

NAESB Digital Certificate Tutorial

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E-Learning Resource

Effective July 2016

Topics Covered

- **Change in Certificate Requirements**
 - FERC Mandate
 - Transition Timeline
 - Current vs. Future Process
- **Registering an Entity on ‘EIR’**
- **Providing ‘EIR’ Entity Name & Record ID to NYISO**
- **Obtaining NAESB Compliant Certificates**

Topics Covered Cont'd

- **The Importance of Direct Dial Phone Numbers**
- **Linking a NAESB Compliant Certificate to NYISO MIS**
 - NYISO Applications to use NAESB Certs
- **NAESB Compliant Certificate Expiration & Renewal Process**
- **NYISO MIS Password Expiration**

Change in Certificate Requirements

■ FERC Mandate

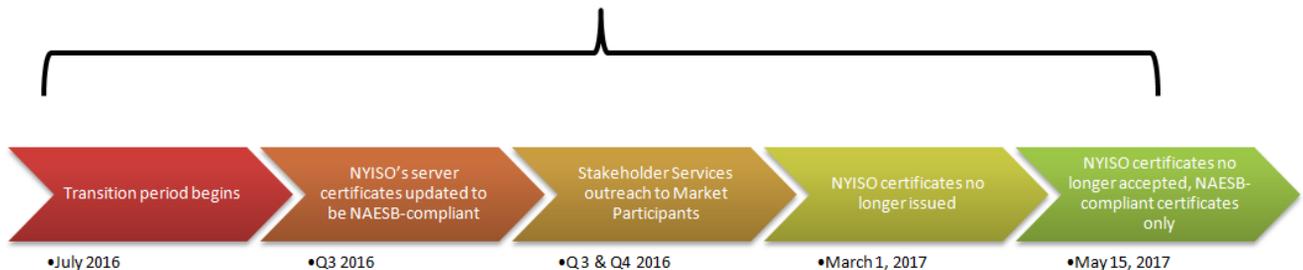
- Order 676-H approves new North American Energy Standards Board (NAESB) standards
 - Public Key Infrastructure (NAESB – PKI) Digital Certificate Standards
- Digital certificates unique to the individual AND organization

Change in Certificate Requirements

■ Transition Timeline

- 10-Month Period in which both NYISO Issued certs and NAESB Authorized Certificate Authority (ACA) issued certs are accepted
- NYISO to Stop issuing Digital Certs as of March 2017

Monthly DCT conference calls continue



Change in Certificate Requirements

Current Process

vs.

Future Process

- Digital Certificate issued by NYISO Stakeholder Services as Certificate Authority
 - Certificates valid for 1 year periods
 - New users confirmed by MP Main Contact or MIS Administrator
 - NYISO issued Digital Certificate, User Name and Password required to access NYISO Markets and Applications
- Digital Certificate issued by 3rd Party NAESB Authorized Certificate Authority (ACA)
 - Certificates validation period may differ based on provider
 - Certificates are unique to the user and the organization with individual certificates for each organization a user represents
 - NAESB compliant Digital Certificate, User Name and Password required to access NYISO Markets and Applications

Registering on the ‘EIR’

- ‘EIR’ is the NAESB Electric Industry Registry
 - Hosted by OATI and referred to as webRegistry
- Entities must be Registered on EIR
 - Registering requires a NAESB ACA Digital Cert
 - Certs Available through OATI or GlobalSign
- To Register, Visit:
 - <https://www.naesbwry.oati.com/NAESBWRY/sys-index.wml>

Registering on the ‘EIR’ Cont’d



[Registered user? Click here to login.](#)



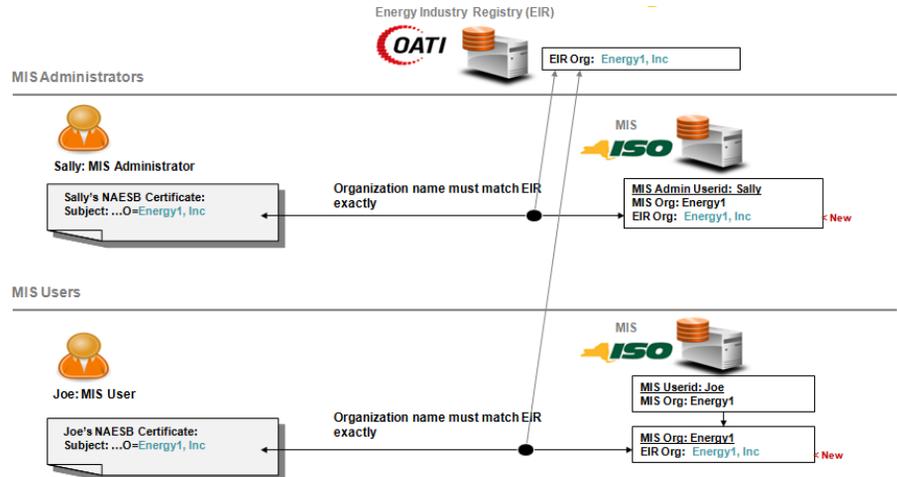
[Not a registered user? Click here to apply.](#)

- *Click on “Not a registered user? Click here to apply.”*
- *Select your NAESB ACA digital certificate to start the Application for Registration*

Registering on the 'EIR' Cont'd

■ *IMPORTANT:*

- Organization name on the certificate Must Match the Entity Name registered on the EIR



Registering on the ‘EIR’ Cont’d

- **OATI can assist Entities in the EIR Registration Process**

- Send email to OATI Support support@oati.net

Or...

- Go to www.oati.com/nyiso-digital-certificate and submit sign up form

- ***OATI Support Staff will contact Entity with next steps***

Providing ‘EIR’ Entity and Record ID

■ Once Registered on EIR:

- MIS Admins provide EIR Entity Name & Record ID to NYISO Stakeholder Services
 - Name on EIR is Entity which also needs to be Entity in ‘O=’ field on Digital Cert
 - All MIS Orgs and MIS Admin Accounts must be associated with an EIR Org listed on EIR
 - NYISO Stakeholder Services will work with MPs to...
 - Ensure MIS Admin Accounts & MIS Orgs correctly associated with appropriate NAESB EIR Entity

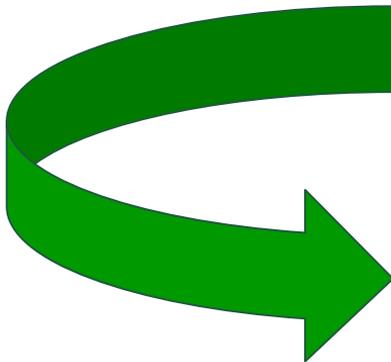
Providing ‘EIR’ Entity Cont’d

■ Administering Multiple MIS Orgs:

- Single MIS Admin Account may continue to be used to Administer users in multiple Orgs
 - Notify NYISO of EIR Org to be associated to MIS Admin account
 - Notify NYISO of EIR Org to be associated to each managed MIS Org

Obtaining NAESB Certificates

- Customers Must obtain
NAESB Compliant Certificates



Issuer: NAESB Issuing CA - SHA256 - ...

Valid From: 6/17/2016 to 6/18/2017

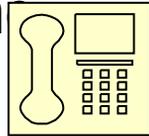
[Click here to view certificate prope...](#)

Obtaining NAESB Certs Cont'd

- **NAESB Compliant Certificates:**
 - Can be purchased from a NAESB Accredited Certificate Authority (ACA)
 - OATI or GlobalSign
 - Separate Cert is Required for each MIS Account
 - Certificate's Subject Organization 'O=' field MUST MATCH exactly to the Entity Name registered on the EIR webRegistry

Direct Dial Phone Numbers

- Each MIS account MUST have valid direct dial (n extension) contact phone number

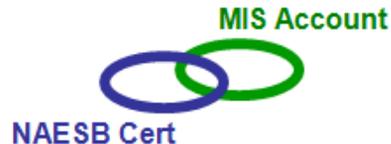


- Contact phone number needs to be updated in MIS account profile
 - PRIOR to linking cert to MIS account
- A security pin will be sent by voice or text to the user during certificate linking and password management processes

Contact Information	
Primary Contact Phone:	518-356-6203
Secondary Contact Phone:	
Fax:	
Address:	
Email:	dhooper@nyiso.com
Pager:	

Linking Certificate to MIS Account

- Users need to link NAESB certs to their MIS account



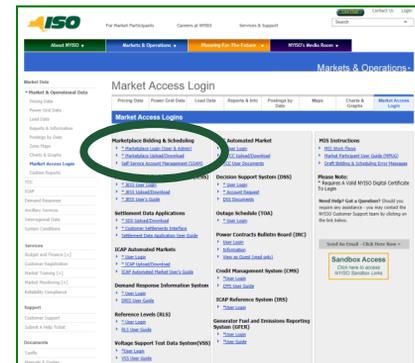
- Allows them to use cert to login to NYISO applications
- Linking performed once for each new certificate
- Multiple certs can be linked to a single MIS account

Linking Certificate Cont'd

- Certificate Linking performed in SSAM application

- 'SSAM' is Self-Service Account Management
- Located from NYISO Market Access Login Page of NYISO Website

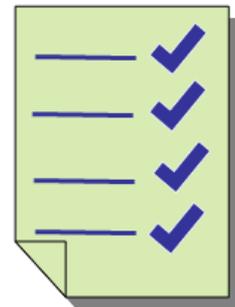
- http://www.nyiso.com/public/markets_operations/market_data/market_access_login/index.jsp



Linking Certificate Cont'd

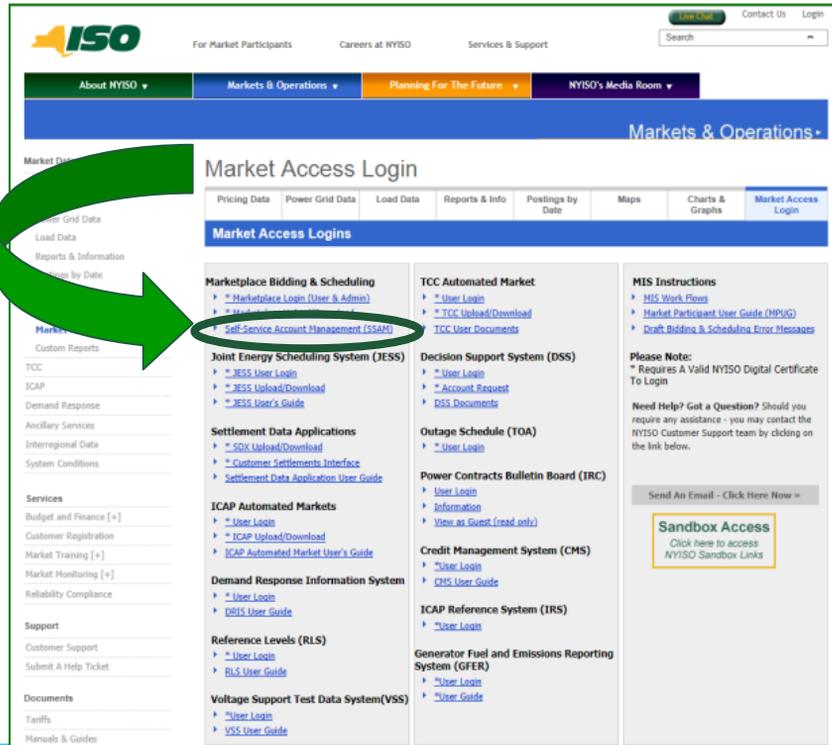
■ To Perform Certificate Linking...

- Users will need the following:
 - MIS user id and password
 - Valid direct dial contact phone number
 - NAESB certificate installed in web browser
 - Certificate that specifies EIR org name associated with MIS org (or admin account if administrator)



Linking Certificate Step 1

- Once ready, navigate to SSAM application



The screenshot shows the NYISO website's "Market Access Login" page. A large green arrow points from the left side of the page to the "Self-Service Account Management (SSAM)" link under the "Marketplace Bidding & Scheduling" section.

Market Access Login

Marketplace Bidding & Scheduling

- [Marketplace Login \(User & Admin\)](#)
- [Self-Service Account Management \(SSAM\)](#)

Joint Energy Scheduling System (JESS)

- [JESS User Login](#)
- [JESS Upload/Download](#)
- [JESS User's Guide](#)

Settlement Data Applications

- [SDX Upload/Download](#)
- [Customer Settlements Interface](#)
- [Settlement Data Application User Guide](#)

ICAP Automated Markets

- [User Login](#)
- [ICAP Upload/Download](#)
- [ICAP Automated Market User's Guide](#)

Demand Response Information System

- [User Login](#)
- [DRIS User Guide](#)

Reference Levels (RLS)

- [User Login](#)
- [RLS User Guide](#)

Voltage Support Test Data System(VSS)

- [User Login](#)
- [VSS User Guide](#)

TCC Automated Market

- [User Login](#)
- [TCC Upload/Download](#)
- [TCC User Documents](#)

Decision Support System (DSS)

- [User Login](#)
- [Account Request](#)
- [DSS Documents](#)

Outage Schedule (TOA)

- [User Login](#)

Power Contracts Bulletin Board (IRC)

- [User Login](#)
- [Information](#)
- [View as Guest \(read only\)](#)

Credit Management System (CMS)

- [User Login](#)
- [CMS User Guide](#)

ICAP Reference System (IRS)

- [User Login](#)

Generator Fuel and Emissions Reporting System (GFER)

- [User Login](#)
- [User Guide](#)

MIS Instructions

- [MIS Work Flows](#)
- [Market Participant User Guide \(MPUG\)](#)
- [Draft Bidding & Scheduling Error Messages](#)

Please Note:
* Requires A Valid NYISO Digital Certificate To Login

Need Help? Got a Question? Should you require any assistance - you may contact the NYISO Customer Support team by clicking on the link below.

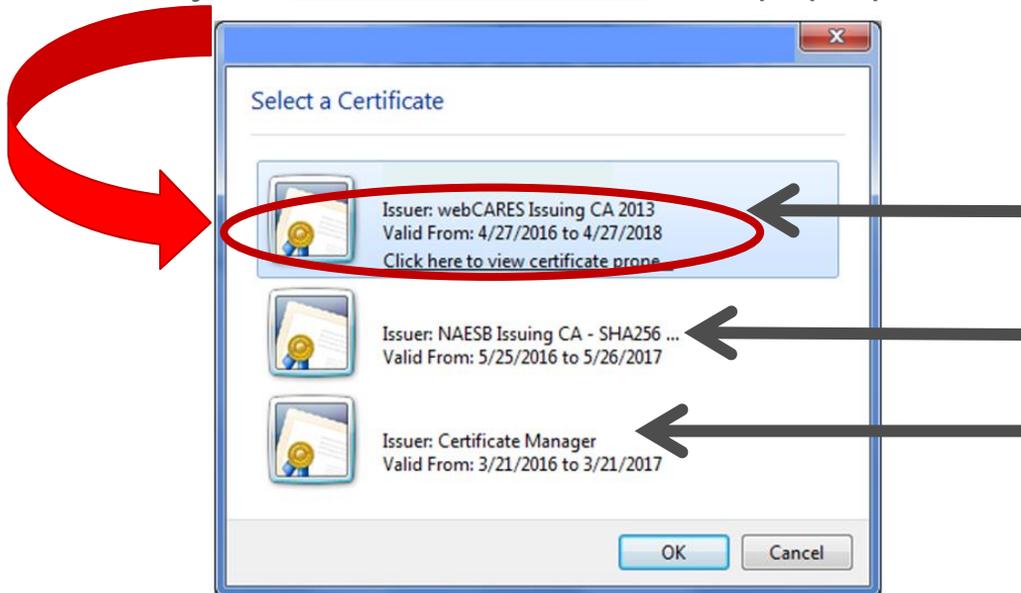
Send An Email - Click Here Now =>

Sandbox Access
Click here to access NYISO Sandbox Links

Linking Certificate Step 2

■ Upon entry into SSAM

- Select your NAESB certificate from pop up



Linking Certificate Step 3

- From 'Link Certificate' screen
 - Enter MIS user name and password
 - Select 'Request Pin'

NYISO Account Services

Link Certificate

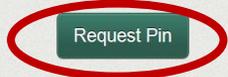


Link NAESB Certificate

User Name

Password

Request Pin



Linking Certificate Step 4

- From “Request Verification Code’ screen
 - Select mode for receiving pin
 - SMS Text or Voice Message
 - Default phone # is associated with MIS account



NYISO Account Services

Request Verification Code

Home > Request Verification Code

1 Select a Phone Number

Please select one phone number from the list so we can contact you with your PIN information.

(###) ###-6203

2 Select Delivery Method

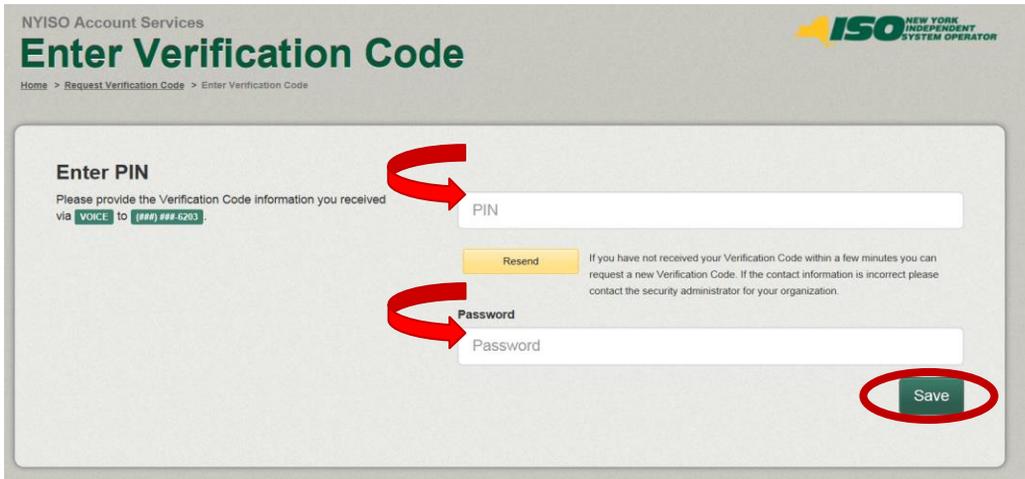
Please select the delivery method for your PIN number. If you choose to send using SMS, please make sure the phone number you have selected supports SMS.

PIN will expire after 60 minutes. User must enter PIN in the same browser session used to request the PIN.

SMS Text OR Voice Message

Linking Certificate Step 5

- User will receive phone call or text message with Verification Code
 - From 'Enter Verification Code' screen
 - Enter PIN and MIS Password
 - Select 'Save'



NYISO Account Services

Enter Verification Code

Home > Request Verification Code > Enter Verification Code

Enter PIN

Please provide the Verification Code information you received via **VOICE** to **(888) 888-5203**.

Resend If you have not received your Verification Code within a few minutes you can request a new Verification Code. If the contact information is incorrect please contact the security administrator for your organization.

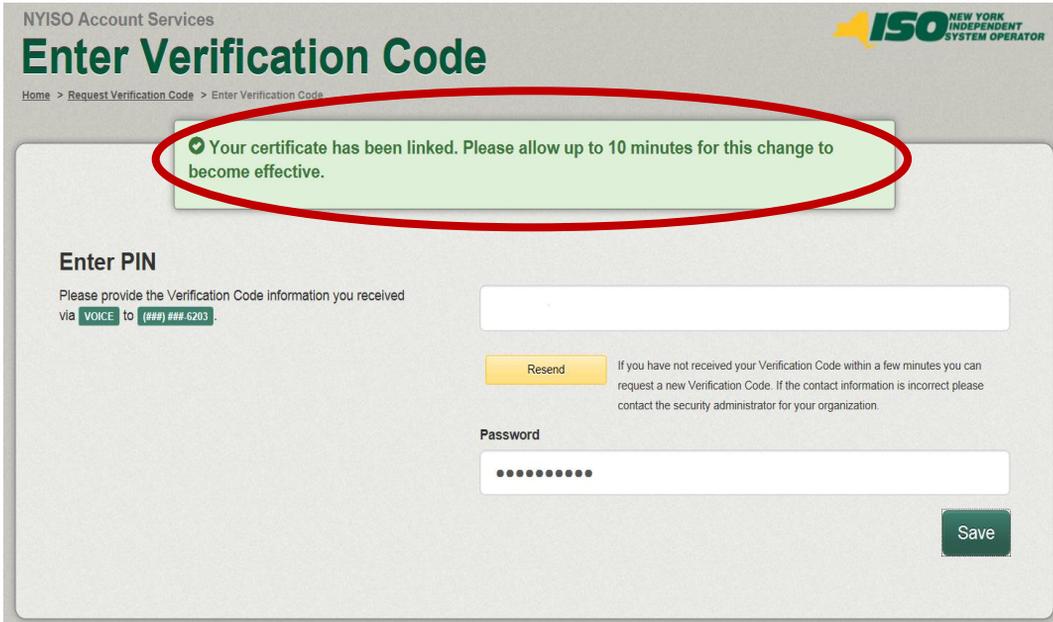
Password

Save

The screenshot shows a web form titled "Enter Verification Code" under "NYISO Account Services". It includes a breadcrumb trail: "Home > Request Verification Code > Enter Verification Code". The form has a section "Enter PIN" with instructions to provide the code received via voice to (888) 888-5203. There is a text input field for the PIN, a "Resend" button, and a "Password" section with a text input field. A "Save" button is at the bottom right. Red arrows point to the PIN and Password fields, and a red circle highlights the "Save" button.

Linking Certificate Confirmed

- Once Certificate Successfully Linked
 - User will receive the following message



NYISO Account Services

Enter Verification Code

Home > Request Verification Code > Enter Verification Code

✔ Your certificate has been linked. Please allow up to 10 minutes for this change to become effective.

Enter PIN

Please provide the Verification Code Information you received via VOICE to (###) ###-6203.

Resend If you have not received your Verification Code within a few minutes you can request a new Verification Code. If the contact information is incorrect please contact the security administrator for your organization.

Password

Save

NYISO Applications to use NAESB Certs

- Once NAESB Cert is Linked to MIS user account
 - User can log in to NYISO applications

Acronym	Name	Business Area
CBM	Consolidated Bid Management / Marketplace2	Energy Markets
CMS	Credit Management System	Finance
CSI	Customer Settlements Interface	Finance
DRIS	Demand Response Information System	Demand Response
DSS	Decision Support System	Multiple/IT
GADS Portal	Generating Availability Data System	Capacity Markets
GFER	Generator Fuel and Emissions Reporting	Energy Markets
ICAP AMS	ICAP Automated Market System	Capacity Markets
IRS	ICAP Reference System	Capacity Markets
JESS	Joint Energy Scheduling System	Energy Markets
RLS	References Level Software	Energy Markets
SDX	Settlement Data Exchange	Finance
TCC	TCC Automated Market	TCC
TOA	Outage Scheduling Application	Energy/ Capacity
	Wind Forecaster	Energy Markets

NYISO Applications to use NAESB Cont'd

- When user navigates to an application login page:
 - If both NYISO cert and NAESB cert are installed in browser...
 - Browser will prompt user to select which cert to use
 - User should select NAESB cert
 - Login page will pre-populate user id field with the information that is linked to NAESB cert
 - MIS password must then be provided to complete login

Certificate Expiration and Renewal

- NAESB Certificates will have expiration dates

- Certificate lifetime is c



- Maximum for both OATI and GlobalSign
 - 2 Years before renewal is required

MIS Password Expiration and Reset

■ Password Expiration

- Expire 13 months from time last set or from May 2017 (which ever is later)



MIS Password Expiration and Reset New York ISO

Cont'd

■ Complexity Requirements

- Must be between 8 and 18 characters
- Must contain at least one letter, one number, and one special character
- Cannot equal user name



■ Password Reuse

- Cannot be reused within 26 months
- Cannot be one of the last 3 passwords

Let's Review

Registered NYISO MP Organization



NYISO Market Application User

Issued by NAESB Approved Certificate Authority



2nd



1st

Organization listed on Electric Industry Registry (EIR)
<https://www.naesbwry.oel.com/NAE%20WRY/cyrc-index.wml>

Certificate is linked to User Account in Market Information System

3rd

Welcome To The Bidding & Scheduling System



4th



Acronym	Name	Business Area
CBM	Committed Bid Management/ Management	Energy Markets
OMS	Credit Management System	Finance
CS	Customer Settlements Module	Finance
DRS	Demand Response Information System	Demand/Response
DSS	Decision Support System	Market/IT
EMCS/EMIS	Generation Module Data System	Capacity Markets
EMER	Generation Fuel and Emissions Reporting	Energy Markets
ICAP/MS	ICAP Automated Market System	Capacity Markets
IRIS	ICAP Reference System	Capacity Markets
JESD	Joint Energy Scheduling System	Energy Markets
RLS	Reference Load Software	Finance
ESX	Reference Load Exchange	Finance
TCC	TCC Automated Market	TCC
TDA	Dispatch Scheduling Application	Energy Markets
	Wind Forecast	Energy Markets

Support Information

■ NYISO Customer Support

- Contact Stakeholder Services
 - http://www.nyiso.com/public/markets_operations/services/customer_support/index.jsp
 - stakeholder_services@nyiso.com
 - 518-356-6060

■ OATI Customer Support

- Contact OATI Support
 - www.oati.com/nyiso-digital-certificate
 - support@oati.net
 - 763-201-2020

Questions?

We are here to help. Let us know if we can add anything.