logout | Help | Window | | |
|---|---------------|------------|----------|----------|------------|-------|--------|-------------------|---------|-----------|--------|------------------|------|
| 👔 🚑 🖂 🔯 Delta Public | cations X | | | | | | | | | | | Wed 9/28 4:01 / | AM P |
| Operation Changed Publication: PENDING - 1008_20160302_S (03/02/2016) Image: Provide Addition (PENDING - 1008_20160302_S (03/02/2016)) Image: Provide Addition (PENDING - 1007_20160208_U (02/08/2016)) Image: Provide A | | | | | | | | | | | | | |
| | | | | | | Va | lue | Public | cation | | | | |
| | | Object | Name | Changes | Attribute | Old | New | Changed | Ori | ginal | | | |
| | | POR/POD | NOLIP2 | Added | | | | 1008_20160302_S | 1007_20 | 0160208_ | U | | |
| | | POR/POD | NOLPor1 | Added | | | | 1008_20160302_S | 1007_20 | 0160208_ | U | | |
| | | POR/POD | NoLiP2 | Added | | | | 1008_20160302_S | 1007_20 | 0160208_ | U | | |
| | | POR/POD | NoLpor1 | Added | | | | 1008_20160302_S | 1007_20 | 0160208_ | U | | |
| | | POR/POD | nolip2 | Added | | | | 1008_20160302_S | 1007_20 | 0160208_ | U | | |
| | | < | | | | | | | | > | | | |
| | | 09/28/2016 | 04:01:20 |) PPT | P | age | 1 of 1 | | Record | ls 1–5 of | 5 | | |
| | | | | | | Close |] | | | | | ©2018 OATI, Inc. | |
| | | | | | | | | | | | | | |

11.2 Publication History

The Publication History display shows a summary of all registry publications (scheduled and unscheduled) along with links to corresponding data files.

To locate Publication History, navigate to Registry Management > Publication History.

| Entities Objects Adjacencies Approval | Payment Audit A | larming Ad | Iministration | Registry Ma | inagement | t Logou | t Help | Window | | | |
|--|-----------------|---------------------|---------------|-------------|-----------|----------------|---------|---------------------|-----------|------------|--------------------|
| 👔 🚭 🖂 🕘 Publication History 🛛 🗙 | | | | | | | | | | | Wed 9/28 4:02 AM P |
| On Publication History Effective Date: A | LL | | | | | | | | | | E 🗆 🖸 🛃 🔊 - 🚔 🔞 🤅 |
| | Publication | | | | | | | | | | |
| п | Code | Effective Date 🔻 | Method | Version | Notes | Changes | User | Timestamp | Published | A Download | |
| 1008 | 1008_20160302_S | 03/02/2016 | Scheduled | PENDING | | <u>Changes</u> | System | 03/01/2016 07:00:03 | Yes | View XML | |
| 1007 | 1007_20160208_U | 02/08/2016 | Unscheduled | ACTIVE | | Changes | btlewis | 02/08/2016 15:43:33 | Yes | View XML | |
| 1006 | 1006_20160202_U | 02/02/2016 | Unscheduled | ARCHIVE | | Changes | btlewis | 02/02/2016 09:38:36 | Yes | View XML | |
| 1005 | 1005_20160109_S | 01/09/2016 | Scheduled | ARCHIVE | | Changes | System | 01/08/2016 12:51:03 | Yes | View XML | |
| 1004 | 1004_20160108_S | 01/08/2016 | Scheduled | ARCHIVE | | Changes | System | 01/07/2016 13:43:04 | Yes | View XML | |
| 1003 | 1003_20151024_S | 10/24/2015 | Scheduled | ARCHIVE | | Changes | System | 10/22/2015 23:00:02 | Yes | View XML | |
| 1002 | 1002_20151023_S | 10/23/2015 | Scheduled | ARCHIVE | | <u>Changes</u> | System | 10/21/2015 23:00:02 | Yes | View XML | |
| 1001 | 1001_20151022_S | 10/22/2015 | Scheduled | ARCHIVE | | Changes | System | 10/20/2015 23:00:02 | Yes | View XML | |
| 1000 | 1000_20151021_S | 10/21/2015 | Scheduled | ARCHIVE | | <u>Changes</u> | System | 10/19/2015 23:00:02 | Yes | View XML | |
| 1009 | 1009_20151021_U | 10/21/2015 | Unscheduled | ARCHIVE | View | Changes | NongL | 06/20/2016 13:21:38 | No | View XML | |
| 1010 | 1010_20151021_U | 10/21/2015 | Unscheduled | ARCHIVE | View | Changes | NongL | 06/20/2016 13:21:48 | No | View XML | |
| 999 | 999_20151020_S | 10/20/2015 | Scheduled | ARCHIVE | | Changes | System | 10/19/2015 08:00:02 | Yes | View XML | |
| 998 | 998_20151017_S | 10/17/2015 | Scheduled | ARCHIVE | | Changes | System | 10/15/2015 23:00:02 | Yes | View XML | |
| 997 | 997_20151016_S | 10/16/2015 | Scheduled | ARCHIVE | | Changes | System | 10/14/2015 23:00:02 | Yes | View XML | |
| 996 | 996_20151015_S | 10/15/2015 | Scheduled | ARCHIVE | | <u>Changes</u> | System | 10/13/2015 23:00:02 | Yes | View XML | |
| 995 | 995_20151014_S | 10/14/2015 | Scheduled | ARCHIVE | | Changes | System | 10/12/2015 23:00:02 | Yes | View XML | |
| 994 | 994_20151013_S | 10/13/2015 | Scheduled | ARCHIVE | | <u>Changes</u> | System | 10/12/2015 15:01:02 | Yes | View XML | |
| 993 | 993_20150909_S | 09/09/2015 | Scheduled | ARCHIVE | | <u>Changes</u> | System | 09/08/2015 07:07:03 | Yes | View XML | |
| < | | | | | | | | | | > | |
| 09/28/2016 04:02:27 PPT Page 1 of 29 P P Records 1–30 of 849 ©2018 OATI, | | | | | | | | ©2018 OATI, Inc. | | | |
| | | | | | Close | | | | | | |

This document contains proprietary and confidential information of OATI, Inc. Do not copy or distribute without explicit permission of OATI, Inc. ©2018 Open Access Technology International, Inc.

To view the registry publication eXtensible Markup Language (XML) files, click on the "View XML" link next to the registry publication that the user would like to view the XML files for.

| Publication | | | | | | | | | | | |
|-------------|-----------------|-------------------|-----------|---------|-------|---------|--------|---------------------|-----------|----------|---|
| ID 🔻 | Code | Effective Date | Method | Version | Notes | Changes | User | Timestamp | Published | Download | |
| 1697 | 1697_20170330_S | 03/30/2017 | Scheduled | PENDING | | Changes | System | 03/29/2017 00:00:03 | Yes | View XML | 1 |
| 1696 | 1696_20170329_S | 03/29/2017 | Scheduled | ACTIVE | | Changes | System | 03/28/2017 00:00:02 | Yes | View XML | |
| 1695 | 1695_20170328_S | 03/28/2017 | Scheduled | ARCHIVE | | Changes | System | 03/27/2017 00:00:02 | Yes | View XML | |
| 1694 | 1694_20170325_S | 03/25/2017 | Scheduled | ARCHIVE | | Changes | System | 03/24/2017 00:00:02 | Yes | View XML | |

1

©2018 OATI, Inc.

Click on the individual XML file links to see the data inside the XML files.

| | cation Version 1696_2017 Effective Date 03/29/201 | - |
|--|---|---|
| webRegistry ACA.xml BAAdjacency.xml ERO.xml PKICA.xml Product.xml RC.xml SourcePORAdjacency.xml TSP.xml | ASP.xml ControlZone.xml Interconnection.xml PODPORAdjacency.xm PSE.xml RRO.xml SourceSink.xml | BA.xml Entity.xml MO.xml PORPOD.xml PseudoTie.xml SinkPODAdjacency.xml TransmissionPath.xml |
| TSIN Registry Files not available | | |
| | Close Refresh | ©2018 OATI, Inc. |

11.3 Registry Download

This display will allow users to download data files associated with Registry publications in XML format. Downloads in CSV or MDB are no longer available.

To locate the Registry Download, navigate to Registry Management > Registry Download. To download selected objects:

Select the registry publication version.

Select Format = "XML".

Click on the "Download Selected Objects" button.

| @r/ Registry Download | 🗾 🖨 🞯 🔂 |
|---|------------------|
| Version ACTIVE - 1007_20160208_U (02/08/2016) | |
| 3 Download Selected Objects Close | ©2018 OATI, Inc. |

A window will open with the available XML files to download:

| Com Registry Download Objects | | II 🔒 🛛 🔾 |
|-------------------------------|--|------------------|
| | Publication Version 234_20120326_5 Effective Date 03/26/2012 Download Format XML | |
| | webRegistry ASP.xml BA2 ControlZone.xml Entty.xml ERO.xml Interconnection.xml MO.xml PKICA.xml PORPOD.xml Product.xml PSE.xml RC.xml RO.xml SourceSink.xml TSP.xml | |
| | TSIN Registry Files not available | ©2018 OATI, Inc. |

- 1 The currently selected Publication Version, Effective Date, and file Download Format.
 - Click on the link associated to the file to download.

2

3

4

- Click on the "Close" button to close the display. No download will take place.
- Click on the "Refresh" button to refresh the contents on the display.

12. Help

12.1 webRegistry Online Help

For additional assistance with any display in the webRegistry system, click on the "webRegistry Online Help" link in the "Help" menu. The help console will offer topical information in a searchable format.

The question mark in the upper right hand corner of the display will also open the webRegistry Online Help console.



12.2 Recommended Browser Settings

OATI webRegistry supports Internet Explorer 11. Associated documentation guides a user through recommended browser settings for the corresponding Internet Explorer release.

To locate the recommended settings, navigate to Help > Recommended Browser Settings > Internet Explorer version.

12.3 Registry Documentation

OATI webRegistry includes related documentation to assist users with the system.

To locate documentation, navigate to Help > Registry Documentation.

| | Related Documents | | | | | | |
|----------------|-------------------|------------|--|--|--|--|--|
| Fi | le Inform | ation | | | | | |
| Туре | Size | Date | Description | | | | |
| Acrobat | 2600 KB | 03/20/2012 | webRegistry Quick Start User Guide | | | | |
| <u>Acrobat</u> | 1820 KB | 02/03/2014 | webRegistry Technical Guide | | | | |
| Acrobat | 409 KB | 07/18/2012 | webRegistry Service Point Update Guide | | | | |
| Acrobat | 251 KB | 10/30/2012 | webRegistry Terms and Conditions | | | | |
| Acrobat | 367 KB | 06/07/2013 | webRegistry Release Notes 1.1 | | | | |
| Acrobat | 275 KB | 04/07/2014 | webRegistry Release Notes 1.2 | | | | |

©2018 OATI, Inc.

This document contains proprietary and confidential information of OATI, Inc. Do not copy or distribute without explicit permission of OATI, Inc. ©2018 Open Access Technology International, Inc.

13. Registry Publication Schedule

A pending registry is published at 12:00 AM CST and becomes effective at 12:00 AM CST the following day. For example, a pending registry published at 12:00 AM CST Tuesday becomes effective 12:00 AM CST Wednesday. There are a few exceptions:

- 1. A pending registry is never published on weekends (Saturday and Sunday). A pending registry is only published on weekdays (Monday through Friday). This means that a new registry never becomes effective on Sunday and Monday.
- 2. A pending registry never becomes active on a day that NAESB has registered in webRegistry as a holiday. However, a pending registry is published on a holiday. For example, Thanksgiving always falls during the work week on a Thursday. So, there will be no pending registry published at 12:00 AM on Wednesday to be effective 12:00 AM on Thursday. However, a pending registry will be published on 12:00 AM Thursday to be effective 12:00 AM Friday.

Note: Emergency publications are exempt from the above rules, and may be published at any time.