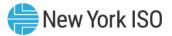


Introduction to Decision Support System

E-Learning Module 1: Getting Started



COURSE OBJECTIVES: Participants will be able to

Module 1: **Getting Started**

 Explain how to access DSS

Module 2: **Primer**

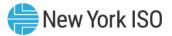
- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: **Corporate Reports**

 Understand how to access DSS Corporate Reports

Module 4: **Automated Data** Delivery (ADD)

 Request an **Automated Data** Delivery (ADD) File



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

 Explain how to access DSS

Module 2: Primer

- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

 Request an Automated Data Delivery (ADD) File

Accessing DSS





Browser Compatibility

Mozilla Firefox and Google Chrome





Images: Creative Commons

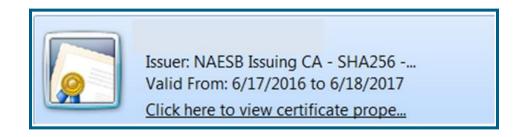
- Firefox, 2020
- Google Chrome, 2020



NAESB Certificate

Requires Digital Certificate and DSS account

Account types: Super Administrator, Subject Area Administrator,
 Public Market Data User, Customer Settlement User





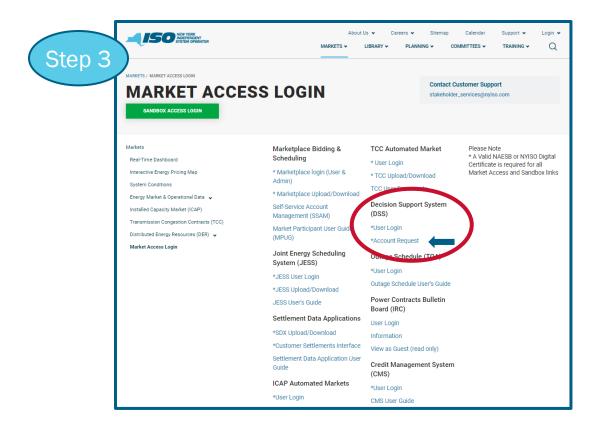
Obtaining User Account





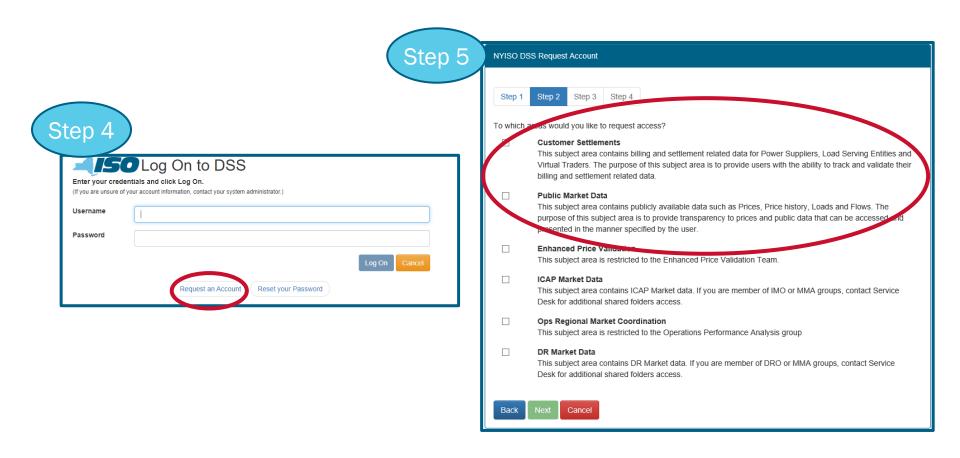


Obtaining User Account





Obtaining User Account



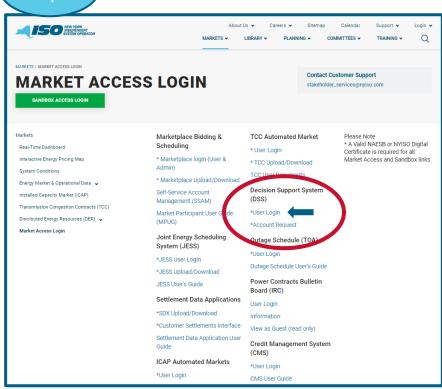
Logging into DSS

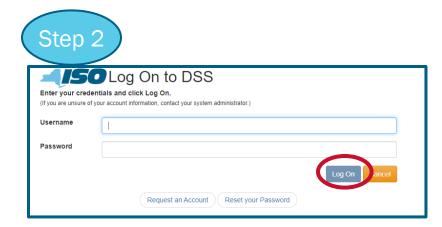


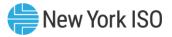


Logging into DSS

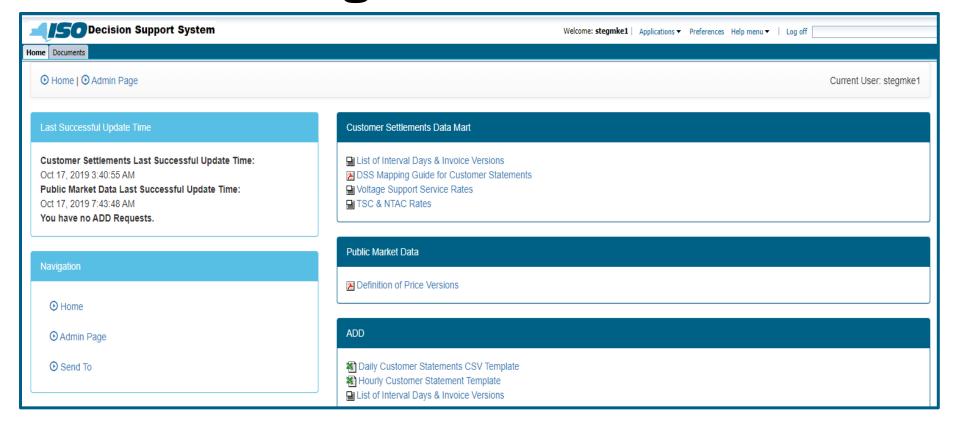
Step 1







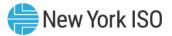
DSS Home Page





Introduction to Decision Support System

E-Learning Module 2: Primer



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

 Explain how to access DSS

Module 2: Primer

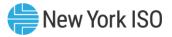
- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

 Request an Automated Data Delivery (ADD) File



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

• Explain how to access DSS

Module 2: Primer

- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

 Request an Automated Data Delivery (ADD) File

Decision Support System Defined



DSS...

DSS - What is it?

- A Data Warehouse
- Primary Resource for NYISO Market Settlements and Market Pricing Data
- Provides Data from Various Internal NYISO Source Applications
- Brief Daily Outage for Data Loading



DSS - Where does the data come from?

Source Data for DSS

- ETL Process Used Extract, Transform, Load
 - Extract Data is collected....
 - Transform Data is formatted....
 - Load Data is migrated....
- Refresh Takes Place daily between 2 5 am
- Data is Available from Billing Day of Two Days Prior



Benefits of using DSS





DSS - Why use it?

- Used in Support and Reconciliation of Consolidated Invoices
- Provides Accessibility to
 - Billing Determinants across all Settlements
 - Key Intermediate Calculations
- Real Time Level Data
- Provides Accessibility to Advisory Billing Files

Reports available in DSS





Reports Available in DSS

Customer Settlements Reports

- Corporate Reports
- Custom Reports

Public Market Data

- Access to OASIS data as seen on NYISO website
- Custom Reports

Automated Data Delivery (ADD)

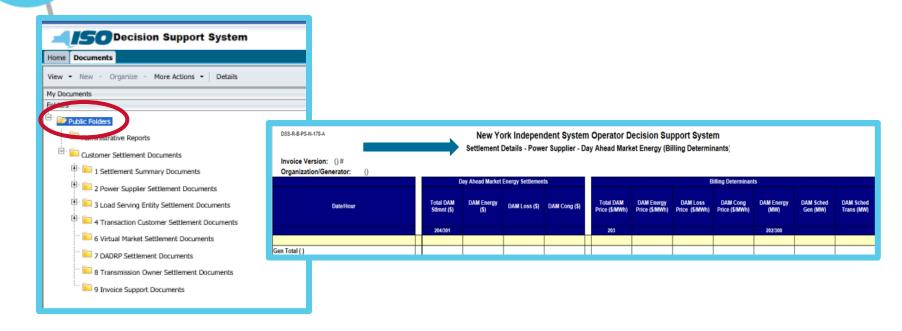
Advisory hourly/daily billing files



Customer Settlement Reports

Customer Settlements Reports

- Corporate Reports
- Custom Reports

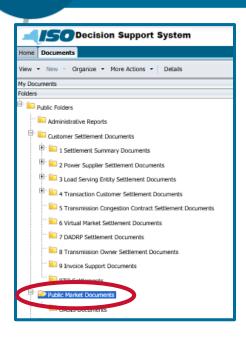


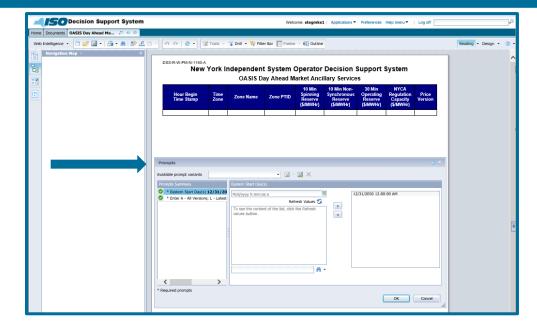


Public Market Data

Public Market Data

- Access to OASIS data as seen on NYISO website
- Custom Reports







Automated Data Delivery (ADD)

Automated Data Delivery (ADD)

Advisory hourly/daily billing files

| POWER SUPPLIERS | | | |
|--------------------------|-----------------|-----------|------------|
| 100 | 200 | | |
| Org name | Gen name | Gen Ptid | Start day |
| LSE LBMP ENERGY | | | |
| 100 | 400 | 401 | |
| Org name | LSE name | Bus name | Start day |
| TRANSACTIONS | | | |
| 100 | 400 | 500 | |
| Org name | LSE name | Trans Id | Start day |
| TRANSACTIONS LBMP ENERGY | | | |
| 100 | 400 | 500 | |
| Org name | LSE name | Trans Id | Start day |
| ANCILLARY SERVICES | | | |
| 100 | 400 | 101 | |
| Org name | LSE name | Start day | Start hour |
| TCC | | | |
| 100 | 900 | 101 | |
| Org name | TCC Contract ID | Start day | Start hour |
| | | | |

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Versioning within DSS





Important to Know

- There may be multiple versions of the same month's data
- Version selection impacts report results
- Understanding DSS versioning strategy is <u>key</u>



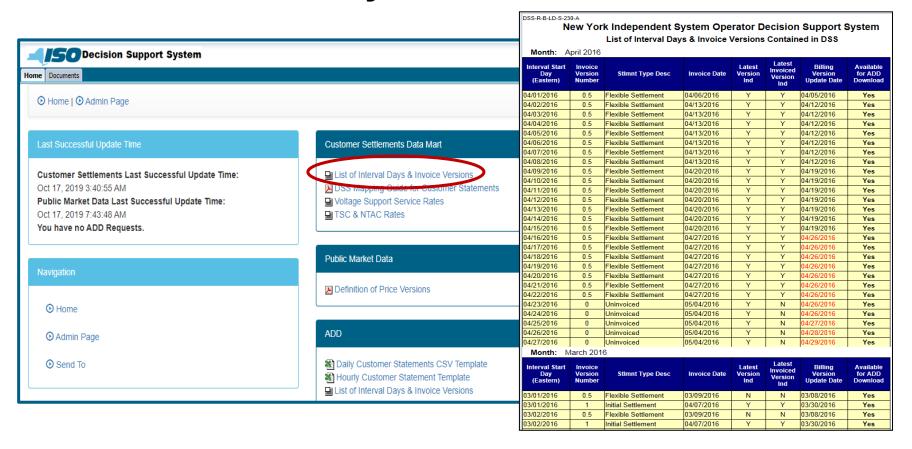


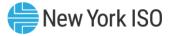
What does the version number mean?

| Stage in Billing Cycle | Version Number |
|--|----------------|
| Billing Period 'x' Weekly Invoice issued (FIP) | Version 0.5 |
| Billing Month 'x' in process for 1 st time (Initial Month Invoice prep) | Version 0 |
| Billing Month 'x' Initial Invoice issued | Version 1 |
| Billing Month 'x' in process for 2 nd time (4 Month Re-Bill Invoice prep) | Version 0 |
| Billing Month 'x' 4 Month Invoice issued | Version 2 |



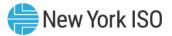
List of Interval Days & Invoice Versions





Introduction to Decision Support System

E-Learning Module 3: Corporate Reports



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

 Explain how to access DSS

Module 2: Primer

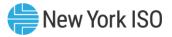
- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

 Request an Automated Data Delivery (ADD) File



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Module 1: Getting Started

• Explain how to access DSS

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- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

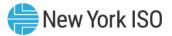
 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

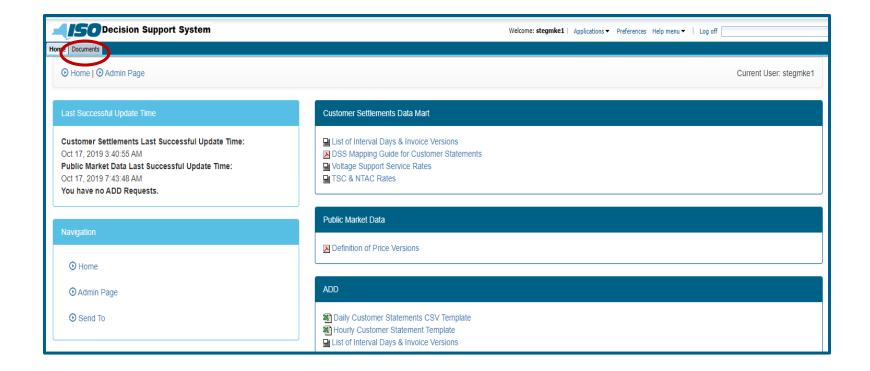
 Request an Automated Data Delivery (ADD) File

Accessing DSS Corporate Reports



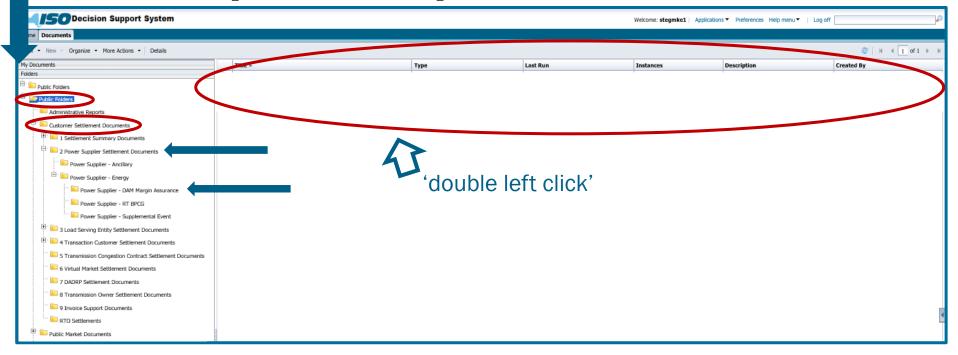


D&& Gorparate Reparts



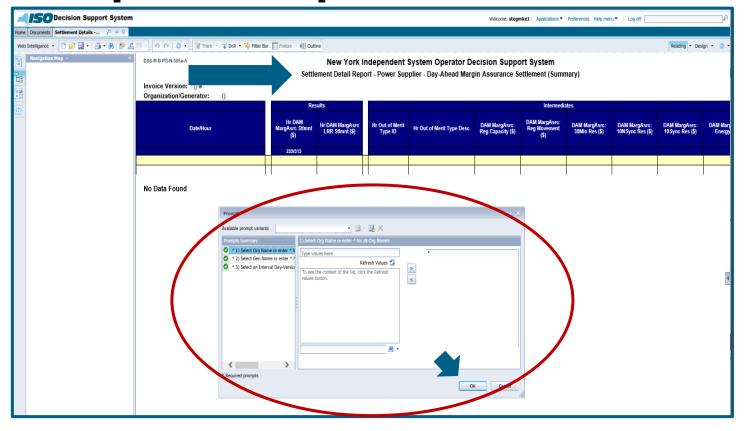


DSS Corporate Reports

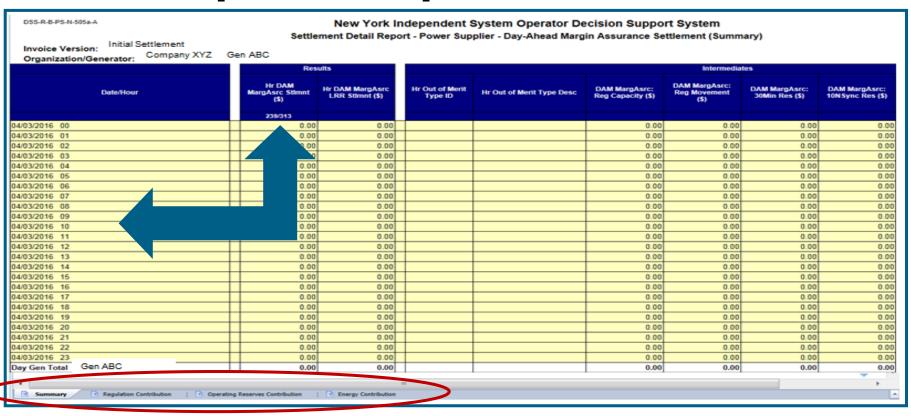


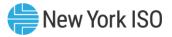


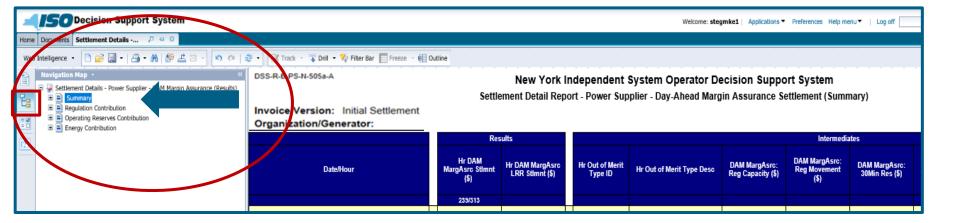
DSS Corporate Reports



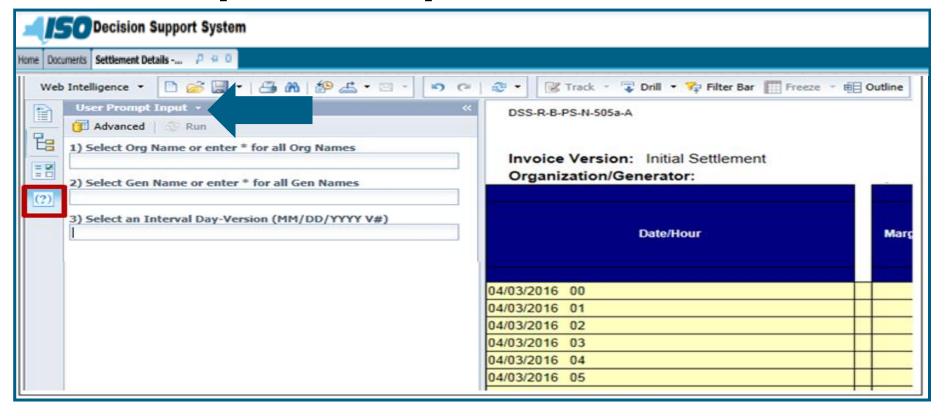




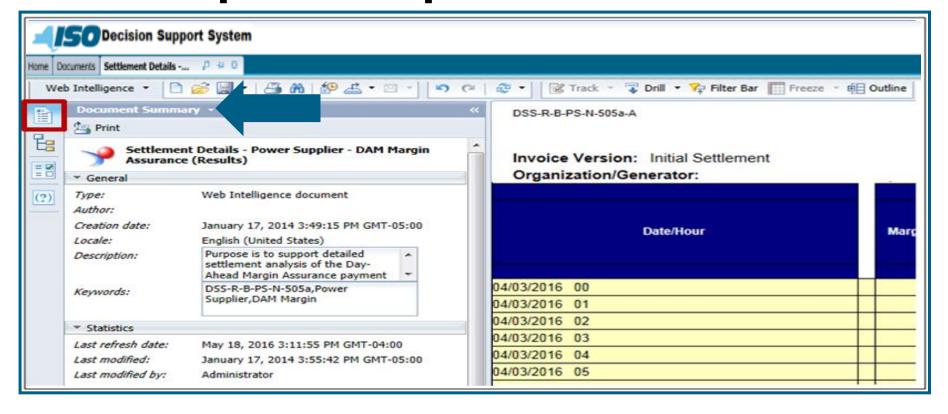




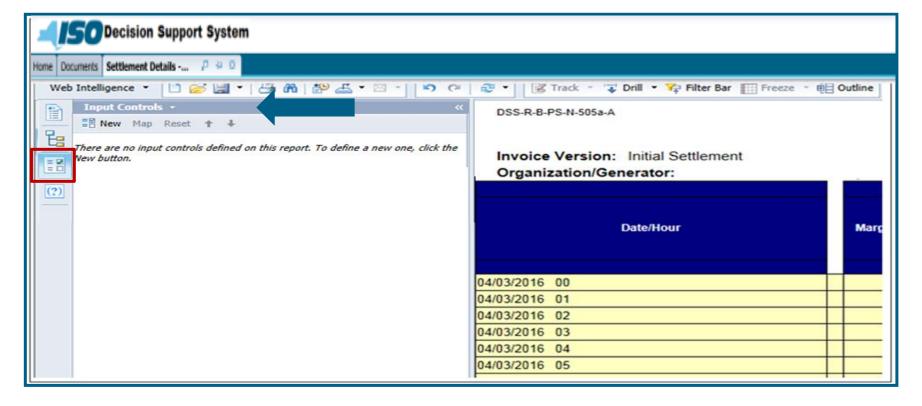




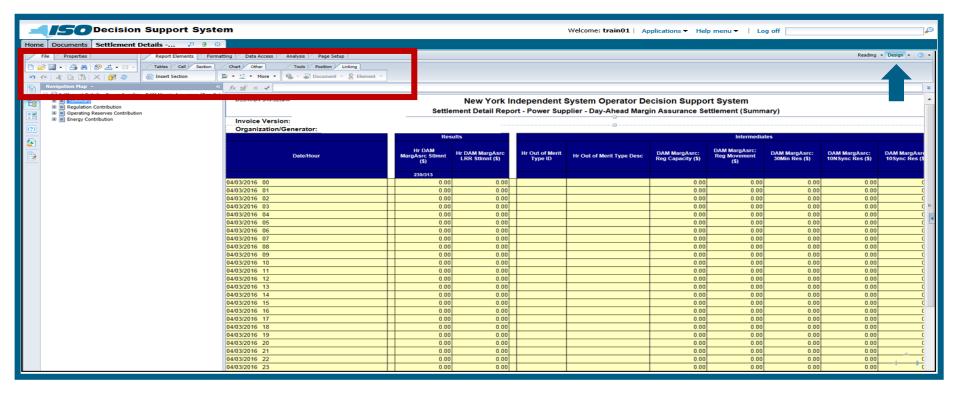




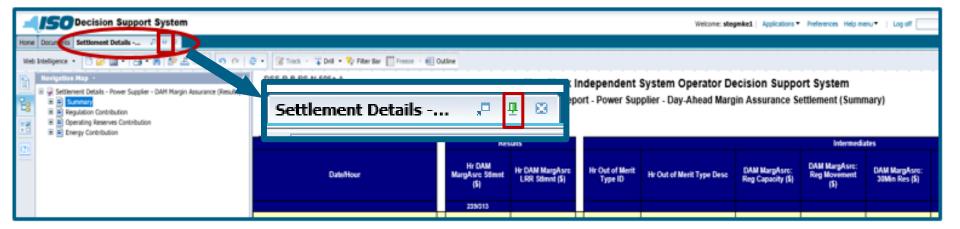




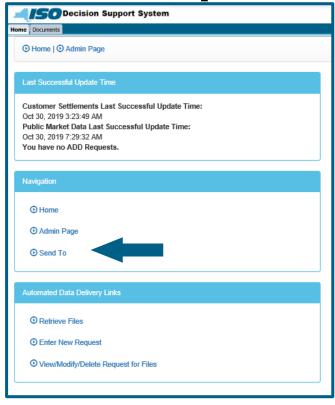


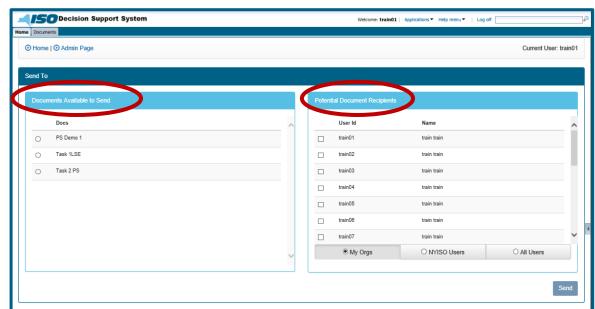




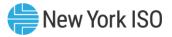


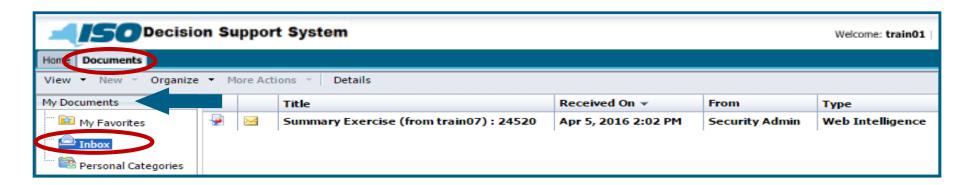








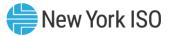






Introduction to Decision Support System

E-Learning Module 4: Automated Data Delivery (ADD)



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

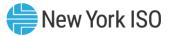
Explain how to access DSS

Module 2: Primer

- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

Explain how to access DSS

Module 2: Primer

- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

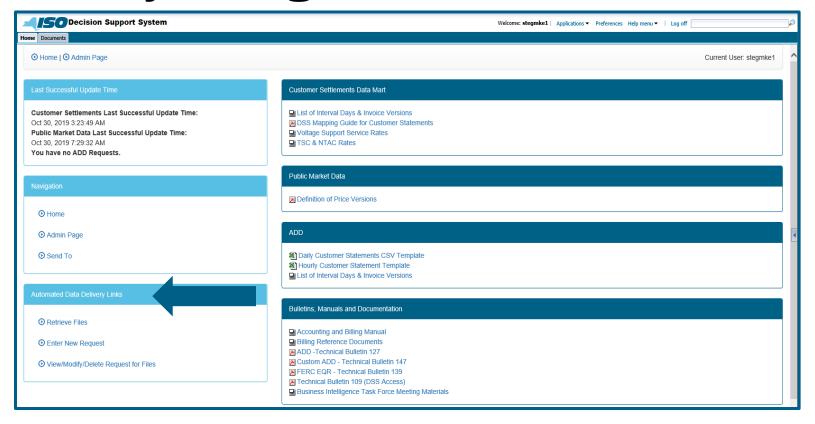
 Understand how to access DSS Corporate Reports

Automated Data Delivery (ADD)



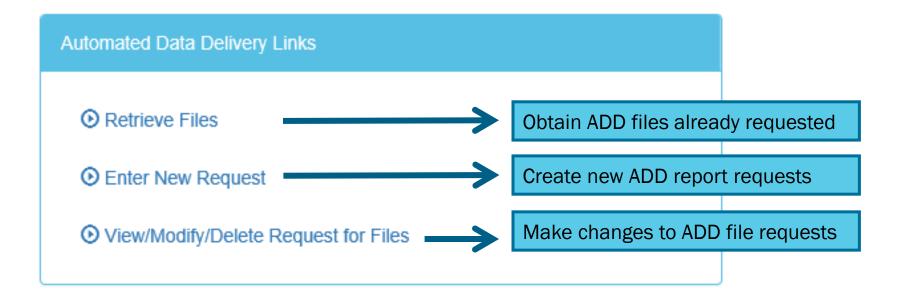


Advisory Billing Information

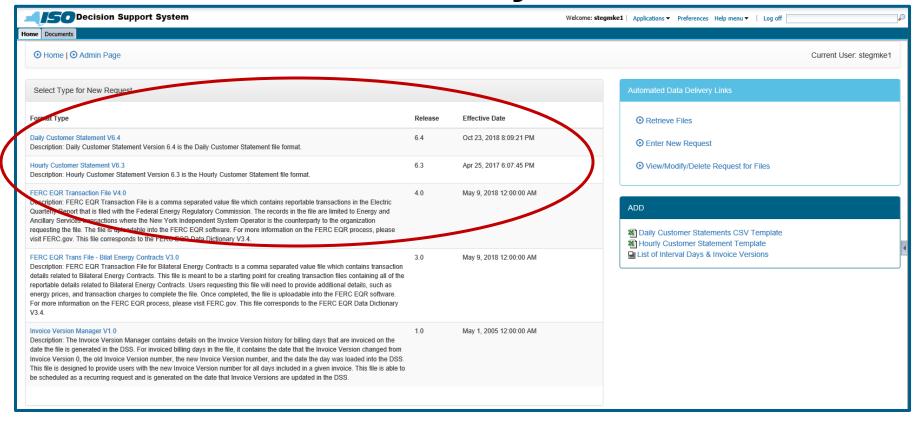


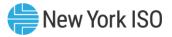


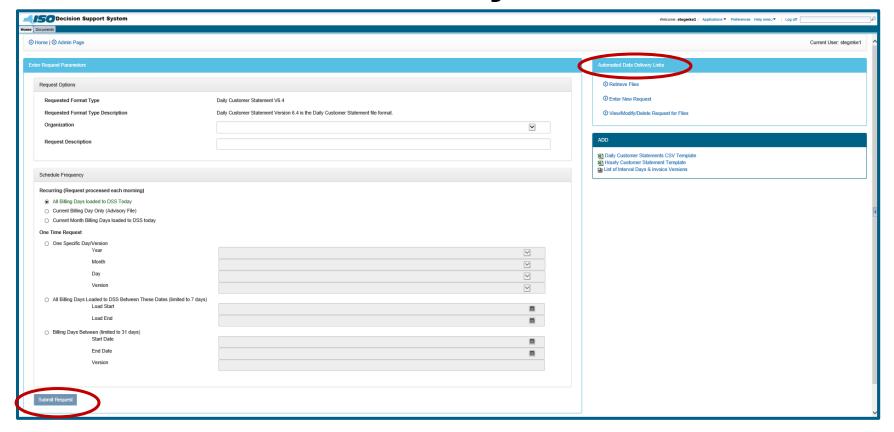
Automated Data Delivery Links

















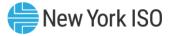


| A DWER SUPPLIERS 100 g name BE LBMP ENERGY | B 200 | C | D | |
|--|---|--------------------------------|--------------------------|----------|
| 100 g name | | | | |
| g name | | | | |
| | | 201 | 101 | |
| E LEMD ENEDGY | Gen name | Gen Ptid | Start day | Start ho |
| | | | | |
| 100 | 400 | 401 | 101 | |
| g name | LSE name | Bus name | Start day | Start ho |
| ANSACTIONS | | | | |
| 100 | 400 | 500 | 101 | |
| | LSE name | Trans Id | Start day | Start ho |
| ANSACTIONS LBMP ENERGY | | | | |
| 100 | 400 | 500 | 101 | |
| | LSE name | Trans Id | Start day | Start ho |
| ICILLARY SERVICES | | | | |
| 100 | 400 | 101 | 102 | |
| g name | LSE name | Start day | Start hour | Hrly And |
| C | | | | |
| 100 | 900 | 101 | 102 | |
| | TCC Contract ID | Start day | Start hour | Tcc cred |
| EMAND RESPONSE PROGRAMS | | | | |
| 100 | 2000 | 2001 | 101 | |
| g name | Demand Reduction Provider Name | Demand Reduction Provider TPID | Start day | Start ho |
| RTUAL BIDDING PROGRAM | | | | |
| 100 | 400 | 3000 | 3001 | |
| g name | LSE name | Virtual Bidding Bus Name | Virtual Bidding Bus PTID | Start da |
| | | | | |
| | | | | |
| | g name ANSACTIONS LBMP ENERGY 100 g name CILLARY SERVICES 100 g name C 100 g name MAND RESPONSE PROGRAMS 100 g name RTUAL BIDDING PROGRAM | name | name | Name |

Questions?

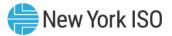
For any future assistance, please contact NYISO Stakeholder Services at stakeholder_services@nyiso.com or by phone at (518) 356-6060





Introduction to Decision Support System

Supporting Documentation



COURSE OBJECTIVES: Participants will be able to

Module 1: Getting Started

• Explain how to access DSS

Module 2: Primer

- Define "Decision Support System" (DSS)
- Identify the benefits of using DSS
- List various reports available within DSS

Module 3: Corporate Reports

 Understand how to access DSS Corporate Reports

Module 4: Automated Data Delivery (ADD)

 Request an Automated Data Delivery (ADD) File

Module 1: Getting Started





Accessing DSS



GUIDE 01

Market Participants User's Guide

............

4.4 Digital Certificates

In this section, the terms digital Certificate and certificate are used interchangeably.

All Users must have a valid digital certificate installed on their respective computers and specific to the browser of their choice in order to access the NYISO MIS and the Decision Support System (DSS). This will provide a secure connection between the NYISO's computer systems and the Market Participant's computer system.

Each Market Participant and its MIS Administrator must establish a digital certificate User policy for its organization. There are three primary issues when considering and establishing a digital certificate User policy—security, logging-in, and reliability. For example, if a common certificate is used within a Market Participants' organization, systemuse by individuals cannot be monitored. In addition, ALL Users within the organization would be denied access if the certificate expuses or becomes unusable. The MIS Administrator and the Main Contact should review their specific needs and develop specific policies that will best meet their organization's needs.



TECHNICAL BULLETIN 109

6/27/2003, revised 2007, 2009, 2010, recertified 9/14/11, recertified 07/29/14, 12/14/2015

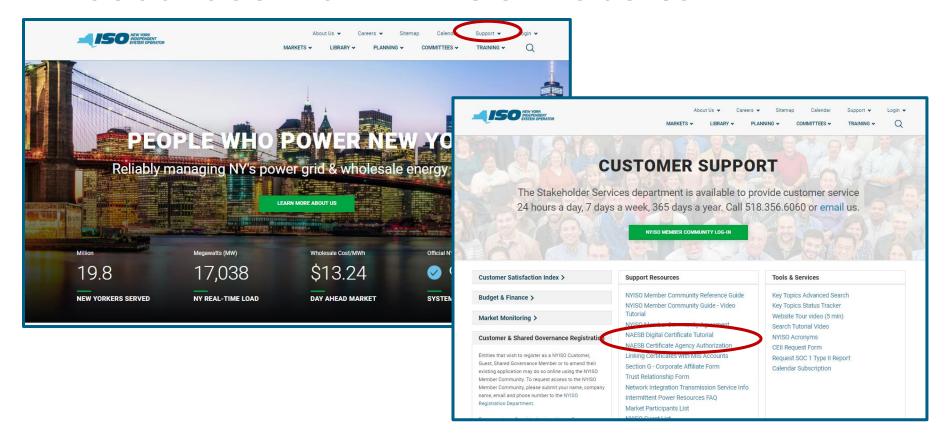
Subject: Registering for Access to the NYISO Decision Support System (DSS)

Access to the NYISO DSS is password protected and restricted to authorized Market Participants. Individuals that desire access to the NYISO DSS must register for an account, and be approved by their organization's DSS Administrator.

| Table of Contents | |
|---|----|
| Browser and Security Requirements | 1 |
| DSS Registration Process for Users | |
| Requesting Additional DSS Access | 10 |
| DSS Registration Process for DSS Administrators | |
| DSS Administrator Duties and Responsibilities. | 17 |



Resources from NYISO website

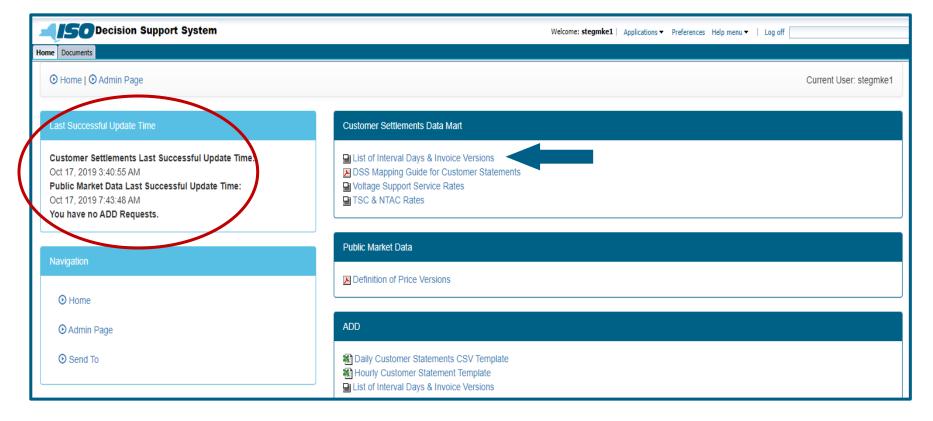


Module 2: Primer



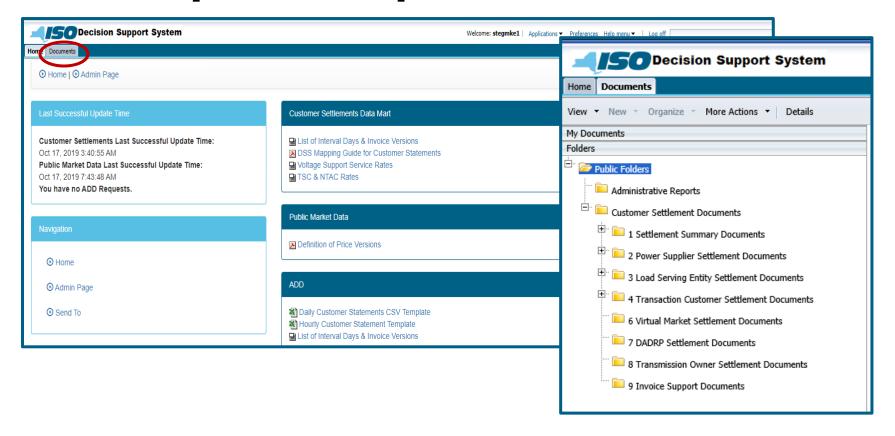


Decision Support System

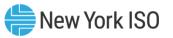


Module 3: Corporate Reports

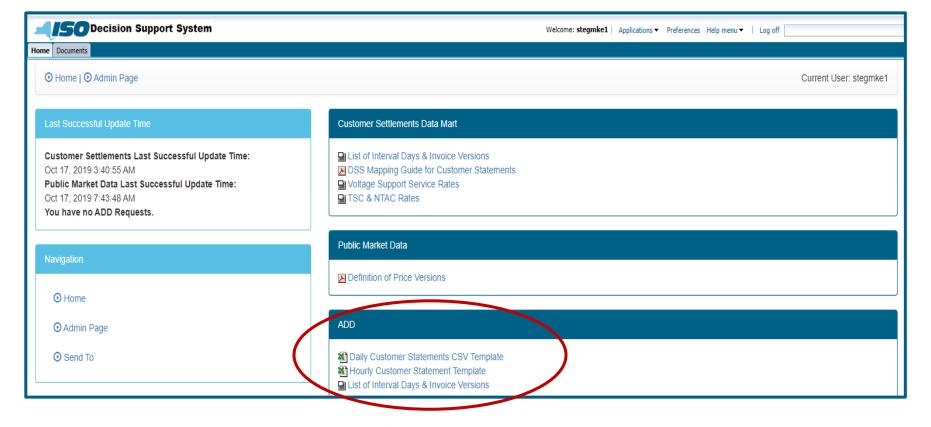




Module 4: Automated Data Delivery (ADD)



DSS Automated Data Delivery (ADD)





Supporting Documentation

ADD - Advisory Files

- Technical Bulletin #127
- Customer Statements to DSS Mapping



TECHNICAL BULLETIN

127

6/3/2005

Subject: Accessing Customer Statement Files through the Decision Support System (DSS)

NYISO Customers may access customer statement files in comma separated value (CSV) format directly through the DSS Automated Data Delivery (ADD) tool.

Details:

Background

Settlement advisory files are available through the Automated Data Delivery (ADD), a subsystem of the Decision Support System (DSS). The ADD allows customers to dynamically access customer settlement data - specifically daily and hourly customer statement files - directly from the DSS.

Additionally, Market Participants may create Transaction Import Files for the Federal Energy Regulatory Commission Electric Quarterly Report (FERC EQR) through the ADD. This functionality is described in Technical Bulletin 139, "The NYISO Decision Support System (DSS) and the FERC Electric Quarterly Report (EQR)."

| FILE TWO: Hourly Data I. Power Supplier Data (Hourly) | | | | | | | | | |
|--|-------------------------------|--------------------------------|-----------------|--|----------------------------|---|--|--|--|
| Code | Column Header | Data Type | Element Type | Description | Payment Made To/From | Primary DSS Universe DSS Class | D88 Object Name | | |
| 100 | Org Name | VARCHAR2(50) | ID | Name of the Organization | | Cust Stilmt – Power Suppliers Organization | ORG Name | | |
| 200 | Gen name | VARCHAR2(50) | ID | Name for the Generator | | Cust Strimt – Power Suppliers Generators | Gen Name | | |
| 201 | Gen Ptid | NUMBER(5) | ID | NYISO assigned point identifier | | Cust Strimt – Power Suppliers Generators | Gen PTID | | |
| 101 | Start day | DATE Format: MON/DD/YYYY | Date | Start Date | | Cust Strimt – Power Suppliers Time Day | Interval Start Day (Eastern) Note: Formst is slightly different. DSS format is MM/DD/YYYY. | | |
| 102 | Start hour | NUMBER(2) | Bour | Start Hour | | Cust Strimt – Power Suppliers Time Hour | Interval Start Hour (Eastern) | | |
| 202 | Day Ahead Hrly LBMP MWh | NUMBER(17,4) | MWh | LBMP MWs sold Day-Ahead, based on decremental bid may be (-) which results in a purchase of LBMP MWs Day-Ahead (Day-Ahead Scheduled MWs – Bilateral Transaction MWs) | + = Sale to the ISO | Cust Strimt – Power Suppliers DAM Energy Settlement/HourlyoBilling Determinents | Hr NYISO DAM Energy (MW) | | |
| 203 | Day Ahead Hrly LBMP \$ | NUMBER(15,2) | SS | LBMP price at this generator bus | | Cust Strimt – Power Suppliers DAM Energy Settlement/Hourly/Billing Determinants | DAM Total Price: Gen (\$5MW) | | |
| 204 | Day Ahead forward Energy S | NUMBER(15,2) | ss | Generator total DAM LBMP value | + = Due Generator | Cust Stilmt – Power Suppliers DAM Energy Settlement/Hourly/Stilmst Results | Hr Total DAM Stheet: Gen (\$) | | |
| 205 | Day Ahead BPCG \$ | NUMBER(15,2) | SS | Generator bid production cost | + = Due Generator | Cust Stilmt – Power Suppliers DAM BPCG Settlement/Intermediate Calculations | Hr DAM Total Net Cost (\$) | | |