new . york . independent . system . operator

nyiso Market Participant User's Guide

revised: 06-05.01-23.20012002

new • york • independent • system • operator

This document was prepared by:

New York Independent System Operator 3890 Carman Rd Schenectady, NY 12303 (518) 356 6060 www.nyiso.com

Disclaimer

The information contained within this manual, along with the other NYISO manuals, is intended to be used for informational purposes and is subject to change. The NYISO is not responsible for the user's reliance on these publications, or for any erroneous or misleading material.

© Copyright 2001, 2002 New York Independent System Operator

Market Participant User's Guide **Table of Contents**

0.0 Revision History	7
1.0 Introduction to the NYISO Market Participant User's Guide	1-1
 2.0 NYISO and the Electricity Market	2-1 2-3 2-3 t2-4 2-5 2-7 2-7 2-7
Congestion Rents and Allocation of TCCs	2-8
3.0 NYISO Market Mechanics 3.1 Market Processes 3.1.1 Seasonal Planning Process	3-1
3.1.2 Week-Ahead Operation	3-2
3.1.3 Day-Ahead Operation	
3.1.4 Hour-Ahead Operation	
3.1.5 Real-Time Operation	
3.2 Market and Settlement Processes	3-4
3.2.1 Market Information System (MIS)	
Day-Ahead Generation Bids	
Day-Ahead Load Bids	3-7
Day-Ahead Transaction Bids	3-7
Hour-Ahead Generation Bids	
Hour-Ahead Transaction Bids	
OASIS	
3.2.2 Day-Ahead Market (DAM)	.3-10
Assemble Day-Ahead Transmission Outages	
Produce ISO Preliminary Zonal Load Forecast	
Security-Constrained Unit Commitment Process	
SCUC Activity Detail	
Evaluate Transactions	
3.2.3 Hour-Ahead Market (HAM)	3-11
Hour-Ahead Scheduling	.3-12
3.2.4 Supplemental Resource Evaluation (SRE)	.3-12
3.2.5 Real-Time Dispatch	
3.2.6 Settlement and Billing	
3.3 Locational Based Marginal Price (LBMP)	.3-13
3.3.1 Components of LBMP	

 4.0 NYISO Market Relations Services	4-1 4-1 4-2 4-3 4-3 4-4 4-6 4-6
Contacting NYISO Market Relations Specific Issues Support Section 4 Organization 4.2 Key Terms	4-1 4-2 4-3 4-3 4-4 4-6 4-6 4-6
Specific Issues Support Section 4 Organization 4.2 Key Terms	4-1 4-2 4-3 4-4 4-6 4-6
Section 4 Organization 4.2 Key Terms	4-2 4-3 4-4 4-6 4-6
4.2 Key Terms	4-3 4-4 4-6 4-6
4.2 Key Terms	4-4 4-6 4-6
4.3 Overview of NYISO Web site	4-4 4-6 4-6
	4-6 4-6
4.4 Digital Certificates	4-6
4.4.1 Applying for a Certificate	
Obtaining a Digital Certificate	
Installation	
4.4.2 Checking for Valid Certificates	
For MS Explorer V5.01 Browser	
For Netscape Navigator V4.0 Browser	
Possible Errors	
Usage	
4.5 Update of Generator Physical Parameters	
4.6 Changing Market Participant Administrators	
5.0 OASIS	5-1
5.1 Introduction	
5.2 Viewing Data Through Displays	
5.3 Market Prices	
5.3.1 Day Ahead Market Zonal LBMP Data	
5.3.2 Day Ahead Market Generator LBMP Data	
5.3.3 Real Time Market Zonal LBMP Data	
5.3.4 Real Time Market Generator LBMP Data	
5.3.5 Ancillary Service Prices - Day Ahead Market	
5.3.6 Ancillary Service Prices - Hour Ahead Market	
5.4 Advisory Prices	
5.4.1 Hour Ahead Zonal LBMP Data	
5.4.2 Hour Ahead Market Generator LBMP Data	
5.4.3 Time Weighted/Integrated Real Time Zonal LBMP	
5.4.4 Time Weighted/Integrated Real Time Generator LE Data	
5.5 Real-Time Market LBMP Zonal Map	
5.6 Bidding and Scheduling	
5.7 Operational Information	
5.7.1 ATC/TTC	
5.7.2 Load Forecast	
5.7.3 Transmission Service Charges - TO, TSC, and NT	
Rates.	
5.7.4 Transmission Service Charges - External Transact	
Summary and Details	
5.7.5 Transfer Limitations	
5.7.6 Outage Schedule	
5.7.7 Operational Announcements	5-30
5.7.8 NYCA Interconnection Flows	
5.7.9 Transmission Owner Information	5-33

5.8 MIS Instructional Documents	5-34
5.8.1 Upload/Download Specifications	5-35
5.8.2 Example Pages	5-36
5.8.3 Bid Constraint Messages	5-38
5.8.4 Validation Messages	5-39
5.9 New York Control Area Information	5-40
5.9.1 Generator Names	5-41
5.9.2 Generator - Genco List	5-42
5.9.3 Load Names	
5.9.4 Load Serving Entity Contact Information	5-44
5.9.5 Subzones by Transmission Owners	
5.9.6 Organization Contact Information	5-46
6.0 Market Participant Administrator Tasks	
6.1 Introduction	
6.1.1 Section 6 Summary	
6.2 Administrator Display Overview	
6.2.1 Key Display Features	
6.2.2 Market Participant Administrator Displays	
6.2.3 Market Participant Administrator Login	
6.2.4 Secure Communication with MIS	
6.2.5 MIS Data Model	
6.2.6 Getting Started	
6.3 NYISO Customer or Guest Classification	
6.3.1 Administrator's Displays and Tasks	
6.3.2 New Users' Displays and Tasks	6-18
6.3.3 Organization Users' Displays and Tasks	6-20
6.3.4 Organization Displays and Tasks	
6.4 Generator Classification	
6.4.1 Administrator's Displays and Tasks	
6.4.2 Generator Displays and Tasks 6.4.3 Organization Displays and Tasks	
6.5 LSE Classification	
6.5.1 Administrator Displays and Tasks 6.5.2 LSE Administrator Displays and Tasks	
6.5.3 Organization Display and Tasks	
	0-04
7.0 Market Participant User Tasks	
7.1 Introduction	
7.1.1 Market Participant User Display Overview	
7.1.2 Key Display Features	7-3
7.1.3 Market Participant User Login	7-4
7.2 User Administration	7-6
7.2.1 View/Change User Detail	7-6
7.2.2 Change Password	7-8
7.2.3 View Organization Detail	
7.2.4 View Authorized Generators	
7.2.5 View Authorized Loads	
7.3 Generator Commitment Parameters	
7.3.1 View/Change Generator Commitment Parameters	
7.3.2 View Generator Detail	7-22

7.4 Generator and Ancillary Services Bids	7-26
7.4.1 Submit New Generator Bids	
7.4.2 Review/Change Generator Bids	7-36
7.5 Load Bids	
7.5.1 Submit New Load Bids	7-42
7.5.2 Change Load Bids	7-50
7.6 Transaction Bids	7-53
7.6.1 Submit a New Transaction Bid	7-53
7.6.2 Review/Change Transaction Bids	7-65
7.6.3 Confirm Transaction Bids	
7.7 Virtual Bidding	
7.7.1 Registration Requirements	
7.7.2 Introduction to Virtual Bidding	
7.7.3 Submitting Virtual Bids in the Day Ahead Market	
7.7.4 Changing a Virtual Load or Virtual Supply Bid	7-82
7.7.5 Virtual bids via Upload/Download	<u>7-83</u>
7.8 Preschedules	
7.8.1 Submit a New Preschedule	
7.8.2 Managing submitted preschedule requests	
7.8.3 To change a submitted preschedule request	7- XX<u>90</u>
8.0 Upload/Download Batch Procedures	
8.1 Introduction	
8.1.1 Upload and Download Process	
8.1.2 Overview of Templates	
8.1.3 Section Organization	
8.2 Upload Templates	8-8
8.2.1 Submit Generator Bids	
8.2.2 Submit Generator Commitment Parameter	
8.2.3 Submit Loads	
8.2.4 Submit Transactions	
8.2.5 Confirm Transaction Bids	-
8.2.6 Delete Generator Bids	
8.2.7 Delete Load Bids	
8.2.8 Delete Transaction Bids	8-26
8.2.9 Submit Preschedule Transaction	8-27
8.3 Download Templates 8.3.1 Generator Bids and Schedules	8-28
8.3.2 Generator Commitment Parameters	
8.3.3 Load Bids and Schedules 8.3.4 Transaction Bids and Schedules	
8.3.5 Transaction Confirmation Status	8-34

Market Participant User's Guide Revision History Page

May 2002 Update: Technical Bulletins Incorporated

- T.B. #71 <u>Multiple Response Rates may be specified for Generating Units</u>: Incorporated into Section 7.2.4, *View Authorized Generator*; Section 7.3.2, *View Generator Detail*
- T.B. #74 <u>Virtual Bidding in the Day-Ahead Market:</u> Incorporated into Section 7.7, *Virtual Bidding*
- T.B. #81 <u>Submitting Virtual Bids in the Day-Ahead Market:</u> Incorporated into Section 7.7, *Virtual Bidding*
- T.B. #83 Bidding and scheduling external multi-hour block transactions: Incorporated into Section 7.6.1, *Submit a New Transaction Bid*
- T.B. #90 <u>Submitting and managing preschedule requests:</u> Incorporated into Section 7.8, *Preschedules*; Section 8.2.9, *Submit Preschedule Transactions*

Other Revisions:

Sect. 7.4.1, "Special Note": Add this sentence to the end of the paragraph: "However, when the unit is registered for the ELR/CLR program, the MIS ignores the Upper Operating Limit and uses the last point on the bid curve."

Throughout the manual: (Sect. 3.1.4, 1st paragraph; Sect. 3.2.3, 1st paragraph; Sect. 7.4.1, bullet 2; Sect. 7.4.2, bullet 2; Sect. 7.6.1, bullet 3; Sect. 7.6.2, bullet 3; Sect. 7.6.2, 1st paragraph)

Change the Hour-Ahead Market closing time from "90" minutes before the start of the actual dispatch hour to "75" minutes before.

June 2001 Update:

Technical Bulletins Incorporated

T.B. #01 <u>Digital Certificates - Obtaining, Validation, Backup, and Usage</u>: Incorporated in Sections 4.4, 4.4.1, 4.4.2, and a re-titled 4.4.3

- T.B. #04 <u>Billing Organization Changes</u>: Incorporated into Section 6.4.2, *View/Change Billing Organization*. Also, incorporated into Section 6.5.2, *View/Change Billing Organization*
- T.B. #05 <u>MIS Transactions with Zero Megawatts</u>: Incorporated into Section 7.6.1, *Step 8, Special Notes*
- T.B. #06 <u>Load Forecasts for Facilities in the MIS</u>: Incorporated into Section 7.5.1, *Step 5, Load Forecasting*
- T.B. #07 Price Capped Loads and their Day-Ahead Scheduling: Now superceded by T.B. #69 which is incorporated into Section 7.5.1, *Zonal Price Capped Load Bidding*
- T.B. #08 Establishing a Price Capped Load Bus: Now superceded by T.B. #69 which is incorporated into Section 7.5.1, *Zonal Price Capped Load Bidding*
- T.B. #09 <u>Meaning of the MIS Generator Bid Expiration Date</u>: Incorporated into Section 7.4.1, *Step3*, #5- *Expiration (DAM Only)*
- T.B. #11 <u>Minimum Run Times Extending Past the Commitment Period</u>: Incorporated into Section 7.3.1, *Minimum Run Times*
- T.B. #12 Dispatchable Units' Minimum and Upper Operating Limits Must be Different Values: Incorporated into Section 7.4.1, Step 4, #2, Minimum Generation, Special Note
- T.B. #13 <u>MIS Load Modeling and LSE Responsibilities</u>: Incorporated into Section 7.5.1, *Prerequisites*
- T.B. #14 Changes to Transaction Information in the MIS: Incorporated into Section 7.6.1, Step 9, *Transaction Contract Owner and TUC Charge*
- T.B. #19 <u>MIS Messages for Transactions</u>: Incorporated into Section 7.6.1, Step 9, *Transaction Messages*
- T. B. #20 Decremental Bids for Import and Wheel-Through Transactions: Incorporated into Section 7.6.1, *Step 7, Step 4*
- T.B. #30 Bidding into the NYISO LBMP Market from an External Control Area: Incorporated into Section 7.6.1, *Proxy Buses*, in conjunction with T.B. #37. The last section of T.B. #30, *Scheduling of Service*,

is incorporated into Section 7.6.1, *Step 9, Scheduling of External Transactions*

- T.B. #31 <u>Minimum Generator Level Cost Determination</u>: Incorporated into Section 7.4.1, Step 4- #3, *Minimum Generation Cost*
- T.B. #37 <u>Proxy Buses</u>: Incorporated into Section 7.6.1, *Proxy Buses*, in conjunction with T.B. #30
- T.B. #41 <u>Changing Transaction Bids for the Current Day in the Hour-</u> <u>Ahead Market</u>: Incorporated into Section 7.6.2, *Changing Transaction Bids for the Current Day in the Hour-Ahead Market*
- T.B. #46 Bidding Above ICAP DMNC in the Day-Ahead and Real-Time Markets: Incorporated into Section 7.4.1, *Step 4, Bidding Above ICAP DMNC*
- T.B. #47 <u>Updating Generator Physical Parameters in the MIS</u>: Incorporated into Section 6.4.2, *Updating Generator Physical Parameters*
- T.B. #52 <u>Sink Price Caps for External Transactions</u>: Incorporated into Section 7.6.1, *Step 8, #2, Sink Price Cap*
- T.B. #55 <u>ECA #3- ICAP Units' DAM bids in the MIS</u>: Incorporated into Section 7.4, *ICAP Generator Bids in the Day-Ahead Market*
- T.B. #63 <u>NYISO Market Participant Support</u>: "Details" incorporated into Section 4.1; Specific Issues Support, A & B also placed in 4.1
- T.B. #69 Zonal Price Capped Load Bidding in the Day-Ahead Market: Incorporated into Section 7.5.1, Zonal Brice Capped Load Bidding

1.0 Introduction to the Market Participant User's Guide

Introduction

This User's Guide provides Market Participants with the information needed to participate in NYISO Energy Markets.

Market ParticipantsMarket Participants include all entities that produce, transmit, sell and/or purchase for
resale – capacity, energy and ancillary services in the New York State wholesale market.
Exhibit 1.1 identifies the categories of Market Participants considered in this manual.

Exhibit 1.1: Market Participants

Eligible Customers					
Suppliers					
– Generators					
 Ancillary Service Suppliers 					
 Demand-Side Resources 					
Power Exchanges					
Transmission Customers					
 Load Serving Entities (LSEs) 					
 Energy Service Customers (ESCOs) 					
 Municipalities 					
- Cooperatives					
 Industrial Customers 					
 Commercial Customers 					
Marketers					
TCC Buyers and Sellers					
Transmission Owner					
Public Interest Groups					
Regulators					

Within each group that is called a <u>"</u>Market Participant,<u>"</u> there are a variety of positions that will interface with the NYISO (Market Participant roles). This manual provides specific information for those who want to know more about:

- NYISO organization and mission (General)
- Completing forms needed to be admitted into the NYISO Energy Markets (Manager)
- Setting-up administrative files needed to participate in the NYISO (Administrator)
- Submitting/modifying bids for capacity, energy and other services (Trader)

While all Market Participants are urged to read all sections, some sections are aimed at those who will perform certain tasks.

Following, is a brief description of each of the main sections of the manual:

1. Introduction to the Market Participant User's Guide	This section provides an overview of the NYISO Market Participant User's Guide.				
2. NYISO and the Electricity Market	 This section describes the general and specific duties of the NYISO. Installed Capacity Energy and Bilateral Transactions Ancillary Services Transmission Congestion Contracts Each market description includes the market's definition, its purpose, the responsibilities of NYISO in administering the market, and Market Participant eligibility requirements.				
3. NYISO Market Mechanics	 This section describes the general market structure and market processes in terms of the following major components: Annual Planning Process Week-Ahead Operation Day-Ahead Operation Hour-Ahead Operation Real-Time Operation The cornerstone of the NYISO market operation is Locational Based Marginal Pricing (LBMP). The importance of LBMP and its components are covered in this section, along with some basic information about the management of risk as a player in the market. 				
4. NYISO Market Relations Services	This section provides information on contacting the ISO, some key terms, an overview of the NYISO Website, how to obtain digital certificates, the process for updating generator physical parameters and changing Market Participant Administrators.				
5. OASIS	This section covers accessing the public information that is available to anyone via the NYISO Website. The information in this section can be accessed by either of two methods. The first method is "view only" and is known as LBMP Results. The second method is downloadable and is known as LBMP Results - CSV format. Items that can be viewed or downloaded range from LBMP prices for Day-Ahead through Real-time, ISO Load Forecasts, ATC/TTC, Transmission Service Charges (TSC), LBMP Zonal Maps, Actual Load and SCUC Forecast data, Transmission Outage Schedules, Interface Flows, Dispatcher Notices, Primary holders of Transmission Congestion Contracts (TCC), Bid and Validation messages to Contacts for Load Serving Entities (LSE).				
6. Market Participant Administrator Tasks	This section provides step-by-step instructions on using the NYISO Market Information System (MIS). The administrator's functions will be discussed. Administrators will learn how to do the following:				
	 Define organizations, administrators, generators, loads and LSEs Assign bidding and qualified-to-bid privileges Define and maintain individual user accounts Assign user rights to access specific generators and loads 				

	Control access through password control	
7. Market Participant User Tasks	This section provides step-by-step instructions on using the NYISO Market Participant Web pages (accessible via the Internet) to submit/review/modify bids and schedules for:	
	 Generator <u>& and</u> Ancillary Services Loads Bilateral Transactions 	
	Included is an overview of the bid displays along with actual pictures of the displays used by Market Participant Users to interact with the Market Information System (MIS). View-only displays with administrative information are also described.	
8. Upload/Download Batch Procedures	This section provides directions for downloading NYISO Web pages from the NYISO Internet Site, entering data off-line, then uploading the files back onto the NYISO Internet Site. The section focuses on procedures specifically related to the uploading and downloading of bid data.	
	Because the process of entering data for multiple bids can be cumbersome, this process will enable Market Participants to develop their own systems for streamlining the data entry and review process.	

[*This blank page intentionally inserted.*]

2.0 NYISO and the Electricity Market

2.1 NYISO Duties

The principal mission of the New York Independent System Operator (the NYISO) is to direct the operation of the New York State (NYS) power system in order to supply power to loads while maintaining safety and reliability in compliance with the reliability rules established by the New York State Reliability Council (NYSRC). The NYISO procures sources of power and certain ancillary services through open markets that it administers.

In doing so, the NYISO facilitates open access to the NYS transmission system, provides non-discriminatory access for all Market Participants, and allows meaningful involvement by Market Participants in the operation of the NYISO.

General The NYISO's duties are determined by the provisions of the NYISO Agreement, the NYISO/Transmission Owner (NYISO/TO) Agreement, the NYISO/NYSRC Agreement, and the reliability rules (rules, standards, procedures, and protocols) established by the NYSRC. The NYISO implements all of its responsibilities under non-discriminatory terms and conditions and impartially administers the NYISO Tariff to all Market Participants.

Specific Duties The NYISO performs the following duties:

- Interacts with neighboring control area operators whenever necessary to ensure interconnection reliability
- Maintains a fiduciary responsibility with the incorporating parties to protect their transmission assets over which the NYISO assumes operational control and/or direction and protects the incorporating parties from any potential liability that may arise from their ownership of these transmission assets
- Makes available to all Market Participants the same non-confidential transmission and market information at the same time
- Gives all Market Participants the same opportunity to participate on a comparable and non-discriminatory basis in the purchase and sale of capacity, energy, ancillary services and transmission congestion contracts
- Prepares and files agreements and procedures necessary to provide transmission service to transmission customers and to maintain safe, reliable, and efficient operation of the NYCA
- Develops and utilizes operating and billing procedures to carry out the NYISO responsibilities under the NYISO Agreement and NYISO Tariff and to facilitate the financial settlements of Market Participants
- Requires all Market Participants to sign a service agreement indicating compliance with the policies, procedures, and requirements of the NYISO tariff
- Administers the electricity market monitoring program as approved by FERC and ensures that the NYISO's compliance staff and outside advisors have access to all necessary information to conduct their reviews
- Monitors the performance of Market Participants and imposes appropriate warnings and penalties for failure to perform
- Makes information concerning NYISO operations available to Market Participants as

	well as to state and federal regulatory agencies (subject to reasonable confidentiality requirements)
Operation	The NYISO Tariffs require that entities entering into a service agreement with the NYISO to comply with the reliability rules and NYISO procedures and furnish required data to the NYISO. The NYISO has authority to control generators, transmission facilities, and other facilities required to operate the NYS power system in a reliable manner.
Transmission Service and Wholesale Market	The NYISO provides transmission service and ancillary services over the NYS transmission system in compliance with the NYISO Tariffs. The NYISO facilitates a day-ahead market and an hour-ahead market using Market Participants' bid data.
Maintenance Scheduling	The NYISO coordinates planned outage schedules for generators that are under contract to provide installed capacity to the NYS power system. The NYISO also approves requests for transmission outages on those transmission facilities under NYISO operational control that are defined in Appendix A-1 of the NYISO/TO agreement.
Capacity Requirements	The NYISO establishes locational capacity requirements for the NYCA to maintain reliability based on the availability of the NYS transmission system. The NYISO also requires all Load Serving Entities (LSEs) with service agreements to maintain appropriate levels of installed capacity.
Planning and Transmission System Expansion	The NYISO is responsible for assessing the reliability and expansion of the NYS Transmission System in compliance with the reliability rules of the NYSRC. This process includes the annual compilation of a NYS transmission plan.

2.2 NYISO Electricity Market

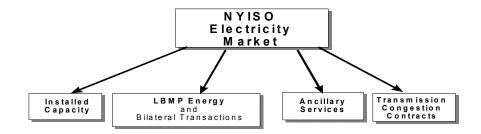
The NYISO facilitates and administers the markets for installed capacity, energy, ancillary services, and transmission congestion contracts. The NYISO also administers the scheduling of firm and non-firm point-to-point transmission service and Network Integration Transmission Service.

Market Participants may submit bids on a day-ahead and hour-ahead basis for generation, load and bilateral transactions.

At the close of each market, the NYISO initiates a bid evaluation process. The process involves retrieving bids from the Market Information System, analyzing the bids according to prescribed rules, making adjustments to ensure that reliability requirements are met, and posting results to the Market Information System.

The markets that are administered and conducted by the NYISO are shown in Exhibit 2.1:

Exhibit 2.1: NYISO Electricity Market



2.2.1 Installed Capacity Market

The installed capacity market is established to ensure that there is sufficient generation capacity to cover the capacity requirements determined by the NYISO. An installed capacity resource is a generator or load facility that is accessible to the NYS transmission system, which is capable of supplying and/or reducing the demand in the NYCA and complies with the requirements of the reliability rules. The sum of all installed capacity resources for the NYCA is the total installed capacity of the NYCA.

Installed Capacity Providers

- *Installed Capacity Providers* are the owners or legal representatives of an installed capacity resource.
- *Installed Capacity Users* are the Load Serving Entities (LSEs) that participate in the NYCA market.
- *Interruptible Load Resources* are loads that are obligated under a contract to be interrupted when required by the ISO.

LSEs may acquire ICAP through bilateral transactions with ICAP providers, which could be generator resources and/or interruptible load resources, or through the ISO facilitated ICAP auction to cover their load. (See *NYISO ICAP Manual*)

2.2.2 LBMP Energy and Bilateral Energy Transactions Market

The energy and bilateral transactions market provides a mechanism for Market Participants to buy and sell energy and to bid various kinds of bilateral transactions.

- Generators may sell energy directly into the market at LBMP or be party to a bilateral contract.
- LSEs and others wanting may purchase LBMP energy at LBMP by submitting bids and/or they may be party to a bilateral contract.
- Parties to a bilateral contract may elect to bid a transaction as a firm point-to-point transaction, in which case they are accepting to pay congestion charges to secure delivery of the requested energy. Or, they can enter a non-firm point-to-point transaction, in which case they indicate a willingness to accept the scheduled delivery of power only if there is no congestion; i.e., not willing to pay congestion charges.

Two Settlement The NYISO energy market is implemented using a two-settlement process.

Processes

The first settlement is based upon the day-ahead market and corresponding day-ahead Security Constrained Unit Commitment (SCUC). The second settlement is based upon the hour-ahead bids and the corresponding real-time Security Constrained Dispatch (SCD). Market Participants may participate in the day-ahead market and/or the hour-ahead market.

As a result of the day-ahead commitment process, a set of generators is designated to be available for dispatch in each hour of the next day. LSEs have submitted hourly load forecasts for each hour of the next day and they can designate any portion of that forecast load to be settled at the "day-ahead" price.

The generators designated by SCUC to be available for the next day are dispatched against the committed load. From the dispatch, LBMPs are computed and forward contracts are established for the generation and load accordingly. Subsequently, during real-time operation, changes in operating conditions, the influence of hour-ahead bids, and variations in actual load will cause the real-time LBMP to be different than the day-ahead price. Difference in generation levels and in load consumption as compared to the first settlement values are settled at the second settlement, or real-time price.

All holders of TCCs are paid based upon the first settlement LBMPs or DAM LBMP.

2.2.3 Ancillary Services Market

Ancillary services support the transmission of energy and reactive power from resources to loads and are used to maintain reliable operation of the NYS power system. More specifically, ancillary services refer to services provided by rotating machines and other system equipment, services provided by NYISO, and by interruptible load.

One of the NYISO's main responsibilities is to facilitate the ancillary service transactions of the transmission customers and suppliers. NYISO also coordinates, controls, and, if necessary, directs the actions of generation resources and other facilities that provide ancillary services to the NYISO.

Six types of ancillary services are summarized as follows:

- 1. **Scheduling, System Control & Dispatch Service** This service includes management of real-time functions such as tie-line regulation, time error, and system restoration; and management of capacity functions such as operating reserve and generator outage scheduling. It includes all the NYISO's costs for scheduling, system control and dispatch as well as any possible uplift charges. The service is funded through the Rate Schedule 1 charges to direct customers. Transmission customers must purchase this service from the NYISO.
- 2. *Voltage Support Service* This service provides reactive power to maintain voltages on the NYS transmission system. The NYISO and transmission owners (TOs) coordinate the reactive power supply and voltage control facilities. The NYISO pays all internal generators that are eligible. The service is funded through the Rate Schedule 2 charges to direct customers. Transmission customers must purchase this service from the NYISO.
- 3. **Regulation & Frequency Response Service** These services are necessary for the continuous balancing of resources (generation and NYCA net interchange) with load, in accordance with NERC criteria. The NYISO directs the operation of generating units that are providing regulation service. The NYISO selects regulation service in the day-ahead and hour-ahead markets from qualified generating resources that bid to provide regulation service. The NYISO offers this service to transmission customers. Transmission customers may purchase this service from the NYISO or may self-supply the service.
- 4. **Energy Imbalance Service** This is the method used to adjust financial obligations based on updated data (internal) and inadvertent balancing (external). Energy imbalance is usually reflected in the deviation between scheduled and actual withdrawals and injections. The service is funded through schedule charges to transmission customers. Transmission customers must purchase this service from the NYISO.
- 5. **Black Start Service** Black start capability represents the key generators that, following a system-wide blackout, can start without the availability of an outside supply. Such generators must be able to participate in NYS power system restoration activities that are under the control of the NYISO. Payments are based on approved embedded costs and operating & maintenance expenses of equipment and training costs, which allow the generator to self-start in the absence of the synchronous power system. Transmission customers must purchase this service from the NYISO.
- 6. **Operating Reserve Service** This service provides backup generation in the event that major generating resources or transmission is lost either to a power system contingency or equipment failure. Most of the reserves must be available from units within the NYCA and within specific regions. The NYISO offers this service to transmission customers. Transmission customers may purchase this service from NYISO

or may self-supply the service.

Self-Supply of
Ancillary ServicesTransmission customers and suppliers are permitted to self-supply the following ancillary
services:

- Regulation and frequency response
- Operating reserve

In general, the following process must occur in order to self-supply ancillary services:

- Transmission customers and suppliers bid the resource required to provide the ancillary service into the ancillary services market.
- The NYISO selects the successful bidders to provide each ancillary service.
- The selected transmission customers and suppliers use the revenues they would otherwise receive for providing these services as an offset against charges they would otherwise need to pay the NYISO for the service. This permits the transmission customers and suppliers to offset the amounts they are charged by the market-value of the services they themselves provide.

In order for a transmission customer and supplier to self-supply an ancillary service, it must place the facility that is providing the ancillary service under the operational control of the NYISO. This enables the NYISO to coordinate the provision of the ancillary service for the entire NYCA.

2.2.4 Transmission Congestion Contracts Market

NYISO is responsible for managing congestion (transmission limitations) in the NYS power system. In the day-ahead market, energy bids are evaluated and a commitment schedule is produced that takes into account line and interface constraints of the transmission system.

To avoid overloading certain lines and equipment, the NYISO may need to deviate from its least-expensive (bid-price) generating resources and re-dispatch to ensure that no constraints are violated. This means that the cost of energy will be higher in some locations and lower in others, resulting in a locational difference in costs to LSEs. As more bidders vie for existing transmission capacity across key interfaces, the value of that transmission capacity tends to increase.

Estimated versus Actual Congestion The Day-Ahead market allows bidders to lock into prices ahead of time assuming the bidders perform consistent with their bids. But the price can't be locked in completely. The day-ahead evaluation can only estimate the location and cost of congestion. Actual congestion and its cost will not be known until it occurs. Depending on the type of bid or bilateral contract, one or more parties will be exposed to the uncertainties of congestion.

To manage congestion and bring price predictability to market costs, a financial instrument called the Transmission Congestion Contract (TCC) was created. TCCs provide a way for Market Participants to pay a fixed charge for transmission service ahead of time, thereby hedging their exposure to transmission congestion.

Definition: TCCs TCCs are financial obligations that provide an alternative to physical transmission reservations. A TCC, which is specified between two locations and uni-directional, pays the holder the congestion rent based on the actual transmission congestion experienced between those locations.

TCCs can provide the financial equivalent of firm transmission service to support bilateral contracts, and are cleared in the day-ahead market.

- If the TCC holder's net injections and withdrawals match the TCC quantities, the TCC is equivalent to a transmission right to inject a given number of MWs at one bus and to withdraw the same number of MWs at a second bus by receiving the congestion rent paid for in the transmission charge for the bilateral transaction.
- Ownership of a TCC is not a physical right to move power.
- TCC-based firm transmission service facilitates economic dispatch and trading because the owner of a TCC receives the value of its rights independently of physical operation.

TCC Holders

When the NYISO was formed, the transmission owners were still bound through pre-
existing agreements to serve certain wholesale loads and to honor contracts with other TOs
and third parties. The NYISO Tariff provides incentives for parties of these agreements to
move toward the new market structure by providing the opportunity for transmission
customers to convert their rights under existing agreements to TCCs.
There are certain terms that you should be familiar with:Grandfathered RightsParties to existing agreements that do not convert to TCCs will hold *Grandfathered Rights*.Grandfathered TCCsIf the party then converts the rights to TCCs, they will hold *Grandfathered TCCs*.Residual Transmission
Capacity*Residual transmission capacity* is the transmission capacity remaining after all grandfathered
TCCs and grandfathered rights have been accounted for.

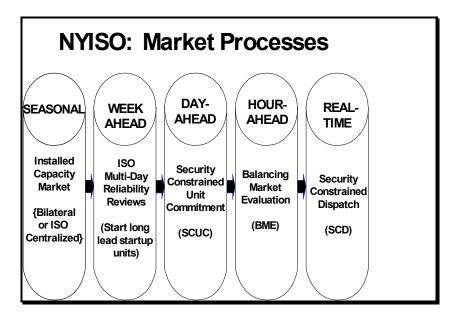
Residual TCCs	A portion of this residual transmission capacity is allocated to the TOs as <i>residual TCCs</i> prior to the formation of the NYISO.
	All grandfathered rights and TCCs held by an investor-owned utility are considered held for the benefit of their transmission customers.
Direct Sales and Auction	Buying and Selling TCCs TCCs may be bought or sold through direct sales or an auction. TOs have the opportunity before each auction to sell Grandfathered TCCs and Residual TCCs allocated prior to the formation of the NYISO through direct sale on their OASIS. Any Residual TCCs allocated prior to the formation of the NYISO that are not sold through the OASIS are released by the TOs for sale in the TCC auction. Grandfathered TCCs may also be sold directly through the auction, or they may be retained.
	TCCs sold at an auction may be for time periods ranging from 6 months to 5 years. The NYISO Tariff provides for an auction process to facilitate the selling of TCCs. Owners of TCCs are considered "Primary Holders" of their TCCs, if they are credit qualified customers of the NYISO.
Definition: Congestion Rents	Congestion Rents and Allocation of TCCs The congestion charges paid by transmission customers are called Congestion Rents. Customers may lock in their congestion-related costs before undertaking transactions by purchasing TCCs. The holder of a TCC collects congestion rents. The transmission customer pays congestion rents. When the TCC owned and the transmission request are between the same locations in the same direction and for the same quantity of MWs, the two payments tend to offset each other. In this way, a customer can lock in its congestion rent costs in advance, it is the price paid to purchase the TCCs.
	Customers with grandfathered transmission rights who convert their rights to TCCs lock in their congestion rent costs at the price they pay under their current transmission contract.
	Customers scheduling bilateral transactions may choose to take non-firm point-to-point transmission service. In that case, their bilateral transaction will be terminated by the NYISO in lieu of incurring congestion charges.
Allocation of TCCs	The NYISO is required to periodically allocate new TCCs by holding a centralized TCC auction. The TCCs sold in this auction will be based on transmission capacity made available by the expiration of the TCCs sold in the previous auction, by the expiration of grandfathered transmission contracts and by TCC holders that have released TCCs for sale in the auction, either voluntarily or by mandate.
	After the initial allocation of TCCs the transmission owners may sell their initial allocation over their OASIS, as well as through the centralized TCC auction. All other TCCs may be sold through the TCC auction or on the secondary market.
	The NYISO and the auctioneer will use power flow software to verify the simultaneous feasibility of the set of TCCs that is allocated for the transmission system. The feasibility test ensures that the set of TCCs awarded and all Grandfathered Rights and TCCs reflect a feasible operating condition.

3.0 NYISO Market Mechanics

3.1 Market Processes

The NYISO market is comprised of a number of closely linked processes to insure efficiency and promote reliable operation. The major processes, illustrated in Exhibit 3.1, include an annual installed capacity requirement/market, week-ahead reliability reviews, day-ahead market, hour-ahead market, and finally the real-time dispatch. These processes are inter-related and dependent upon one another.

Exhibit 3.1: NYISO Market Processes



3.1.1 Seasonal Planning Process

The first step is the annual planning process in which Load Serving Entities (LSEs) within the New York Control Area (NYCA) must forecast their peak load requirements for the coming year. The forecasted peak is then translated into an Installed Capacity requirement for each LSE. The LSE must demonstrate to the NYISO that it either owns, or has title to, sufficient Installed Capacity to meet its yearly obligation.

LSEs may obtain title to capacity through ownership, bilateral contracts, or an auction facilitated by the NYISO. Generators, who qualify as Installed Capacity providers, are required to either schedule bilateral transactions or submit bids to serve NYCA load into the NYISO's day-ahead market.

The installed capacity market provides an important link to the ISO's day-ahead market, which is designed to insure that there are sufficient resources identified to meet the NYISO's day-ahead forecast load and capacity requirements.

3.1.2 Week-Ahead Operation

Bid data, sufficient for seven days of operation, is requested by the NYISO. Though only commitments for the next day are financially binding, the remaining data is examined for security purposes. Without regard for economics, NYISO load forecasts for energy and reserves are examined for each day of the remaining six days of bids and proposed transaction schedules to determine if there are sufficient resources available to meet all ISO forecast requirements. If there are sufficient resources, then the ISO need not take any additional action.

If a shortfall is predicted through this process, there are a number of actions that could be taken by the NYISO, including: notifying the market relative to the shortage, purchasing additional reserves, and, if need be, selecting a long-lead start up unit (a generator which requires a period of time in excess of 24 hours to start and synchronize to the power system). The seven-day Reliability Check provides the NYISO with an opportunity to solicit additional resources, in addition to the obligations of the Installed Capacity providers. (See the *NYISO Transmission and Distribution Interconnection Manual*)

Both the Installed Capacity obligations and ISO actions resulting from the multi-day Reliability Checks, insure that there will always be "enough" resources available for the ISO to solve a viable day-ahead unit commitment.

3.1.3 Day-Ahead Operation

The day-ahead unit commitment process software package, which determines the winning bid selections, is a combination of both economics and security. Known as Security Constrained Unit Commitment (SCUC), this software package for commitment mirrors the functionality of the Security Constrained Dispatch (SCD) for dispatch, in that both automatically account for transmission limitations and bottlenecks. This strategy reduces the necessity for successive iterations and extensive operator judgements and intervention.

The optimization is set to secure the next 24-hour period. The NYISO chose a 24-hour commitment optimization to strike a balance between the minimum period to insure reliable operation while allowing the market to have the maximum flexibility for all participants. A 24-hour commitment objective provides the needed balance while not over-extending the ISO's role of facilitating the market.

3.1.4 Hour-Ahead Operation

Balancing Market Evaluation (BME) is the tool used by the NYISO dispatchers to evaluate proposed schedule modifications and additional bids submitted by the market 9075 minutes in advance of the hour in question.

Logic, identical to that used in the SCUC, is employed to facilitate the hour-ahead or BME process.

A version of the SCUC was created for the "Balancing Market Evaluation" (BME) process. The following BME features differentiate BME from SCUC:

- 3-hour optimization, instead of 24 hours
- load forecast updated for current conditions
- network configuration that reflects current conditions

The BME allows the NYISO dispatchers to re-confirm the security of the grid in the face of numerous proposed schedule changes desired by the market on the hour or for events that have occurred since the day-ahead unit commitment.

Excluding the commitment of new resources, the results of the BME are advisory: they do not result in forward contracts to sell or buy energy. If the BME process requires the commitment of resources that were not committed in the day-ahead unit commitment, then minimum run and startup guarantees are given to the new units. The BME is designed to help assure that there are sufficient resources to operate the system in real-time.

In the event that system disturbances occur, or significant outages occur in-hour, the NYISO dispatchers have a Supplemental Resource Evaluation commitment process available to make corrections that cannot wait until the next BME period.

3.1.5 Real-Time Operation

The core of the real-time operation is the Security Constrained Dispatch (SCD). The additional processes and settlements mentioned above assure that SCD will have sufficient dispatchable resources to adjust the system, automatically, in the face of system constraints without the need to apply excessive human intervention and judgment.

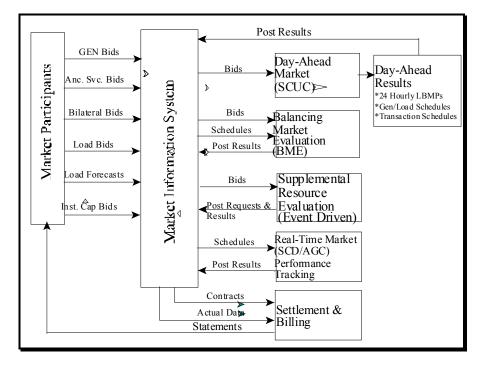
Parameters extracted from the SCD results are used to calculate LBMPs for the real-time markets. Market Participants will make settlements with the ISO for differences between real-time operation and that scheduled day-ahead at the real-time prices.

3.2 Market and Settlement Processes

Exhibit 3.2 presents an overview of the day-ahead, the hour-ahead, and the real-time markets and settlements.

Exhibit 3.2:

Market and Settlement Process

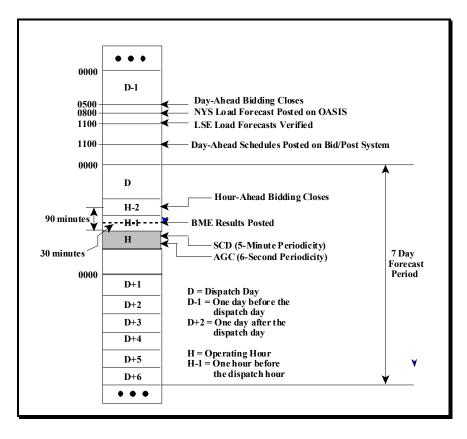


The market process consists of the following major elements:

- Market Information System (MIS)
- Day-Ahead Market (DAM)
- Hour-Ahead Market (HAM)/Balancing Market Evaluation (BME)
- Supplemental Resource Evaluation (SRE)
- Real-Time Market (RTM)
- Settlement and Billing

Exhibit 3.3 shows a time line of events for market operation.

Exhibit 3.3: Market Time Line



Energy and other related services are offered through a competitive bidding process that is administered and facilitated by the NYISO. Although bids can be entered at any time up to 15 days in advance, the day-ahead and hour-ahead markets have specific closing times.

Exhibit 3.4 lists when and how various forms of energy are bid into the market.

	Energy	Reserve	Regulation	Comments
Day-Ahead	Day-Ahead Bids	Day-Ahead Bids	Day-Ahead Bids	Day-ahead bids that are honored in the commitment process include start-up times. When selected, day- ahead unit hourly schedules are copied to the proper hours of the hour-ahead market tables and become "Must Run" in BME.
Supplemental Resource Evaluation (SRE)	Uncommitted Day-Ahead Bids	Uncommitted Day-Ahead Bids	Uncommitted Day-Ahead Bids	For the given period, bids are selected from those unselected day-ahead bids that have not expired. Bids may be entered or modified after market closes. Start-up times are honored.
Hour-Ahead Market (BME)	Hour-Ahead Bids			By bidding into this market, units have agreed that they will start with 30-minute notice if selected. Start-up times are not considered.
Supplemental Resource Evaluation (SRE)	Uncommitted Hour-Ahead Bids	Uncommitted Hour-Ahead Bids	Uncommitted Hour-Ahead Bids	For the current hour, bids are selected from unselected hour-ahead bids. All hour- ahead bids are valid from market close through the schedule hour. Start-up times up to 30 minutes are honored.

Exhibit 3.4: Bid Sources by Market

3.2.1 Market Information System (MIS)

The Market Information System is the scheduling interface between a Market Participant and the NYISO. It allows each Market Participant to enter, view, modify and change bids for:

- Day-Ahead Generation
- Day-Ahead Load
- Day-Ahead Hourly Load Forecast
- Day-Ahead Bilateral Transactions
- Hour-Ahead Generation
- Hour-Ahead Bilateral Transactions

The MIS is also a means for tracking market activities; e.g., to verify if schedules have been accepted after a market settles or to view public information such as LBMPs, ATCs, and other OASIS information. The MIS is used to implement OASIS requirements.

There are two methods for interacting with the MIS:

- 1. One method is based on using a Web browser as a means for interacting with the MIS server. The browser is used by the Market Participant to enter information and to view information posted by the NYISO. The procedures for these interactions are described in Section 6.
- 2. The second method is a batch process, where the Market Participant prepares all the data in a text, Comma Separated Value (CSV) file format, as explained in Section 7. This file is sent to the MIS server using a Web Browser (or a functionally equivalent program). Market Participants can also request the results of their queries in the same file format, using the same process for downloading to a local computer.

When submitting bids, in general, bid data is examined for the following items:

- format validity;
- ownership and permission;
- completeness; and
- consistency

Having passed all of these, it is inserted into the MIS database and checked against other business rules. If no violations are detected in this process, the bid status is set to "Validation Passed". Otherwise, it is posted as "Validation Failed", and a message explaining the failure is provided.

Market Closing Time Bids must be submitted by the market closing time. Any bid submitted after the market closing time will not be considered a valid bid. Bids can be submitted up to 15 days ahead of time.

After the market closes, bids are evaluated and the results are posted to the MIS according to the time-line shown on Exhibit 3.3. Market Participants must check the MIS periodically to retrieve the status of their bids.

Day-Ahead Generation Bids

Once the day-ahead market has closed, the valid bids are first posted as "Evaluating". The MIS builds a file of these bids and submits it to the Security Constrained Unit Commitment (SCUC) function. After SCUC runs, the generation schedule file is returned and MIS reviews the unit commitment results. If the unit was not committed, the posted bid status is changed to "Rejected". If it was accepted, the posted bid status is changed to "Accepted" and LBMP are posted.

Day-Ahead Load Bids

All Direct Customers who are LSEs are required to submit a set of hourly load forecasts for the next day. In addition, they will either submit or confirm bilateral transactions to help cover their load and will also indicate a desire to purchase some fraction of their load from the first settlement market. Load forecasts and load bids are assembled by zone for use by the SCUC process. Once the SCUC has finished, the first settlement contracted load information, including zonal LBMPs, is posted.

Day-Ahead Transaction Bids

There is an additional step in the validation process for bilateral transactions. Bilateral Transactions must be confirmed by both the buyer and seller. If the supplier posts the transaction, the buyer must confirm, and vice versa. Transactions that have not been confirmed by all parties at market close are not considered valid. Those transactions that

pass are posted as "Evaluating."

Next, non-firm transaction requests are separated and sent to the transaction selector. Firm transactions are converted to equivalent generation and load in order to allow SCUC to consider them. When the results of SCUC and transaction selector are posted back, the post-UC process matches committed generation for all transactions served by external units. Transactions served by internal units are matched with load schedules if price cap supplied, or else they are accepted. Non-firm advisory approvals/rejections are also posted at this point.

Finally, external transactions are confirmed with the affected external control area(s) affected. The day-ahead bid will be marked accepted and the agreed upon amount (which could be 0) will be posted into the hour-ahead bid.

Hour-Ahead Generation Bids

As with the day-ahead process, as soon as the hour-ahead market closes, all validated hour-ahead bids are posted as "Evaluating." Once the balancing market evaluation process has finished, the generation schedules are returned to the MIS. If the generation was scheduled, the bid status is changed to "Accepted" and the schedule is posted. If not, it is posted as "Rejected."

Hour-Ahead Transaction Bids

Upon hour-ahead market closing, all validated and confirmed hour-ahead transaction requests are posted as "Evaluating". All non-firm transactions, including those advisory accepted and advisory rejected in DAM, are separated and passed to the Non-Firm Transaction Evaluator. The firm transactions are converted to equivalent generation and load and passed to the BME process.

The results of BME are returned to the MIS where they are matched against the transaction requests to determine which have been scheduled, in the same fashion as DAM. The results are posted accordingly. Non-firm transactions are considered at this point. Non-firm transactions approved in HAM will be marked as either "Advisory Accepted/Rejected;" i.e., scheduled or rejected.

OASIS

OASIS data includes the public Market Information System data. The information is available on web display pages and may be downloaded by the user. Section 5 describes the steps to access these display pages and to download this data.

The following information is posted on the MIS and available to all NYISO Eligible Customers and users authorized to review such information. None of the data presented here is considered confidential to any specific Direct Customer.

- 1. Primary TCC Holder. This includes the amount of MWs purchased, source location, sink locations, owners' name, and owner contact information. TCCs can be sold on a secondary market where market participants contact the primary TCC holders directly.
- 2. Retained Transmission Rights. Includes the same type of information as primary TCC holder information.
- 3. Transmission Service Charges (TSC) Posting of a district-based TSC for each transmission owner.
- 4. ISO-Approved Transmission Outage Schedules.

	5. Listing of long term planning studies available from the ISO.
	6. Transmission provider personnel transfers between transmission and marketing functions.
	7. Standards of conduct for the transmission providers.
	8. Day-ahead, and real-time LBMPs, marginal cost of losses, and marginal cost of congestion.
	9. Day-ahead ancillary service clearing prices.
	10. ISO load forecast used in the day-ahead commitment process.
	The above information is to be posted using static HTML files referenced from an index page on the MIS Home Page.
ATC and TTC Postings	Available Transfer Capability (ATC) and Total Transfer Capability (TTC) are posted for each operating interface. Each interface has a value for the day-ahead market (DAM) and the hour-ahead market (HAM). There are several ATC and TTC values posted. ATC, without non-firms, shows the remaining transaction capacity of the interface prior to scheduling any non-firm transactions. ATC, with non-firms, represents the remaining transmission capacity once all the non-firm transactions that can be scheduled have been scheduled.

The following table is an example of the information that will be posted and downloadable through the MIS:

		DAM			HAM	
Time	TTC	ATC w/o Non-Firms	ATC w/ Non-Firms	TTC	ATC w/o Non-Firms	ATC w/ Non-Firms
0:00	378	25		412		0
"	**	"		**		"
23:00	412	170		412		20

Interface: WEST-CENTRAL Date: 03/25/1998

Important Notes

There are several important characteristics of this approach.

- The interfaces to be posted are the operating interfaces of the NYISO, not point to point values used in the previous OASIS system.
- The calculation of ATC without non-firm transactions relies on a centralized dispatch program that accounts for the effect of both LBMP market bids and transaction bids on the system.
- ATC with non-firms picks up where the solution left off and evaluates the impact of each additional transaction on the operating interfaces.
- Components in the current ATC calculation such as own load or reserve for own use are not available because of the centralized system dispatch that includes these quantities along with the transactions.

3.2.2 Day-Ahead Market (DAM)

The decision regarding which generation bid to accept and which bilateral transaction to schedule is performed by the Security-Constrained Unit Commitment (SCUC). Dayahead outages are assembled along with the preliminary zonal load forecast as major inputs to SCUC. SCUC then uses these inputs along with the generation bids, LSE and NYISO load forecasts, LSE load bids, and requests for firm external transactions to perform the unit commitment process.

After the unit commitment has been performed, the transactions are then processed against the committed generators in order to evaluate which external transactions have been approved. At this time, non-firm transaction requests are also considered. Results of the day-ahead process are posted on the MIS for subsequent viewing by Market Participants.

Assemble Day-Ahead Transmission Outages

The transmission system outages scheduled for the next day are extracted from the operations planning database. This database is prepared in the weeks and days ahead of this time by the Outage Coordinator in conjunction with the Transmission Provider Outage Coordinators.

The NYISO Outage Coordinator assures that the pattern of planned outages for a given period does not represent an unnecessary risk to the secure operation of the electric system. The outages scheduled for the next day are extracted from the database and are used to update limits for the SCUC model, and the Total Transfer Capability (TTC's) for posting on the MIS.

Produce ISO Preliminary Zonal Load Forecast

Weather forecast information grouped by zone is input into a neural network forecaster tool to produce a preliminary zonal load forecast for each hour of the following day. The tool makes use of historical load and weather patterns. The results are combined with LSE-furnished load forecasts to produce the composite forecast for use by the unit commitment.

Security Constrained Unit Commitment Process

A Transmission Constraint Group (TCG) file is assembled from load bids, load forecasts, and Total Transfer Capability (TTC) values and forms a major input to the SCUC process. The SCUC model, updated for transmission outages, and the generator bids are the other major inputs to the process. SCUC produces a list of committed generators, their first settlement schedules and LBMPs for all forward contracts generated by the day-ahead market.

In the TCG file, the required SCUC inputs are organized by groups—taking into account the location of load and resources—with respect to transmission constraints. The first step in the process is to assemble the preliminary zonal load forecast produced by the Zonal Load Forecast program along with the forecasts provided by LSEs, grouped by zone. The two forecasts are used together to obtain a composite forecast for use by the unit commitment program.

Then the loads, the LSE load bids, the TTCs and the Firm Transaction Export requests are combined with the reserve and regulation requirements to form two separate sets of TCGs. One set represents the first settlement bid load and the other represents the entire forecast load. These are used respectively in the two steps of SCUC.

SCUC Sequential Run, First Settlement

There are actually two separate executions of SCUC that are performed sequentially. The first run (Commit to Bid Load + Firm Transactions) uses as its input a Transmission Constraint Group (TCG) file that reflects only that portion of the load represented by firm transactions and by LSE day-ahead market commitments. The load for dispatch includes export transactions. Reserve requirements are also factored into the requirements as well. The total load used in this first step is referred to as the "First Settlement Load". Consequently, the set of generators committed to meet this load is termed "Gen. Set 1".

The second execution of SCUC considers the entire forecast load plus exports. As generating resources, it first considers all "Gen. Set 1" units as "must run". It then considers any additional units it must commit to meet the additional load, choosing them based not on their original energy bids but on their reserve availability bids. The results of this commitment are labeled "Gen. Set 2".

Finally, the generators in Gen. Set 2 are dispatched to the first settlement load level in each hour of the next day. Results of the dispatch are used to produce the day-ahead LBMPs and schedules for the first settlement forward contracts.

SCUC Activity Detail

SCUC does an initial unit commitment that is designed to meet the required load while minimizing total cost but without regard for security constraints. This initial guess at the commitment is then used to produce a set of 24 base-case load flows, one for each hour, using the system model.

For each hourly load flow, the entire set of contingencies to be considered is checked for violations. The constraints derived from this process are then used as constraints in another invocation of the linear programming engine to modify the solution to solve for these violations. The process is repeated until no new violations are created, or a user defined maximum iteration count is reached.

Evaluate Transactions

During the commitment process, all external firm imports are treated as generators and all firm exports are treated as load. Once the commitment has finished, the results of the commitment are re-matched with the original transactions. To the extent they match the results of SCUC, the transaction is considered approved (subject to confirmation with the external control area involved). All internal firm transactions are automatically approved since they are financial and do not directly affect dispatch.

Non-firm transactions are then evaluated. If it is determined that a non-firm transaction will either not encounter congestion or that it is in a direction opposite to a constraint, it is then checked against available transfer capability. The order in which non-firm transactions are selected for consideration is based on the NERC Priority guidelines and thence on a first-come, first-served basis.

3.2.3 Hour-Ahead Market (HAM)

The Hour-Ahead Market is used to (1) evaluate generation and transaction bids submitted for consideration in the HAM time window and (2) keep track of current transaction schedules. The hour-ahead market is closed 9075 minutes before the start of the actual dispatch hour and results are posted 30 minutes before the hour.

Hour-Ahead Scheduling

The Hour-Ahead Market evaluates bids for generation and the transactions specified for HAM. These bids will include any unused bids from the DAM that were bid as both HAM and DAM.

HAM evaluation utilizes the Balancing Market Evaluation (BME) tool. BME makes use of the SCUC software but is adjusted to only consider a three-hour window starting with the next hour. In addition to evaluating last minute submissions to the market, it also allows NYISO operators to evaluate the effect of any unplanned events that have occurred since the HAM posting.

To evaluate conditions properly, it is necessary to provide an updated zonal load forecast reflecting actual conditions and an updated transmission system model reflecting the current actual topology of the system. At this time, an updated advisory report of the likely status of non-firm transactions is also performed.

3.2.4 Supplemental Resource Evaluation (SRE)

Supplemental commitments for energy and/or ancillary services may be required at any point after the day-ahead unit commitment process has completed. The need would most generally arise due either to the unexpected withdrawal of a unit from service or to an unexpected change in either the load or the transmission topology.

Various events can trigger this process. If it is the sudden loss of generation or transmission in real-time, emergency procedures may also need to be invoked by the NYISO to respond to immediate conditions.

Exhibit 3.3, in an earlier section, shows when the NYISO selects supplemental energy.

3.2.5 Real-Time Dispatch

For real-time dispatch, all NYCA generators are dispatched by Security Constrained Dispatch (SCD) to satisfy all NYCA loads and exports. The MIS supplies bid curve data and decremental bid data to the SCD. The results of SCD are individual generator desired outputs and the bus LBMPs for generators and the zonal LBMPs for loads. Generators are scheduled every 5 minutes by SCD and controlled every 6 seconds by Automatic Generation Control (AGC).

3.2.6 Settlement and Billing

All energy bids are settled, based on the Locational Based Marginal Prices (LBMPs) at the location of the generators (by bus) and the loads (by zone). LBMPs are calculated as a part of the day-ahead scheduling process and during the real-time operation.

During each hour of operation, the results of SCD and AGC are captured and stored for later use by the billing subsystem. The NYISO has all the information necessary to determine all of the charges and payments that flow between the NYISO and the Market Participants.

3.3 Locational Based Marginal Price (LBMP)

The cornerstone of the NYISO Market Operation is LBMP. The principle of efficient economic operation suggests that, in the absence of any transmission losses and transmission constraints, the least costly way of producing electric energy is achieved when all generators supply energy at a MW level such that the price of one more MW of output is the same for all unconstrained units.

The price of producing this additional MW is called the marginal price. For the assumed conditions, the marginal price will be the same for all generators and loads. This ideal operating condition is known as "equal lambda" dispatch.

In real power networks, the presence of losses and network constraints on the flow of electricity requires a departure from this dispatch to satisfy the most efficient operation.

- **Transmission Losses** Transmission losses cause a small amount of generation to be dissipated (lost) along the transmission path(s) to the load. Efficient scheduling takes into account the effect that each generator has on transmission losses. There is a component of LBMP to account for the losses. If the losses were zero, this component would be zero as well.
- TransmissionIn some instances, generation scheduled according to the most efficient operation
criterion may cause one or more transmission lines or other transmission equipment to
carry more power than their rating allows. In these cases, more expensive units, those
that do not need to use the congested path, have to be scheduled to satisfy the loads. The
price to produce an extra MW of power on these units will be different from the price to
produce an extra MW elsewhere in the system. This congestion gives rise to another
component of LBMP called marginal cost of congestion.
- **Reference Bus LBMP** Since LBMPs are always defined with respect to a NYISO-selected reference bus, we will first explain how the LBMP of the reference bus is derived.

The LBMP for the reference bus is defined as the cost to supply a 1 MW load attached to the reference bus, while honoring all transmission constraints.

3.3.1 Components of LBMP

The reference bus LBMP establishes the marginal price for energy, which is the basic component of the LBMP at all the other buses in the system. Each LBMP bus has the following components:

• Marginal price for energy (usually positive)

What does LBMP

Mean?

- Marginal price for losses (positive or negative)
- Marginal price for congestion (positive or negative)

The LBMP is the price that the energy market:

- will pay a generator to inject power at that location, or
- will charge a load for the power withdrawn from a subzone. Note that one LBMP is used for an entire zone (including all its subzones).

Exhibit 3.5 summarizes the conditions that can result in positive and negative LBMP components for losses and congestion.

Exhibit 3.5: LBMP Components

LBMP	LBMP Components at	LBMP Components at any
Components	Reference Bus	Bus
Marginal	Reference Bus	Equal to LBMP at Reference
Energy Price	LBMP	Bus; Positive
Marginal Loss Price	0	Positive or Negative
Marginal Congestion Price	0	Positive or Negative

LBMP = (Marginal Energy) + (Marginal Losses) - Σ (Marginal Congestion)

Relative Price	Generators	Loads
LBMP Greater than	Encourages	Discourages
Ref Bus LBMP	Sales	Purchases
LBMP Less than	Discourages	Encourages
Ref Bus LBMP	Sales	Purchases

The marginal losses component of the LBMP at a bus is positive when a small increase in generation at the bus causes an overall decrease in transmission losses.

Conversely, the marginal losses component of the LBMP at a bus is negative when a small increase in generation at the bus causes an overall increase in transmission losses. The effect of generation on losses is measured in terms of delivery factors with respect to the reference bus.

Marginal Losses	The delivery factor is defined for a source of power and it equals the amount of power
Component	that could be delivered to a load at the reference bus if generation at the source is
1	increased by 1 MW. When losses decrease, as a result of this specific power transfer, the
	delivery factor is greater than 1.0. When losses increase, as a result, the delivery factor is
	less than 1.0.

The marginal congestion component of the LBMP represents the combined effect of all the flow constraints in the NYCA. Congestion exists when a flow is either violating its limit or the flow is being held at its limit. Conceptually, to relieve an overload or to hold flow at its limit, we should attempt the following:

- Increase generation on the receiving side of the flow
- Decrease generation on the sending side of the flow

Marginal Congestion Component The calculation of the marginal congestion component of the LBMP depends on the generators' effect on the constrained flow. This effect is called the generation shift factor (GF). Generator shift factors are applied to changes in area loads, external interchange schedules, and generation schedules. They are used to project the pre-contingency line flows used to analyze system security.

3.4 Risk Management

Market Participants of the NYISO electricity market have several ways to manage exposure to the volatility of the market.

If you are an LSE, you can:

- Enter into a firm or a non-firm bilateral contract. The non-firm contract simply says that you will take power through the contract, only if doing so will not cause you to pay congestion charges.
- Lock the price for all or a portion of energy in the day-ahead market, where it is expected that the volatility should be smaller than in the spot market.
- Enter the price cap above which you do not wish to accept energy.
- Buy transmission congestion contracts (TCCs) to manage the cost of congestion.

If you are a Generator, you can:

- Provide ICAP
- Supply energy, reserve or regulation, or any mix of these (within the limits of actual plant capability).
- Bid power into the day-ahead market, the hour-ahead market, the supplemental market, or you can provide power through a firm or a non-firm bilateral contract (subject to a conclusion of a private contract for the bilateral transaction).
- Satisfy your bilateral contract obligations entirely from your generation by specifying appropriate price bid. Or, if you find it more economical, you can supply a part from the market and a part from your plant, with each portion determined automatically by the NYISO—based on your price bid.

[*This blank page intentionally inserted.*]

4.0 NYISO Customer Relations Services

4.1 Introduction

The primary point-of-contact for information about the NYISO is the NYISO Customer Relations Department. Customer Relations provides the following services to all interested parties:

- Provides copies of the NYISO documents such as the NYISO Agreement, the NYISO Tariffs, the NYISO Manuals, Application Forms, and Service Agreements.
- Assists applicants in meeting the requirements for obtaining service under the NYISO Tariffs.
- Explains the type of data that must be submitted with applications.
- Clarifies procedures and requirements defined in the NYISO documents.
- Explains bidding procedures.
- Defines which control center, communications and metering requirements apply.
- Answers questions related to billing and accounting charges, payments, and penalties.
- Conducts initial and on-going training for Market Participants.

Contacting NYISO Customer Relations

The Customer Relations Help Desk is available to address routine business inquiries from 7:00 a.m. until 7:00 p.m., Monday through Friday. The Help Desk e-mail address is: <u>marketrelations@nyiso.com</u>, and the telephone number is 518-356-6060. The fax number is 518-356-6146.

The Help Desk telephone will be answered 24-hours-a-day to address urgent issues, such as problems with access to the Market Information System. In the event that system conditions preclude NYISO staff immediately answering this telephone line, the caller can either leave a message or try again within a few minutes.

US Mail and Express Package Delivery:

NYISO Customer Relations 5172 Western Turnpike Altamont, NY 12009

Specific Issues Support

Real-Time Curtailments Customers currently receive e-mail notification of transactions that have been curtailed in real time by the Interchange Scheduler Plus (IS+). These notifications provide the reason for the curtailment. More detailed information about real-time interface conditions is posted on the NYISO website at: http://mis.nyiso.com/public/htm/OperMessages/CurrentOperMessages.htm#disp.

Urgently needed clarification about real-time curtailments is available from the Operations Department 24-hours-a-day at 518-356-7540. <u>This telephone number is for real-time curtailment inquiries only</u>; other requests will be directed to the Customer Relations Help Desk.

The real-time curtailment telephone line will be answered unless system conditions are such that all operators are otherwise engaged. In that event, the telephone line will be answered with a message that no operators are available. The caller can either try again within a few minutes or call the Customer Relations Help Desk line.

Generating Unit
BasepointsThe New York ISO Operations Department is available to talk directly to Generator
operators if there is an urgent issue with basepoints that cannot be resolved through the
Transmission Owner. The telephone number for basepoint-related issues is 518-356-
6028. All other types of questions will be directed to the Customer Relations Help Desk
line. This basepoint telephone number will be answered 24 hours a day, unless system
conditions are such that all operators are otherwise engaged.

Section 4 Organization

This section starts with an introduction of key terms such as MIS, administrator and user. It continues with a discussion of the NYISO Web site and the requirements for accessing the MIS, updating physical parameters of generators, and changing administrators. The section is organized as follows:

- Section 4.2 Key Terms
- Section 4.3 Overview of NYISO Web site
- Section 4.4 Digital Certificates
- Section 4.5 Update of Generator Physical Parameters
- Section 4.6 Changing Market Participant Administrators

4.2 Key Terms

	The NYISO makes an important distinction between administrators and users. Administrators manage the operation of the Market Information System (MIS). The MIS is the portion of the OASIS that is restricted to authorized customers who comply with registration requirements. "Users" is a generic term that refers the actual people or departments in an organization who actually access the MIS for some end-use purpose, such as:
	 Submitting bids Changing bids Scheduling transmission Viewing and interpreting bid results Viewing and interpreting public data Administrators and users are assigned certain privileges. These permissions determine what a
	particular administrator or user can or cannot do when accessing the MIS. There are three categories of administrators/users:
Definition: ISO Administrator	 ISO Administrator is the term given to personnel in the NYISO who control the accounts and permissions for all Eligible Customer and Guest organizations. The ISO Administrator defines the total set of generators and load serving entities (LSEs) that each Eligible Customer & Guest organization can access when establishing Eligible Customer & Guest accounts.
Definition: Market Participant Administrator	2. <i>Market Participant Administrator</i> is the term given to the entity, group, or persons who are responsible for overseeing the MIS interface to the NYISO in a particular organization. The Market Participant Administrator authorizes the personnel (the users) who use the MIS for that organization, and determines what data can be shared with other Market Participant Administrators.
	% The Market Participant Administrator ensures that user information is accurately maintained.
	% Market Participant Administrators are registered with the NYISO. They may be generators, LSEs, or agents charged with administrative responsibility for one or more generators and/or LSEs.
	% The assignments and permissions that Market Participant Administrators make are largely invisible to the ISO Administrator.
Definition: Market Participant User	3. <i>Market Participant User</i> is the term given to an Eligible Customer who is authorized, through its respective Market Participant Administrator, to submit and/or modify bids through the MIS. Each Market Participant User's interaction with the MIS is limited to the set of generators, loads, and user permissions defined by the Market Participant Administrator. A Market Participant User may also be a Guest, which limits access to view-only privileges with the MIS.

4.3 Overview of NYISO Web Site

The NYISO maintains a Web site at the following Web site location: http://www.nyiso.com/

This calls up the NYISO Home Page shown in Exhibit 4.1.



4150	ABOUT NYISO 🗄 LINKS 🗄 SEARCH 🗄 CAREERS 🗄 CONTACT US 🗄 SITE MAP
New York Independent System Operator	
NEWSROOM III SERVICES III	tion of Power Markets
	Demand Response Programs Information and Registration Material for the Emergency Demand Response and Day-Ahead Demand Response Programs. More Details
NYISO Annual Report for year 2000 <u>More Details</u>	Independent Market Monitor Report - Independent Market Monitor Pronounces NYS Electricity Markets Competitive, but Emphasizes Need for More Generation <u>More Details</u> <u>New York Market Advisor Annual Beport</u> on The New York Electric Markets for Calendar Year 2000

The Home Page is divided into four sections. Sensitive selection areas link the user to an array of topics.

- 1. *Newsroom* carries the latest information related to additions/changes to the NYISO Web site, press releases, a calendar of the NYISO meetings and events, and the Daily Energy and Weekly Pricing Reports.
- 2. *Services* provides links to the NYISO Planning Department's publications and other important NYISO documents. It also provides access to NYISO training course literature, the NYISO Customer Relations Department, NYISO committees and working groups, and the NYS Reliability Council.
- 3. **OASIS** provides an entry point to the public OASIS data, secure access to bid and schedule on the Market Information System (MIS), temporary emergency procedures, MIS instructions and other system operations information. The user must be properly registered with the NYISO and obtain a Digital Certificate to login and access the MIS displays. We discuss more about Digital Certificates in Section 4.4.
- 4. *The Markets* provides access to public OASIS data: documents explaining the TCC Auction and Installed Capacity (ICAP); information about market monitoring; and billing and accounting customer statements. The user must be properly registered with the NYISO and obtain a Digital Certificate to access billing and accounting information. This link also contains NYCA Information and the Market Data Toolbox.

The user may select the menu page for each section listed on the Home Page by clicking on

the section name or the picture area below the section name. The user may also jump directly to a particular topic by selecting a topic name above any section name.

4.4 Digital Certificates

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 Market Information System (MIS) and the Customer Statements Server (CSS). This will provide a secure connection between the NYISO's computer system and the Market Participant's computer system.

Each Market Participant must determine and establish a digital certificate user policy for its organization. The three primary issues for considering and establishing a digital certificate user policy should be security, logging-in, and reliability. For example, if a common certificate is used within a Market Participants' organization, system use by individuals cannot be monitored. In addition, ALL users within the organization would be denied access if the certificate becomes unusable. The Main, MIS Administrator, and Billing contacts within each organization should review their specific needs and develop specific policies that will best meet their organization's needs.

Individual users within a Market Participants' organization may apply for an individual certificate. The certificate will be approved if the individual is listed in the NYISO's customer database. Individuals not in the customer database must submit a written request by e-mail or fax to the NYISO by their organization's Main, MIS Administrator, or Billing contact requesting approval of the certificate. This request must specifically designate the level of access sought for the individual user.

If a common certificate will be used, the Market Participant's Main, MIS Administrator, or Billing contact must notify the NYISO's Certificate Administrator by e-mail or fax with a request for approval of the certificate enrollment/application. No certificate will be approved by the NYISO without proper authorization. The NYISO will contact the appropriate person within the Market Participant's organization to resolve any questions that may arise concerning the enrollment/application. Please note that Digital Certificates *are not* required to access public data in OASIS.

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

4.4.1 Applying for a Certificate

Please be aware of the compatibility issues listed below when (1) applying for a Digital Certificate, (2) exporting that Certificate to another computer, or (3) connecting with a browser to the NYISO MIS or CSS.

1. Direct Installation

A Digital Certificate must be installed on the same computer and browser that will be used to access the MIS or CSS. If using both Netscape AND Microsoft browsers, please inform us! This is done by leaving a note in the "comments" box of the application web page that is referred to below, in the instructions for obtaining a Digital Certificate. In the "comments" box, please state which browser is used for that particular Certificate.

Certificates granted by the NYISO will be specific to the Internet browser version indicated by the Market Participant when the enrollment/application is made. For example, a Netscape certificate granted by the NYISO will work only in the version of Netscape indicated in the applicant's enrollment form. The same limitation will apply to an Internet Explorer-based certificate. If the applicant performs an Internet browser upgrade after submission of an enrollment/application form but prior to the NYISO's approval for a certificate, the certificate will be rejected during installation. In addition, please verify that only ONE version of an Internet browser is installed on the computer. The presence of multiple versions of the same browser on a computer will result in the rejection of the certificate during installation and will require that the enrollment process be repeated. Market Participants should not apply/enroll for

a digital certificate through a browser that has been opened by another application; it may not work.

Certificates are valid for a period of one year from date of enrollment and must be renewed thereafter.

2. Export for Use on Another Computer Digital Certificates can be exported for use on another computer. The other browser Digital Certificate must be an equal or newer version of the same browser that the Digital Certificate was originally installed in. If needed, a Digital Certificate can also be revoked and then replaced rather than exporting/importing one.

3. Browser Recommendations For Microsoft Explorer users, the NYISO recommends version 5.01 or higher. For Netscape NYISO has not verified full functionality with all applications.] The NYISO also recommends that applications/enrollments be made for certificates with both browsers, even where the organization has standardized internally on a particular browser. In the event that the primary browser does not function, the other browser may be used and access to the NYISO servers may continue with a minimal interruption of service.

MIS Administrators will have MIS Users request their own Certificates. Likewise, Billing Contacts will have their Billing Users request their own Certificates. As a security check, only User names that are known to the NYISO Customer Relations Department will be approved. So, please let us know (via phone, fax, or e-mail) if you have Users that we might not have in our database, yet. Otherwise, we will have to contact you to verify and authenticate each Certificate application.

Phone: 518-356-6060 Fax: 518-356-6146 E-mail: cert@nyiso.com

Each User is limited to owning two concurrent Digital Certificates, which gives the option of using both Microsoft and Netscape browsers (since each Digital Certificate is good for only one brand of browser).

Obtaining a Digital Certificate

Certificates can be obtained by following the given set of instructions.

Step 1: Open the following web page from your computer, using the browser that you will install the new certificate in:

http://cert.nyiso.com

Step 2: Complete all required information in the form. Do not add any other information in these fields as this will result in the rejection of the enrollment/application. Use the "comment box" for additional information. Identify the browser and version number to be used. Identify the user's MIS Administrator. List any other relevant information, such as user function or a request that the NYISO certificate manager call for details, etc.

NOTE: Comments are optional. However, they can include (1) a time limit for this User, (2) the User function, (3) any relevant note to the certificate manager, such as a request to call for details.

Step 3: First time applicants who use Netscape will have the option of 'protecting' their certificate database file with a password in the enrollment/application process. Files that are already password protected due to the installation of a prior certificate will continue to require passwords. If a password is used, it will be required during the installation process and each time Netscape is restarted and a certificate is used. If a password is lost, the NYISO has NO

access to reset it. Reapplication for a certificate will be necessary after the browser software has been reinstalled to reinitialize the certificate database file.

NOTE: Up to this point, you should have entered data into all of the form fields. Errors will be rejected; meaning this process must be repeated. You will receive notification of any rejection along with an explanation.

- **Step 4:** An e-mail notice to the applicant will confirm the NYISO's receipt of a request for a digital certificate. This confirmation will contain a numeric code to identify the certificate request. Approval or rejection will occur within two business days.
- **Step 5:** After approval, an e-mail notice to the applicant will provide the URL address where certificates may be downloaded and installed.
- **Step 6:** If rejected, an e-mail notice will also be sent. Contact the Certificate Administrator. Rejection is usually due to enrollment form errors.

Installation

- Step 1: When an e-mail approving a certificate is received, logon to the same computer using the same logon and browser that was used in the application for the certificate. Copy the link contained in the e-mail notification into the browser. If an error message is received at this point, contact the Computer System Administrator to ensure access to port 443 (SSL) through the proxy server/firewall/router.
- Step 2: Follow the instructions on the web page for installation of the certificate.

Step 3 - NETSCAPE: Netscape will prompt for a password to protect access to the digital certificate database. If the option to password protect the certificate was used in the enrollment process or the certificate database file is already password protected, it is required here. Leave the password entry blank if password protection is not required or desired. The certificate may also be named. Choose a meaningful name that will identify the characteristics of your certificate: for example, NYISO-Cert.plz

When using the certificate for the first time, users will be prompted through several Wizard screens. Respond accordingly. There will be a prompt to install a new Root CA. Make the appropriate selections to allow Netscape to perform this function. The opportunity will also be presented to 'accept' this certificate 'forever' or limit the duration to a time frame specified by the user. Place check in box to 'Accept Forever'. By default, the certificate will expire one year from date of enrollment.

Step 3 – Internet
Explorer:MS-IE will display a dialog box prompting the user to install a new Root CA. Make the
appropriate selections to allow MS-IE to carry out the installation.

Step 4: Please make a back-up copy of the certificate that can be used in the event the browser software must be removed and re-installed. Details for Netscape and MS-IE will be detailed in the next section.

4.4.2 Validation, Export/Import

After completing the installation procedure, verify that the certificate is installed and valid. Also, if access is denied at a later date, it will be possible to verify that the certificate is still valid. A back-up copy of the certificate may also be saved to the removable storage of choice. This will allow the importation of the certificate back into the browser (or another computer with the same (or higher version) browser if the browser software must be reinstalled or another computer must be used. To find out if a valid Digital Certificate is installed in a browser, follow the guides below for the particular brand of browser.

For MS- Internet Explorer v5.01 Browser

Open and select: Tools>Internet Options>Content>Certificates.

- Step 2 Appearing under the 'Personal' heading will be the certificates installed. If this area is blank, then no certificates are installed or the Windows registry is corrupted and the browser software must be reinstalled. [Note: Some errors may be repaired using the Repair Explorer feature of MS-IE. Contact the appropriate IT staff for guidance.]
- Step 3 Select the NYISO certificate and 'View' it. Select 'Certification Path' to determine if the certificate is 'OK'.
- Step 4 Close the 'View' window and return to the 'Certificates' window. Three "select" buttons will appear Export, Import, and Remove. To create a back-up copy, select 'Export' and place a check in box to 'export WITH private key'. In the event that the browser software must be removed and re-installed, return to this menu and 'Import' the certificate. Follow the directions given.

For Netscape Navigator v 4.0 Browser:

- Step 1
 Open and press Ctrl+Shift+i simultaneously. This opens the Netscape Security Information window.
- Step 2 Select 'Yours' to display certificates installed with the current User ID. If no certificates are listed, then the certificate was not installed properly and/or the certificate was removed from the database. Select the certificate and press the 'View' button, which will show details concerning the certificate.
- Step 3 To create a back-up copy of the certificate, select the appropriate certificate and select 'Export'. If password protection is in use, enter that password in the dialog box, otherwise leave that entry blank and press the 'Enter' key. Follow the remaining directions. To 'Import' that certificate back into the computer, return to this menu and select 'Import' and follow directions.

Possible Errors:

Step 1

1. PKCS7: Attempting to install certificate on incorrect browser, registry problems. Probable solution - repair or reinstallation of MS-IE; reinstallation of Netscape.

2. VBScript: Registry problems. Make sure the same (enrollment) browser is used. Probable solution - repair or reinstallation of MS-IE; reinstallation of Netscape.

3. Page not found (error 404): Verify that access to secure sites is allowed. NYISO site may not be available (not likely). Access to firewall/proxy/server/router is probable cause. Also, check for correct URL from approval e-mail.

4. Credentials incorrect: Verify logon account and browser are identical to those submitted in the application/enrollment process for the certificate. Could be corrupt/missing registry file (MS-IE) or corrupt certificate database file (Netscape).

Usage:

1. MIS Users: In addition to the certificate, the MIS Administrator must also set-up an MIS User account. The Administrator will provide an MIS User ID and password and set the bidding and scheduling authorization privileges.

2. Billing Users: A separate User ID is NOT required to access the CSS server and view the customer statements. However, the Market Participant's Main Billing Contact must notify the NYISO and request additions to the list of approved users that may access the customer statements. [Note: This access is linked to the e-mail address used in applying/enrolling for the certificate. Therefore, the NYISO must be notified of any changes in e-mail addresses.]

4.5 Update of Generator Physical Parameters

	Market Participant Administrators and Users do not have the ability to update a type of data labeled <i>Generators' Physical Parameters</i> through the Market Information System (MIS). Rather, the Market Participant must submit a parameter update request to Customer Relations. A form for requesting the parameter change will be posted on the NYISO Web site. The request will be implemented in ten business days or less, depending on the parameter. The generator physical parameters are identified in Section 7.3.2, <i>View Generator Detail</i> . The NYISO must perform these updates because the parameters are modeled in several software programs administered by different NYISO departments. By retaining control of the update process, the NYISO can ensure that all the programs process the data in an identical and accurate manner.
Parameters Requiring 3 Days Lead Time	The following parameters can be updated in three business days:
5 Days Lead Time	• Minimum generation (MW)
	• Energy, emergency, and regulation response rates (MW/Minute).
	• Maximum operating megawatt limits for winter or summer only if they are to be decreased
Parameters Requiring 10 Days Lead Time	The following can be updated in ten business days:
	• Maximum operating megawatt limits for winter or summer if they are to be increased (must submit documentation supporting the increase as a valid number)
	Installed capacity contracts for winter or summer
	AVR Qualified
	Unit VAR Capability Leading (MW/Mvar)
	Unit VAR Capability Lagging (MW/Mvar)
	Some generator parameters are updated in other ways.
	• The Penalty Factor parameter is updated through the Security Constrained Dispatch program.
	• The Power Factor parameter is supplied by Transmission Owners.
	If these generator parameters need to be updated, the new data must be supplied to NYISO Customer Relations by fax, e-mail, or regular mail.

4.6 Changing Market Participant Administrators

Market Participant Administrator names that are included in the registration packet may be activated through the MIS. When activated, they will be initially associated with the Generator/LSE facilities identified in the packet.

If a new Market Participant Administrator is added, then the following information described in Section F of the Registration Packet must be completed and sent to Customer Relations:

- Administrator's Name
- Title
- Address
- Primary Phone Number
- Secondary Phone Number
- Facsimile Number
- Pager Number
- E-mail Address

In addition, information in Section B of the Registration Packet, defining the role of the applicant, must also be completed and sent to Customer Relations.

When the application has been successfully processed, the NYISO will create the Market Participant Administrator in the MIS and set up that person with an account and Digital Certificate(s). This can take up to three (3) business days.

The Market Participant Administrator will be able to grant authorization over its organization and facilities to other new administrators as they become active in the system.

5.0 OASIS

5.1 Introduction

The OASIS Web site provides public data that is accessible through Web-based displays. Both hour-ahead and day-ahead LBMP data is made available at the end of the day, while real-time LBMP data is available after the hour. Other information is re-posted daily or as soon as possible after it changes.

In addition to viewing the data, the Market Participant User may also download data files corresponding to each Web site display for direct input to the user's computer. Most downloaded files are in Comma Separated Value (CSV) format. These files are also sometimes referred to as templates. Some files are downloaded using Acrobat Reader and subsequently may be either printed or displayed.

5.2 Viewing Data Through Displays

Access to OASIS public information begins through the *NYISO Home Page* (see Exhibit 4.1). Selecting "OASIS" brings up the following display.

□ NYISO OASIS Display (<u>http://www.nyiso.com/oasis/index.html</u>)

New York Independ	lent System Operate	or	ABOUT NYISO : L	(NKS : SEARCH	CAREERS : CONTACT US : SITE MAP
NEWSROOM III ECA Notices OASIS/MIS/CSS Changes Market Prices Advisory Prices Operational Information Zone Maps Bidding & Scheduling MIS Instructions	Syste P ECA P Notic U Balar U Zone U Deer	n Access Same m) <u>Notices</u> <u>e of Changes to DASIS/MI et Prices</u> hoing Market Advisory Infor <u>Maps</u> ng and Scheduling ational Information			Related Links ::: Movemboad Acrobat Reader
	Market Day Ahea Day Ahea Day Ahea Day Ahea Cona Day Cona Day A Day Ahea Day A Day A Day Ahea Day Ah	d Market LBMP <u>I</u> <u>irrator</u> e Market LBMP <u>I</u>			

The general steps for initiating the call-up of a display for viewing or downloading are as follows:

- Select the link to the display that you desire to call up. For example, on the OASIS page, choose the Day Ahead Market LBMP Zonal link.
- This typically causes one or more lists of available dates to appear in the window. The dated material can be available in one of three formats:

1. CSV files, 2. HTML files, 3. PDF files

iress 🛃 http://mis.nj	viso.com/public/P-2Alist.htm	1	•
	Day Ahead Ma	urket LBMP - Zon	al
CSV Files	HTML Files	PDF Files	Last Updated
04-12-2000	04-12-2000	04-12-2000	04/11/00 10:29
04-11-2000	04-11-2000	04-11-2000	04/10/00 09:40
04-10-2000	04-10-2000	04-10-2000	04/09/00 10:38
04-09-2000	04-09-2000	04-09-2000	04/08/00 09:48
04-08-2000	04-08-2000	04-08-2000	04/07/00 10:02
04-07-2000	04-07-2000	04-07-2000	04/06/00 09:49
04-06-2000	04-06-2000	04-06-2000	04/05/00 09:52

Lists of Data Available in Three Formats: CSV, HTML, and PDF

- Select the desired date in one of the three formats presented (CSV, HTML, or PDF files). This causes the chosen display to appear for the specified date.
- In a few cases, selecting the link goes directly to the desired information.

A unique identifier (or page reference) is shown on the upper left-hand corner of each link's display page. For example:

- P-2A is the Day Ahead Market LBMP Zonal display
- P-7 is the ISO Load Forecast display

Lunique Identifier (Page Reference) Shown on Display Page

			Da	iy A	hea	d M	ark	et Z	ona	I LE	BMP	•					_						
	LBMP	\$				Margii	nal Co	st of I	.osses					Ma	arginal	l Cost	ofCo	ngesti	ion				
Zonal Pr	ices																			Date	e: 04/	11/20	00
Name Ptid	00:00 01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:0
ruu																							
CAPITL 61757	24.75 18.58 0.73 0.55 0.00 0.00	0.54	18.16 0.54 0.00	0.54	28.58 0.84 0.00	37.00 1.09 0.00	34.53 1.02 0.00	37.00 1.09 0.00	37.26 1.10 0.00	38.64 1.14 0.00	37.26 1.10 0.00	38.11 1.12 0.00	37.23 1.10 0.00	37.08 1.09 0.00	37.23 1.10 0.00	37.00 1.09 0.00	35.59 1.05 0.00	35.54 1.05 0.00	37.00 1.09 0.00	37.17 1.10 0.00	37.08 1.09 0.00	32.47 0.96 0.00	0.7

The remainder of this Section 5 presents the individual public displays whose data may be viewed through Web displays and downloaded.

- Each section starts with a picture of the display.
- Important notes about the display follow.
- Finally, data definitions in the download (CSV) format are presented.

5.3 Market Prices

On the OASIS page, under "Market Prices," the following categories of information may be accessed:

- Day Ahead Market Zonal LBMP Data
- Day Ahead Market Generator LBMP Data
- Real Time Market Zonal LBMP Data
- Real Time Market Generator LBMP Data
- Ancillary Service Prices—Day Ahead Market
- Ancillary Service Prices—Hour Ahead Market

5.3.1 Day Ahead Market Zonal LBMP Data

The LBMP data for the day-ahead market organized by Load Zone for the selected date may be viewed on the following display. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction. The file is viewable in all three formats. We will show each one so you can see the differences.

Day-Ahead Market Zonal LBMP (P-2A)

			Da	y A	hea	d M	ark	et Z	ona	I LE	BMP	•					_						
Zonal Pri	LBMP	\$,	Margii	nal Co	ost of I	.055C5					Mi	argina	l Cost	of Co	ngesti	on	Der		11/20	00
Name	00:00 01:00) 02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00				
Ptid																							
Ptid CAPITL 61757	24.75 18.58 0.73 0.55 0.00 0.00	5 0.54	0.54	18.16 0.54 0.00	28.58 0.84 0.00	37.00 1.09 0.00	34.53 1.02 0.00	37.00 1.09 0.00	37.26 1.10 0.00	38.64 1.14 0.00	37.26 1.10 0.00	38.11 1.12 0.00	37.23 1.10 0.00	37.08 1.09 0.00	37.23 1.10 0.00	37.00 1.09 0.00	35.59 1.05 0.00	35.54 1.05 0.00	37.00 1.09 0.00	1.10	37.08 1.09 0.00	32.47 0.96 0.00	26.6 0.7 0.0

This is a scrollable display providing three sets of information for each of the 15 Load Zones for each hour of the selected day posted at approximately 11AM:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

The HTML display appears the same as the PDF display.

Note: All posting times are current as of the date of publication of this manual.

Download Format

The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","Name","PTID","LBMP (\$/MWHr)","Marginal Cost Losses (\$/MWHr)","Marginal Cost Congestion (\$/MWHr)"

5.3.2 Day Ahead Market Generator LBMP Data

The LBMP data for the day-ahead market organized by Generator for the selected date may be viewed on the following display. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction.

Day-Ahead Market Generator LBMP (P-2B)

							Day	Ahea	d Ma	rket	Gene	rator	LBM	Р										
		1	LBMP	\$		Ma	irginal	l Cost	of Loss	es		-	- Marş	çinal C	ost of (ongest	tion							
Generator Prices																						Date:	06/07.	/200
Name PTID			02:00 EDT			05:00 EDT		07:00 EDT	08:00 EDT	09:00 EDT	10:00 EDT	11:00 EDT	12:00 EDT	13:00 EDT	14:00 EDT	15:00 EDT	16:00 EDT	17:00 EDT	18:00 EDT	19:00 EDT	20:00 EDT	21:00 EDT	22:00 EDT	23:0 ED1
59TH STREET_GT_1 24138	10.99	7.82		7.62	8.93 0.44	14.47			40.11 4.03	45.88 4.20	68.32 4.65	68.38 4.84	68.33 4.67	68.38 4.93	68.34 4.93	49.13 4.97	45.92				39.91 4 1 3			
	0.00	0.00		0.00				-1.03	-0.45						-21.62				-3.79		-2.74	-2.45	0.00	
74TH STREET_GT_1	10.99	7.82	7.64	7.62	8.93	14.47	23.25	39.79	40.11	45.88	68.32	68.38	68.33	68.38	68.34	49.13	45.92	40.41	39.86	39.63	39.91	39.48	30.26	15.2
24260	0.58 0.00	0.40 0.00		0.38	0.44 0.00	0.74 0.00		3.90 -1.03	4.03 -0.45	4.20 -3.47	4.65 -22.88	4.84 -21.79	4.67 -23.03	4.93 -21.66	4.93 -21.62	4.97 -2.37	4.38 -7.09						3.17 0.00	

This is a scrollable display providing three sets of information for each of the Generators in the NYCA for each hour of the selected day posted at approximately 11AM:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

Download Format

The LBMP data for the day-ahead market organized by Generator for the selected date may be downloaded using the CSV file format as is laid out in the columns that follow:

CSV File Format "Time Stamp","Name","PTID","LBMP (\$/MWHr)","Marginal Cost Losses (\$/MWHr)","Marginal Cost Congestion (\$/MWHr)"

5.3.3 Real Time Market Zonal LBMP Data

The real-time market LBMP data organized by Load Zone for the selected date may be viewed on the following display. Data is posted approximately five minutes after it is calculated. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction.

E Real-Time Market Zonal LBMP

Real Time Marke Note: Dates with corrected price	
CSV Files	Last Updated
Most recent interval	04/13/00 11:01
04-13-2000	04/13/00 10:13
04-12-2000	04/13/00 00:17
04-11-2000	04/12/00 00:17
04-10-2000	04/11/00 00:16
04-09-2000	04/10/00 00:16
04-08-2000	04/09/00 00:16
04-07-2000	04/08/00 00:15
04-06-2000	04/11/00 17:16
04-05-2000	04/06/00 00:16
04-04-2000	04/05/00 00:17

Select the date and the CSV file will appear on your screen as shown in the next display.

CSV file for Real-Time Market Zonal LBMP (P-24A)

Add	ress 遵 http	o://mis	.nyiso.com/pi	ublic/csv/real	time/20010608realtime_:	zone.csv	•	∂ Go	Links	🥭 Best
	A1	•	=	Time Stam	p					
	Α		В	С	D	E	F	G	Н	
1 [Time Stam	ip]	Name	PTID	LBMP (\$/MWHr)	Marginal Cost Losses	Marginal Cos	t Conge	stion (\$/	MVVHr)
2	6/8/01	0:00	CAPITL	61757	16.06	0.62	0			
3	6/8/01	0:00	CENTRL	61754	14.96	-0.48	0			
4	6/8/01	0:00	DUNWOD	61760	16.27	0.83	0			
5	6/8/01	0:00	GENESE	61753	14.9	-0.54	0			
6	6/8/01	0:00	НQ	61844	15.5	0.06	0			
7	6/8/01	0:00	HUD VL	61758	16.03	0.59	0			
8	6/8/01	0:00	LONGIL	61762	16.17	0.73	0			
9	6/8/01	0:00	MHK VL	61756	15.71	0.27	0			
10	6/8/01	0:00	MILLWD	61759	16.05	0.61	0			
11	6/8/01	0:00	N.Y.C.	61761	16.52	1.08	0			
12	6/8/01	0:00	NORTH	61755	15.58	0.14	0			
13	6/8/01	0:00	NPX	61845	15.8	0.36	0			
14	6/8/01	0:00	ОН	61846	14.54	-0.9	0			
15	6/8/01	0:00	PJM	61847	14.72	-0.72	0			
16	6/8/01	0:00	WEST	61752	14.48	-0.96	0			
17	6/8/01	0:00	CAPITL	61757	23.03	0.88	0			
18	6/8/01	0:00	CENTRL	61754	21.46	-0.69	0			
19	6/8/01	0:00	DUNWOD	61760	23.32	1.17	0			
20	6/8/01	0:00	GENESE	61753	21.35	-0.8	0			
21	6/8/01	0:00	НQ	61844	22.23	0.08	0			
22	6/8/01	0:00	HUD VL	61758	23	0.85	0			
23	6/8/01	0:00	LONGIL	61762	23.19	1.04	0			
24	6/8/01	0:00	MHK VL	61756	22.49	0.34	0			
25	6/8/01	0:00	MILLWD	61759	23.01	0.86	0			
26	6/8/01	0:00	N.Y.C.	61761	23.69	1.54	0			
27	6/8/01	0:00	NORTH	61755	22.34	0.19	0			
28	6/8/01	0.00	NPX	61845	22.65	0.5	Ω			

Due to the volume of information, the real-time market zonal LBMP data is provided in CSV format only. The following information is provided for each of the 15 Load Zones for each execution of the Security Constrained Dispatch program (approximately every five minutes) in the selected day:

- LBMP (\$/MWHr)
- Marginal Cost of Losses (\$/MWHr)
- Marginal Cost of Congestion (\$/MWHr)

Download Format

The real-time market LBMP data organized by Load Zone for the selected date may be downloaded using the steps outlined in the *Downloading Data Through Displays* section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","Name","PTID","LBMP (\$/MWHr)","Marginal Cost Losses (\$/MWHr)","Marginal Cost Congestion (\$/MWHr)"

5.3.4 Real Time Market Generator LBMP Data

The real-time market LBMP data organized by Generator for the selected date may be viewed on the following display. Data is posted approximately five minutes after it is calculated. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction.

B Real-Time Market Generator LBMP

Note 2: Updated histo	Note 1: Dates with prical LBMPs have b	een posted in the arc	isplayed with green lir	explanation of the issues
		CSV Files		
All	HB00-HB07	HB08-HB15	HB16-HB23	Last Updated (EDT)
Most recent interval				06/08/01 09:06
06-08-2001	<u>06-08-2001</u>	<u>06-08-2001</u>	<u>06-08-2001</u>	06/08/01 08:15
<u>06-07-2001</u>	<u>06-07-2001</u>	<u>06-07-2001</u>	<u>06-07-2001</u>	06/08/01 00:25
<u>06-06-2001</u>	<u>06-06-2001</u>	<u>06-06-2001</u>	<u>06-06-2001</u>	06/07/01 00:24
<u>06-05-2001</u>	<u>06-05-2001</u>	<u>06-05-2001</u>	<u>06-05-2001</u>	06/06/01 00:24
<u>06-04-2001</u>	<u>06-04-2001</u>	<u>06-04-2001</u>	<u>06-04-2001</u>	06/06/01 16:20
<u>06-03-2001</u>	<u>06-03-2001</u>	<u>06-03-2001</u>	<u>06-03-2001</u>	06/05/01 20:21
<u>06-02-2001</u>	<u>06-02-2001</u>	<u>06-02-2001</u>	<u>06-02-2001</u>	06/05/01 18:24
<u>06-01-2001</u>	<u>06-01-2001</u>	<u>06-01-2001</u>	<u>06-01-2001</u>	06/04/01 20:20
<u>05-31-2001</u>	05-31-2001	05-31-2001	05-31-2001	06/01/01 18:19
<u>05-30-2001</u>	<u>05-30-2001</u>	05-30-2001	<u>05-30-2001</u>	06/01/01 20:19
<u>05-29-2001</u>	<u>05-29-2001</u>	<u>05-29-2001</u>	<u>05-29-2001</u>	06/01/01 12:16
<u>05-28-2001</u>	<u>05-28-2001</u>	<u>05-28-2001</u>	05-28-2001	05/30/01 19:19

Select the date and the CSV file will appear on your screen as shown in the next display.

CSV file for Real-Time Market Generator LBMP (P-24B)

	A1	-1	= Time S	Stamp						
	Α		В	C	D	E	F	G	Н	
	me Stamp		Name	PTID	LBMP (\$/MWHr	Marginal Cost Losses	Marginal C	ost Conges	stion (\$/MV	VHr)
2	6/7/01	0:00	59TH STREET	24138	24.86	1.7	0			
3	6/7/01	0:00	74TH STREET	24260	24.86	1.7	0			
L I	6/7/01	0:00	74TH STREET	24261	24.86	1.7	0			
5	6/7/01	0:00	ADK HUDSON	24011	23.5	0.34	0			
ò	6/7/01	0:00	ADK RESOUR	23798	23.5	0.34	0			
ſ	6/7/01	0:00	ADK S GLENS	24028	23.5	0.34	0			
3	6/7/01	0:00	ADK_NYS[23527	24.42	1.26	0			
3	6/7/01	0:00	ALBANY1	23571	24.65	1.49	0			
0			ALBANY 2	23572	24.65	1.49	0			
1	6/7/01	0:00	ALBANY 3	23573	24.65	1.49	0			
2	6/7/01	0:00	ALBANY4	23574	24.65	1.49	0			
3	6/7/01	0:00	ALLEGHENY	23514	23.53	0.37	0			
4	6/7/01	0:00	AMERICAN R	24010	21.74	-1.42	0			
5	6/7/01	0:00	AMERICAN	23903	21.74	-1.42	0			
6	6/7/01	0:00	ARTHUR KILL	23512	24.84	1.68	0			
7	6/7/01	0:00	ARTHUR KILL	23513	24.86	1.7	0			
8	6/7/01	0:00	ARTHUR KILL	23520	24.84	1.68	0			
9	6/7/01	0:00	ASHOKAN	23654	24.1	0.94	0			
0	6/7/01	0:00	ASTORIA GT	23523	25.19	2.03	0			
1	6/7/01	0:00	ASTORIA GT	24110	25.19	2.03	0			
2	6/7/01	0:00	ASTORIA_GT	24225	25.19	2.03	0			
3	6/7/01	0:00	ASTORIA GT	24226	25.19	2.03	0			
4	6/7/01	0:00	ASTORIA_GT	24227	25.19	2.03	0			
5	6/7/01	0:00	ASTORIA GT	24106	25.4	2.24	0			
6	6/7/01	0:00	ASTORIA GT	24107	25.4	2.24	0			
7	6/7/01	0:00	ASTORIA GT	24108	25.4	2.24	0			
8	6/7/01	0:00	ASTORIA GT	24109	25.4	2.24	0			
9	6/7/01	0:00	ASTORIA GT2	24094	25.4	2.24	0			
0			ASTORIA GT2		25.4	2.24	0			
1			ASTORIA GT2		25.4	2.24	0			

Due to the large volume of information, the real-time market generator LBMP data is provided in CSV format only. The following information is provided for each of the Generators in the NYCA for each execution of the Security Constrained Dispatch program (approximately every five minutes) in the selected day:

- LBMP (\$/MWHr)
- Marginal Cost of Losses (\$/MWHr)
- Marginal Cost of Congestion (\$/MWHr)

Download Format

The real-time market LBMP data organized by Generator for the selected date may be downloaded using the steps outlined in the *Downloading Data Through Displays* section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","Name","PTID","LBMP (\$/MWHr)","Marginal Cost Losses (\$/MWHr)","Marginal Cost Congestion (\$/MWHr)"

5.3.5 Ancillary Service Prices - Day Ahead Market

The Ancillary Service Prices for the day-ahead market for the selected date may be viewed on the following display. Information is posted at approximately 11AM. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction.

Ancillary Services – DAM Results (P-5)

nge Ref: P-5		Ancillary Service Pri Day Ahead Marke 06/22/2001		
Time Stamp	10 Min Spinning Reserve (\$/MWHr)	10 Min Non-Synchronous Reserve (\$/MWHr)	30 Min Operating Reserve (\$/MWHr)	Regulation (\$/MWHr
00:00	0.80	0.68	0.27	8.55
01:00	0.80	0.68	0.27	8.55
02:00	0.80	0.68	0.27	8.55
03:00	0.80	0.68	0.27	8.55
04:00	0.80	0.68	0.27	8.55
05:00	0.80	0.68	0.27	8.55
06:00	2.44	2.44	0.27	8.55
07:00	2.43	2.43	0.02	5.90
08:00	2.43	2.43	0.02	5.90
09:00	2.45	2.45	0.02	5.90
10:00	2.44	2.44	0.02	5.90
11:00	2.45	2.45	0.02	5.90
12:00	2.45	2.45	0.02	5.90

Download Format

The Ancillary Service Prices for the day-ahead market for the selected date may be downloaded using the steps outlined in the *Downloading Data Through Displays* section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","10 Min Spinning Reserve (\$/MWHr)","10 Min Non-Synchronous Reserve (\$/MWHr)","30 Min Operating Reserve (\$/MWHr)","Regulation (\$/MWHr)"

5.3.6 Ancillary Service Prices - Hour Ahead Market

The Ancillary Service Prices for the hour-ahead market for the selected date may be viewed on the following display. This information is posted approximately 30 minutes before the hour. The display is selected using the steps outlined in the *Viewing Data Through Displays* section in the Introduction.

Select the date and the file will appear on your screen as shown in the next display.

ge Ref: P-6	<u>.</u>	Ancillary Service Pri Hour Ahead Marke		
Hour	10 Min Spinning Reserve (\$/MWHr)	10 Min Non-Synchronous Reserve (\$/MWHr)	30 Min Operating Reserve (\$/MWHr)	Regulation (\$/MWHr
00:00	0.00	0.00	0.00	8.5
01:00	0.80	0.00	0.00	8.5
02:00	0.80	0.00	0.00	8.55
03:00	0.80	0.00	0.00	8.5
04:00	0.80	0.00	0.00	8.5
05:00	0.80	0.00	0.00	8.5
06:00	2.44	2.44	0.00	8.5
07:00	2.43	2.43	0.00	5.90
08:00	2.43	2.43	1.99	5.90
09:00	2.45	2.45	0.00	5.9

Ancillary Services – HAM Results (P-6)

Download Format

The Ancillary Services Prices for the hour-ahead market for the selected date may be downloaded using the steps outlined in the *Downloading Data Through Displays* section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","10 Minute Spinning Reserve (\$/MWHr)","10 Minute Non-Synchronous Reserve (\$/MWHr)","30 Minute Operating Reserve (\$/MWHr)","Regulation (\$/MWHr)"

5.4 Advisory Prices

On the OASIS page, under "Advisory Prices," the following categories of information may be accessed:

- Hour Ahead Zonal LBMP Data
- Hour Ahead Generator LBMP Data
- Time Weighted/Integrated Real Time Zonal LBMP Data
- Time Weighted/Integrated Real Time Generator LBMP Data

5.4.1 Hour Ahead Zonal LBMP Data

The LBMP data for the hour-ahead market organized by Load Zone for the selected date may be viewed on the following display. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

Hour-Ahead Market Zonal LBMP (P-3A)

					н	our	Ahe	ad N	/ark	et Z	onal	LB	MP											
		1	.BMP S	5		-	- Marj	ginal C	ost of i	Losses							Marginal	Cost of	Congest	tion				
Zonal Pri	ces																					Date: (5/07/20)00
Name Ptid	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
CAPITL 61757	72.68 0.06 -67.47	0.05	0.20	0.36	0.22	0.21	0.33	0.32	0.32	41,80 0.28 -27.24	0.27	0.36	0.33	0.21	0.49	46.72 0.35 -28.57	48.66 0.41 -27.86	46.76 0.41 -26.00	48.13 0.65 -14.95	43.42 0.60 -12.79	24,83 0,42 -3,43	24.72 0.42 -3.32	33.67 0.63 -1.44	1.38
CENTRL 61754	-0.10	-0.09	-0.26	-0.49	-0.29	-0.28	-0.44	-0.43	-0.43	17.05 -0.38 -3.15	-0.36	-0.47	-0.44	-0.28	-0.64	20.08 -0.47 -2.75	22.62 -0.54 -2.77	22.40 -0.54 -2.59	33.16 -0.86 -1.49	-0.79	20.43 -0.55 0.00	20.43 -0.55 0.00	30.77 -0.83 0.00	
DUNWOD 61760	61.65 0.35 -56.15	0.32	0.70	1.32	0.80	0.76	1.19	1.17	1,17	37.97 1.02 -22.67	0.99	1.29	1.20	0.75	1.75	41.86 1.27 -22.79	43.36 1.46 -21.51	41.89 1.46 -20.08	46.41 2.33 -11.55	42.06 2.15 -9.88	1.50	259.07 1.50 -236.59	126,91 2,26 -93,05	4.91

This is a scrollable display providing three sets of information for each of the 15 Load Zones for each hour of the selected day posted approximately 30 minutes before the hour:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

Download Format

The LBMP data for the hour-ahead market organized by Load Zone for the selected date may be downloaded using the CSV file format as is laid out in the columns that follow:

CSV File Format "Time Stamp", "Name", "PTID", "LBMP (\$/MWHr)", "Marginal Cost Losses (\$/MWHr)", "Marginal Cost Congestion (\$/MWHr)"

5.4.2 Hour Ahead Market Generator LBMP Data

The LBMP data for the hour-ahead market organized by Generator for the selected date may be viewed on the following display. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

Hour Ahead Market Generator LBMP (P-3B)

	hour and a street		Но	ur A	head	d Ma	rket	Ger	nera	tor L	BM	•												
1	LBMP S				— M	urgicul	Cest	Loss	s						Ma	urginal (Cost of C	ongesti	en.					
Generator Prices																				Dat	te: 05/0	6/ 2 000	0	
Name Prid	00:00	01:00	02:00	03:00	04:00	05:00	05:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
59TH STREET_GT_1 24138	1.37	1.72	1.84	1.61	1.61	1.21	1.45	33.27 1.88 -7.58	1.49	1.87		1.33	1.29	0.88	114.94 0.24 -111.68	0.95	135.69 0.23 -132.58	0.37	79.03 1.29 -61.41	79.03 1.29 -61.41	60.07 1.29 -42.45	1.45		
74TH STREET_GT_1 24260	1.36	1.72	1.84	1.61	1.61	1.21	1.44	33.26 1.87 -7.58	1.48	1.86	60.07 1.44 -40.25	1.33	71.14 1.28 -53.53	0.88	114.94 0.24 -111.68	0.95	135.69 0.23 -132.58	114.95 0.37 -109.90	79.02 1.28 -61.41	79.02 1.28 -61.41	60.06 1.28 -42.45		150.24 10.95 0.00	
74TH STREET_GT_2 24261	38.11 1.35		1.84	1.61	34.38 1.61	36.56 1.21	34.46 1.44	33.26 1.87	38.48 1.48	40.03 1.86			71.14	79.91 0.88 -67.85	114.94 0.24	0.95	135.69 0.23	0.37	79.02 1.28	79.02 1.28	60.06 1.28 -42.45		150.24 10.95 0.00	

This is a scrollable display providing three sets of information for each of the Generators in the NYCA for each hour of the selected day posted at approximately 30 minutes before the hour:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

Download Format

The LBMP data for the hour-ahead market organized by Generator for the selected date may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp","Name","PTID","LBMP (\$/MWHr)","Marginal Cost Losses (\$/MWHr)", "Marginal Cost Congestion (\$/MWHr)"

5.4.3 Time Weighted/Integrated Real Time Zonal LBMP Data

The time weighted/integrated real-time LBMP data organized by Load Zone for the selected date may be viewed on the following display. Data is posted approximately five minutes after the hour. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

□ Time Weighted/Integrated Real-Time Zonal LBMP

Note 1: Note 2: Updated	Dates with corrected historical LBMPs hav	•	
<u>explanation of the</u>		for download.	nate occir aparatea are
CSV Files	HTML Files	PDF Files	Last Updated (EDT)
<u>06-22-2001</u>	<u>06-22-2001</u>	<u>06-22-2001</u>	06/22/01 11:17
<u>06-21-2001</u>	<u>06-21-2001</u>	<u>06-21-2001</u>	06/22/01 00:26
<u>06-20-2001</u>	<u>06-20-2001</u>	<u>06-20-2001</u>	06/21/01 00:24
<u>06-19-2001</u>	<u>06-19-2001</u>	<u>06-19-2001</u>	06/20/01 00:23
<u>06-18-2001</u>	<u>06-18-2001</u>	<u>06-18-2001</u>	06/19/01 00:23
<u>06-17-2001</u>	<u>06-17-2001</u>	<u>06-17-2001</u>	06/18/01 00:25
<u>06-16-2001</u>	<u>06-16-2001</u>	<u>06-16-2001</u>	06/17/01 00:23
06-15-2001	06-15-2001	06-15-2001	06/19/01 10:45
06-14-2001	06-14-2001	06-14-2001	06/19/01 10:34
06-13-2001	06-13-2001	06-13-2001	06/18/01 15:42
06-12-2001	06-12-2001	06-12-2001	06/14/01 17:36
06-11-2001	06-11-2001	06-11-2001	06/14/01 16:35
06-10-2001	06-10-2001	06-10-2001	06/14/01 00:34
06-09-2001	06-09-2001	06-09-2001	06/13/01 21:40

Select the date and file form that you want to view or download. Our example has chosen the HTML display shown in the next display.

Time Weighted/Integrated Real-Time Zonal LBMP (P-4A)

Prid CAPITL 17.99 15.93 16.74 18.84 23.34 23.20 36.08 51.21 76.51 226.93 232.69 239.53 204.72 209.78 246.87 203.60 101.79 27.82 19.47 14.19 24.16 23.71 20 61757 0.26 0.32 0.36 0.46 0.51 0.25 0.30 0.72 0.33 0.02 5.23 0.47 0.24 2.38 0.03 2.96 1.44 0.55 0.17 0.08 0.25 0.37 0	
Prid CAPITL 17.99 15.93 16.74 18.84 23.34 23.20 36.08 51.21 76.51 226.93 232.69 239.53 204.72 209.78 246.87 203.60 101.79 27.82 19.47 14.19 24.16 23.71 20 61757 0.26 0.32 0.36 0.46 0.51 0.25 0.30 0.72 0.33 0.02 5.23 0.47 0.24 2.38 0.03 2.96 1.44 0.55 0.17 0.08 0.25 0.37 0	2:00 23:0
61757 0.26 0.32 0.36 0.46 0.51 0.25 0.30 0.72 0.33 0.02 5.23 0.47 0.24 2.38 0.03 2.96 1.44 0.55 0.17 0.08 0.25 0.37 (
0.00 0.00 0.00 0.00 0.00 0.00 -0.27 -1.14 -49.41 -223.73 -3.79 -219.98 -180.65 -87.10 -243.71 -74.55 0.00 0.00 -0.01 0.00 -2.15 0.00 0	0.78 19.58 0.09 0.07 0.00 0.00

This is a scrollable display providing three sets of hourly time weighted/integrated information for each of the 15 Load Zones for each hour of the selected day:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

Download Format

The time weighted/integrated real-time LBMP data organized by Load Zone for the selected date may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp", "Name", "PTID", "LBMP (\$/MWHr)", "Marginal Cost Losses (\$/MWHr)", "Marginal Cost Congestion (\$/MWHr)"

5.4.4 Time Weighted/Integrated Real Time Generator LBMP Data

The time weighted/integrated real-time LBMP data organized by generator for the selected date may be viewed on the following display. Data is posted approximately five minutes after the hour. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

□ Time Weighted/Integrated Real-Time Market Generator LBMP

Time We	ighted/Integrated	l Real Time LBM	P - Generator
Note 2: Updated	historical LBMPs have issues involved and a	-	with green links. archived files section. An It have been updated are
CSV Files	HTML Files	PDF Files	Last Updated (EDT)
<u>06-22-2001</u>	<u>06-22-2001</u>	06-22-2001	06/22/01 10:19
<u>06-21-2001</u>	<u>06-21-2001</u>	<u>06-21-2001</u>	06/22/01 00:26
<u>06-20-2001</u>	<u>06-20-2001</u>	<u>06-20-2001</u>	06/21/01 00:24
<u>06-19-2001</u>	<u>06-19-2001</u>	<u>06-19-2001</u>	06/20/01 00:23
<u>06-18-2001</u>	<u>06-18-2001</u>	<u>06-18-2001</u>	06/19/01 00:23
<u>06-17-2001</u>	<u>06-17-2001</u>	<u>06-17-2001</u>	06/18/01 00:25
<u>06-16-2001</u>	<u>06-16-2001</u>	<u>06-16-2001</u>	06/17/01 00:23
<u>06-15-2001</u>	<u>06-15-2001</u>	<u>06-15-2001</u>	06/19/01 10:45
<u>06-14-2001</u>	<u>06-14-2001</u>	<u>06-14-2001</u>	06/19/01 10:34
<u>06-13-2001</u>	<u>06-13-2001</u>	<u>06-13-2001</u>	06/18/01 15:42
<u>06-12-2001</u>	<u>06-12-2001</u>	<u>06-12-2001</u>	06/14/01 17:36

Select the date and file form that you want to view or download. Our example has chosen the HTML display shown in the next display.

LBMP \$				Ma	irgina	l Cost	of Lo	55C5		-	- Mar	ginal (Cost o	f Cong	estion									
Generator Prices																					Date	: 05/	01/20	00
Name Ptid	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
59TH STREET_GT_1 24138		1.07	0.80	0.93	1.25	1.92	2.87	3.04	3.25	3.41	3,47	3.27	3.25	3.39		3,21	3.37	3.31	3.69	3.29	42,22 3.64 0.00	3.07	32.53 2.72 0.00	1.67
74TH STREET_GT_1 24260		1.07	0.81	0.93	19.57 1.26 0.00	1.93	2.88	3.05		3.42	3,49	3.28	3.26	3.40		3.23	3.39				42,24 3.66 0.00		2.74	21.24 1.68 0.00
74TH STREET_GT_2 24261	10.65 0.78 0.00	1.07	0.81	15.97 0.93 0.00	1.26	1.93		3.05		3.42	3,49	3.28	3.26	3.40		3.23	3.39	3.33	3.71		42.24 3.66 0.00	3.09		1.68
ADK HUDSONFALLS 24011	-0.10		-0.12	-0.14	-0.20	-0.14	35.47 0.02 0.00	37.21 0.11 0.00	0.16	0.33	0.22	0.22	0.26	0.41	41.74 0.78 -6.05	0,74	0.56	39.71 0.45 -0.04	0.77	37.51 0.59 0.00	39,14 0,56 0,00	0.27		-0.26

Time Weighted/Integrated Real-Time Market Generator LBMP (P-24B)

This is a scrollable display providing three sets of hourly average information for each of the Generators in the NYCA for each hour of the selected day:

- LBMP (\$/MWH)
- Marginal Cost of Losses (\$/MWH)
- Marginal Cost of Congestion (\$/MWH)

Download Format

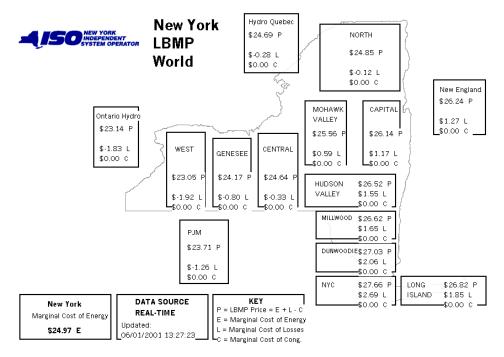
The time weighted/integrated real-time LBMP data organized by Generator for the selected date may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp", "Name", "PTID", "LBMP (\$/MWHr)", "Marginal Cost Losses (\$/MWHr)", "Marginal Cost Congestion (\$/MWHr)"

5.5 Real-Time Market LBMP Zonal Map

On the OASIS page, under "Real-Time Market LBMP Zone Map" small, medium, and large versions of the LBMP Zonal Map can be accessed. Click on the preferred size and the following map will appear.

🗖 Real-Time Market LBMP Zonal Map



Note: This map is periodically updated 4 minutes after the start of every SCD interval to reflect the changing LBMPs, the marginal cost of energy, marginal cost of losses and the marginal cost of congestion.

5.6 Bidding and Scheduling

On the OASIS page, under "Bidding and Scheduling" there are two points of entry into the Market Information System (MIS). Depending upon their assigned status, Market Participants can choose to enter the MIS as either a Market Participant User or Administrator. Additionally, Market Participants can go through a link on this page to upload or download information.

- For a detailed explanation on logging into the MIS as a Market Participant User please view Section 7 of this Manual.
- For a detailed explanation on logging into the MIS as a Market Participant Administrator please view Section 6 of this Manual.
- For instructions on the **upload/download** process see **Section 8** of this Manual.

5.7 Operational Information

On the OASIS page, under "Operational Information" the following categories of information may be accessed:

- ATC/TTC
- Load Forecast
- Transmission Service Charges TO, TSC, and NTAC Rates
- Transmission Service Charges External Transaction TSC B Summary and Details
- Transfer Limitations
- Outage Schedule
- Operational Announcements
- NYCA Interface Flows
- Transmission Owner Information

5.7.1 ATC/TTC

The Available Transfer Capacity / Total Transfer Capacity results for the selected date may be viewed on the following display. The DAM information is posted at approximately 11AM each day and the HAM information is posted approximately 30 minutes before the hour. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

ATC / TTC Results (P-8)

		DAM	I		HAM	
Time Stamp	TTC	ATC w/o Non-Firms	ATC w/ Non- Firms	TTC	ATC w/o Non-Firms	ATC w/ Non- Firms
00:00	2625	727	727	2625	482	482
01:00	2625	616	616	2625	506	506
02:00	2625	778	778	2625	645	645
03:00	2625	770	770	2625	637	637
04:00	2625	914	914	2625	740	740
05:00	2625	829	829	2625	550	550
06:00	2625	779	779	2625	395	395
07:00	2625	275	275	2625	234	234
08:00	2625	373	373	2625	179	179
09:00	2625	394	394	2625	11	11
10:00	2625	382	382	2625	47	47
11:00	2625	372	372	2625	28	28
12:00	2625	354	354	2625	13	13
13:00	2625	244	244	2625	25	175
14:00	2625	279	279	2625	2	198
15:00	2625	415	415	2625	2	2
16:00	2625	368	368	2625	120	120
17:00	2625	439	439			
18:00	2625	527	527			_

The display is divided into sections that correspond to the eleven NYISO Interfaces. There are 24 hourly entries for each interface. Hot keys are provided to enable you to jump directly to the first hour of a selected Interface or back to the top of the display.

Download Format

The ATC/TTC results for the selected date may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows. The * indicates intuitive repetition, the objective being to show the format transition between Interfaces.

CSV File Format "Interface Name", "Time Stamp", "TTC (DAM)", "ATC w/o Non-Firms (DAM)", "ATC w/ Non-Firms (DAM)", "TTC (HAM)", "ATC w/o Non-Firms (HAM)", "ATC w/ Non-Firms (HAM)" "CENT EAST@, A1/1/00 0:00", 2850,997,997,2850,473,473 "CENT EAST@, A1/1/00 1:00", 2850,940,940,2850,398,398 "CENT EAST@, A1/1/00 23:00", 2850,507,507,2850,412,412 "DYSINGER EAST@, A1/1/00 0:00", 2750,2316,2306,2750,2036,2036 "DYSINGER EAST@, A1/1/00 1:00", 2750,2336,2326,2750,1790,1790

*

*

"DYSINGER EAST@, A1/1/00 23:00", 2750,1779,1769,2750,1527,1527 AHQ-NYPP@, A1/1/00 1:00", 2270,2265,2265,2270,2265,2265 etc.

5.7.2 Load Forecast

The ISO Load Forecast for the selected date may be viewed on the following display. This information is posted at approximately 8AM each day. The display is selected using the steps outlined in the Viewing Data Through Displays section in the Introduction.

ISO Load Forecast Results (P-7)

Page Ref:	P-7		I	SO Loa	d For	recast					
				02/29/2	2000						
Time Stamp	Capitl	Centrl	Dunwod	Genese	Hud Vl	Longil	Mhk Vl	Millwd	N.Y.C.	North	West
00:00	1126	1601	513	912	978	1814	982	248	4300	939	1836
01:00	1089	1557	484	878	937	1743	953	238	4051	923	1782
02:00	1076	1530	471	871	927	1714	935	238	3933	917	1756
03:00	1079	1527	467	872	917	1711	935	240	3903	918	1744
04:00	1107	1530	476	887	936	1755	964	241	3941	920	1773
05:00	1195	1644	520	957	1014	1896	1046	266	4203	942	1878
06:00	1379	1830	609	1103	1156	2100	1200	343	4805	979	2064
07:00	1491	1939	694	1189	1311	2310	1276	462	5431	1005	2222
08:00	1508	1968	723	1213	1358	2426	1293	463	6006	1011	2280

Download Format

The ISO Load Forecast data for the selected date may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Time Stamp", "Capitl", "Centrl", "Dunwod", "Genese", "Hud Vl", "Longil", "Mhk Vl", "Millwd", "N.Y.C.", "North", "West"

5.7.3 TO Transmission Service Charges - TSC, and NTAC Rates

Transmission Service Charges are posted for all Transmission Owners. Data for choosing to view the file containing the Transmission Owner's Transmission Service Charge will appear on the PDF'ed file that will be displayed when the Transmission Service Charges is selected. The display will be viewable in the following format:

I TO, TSC and NTAC Rates

TSC and	NTAC Rates:	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01
TP-CH	CENTRAL HUDSON GAS & ELECTRIC CORPORATION	3.8066	3.8066	3.6954	3.7201	3.7453	2.760
TP-CE	CONSOLIDATED EDISON OF NY, INC.	6.9500	6.5900	6.9100	6.6400	7.0100	6.560
TP-LI	LIPA	4.4814	4.4814	4.4814	4.5138	4.5874	4.587
TP-NYS	NEW YORK STATE ELECTRIC & GAS CORPORATION	5.5287	5.8480	5.7803	5.6842	6.0538	6.770
TP-NM	NIAGARA MOHAWK POWER CORPORATION	3.2369	2.3341	2.7934	2.3581	3.0052	3.399
TP-OR	ORANGE AND ROCKLAND UTILITIES, INC.	6.9393	6.9393	6.9393	6.9393	6.9393	6.939
TP-RGE	ROCHESTER GAS AND ELECTRIC CORPORATION	3.7496	3.7369	3.7515	3.7401	3.7852	3.771
TP-NYP	NYPA - VERMONT INTERCONNECTION, PV-20	1.7800	1.7800	1.7800	1.7800	1.7800	1.780
	NYPA - ONTARIO HYDRO INTERCONNECTIONS	1.7800	1.7800	1.7800	1.7800	1.7800	1.780
	NYPA - HYDRO-QUEBEC INTERCONNECTION	2.1900	2.1900	2.1900	2.1900	2.1900	2.190
NTAC	NYPA TRANSMISSION ADJUSTMENT CHARGE	0.3900	0.2100	0.6000	0.3500	0.5200	0.420

 Notes:
 (numbers in RED have been discounted)

 August
 NYSEG-Adjusted to Zero to subsequent review

 May
 ConEd discounted rate from 8.1405 to 6.5000

April ConEd discounted rate from 9.1759 to 6.5000

5.7.4 Transmission Service Charges - External Transaction Summary and Details

External Transaction Transmission Service Charge (TSC) Summary

81)	ficrosoft Excel - tscsmmry_05_	01_00.csv									- 5	9 ×
Personal Contemporation	Eile Edit View Insert Format		Vindow Help									9 ×
-	🛩 🖬 🚳 🖪 🖤 🐰 🖻			f. 41 👘	2 20 Arial	- 10 - B /			\$ \$ %	e m.		
,			1 660							- - <u></u> -	10.000	_
											Prom	(CC
	A1 💌 = Gen											
	A	B	C	D	E	F	G	H	1	J	K	
1	Generator					Summer 2000 DATE: Monday	1 May 2	2000	@ 10:19 E	EXTERNALS	i	
2	HQ_GEN_CHAT DC	\$0.00	\$5.68	\$3.52	\$5.65							
3	N.EGEN_SANDY PD	\$2.19	\$0.00	\$4.03	\$6.04							
4	O.HGEN_BRUCE	\$2.19	\$5.73	\$0.00	\$3.64							
5	PJM_GEN_KEYSTONE	\$2.19	\$5.78	\$1.24	\$0.00							
	59TH STREET_GT_1	\$2.19	\$5.80	\$4.37	\$6.16							
7	74TH STREET_GT_1	\$2.19	\$5.80	\$4.37	\$6.16							
8	74TH STREET_GT_2	\$2.19	\$5.80	\$4.37	\$6.16							
9	ADK HUDSONFALLS	\$2.19	\$5.98	\$3.96	\$6.00							
	ADK RESOURCERCVRY	\$2.19	\$5.98	\$3.96	\$6.00							
11	ADK S GLENS FALLS	\$2.19	\$5.98	\$3.96	\$6.00							
12	ADK_NYSDAM	\$2.19	\$5.91	\$3.99	\$6.02							
13	ALBANY1	\$2.19	\$5.87	\$3.99	\$6.03							
	ALBANY2	\$2.19	\$5.87	\$3.99	\$6.03							
15	ALBANY3	\$2.19	\$5.87	\$3.99	\$6.03							
16	ALBANY4	\$2.19	\$5.87	\$3.99	\$6.03							
17	ALLEGHENYCOGEN	\$2.19	\$5.77	\$3.66	\$6.05							
18	AMERICAN_REF_FUEL	\$2.19	\$5.76	\$3.57	\$5.64							
	AMERICAN_BRASS	\$2.19	\$5.76	\$3.57	\$5.64							
20	ARTHUR KILL_GT_1	\$2.19	\$5.80	\$4.38	\$6.16							
and the second second									1	1	1	1 10000

External Transaction Transmission Service Charge (TSC) Details

_											
	licrosoft E	xcel - t	sodtail.csv	r							_ 8 ×
2	<u>E</u> le <u>E</u> dt	<u>Vi</u> ew <u>I</u> r	isert F <u>o</u> rma	at <u>T</u> oo	ols <u>D</u> ata <u>W</u> indo	w <u>H</u> elp					_ 8 ×
	📽 🖬	<i>a</i> 🖪	\$ \$	Pe (3 🔊 n -	🍓 Σ 丸 👌	🛍 🕄 🙄 Arial	• 10 • I	3 <u>1</u> ∐ ≣ ∄	≣ 🖩 😫 \$ % 💷 • 🔮	<u>-A</u> - "
											📆 Prompt
	E18		= 8	1405							
	A		В		С	D	E	F	G	Н	I 두
1	Generato	r I	Bus_Nam	9	Tie_Name	TO_Name	TO_TSC_Rate_\$/Mwhr	TSC_Cost_\$/Mwhr	Resultant_Dfax	Winter 1999 DATE:Wednesday	1 Decemb
2	HQ_GEN	_CHA1	HQ_LOAD	_CH4	CHATGUAY	NYPA	\$2.19	\$0.00	0		
3	HQ_GEN	CHA1	NE_LOAD	SAN	BEAR SWP	FNIAGARA MOH	\$5.74	\$0.57	-0.0989		
4	HQ_GEN	_CHA1	NE_LOAD	SAN	BERKSHIR A	NIAGARA MOH	\$5.74	\$2.28	-0.3976		
5	HQ_GEN	CHA1	NE_LOAD	SAN	BLISSVIL WI	NIAGARA MOH	\$5.74	\$0.23	-0.0404		
6	HQ_GEN	CHA1	NE_LOAD	SAN	BNNINGTN H	NIAGARA MOH	\$5.74	\$0.15	-0.0263		
7	HQ_GEN	CHA1	NE_LOAD	SAN	GRAND IS P	NYPA	\$1.78	\$0.14	-0.0774		
8	HQ_GEN	CHA1	NE_LOAD	SAN	LONG MTN F	CONSOLIDATE	\$8.14	\$2.85	-0.3503		
9	HQ GEN	CHA1	NE LOAD	SAN	NOR HBR NE	RLIPA	\$4.73	\$0.00	0		
10	HQ GEN	CHA1	NE_LOAD	SAN	SMITHFLD F	CENTRAL HUD:	\$4.12	\$0.04	-0.0092		
11	HQ GEN	CHA1	OH LOAD	BRU	BECK A NIA	INYPA	\$1.78	\$0.20	-0.1113		
12	HQ GEN	CHA1	OH LOAD	BRU	BECK B NIA	INYPA	\$1.78	\$0.20	-0.1111		
13	HQ GEN	CHA'	OH LOAD	BRU	BECK NIAGA	NYPA	\$1.78	\$0.12	-0.0665		
14	HQ GEN	CHA1	OH LOAD	BRU	BECK NM S	NIAGARA MOH	\$5.74	\$0.00	0		
15	HQ GEN	CHA	OH LOAD	BRU	BECK PACK	NIAGARA MOH	\$5.74	\$0.32	-0.0563		
16	HQ GEN	CHA	OH LOAD	BRU	BECK25HZ F	NIAGARA MOH	\$5.74	\$0.00	0		
						NIAGARA MOH		\$0.00	0		

5.7.5 Transfer Limitations

NYISO Transfer Limitations may be viewed on the following display. It will appear in PDF format for viewing.

Transfer Limitations (P-18)

Seasonal Limits	YISO TRANSFER Saturday, June 02, 2001	LIMITATIONS o Sunday, June 24, 2001	
CENTRAL EAST 3100MW STABILITY LIMIT/ 25 TOTAL EAST 6500MW The Total UPNY CONED 5100MW LBMP zor SPRBRK/DUN SOUTH 4700MW Only those	300 VOLTAGE TRANSFER LIMIT Transfer Capabilities (TTCs) indicated ir nes as limited by either interface stability e transmission facility outages that signif	this report represent predicted values of transfer capability betwee imits, voltage transfer limits, or individual transmission facility them cantly impact NYISO transfer capability are reported. The DAM an report due to unanticipated NYISO or external control area limitatio	nal limitations. d HAM values
A2253 LINDEN 230-GOETHALS 230 KV O/S Mon 08/21/00 to Sun 07/15/01 0:01 Continous 16:00 Work scheduled by PJ	PJM ISO to NYISO EXTENDED 09/18/00	PJM ISO East- NYISO Capital/Hudson Valley Impacts Total Transfer Capability TTC with All Lines In Service	2500 MW 0 MW 2500 MW
Y50 DUNWOODIE 345-SHORE RD 345 KV O/S Mon 04/16/01 to Mon 06/18/01 15:47 Continuous 23:59 Work scheduled by LI	CONED-LIPA EXTENDED 05/27/01	New York City-Long Island Impacts Total Transfer Capability TTC with All Lines In Service	800 MW 600 MW 1400 MW
31-PR PORTER 230-ROTTERDAM 230 KV O/S Mon 05/14/01 to Mon 06/11/01 8:00 Continuous 16:00 Work scheduled by NM	CENTRAL EAST UPDATED 05/01/01	Central-Capital/Hudson Valley Impacts Total Transfer Capability TTC with All Lines In Service	5400 MW 250 MW 5650 MW
FRASER # SVC 345 KV O/S Thu 05/31/01 to Wed 06/06/01 8:30 Daily 15:30 Work scheduled by NY	CENTRAL EAST	Central-Capital/Hudson Valley Impacts Total Transfer Capability TTC with All Lines In Service	5575 MW 75 MW 5650 MW
72 DUNWOODIE 345-RAINEY 345 KV O/S Sun 06/03/01 to Sun 06/03/01 4:30 Daily 23:59 Work scheduled by CE	SPR/DUN-SOUTH	Dunwoodie/Sprainbrook-NYC Impacts Total Transfer Capability TTC with All Lines In Service	3800 MW 700 MW 4500 MW

Download Format

The Transfer Limitations may be downloaded using Acrobat Reader by selecting "Save it to disk" and specifying a path for the file. The information, in PDF format, may then be viewed or printed.

5.7.6 Outage Schedule

The Outage Schedule may be viewed on the following display. It will appear in PDF format for viewing.

□ Outage Schedule (P-14)

	E	001		06	80	0 30	6 06	06	06	06 0	06 06	06	06	06	06 0	161	06 0	6 0	8 06	06	06 (06	06 (06 06	06	06	06	06 L	06 ()7 C	0.0	7 07	07	07
Ending	Friday, July 06, 200)1									09 10																							
ID	CIRCUIT			Fri	Sat S	unM	о Ти	eWe	Thu	Frid S	at Su	nMo	Tue	We	Thu Fi	ridS	at Su	unMa	o Tue	eWe	Thu	FridS	Sat S	unMo	Tue	∋We	ThuF	-rid S	sat S	unM	ю Ти	eWe	Thu	JFri
1880-1	NE GLENBROOK	115 ROWAYTN JCT1	115	D	D	DD	D	D	D	D	D D	D	D	D	D	D	DD) D	D	D	D	D	D	D D	D	D	D	D	DI	DI	DD	D	D	D
SVC	NY FRASER	345		D		D	D	D																										
942	NY RICHFIELD	115 E.SPRINGFLD	115	D																														
D	CH E.WALDEN	115 ROCK TAVERN	115	D																														
61	CE RAINEY	345 FARRAGUT	345	D																														
2E	CE FARRAGUT	345		D																														
3E	CE FARRAGUT	345		D																														
2W	CE RAINEY	345		D																														
3W	CE RAINEY	345		D																														
CAP #2	CH ROCK TAVERN	345		D																														
SL	CH ROCK TAVERN	115 SUGARLOAF	115	D																														
BK 7	NM OSWEGO	345 OSWEGO B	115	D																														
BK 1	CE GOETHALS N.2	345 GOETHALS	230	С	С	сс	С	С	С	С	с с	С	С	С	C (С	СС	c 0	С	С	С	С	С	с с	С	С	С	С	C (C (с с	; C	С	С
BK 1N	CE GOETHALS N.1	345 GOETHALS N.2	345	С	С	сс	с	С	С	С	с с	С	С	С	C (С	СС	c	С	С	С	С	С	с с	С	С	С	С	С	C	с с	; с	С	С
2N	CE GOETHALS N.1	345		С	С	сс	С	С	С	С	с с	С	С	С	C (С	СС	c	С	С	С	С	С	с с	С	С	С	С	С	C (с с	; C	С	С
3202	PA GILBOA	345		С	С	сс	с	С	С	С	с с	С	С	С	C (С	сс	c c	С	С	С	С	С	с с	С	С	С	С	C (C	с с	; C	С	С
A2253	PJ LINDEN	230 GOETHALS	230	С	С	сс	с	С	С	С	с с	С	С	С	C (С	сс	С	С	С	С	С	С	с с	С	С	С	С	C (C (с с	; C	С	С
BK 110	NM HUNTLEY	115 HUNTLEY	23	С	С	сс	с	С	С	С	с с	С	С	С	C (с	с	c c	с	С	С	С	С	с с	С	С	С	С	с	c	с с	c	С	С
459	LI BARRETT 1	138 FREEPORT	138	С	С	сс	с	С	С	С	с с	С	С	С	C (С	сс	0	С	С	С	С	С	с с	С	С	С	С	С	C (c c	; c	С	С
PAR	LI BARRETT 1	138 BARRETT 2	138	С	С	сс	с	С	С	С	с с	С	С	С	C (С	сс	c	С	С	С	С	С	с с	С	С	С	С	С	C (с с	; c	С	С
948/940	NY ENDICOTT	115 GOUDEY	115	С	С	сс	с	С	С	С	с с	С	С	С	C (С	с	c	С	С	С	С	С	с с	С	С	С	С	С	C	с с	с	С	С
R400	NM EDIC	345		С	С	сс	С	С	С	С	с с	С	С	С	C (С	С	c	С	С	С	С	С	с с	С	С	С	С						
993	NM GREENBUSH	115 STEPHENTOWN	115	С	С	сс	С	С	С	С	с с	С	С	С	C (С	С	0	С	С	С	С	С	с с	С	С	С	С						
24054	CE HELLGATE 2	138 ASTORIA W	138	С	С	сс	с	С	С	С	с с	С	С	С	C (С	сс	c 0	с	С	С	С	С	с с	С	С	С	С						

Download Format

The Outage Schedule may be downloaded using Acrobat Reader, selecting "Save it to disk," and specifying a path for the file. The information, in PDF format, may then be viewed or printed.

5.7.7 Operational Announcements

The operational announcement section is broken into 3 sections:

- Dispatcher Notices
- Committed for Reliability
- Market Monitor Notices

Displaying this information is a two-step process. First, on the OASIS page, select "Operational Announcements." You will be given a choice of how you want to view or download the information; either through a csv file, an html file, or a pdf file. (See screen shot below). The date and time the file was last updated will also be presented. Choose the type of file that you want to view the information within.

NYISO Operational Announcements

	NYISO Operati	onal Announcem	ents
CSV Files	HTML Files	PDF Files	Last Updated (EDT)
<u>06-22-2001</u>	<u>06-22-2001</u>	<u>06-22-2001</u>	06/22/01 13:20
<u>06-21-2001</u>	<u>06-21-2001</u>	<u>06-21-2001</u>	06/22/01 00:27
<u>06-20-2001</u>	<u>06-20-2001</u>	<u>06-20-2001</u>	06/21/01 00:25
<u>06-19-2001</u>	<u>06-19-2001</u>	<u>06-19-2001</u>	06/20/01 00:24
<u>06-18-2001</u>	<u>06-18-2001</u>	<u>06-18-2001</u>	06/19/01 00:25
<u>06-17-2001</u>	<u>06-17-2001</u>	<u>06-17-2001</u>	06/18/01 00:26
<u>06-16-2001</u>	<u>06-16-2001</u>	<u>06-16-2001</u>	06/17/01 00:24

■ NYISO Operational Announcements (P-25)

P-25	21-Jun-200
	NYISO Operational Announcements
D'	Dispatcher Notices Committed for Reliability Market Monitor Notices
Dispatcher No	Back to top
Insert Time	Message
21-Jun-2001 01:04:17	TP-CE REMOVES ASTORIA3 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 01:00.
21-Jun-2001 01:04:40	TP-CE REMOVES ASTORIA4 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 01:00.
21-Jun-2001 03:39:58	TP-CE REMOVES ASTORIA5 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 03:00.
21-Jun-2001 03:40:28	TP-CE REMOVES RAVENSWOOD_2 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 03:00.
21-Jun-2001 04:43:49	TP-OR REMOVES LOVETT3 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 04:00.
21-Jun-2001 04:48:11	ISO REQUESTS HEMPSTEADOUT OF MERIT FOR ISO SECURITY AT START TIME 06/21/2001 04:00.
21-Jun-2001 04:53:48	TP-CE REMOVES RAVENSWOOD2 OUT OF MERIT FOR TO LOCAL SECURITY AT START TIME 06/21/2001 04:00.

Note: For direct access to an html file of the current day's dispatcher notices, choose "Dispatcher Notices" on the OASIS page.

5.7.8 NYCA Interconnection Flows

The NYCA Interconnection Flows may be accessed from the NYISO Web site, under the category "OASIS" then under "NYCA Interface Flows." Select desired month.

NYCA Interconnection Flows

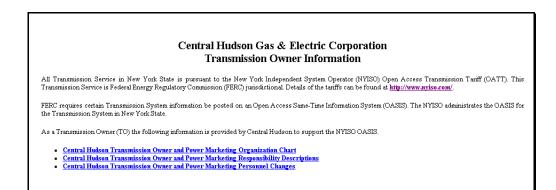
	Α	В	С	D	E	F	G	Н		J
1	DateTime	PJM	OH	NEPEX	HQ May 2001	(+)=Fli	ow Into NYI	SO (-)=Flov	v Out of NY	'ISO
2	05/01/2001	1406	955	-781	42					
3	05/01/2001	2397	1382	-830	-556					
4	05/01/2001	2216	1210	-822	-649					
5	05/01/2001	2220	889	-765	-651					
6	05/01/2001	1908	679	-778	-308					
- 7 -	05/01/2001	1622	921	-834	-179					
8	05/01/2001	1504	1091	-514	-296					
9	05/01/2001	1037	630	-19	53					
10	05/01/2001	494	-294	347	947					
11	05/01/2001	149	-258	355	1190					
12	05/01/2001	13	-299	352	1263					
13	05/01/2001	-223	-351	428	1287					
14	05/01/2001	28	-285	27	1232					
15	05/01/2001	-234	-414	297	1400					
16	05/01/2001	-247	-336	452	1488					
17	05/01/2001	-285	-298	548	1463					
18	05/01/2001	182	-399	517	1059					
19	05/01/2001	327	-442	417	1052					
20	05/01/2001	113	-449	182	1139					

5.7.9 Transmission Owner Information

On the "OASIS" page selecting "Transmission Owner Information" will bring up the following display:

L Transmission Owner Information

This display contains a list of Transmission Owners. Clicking on a particular TO will bring up information such as an organization chart, personnel transfers, standards of conduct, and job descriptions for that organization. The display may look like one of the two screen shots below.



Last Updated T	Z	Standards of Conduct, Personnel Transfers
01/31/1998 20:23:49		per Want ad posted 08/29/1997, Effective 09/01/1997, John Vaghn (Electric Power Supply Engineer), will be transferred to TEEG, Lilco's Energy Marketing group, as an Electric Trader.

5.8 MIS Instructional Documents

In addition to the Market Participant User's Guide, on the OASIS page, under "MIS Instructions" Market Participants can download a variety of documents to assist them as they navigate through the MIS. These documents include the following:

- Upload/Download Specifications
- Example Pages
- Bid Constraint Messages
- Validation Messages

5.8.1 Upload/Download Specifications

The AMIS Upload/Download Description is a thirty-page document outlining the interface that provides a means for bid submission and schedule retrieval of information. This document may be accessed from the OASIS page under the category "MIS Instructions."

The upload/download interface was developed to allow NYISO customers that already have the type of data required by the MIS stored in electronic format or those planning to create such applications to submit data electronically and avoid the need to type data onto a MIS Web Page. The submission format of the data is compliant with OASIS S&CP where applicable.

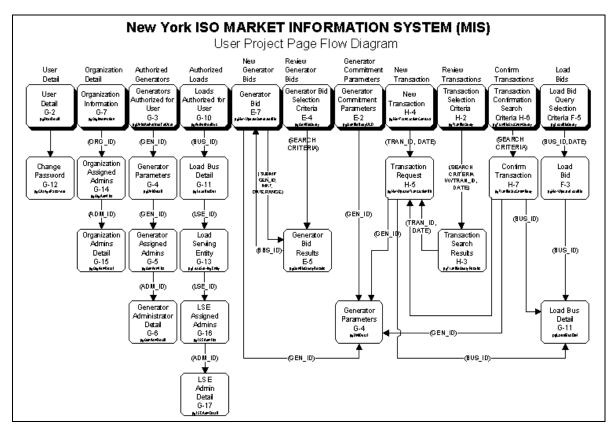
Note: The public information shown on the process flows (ex., ISO Load Forecast, ATC/TTC values, LBMPs) is not provided via the MIS Upload/Download interface.

5.8.2 Example Pages

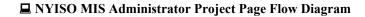
Under the "MIS Instructions" category on the "OASIS" page, Market Participants can view the "Example Pages." These pages outline the screens that are available to either Market Participant Users or Administrators.

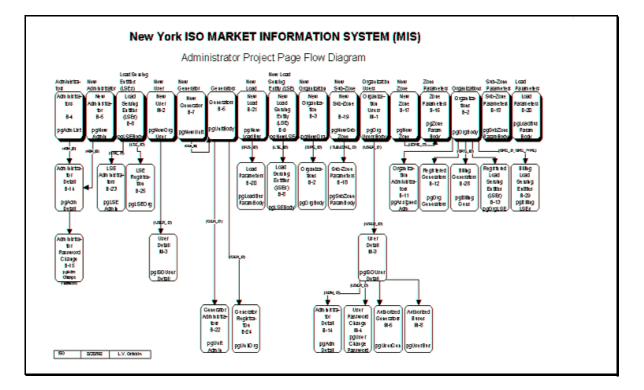
The diagram below shows the areas of the MIS that the Market Participant User would be able to access.

NYISO MIS User Project Page Flow Diagram



And, the areas of the MIS that the Market Participant Administrator would be able to access are outlined in the diagram below.





5.8.3 Bid Constraint Messages

There are nine categories of Bid Constraint Messages that provide warnings of constraints on the entry of data into the OASIS. Bid Constraint Messages are selected directly from the OASIS page under the category "MIS Instructions."

■ Bid Constraint Messages (P-10)

-	£ P-10	
	Bid Cons	traint Messages
		lser Messages
		Generator Bids
	1	<u>ransaction Bids</u> Load Bids
		Init Commitment
		er Update, Misc. nistrator Messages
		et Participant Admin
		ISO Admin
r 7	24	
Genera	Messages tor Bid Messages	back to top
Genera Messag	C	<u>back to top</u> Constraint Message
Genera Messag Id	tor Bid Messages	
Genera Messag Id 10000	tor Bid Messages	Constraint Message DAM Energy Curve segments must be <= 6 and Energy Block segments must be <= 3.
Genera Messag Id 10000 10001	tor Bid Messages e Constraint Name DAM_BID_BLOCK_PLUS_CURVE_CK	Constraint Message DAM Energy Curve segments must be <= 6 and Energy Block segments must be <= 3. DAM generator bids must have unit commitment data assigned prior
Genera	tor Bid Messages e Constraint Name DAM_BID_BLOCK_PLUS_CURVE_CK DAM_BID_CMMT_DATA_CK	Constraint Message DAM Energy Curve segments must be <= 6 and Energy Block segments must be <= 3. DAM generator bids must have unit commitment data assigned prior to evaluation.

Each of the underlined items at the top of the display is a hot key that enables you to jump directly to the beginning of the selected category. Below these links is a listing of all of the Bid Constraint Messages organized by category. There are also hot keys that return you to the top of the display at the top of each message category.

Download Format

The Bid Constraint Messages may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Message ID", "Constraint Name", "Constraint Message"

5.8.4 Validation Messages

There are ten categories of Validation Messages that relate primarily to errors related to the entry of data into OASIS. Validation Messages are selected directly from the LBMP Results menu.

□ Validation Messages (P-9)

Page Ref: P-9	lage Ref: P-9			
Validation Messages				
Transact Load Bid Unit Cor User Up Generic Mess Administrator Market F	or Bid Messages ion Bid Messages 1 Messages nmitment Messages date Messages ages : Messages Participant Messages nin Messages			
	Bid Messages back to top			
Message ID	Message			
12100	DAM generator bid upper operating limit < DAM generator schedule energy.			
12101	HAM generator bid upper operating limit < HAM generator schedule energy.			
12102	The energy block bid is not allowed to increase price at any points in the region where the unit has already been scheduled.			
12103	The energy cost curve bid is not allowed to increase price at any points in the region where the unit has already been scheduled.			

Each of the underlined items at the top of the display is a hot key that enables you to jump directly to the beginning of the selected category. Below these links is a listing of all the Validation Messages organized by category. There are also hot keys that return you to the top of the display.

Download Format

The Validation Messages may be downloaded using the steps outlined in the Downloading Data Through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Message ID", "Message"

5.9 New York Control Area Information

To access the New York Control Area Information on our NYISO Web site, first select the category "Markets" from the NYISO home page (www.nyiso.com). Then, under the "New York Control Area Information" category, you'll find the following list of information:

- ECA Notices
- Notice of Changes to OASIS/MIS/CSS Systems
- Generator Names
- Generator-Genco List (CSV format only)
- Load Names
- LSE Contacts
- Subzones by Transmission Owner
- Organizational Contacts
- Transmission Owner Information (see Section 5.7.9 of this manual for details on accessing TO Info.)
- Market Data Toolbox
- Historical 2000-1999 Hourly Loads
- Historical 1998-1997 Hourly Loads
- Historical 1996-1993 Hourly Loads
- Existing NYCA Generation Facilities (1/00)
- Subzones by Transmission Owners

These categories are updated regularly as changes occur.

5.9.1 Generator Names

The names, point of IDs, and locations (load zone and subzone) of all Generators in the NYCA may be viewed on the following display. The display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual.

Generator Names (P-19)

	Generate	ors	
Generator Name	PTID	Subzone	Zone
59TH STREET_GT_1	24138	CON ED NY CITY	N.Y.C.
74TH STREET_GT_1	24260	CON ED NY CITY	N.Y.C.
74TH STREET_GT_2	24261	CON ED NY CITY	N.Y.C.
ADK HUDSONFALLS	24011	NMPC CAPITAL	CAPITL
ADK RESOURCERCVRY	23798	NMPC CAPITAL	CAPITL
ADK S GLENSFALLS	24028	NMPC CAPITAL	CAPITL
ADK_NYSDAM	23527	NMPC CAPITAL	CAPITL
ALBANY1	23571	NMPC CAPITAL	CAPITL
ALBANY2	23572	NMPC CAPITAL	CAPITL
ALBANY3	23573	NMPC CAPITAL	CAPITL
ALBANY4	23574	NMPC CAPITAL	CAPITL

Download Information

The Generator Names information may be downloaded using the steps outlined in the Downloading Data through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format

"Generator Name", "PTID", "Subzone", "Zone"

5.9.2 Generator - Genco List

The Generator - Genco List, consisting of twenty-two items is available in CSV format. This display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual. Below, are three screen shots showing how the information can be viewed.

🗳 Generator - Genco List

200	A	В	С	D	E	F	G	Н	1
1	GencolD	ORG NAME	MRG Assignment	ORG CONTACT	Pri Org Phone	Sec Org Phone	Org Fax	Org Pager	Org Email
2	1	Canadian Niagara	DRE	Walter Lord Chares	905-354-1641 x	905-354-1641 x-0	905-354-6597		lordcharestwo
3	3	Central Hudson E	RTB	Diane Seitz	914-485-5770 x	24	914-485-5947		dseitz@chen

	J	K	L	M	Ň	0	Р	Q	R
1	Org Address Line 1	Org Address Line 2	Org Address Line 3	Org Address Line 4	Org City	Org State	Org Country	Org Zip	Generator
2	1130 Bertie Street	PO Box 1218			Fort Erie	ON	CN	L2A 5Y2	1
3	110 Main Street				Poughkeepsie	NY		12601-3083	3

	S	T	U	V
1	Generator	Subzone	Zone	PTID
2	RANKINE	NMPC WEST	WEST	23646
3	NIAGARA	NMPC WEST	WEST	23760

Download Format

The Generator - Genco List may be downloaded using the steps outlined in the Downloading Data through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "GencoID", "Org Name", "MRG Assignment", "Org Contact", "Pri Org Phone", "Sec Org Phone", "Org Fax", "Org Pager", "Org E-mail", "Org Address Line 1", "Org Address Line 2", "Org Address Line 3", "Org Address Line 4"," Org City", "Org State", "Org Country", "Org Zip", "Generator ID Match", "Generator", "Subzone", "Zone", "PTID"

5.9.3 Load Names

The names, point of IDs, and locations (load zone and subzone) of all Loads in the NYCA may be viewed on the following display. The display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual.

Load Names (P-20)

Loads				
Load Name	PTID	Subzone	Zone	
ST-ROCHDALE_CE_DUNWOODI	109202	CON ED DUNWOODIE	DUNWOD	
ST-ROCHDALE_CE_MILLWOOD	108202	CON ED MILLWOOD	MILLWD	
ST-ROCHDALE_CE_NY-CITY	110202	CON ED NY CITY	N.Y.C.	
M-TONAWANDA_NM_WEST	301203	NMPC WEST	WEST	
AEI_NM_CAPITAL	306241	NMPC CAPITAL	CAPITL	
AEI_NM_CENTRAL	303241	NMPC CENTRAL	CENTRL	
AEI_NM_GENESEE	302241	NMPC GENESEE	GENESE	

Download Format

The Load Name in formation may be downloaded using the steps outlined in the Downloading Data through Displays section in the Introduction. The CSV files format is laid out in columns as follows:

CSV File Format "Load Name", "PTID", "Subzone", "Zone"

5.9.4 Load Serving Entity Contact Information

The information required to contact Load Serving Entities (LSEs) in the NYCA may be viewed on the following display. The display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual.

Load Serving Entity Contact Information (P-22)

Name	Contact	Email	Primary Ph.	Fax	Address
	Name		Seceondary Ph.	Pager	
3M-TONAW	Timothy Mayer	tjmayer@mmm.com	651-778-6302	651-778-5793	3M Procuremen Operations 900 Bush Ave., Bldg 21-IE-02 P.O.Box 33331 St. Paul, MN 55133-3331

Download Format

The LSE contact information may be downloaded using the steps outlined in the Downloading Data through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "LSE Name", "Contact Name", "E-mail Address", "Primary Phone Number", "Secondary Phone Number", "Facsimile Number", "Pager Number", "Address Line 1", "Address Line 2", "Address Line 3", "Address Line 4", "Address Line 5"

5.9.5 Subzones by Transmission Owners

The list of load subzones organized by Transmission Owner and showing the associated Load Zone may be viewed on the following display. The display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual.

Page Ref: P-23	Subzones by	/ Transm	nission Owner
Transmission Owner	Subzone	Zone	7
TP-CE	CON ED DUNWOODIE	DUNWOD	7
TP-CE	CON ED HUDSON VLY	HUD VL	
TP-CE	CON ED MILLWOOD	MILLWD	-
TP-CE	CON ED NY CITY	N.Y.C.	
TP-CH	CENT HUD HUDSON VLY	HUD VL	
TP-CH	CENT HUD MOHAWK VLY	MHK VL	

Subzones by Transmission Owners (P-23)

Download Format

The load subzone information may be downloaded using the steps outlined in the *Downloading Data through Displays* section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Transmission Owner", "Subzone", "Zone"

5.9.6 Organization Contact Information

The information required to contact organizations associated with the NYISO (other than LSEs), including Market Participants, Transmission Owners, Power Exchanges and the NYISO itself may be viewed on the following display. The display is selected by following the instructions given in Section 5.9: "New York Control Area Information" of this manual.

DOrganization Contact Information (P-21)

Page Ref: P-21 Organization Contact Information					
Name	Contact	Email	Primary Ph.	Fax	Address
	Name		Secondary Ph.	Pager	
1st Rochdale Cooperative Group, Ltd.	Gregory L. Wortham	wortham@lstrochdalenyc.net	212-673-3900 x27	212-673-3902	Ist Rochdale Cooperative Group, Ltd. 465 Grand Street, 2nd floor New York, NY 10002
3M Tonawanda	Timothy J. Mayer	tjmayer@mmm.com	651-778-6302	651-778-5793	3M Procurement Operations 900 Bush Avenue Building 21-IE-02, P. O. Box 33331 St. Paul, MN 55133-3331

Download Format

The Organization Contact Information may be downloaded using the steps outlined in the Downloading Data through Displays section in the Introduction. The CSV file format is laid out in columns as follows:

CSV File Format "Organization Name", "Contact Name", "Primary Phone Number", "Secondary Phone Number", "Facsimile Number", "Pager Number", "E-mail Address", "Address Line 1", "Address Line 2", "Address Line 3", "Address Line 4", "Address Line 5"

6.0 Market Participant Administrator Tasks

6.1 Introduction

To manage users, organizations, generators, and load assignments in the Market Information System (MIS), the NYISO has created the position of an administrator. The administrator takes care of the behind-the-scenes management of the MIS. In general, administrators perform the following types of MIS tasks:

- Define organizations, administrators, generators, loads, and LSEs
- Assign bidding and qualified-to-bid privileges
- Define and maintain individual user accounts
- Assign user rights to access specific generators and loads
- Control access through password control

Administrators vs. Users

The NYISO makes an important distinction between administrators and users.

6.1.1 Section 6 Summary

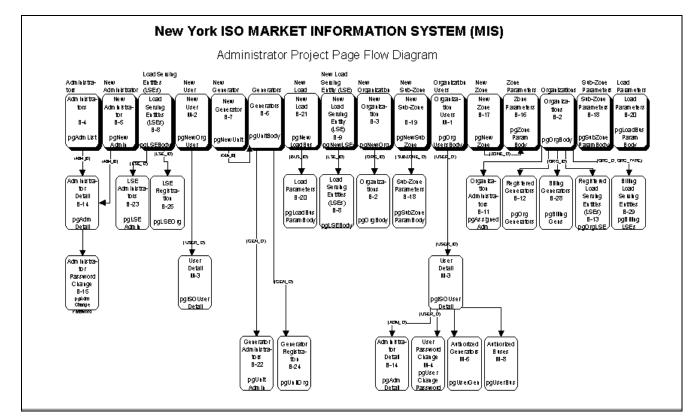
- Section 6 focuses on the Market Participant Administrator tasks, and the displays that are provided for access to the MIS.
- Sections 6.3 6.5 describe the tasks and data accessible to the following classifications of administrators:
 - NYISO Customer and Guest Organizations
 - Generators
 - LSEs

6.2 Administrator Display Overview

An overview of the displays used by the ISO and Market Participant Administrators is shown in Exhibit 6.1. A static copy of the Administrator Project Page Flow Diagram and static copies of the displays to which it is linked are accessible through the NYISO Home Page located at <u>www.NYISO.com</u>. From this page, select <u>OASIS</u>, scroll down to <u>MIS Instructions</u>, then select <u>Example Pages</u>, then select <u>Administrator Pages</u>, either in small or large format.

Exhibit 6.1:





Display Names and Page References

Each box represents an Administrator display. The title of the display is shown inside the box. A unique identifier, or page reference, is shown below the title. For example,

- M-2 is the page reference for the New User display.
- B-22 is the page reference for the Generator Administrators display.

Page references are used internally by the NYISO to identify the function. They are displayed on both the Administrator Project Page Flow Diagram and on actual displays to tie the functions together. The page reference appears in the upper left corner of the actual display.

Menu Names	The name appearing above the top row of displays refers to the name appearing in the Administrator menu frame that sits at the top of the display area. We discuss the menu frame and layout of the display area in Section 6.2.1. In the case of Administrator displays, the menu names are the same as the display name. This is not the case, however, for the Market Participant User displays, which are described in detail in Section 7.
Navigation Alternatives	The ability to move from display to display is shown in part by the lines between boxes on the Administrator Project Page Flow Diagram. Hyperlink points on the displays allow the user to jump to other displays. For example, the Market Participant Administrator may move from the Generators display (B-6) to the Generator Administrators display (B-22) or to the Generator Registration display (B- 24).
	Displays shown on the same horizontal level below a single display usually have hyperlinks to other displays at the same level. For example, the Market Participant Administrator may move between the Authorized Generators (M-5) display and the Authorized Loads (M-8) display, both at the same level under the User Detail display (M-3).
	Selecting hyperlink names from pull-down menus and selecting DISPLAY are other ways to move between displays.
	To keep the page flow diagram readable, not all possible navigation links between displays are shown. You should access the Administrator Project Page Flow Diagram and step through the displays to see the full set of navigation links that connect them.
	The same display may be accessed from more than one display. For example, the User Detail display (M-3) is accessed from the following displays:
	 Organization Users (M-1) New User (M-2) Authorized Generators (M-5) Authorized Loads (M-8)

6.2.1 Key Display Features Exhibit 6.2 illustrates several key display features that Market Participant Administrators should be aware of when interacting with MIS displays.

Exhibit 6.2: **Key Display Features**

Generator Name: ASHOKAN Bid Date 08/28/1999 04:00 (mm/dd/yyyy hhr	Num of Hours mi) 1		Expiration (DAM Only) 999 11:00 (mm/dd/yyyy	hh:mi)
	Energy	Bid		
Upper Operating Limit (MW)	Minimum Gen	eration (MW)	Minimum Gener	ation Cost (\$)
100.0	2.0		500.0	
Bid-Curve Format	Bid-Curve Format		erations	🗹 Zero Start-Up
🖲 Block Bid (3 Pairs Max) C Energy Cost Cu	urve (6 Pairs Max)	O On-Dispatch	Off-Dispatch	Cost

Pull-Down Menus	Selection and Entry Features The arrow next to Generator Name data field denotes a pull-down menu. When selecting the arrow, the user is provided a pull-down menu of all authorized generator names that the user has permission to access. The user selects the desired name from the pull-down menu, and the data field is automatically populated with the selected entry.
Numeric or Alphanumeric Data Entry	Some data fields require entry in a predefined format, as illustrated by the Bid Date field. Here the user is prompted to enter data in a specific format (mm/dd/yyyy hh:mm). If the data is entered in a format other than what is specified, an error may result but may not be detected until a validation test of the data is performed.
	Further down in Exhibit 6.2 are two radio buttons with the labels "Block Bid (3 Pairs Max)" and "Energy Cost Curve (6 Pairs Max)." Radio buttons—when grouped together—operate as follows:
	 One, and only one, button may be selected at a time When a second button is selected, the radio button moves from the previous selection to the new selection There is always one radio button shown as selected at any given point in time.
	Next to the radio buttons is another type of selection called the checkbox.
	• Selecting the checkbox activates the associated feature and places a $$ in the field.
	• Selecting the checkbox again de-selects the associated feature and removes the $$ from the field.
	A checkbox is independently selected or de-selected; it does not depend on the selection of other checkboxes.
	 Validation Process Data has been entered in the correct format Bid data is entered no more than 15 days in advance The bid date has been entered in the correct format

• The number of bid curve pairs has not been exceeded based on the bid curve format selected.

SUBMIT Action

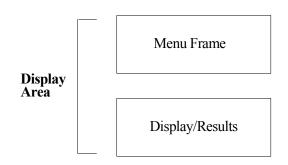
When a SUBMIT action is initiated, the data is submitted to the MIS for validation. The MIS checks the data according to its prescribed rules, and returns an error, VALIDATION FAILED status, or VALIDATION PASSED status.

- An error indicates that the data supplied to the MIS was unacceptable. Any data entered as part of the entry session is discarded, and must be re-entered.
- Error messages appear on a new window. The user should use the Back button on the browser and fix the information that was not correct.
- A VALIDATION FAILED status indicates that the data supplied was accepted by the MIS but that some data modification is required to make validation pass. The data entered during the entry session is retained.
- A VALIDATION PASSED status indicates that the data supplied has been successfully submitted. No further changes are required.

Display Layout

The primary access to the MIS is through a web-based browser connected to the Internet. The MIS display area is divided into two parts, or frames, as illustrated in Exhibit 6.3.

Exhibit 6.3: Display Area



The frames and their use are described below.

- The *Menu Frame* sits at the top of the display area. It serves as the main point of entry to those processes that the user is authorized to perform. It stays at the top of the display area throughout the MIS session. Only those processes authorized to the user show up in the menu frame.
 - If you login as a Market Participant Administrator, you will see the administrator menu frame.
 - If you login as a Market Participant User (see Section 7), you will see the user menu frame.
- The *Display/Results Frame* sits just below the menu frame in the display area. When the user selects a display from the menu frame, the chosen display appears in the display/results frame. The display/results frame serves as the main point of user interaction with displays. The user may enter data and launch processes from the display/results frame. DISPLAY and SUBMIT action buttons are provided to launch processes. When this is done, the results part of the display/results frame becomes populated with results of the action.

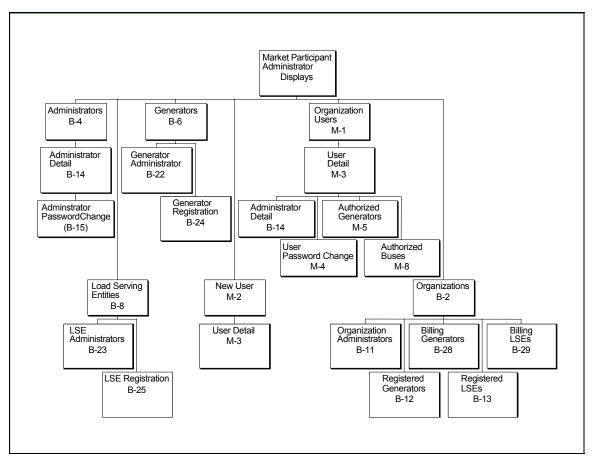
Memo Area	Several of the administrative displays include a Memo area. This area allows the Market Participant Administrator to record notes and comments relating to other entries on the display. Entry in the Memo area is free-format without restrictions on line length or number of lines. Local printout of the display from the web browser, however, will only show the visible portion of the Memo area (with the scroll bars fully up and left). The Enter key may be used to terminate lines to keep all information visible. The Administrator should maintain the Memo areas to keep them current and delete superceded notes.			
Standard Web Browser Navigation Tools	Scrolling features normally associated with a web browser allow the user to scroll from the top of the display area (where the menu frame is) to the bottom of the display area (where the display/results frame is). Moving forward or backward through the sequence of displays last called can be performed by using the "Forward" and "Backward" keys in the Web browser program.			
Presentation Cues	Actual pictures of the displays are shown in picture boxes throughout Sections 6 & 7. The pictures provide a visual image of individual data fields and their relationship to one another. The displays are usually accompanied by a description of the individual data fields. Special symbols, or icons, are provided as cues to help reinforce the actions taken in the task steps.			
	• If entry into a field is mandatory, we use the q symbol.			
	• If entry into a field is optional, we use the \Box symbol.			
	• If entry into the field is mandatory or optional (depending on the selection of other related data fields), we use the q \Box symbols together.			
	• If a display is being referenced, we use the 🗖 symbol.			
	• If data fields as a group or data entry is being referenced, we use the \mathcal{D} symbol.			
	• If an action such as DISPLAY, SUBMIT, RESET or DELETE is referenced, we use the 🖝 symbol.			
	• If special notes are being referenced that you should aware of, we use the \mathbf{E} symbol.			

6.2.2 Market Participant Administrator Displays

Exhibit 6.1 shows the total set of ISO and Market Participant Administrator displays. The ISO Administrator has access to all the displays except organization users displays.

The displays that the Market Participant Administrator can access are shown in Exhibit 6.4.

Exhibit 6.4: Market Participant Administrator Displays



6.2.3 Market Participant Administrator Login

The Market Participant Administrator logs in to the MIS through the Administrator Login page. The Login page is accessed through the MIS Home Page at www.NYISO.com. From this page, select <u>OASIS</u>, select <u>Bidding & Scheduling</u>, and select <u>Administrative Login</u>. With the proper Digital Certificate, the Administrator Login display (B-0) appears.

Exhibit 6.5: Administrator Login Page

Administrator Login		
User Name:		
Password:		
-i. IRMIT		

After the User Name and Password are entered, the Market Participant Administrator selects SUBMIT. An error message will occur if the User Name and Password combination are not authorized.

SUBMIT Entries When Login is completed, the Market Participant Administrator is presented with the administrator menu frame.

💻 🛛 Menu Frame

<u>Administrators</u> - <u>Generators</u> - <u>Load Parameters</u> - <u>Load Serving Entities (LSEs)</u> - <u>Log Out</u> - <u>New</u> <u>Administrator</u> - <u>New Generator</u> - <u>New Load</u> - <u>New Load Serving Entity (LSEs)</u> - <u>New Organization</u> -<u>New Sub-Zone</u> - <u>New Zone</u> - <u>Organizations</u> - <u>Sub-Zone Parameters</u> - <u>Zone Parameters</u> -

The above frame shows the categories of displays that the Market Participant Administrator is permitted to access. The list is consistent with the displays shown in Exhibit 6.4. The categories of accessible displays may actually be fewer in number than the total set shown above. Specific access depends on the organizations, generators, and LSEs that the Market Participant Administrator is allowed to administer.

The menu frame remains at the top of the screen throughout the time the Administrator is logged in. The Market Participant Administrator selects the desired displays from the menu frame.

Selecting the <u>Log Out</u> hyperlink in the user menu frame allows a user to exit the MIS application. This clears the session and connection on the NYISO MIS server. Although log out is not mandatory, it is good practice for system security. The message "You Have Successfully Logged Out" will appear on your screen briefly. Then, the user's screen automatically reverts to the NYISO home page.

6.2.4 Secure Communication with the MIS

The primary medium of communication between the Market Participants and the MIS is the public Internet. Those wishing to obtain proprietary data improperly or who wish to "hack" into system for the purpose of doing damage most likely have sophisticated tools and techniques with which to accomplish these objectives. The MIS employs several techniques designed to prevent such activity. Once logged into the MIS, user IDs and passwords are employed to control and to limit access to only that data appropriate to the user's organization and administrative procedures.

In order to prevent user IDs and passwords from being seen by eavesdroppers, all communications between users and the server are encrypted using SSL (Secure Sockets Layer) v3. The user's browser should be set to accept SSL v3. Furthermore, each user must be authenticated through the use of a Digital Certificate. This certificate, which is issued by a trusted third party, ensures that the server cannot be spoofed into accepting someone else posing as a certified user.

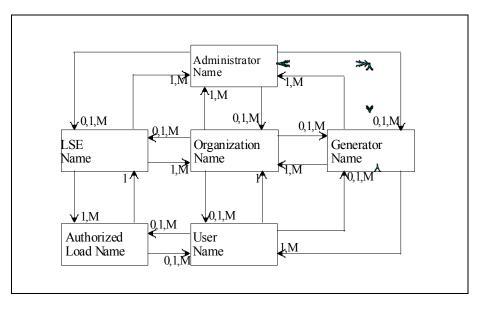
The most popular browsers (e.g., Netscape 4.X and Microsoft Internet Explorer 4.X) support strong encryption. It is transparent to the user, requiring no special actions. However, users must obtain and install the Digital Certificate. Each machine used to access the MIS must have the certificate file installed on it. Machines must be protected against unauthorized access to prevent the certificate from being copied improperly.

Information on obtaining and managing a Digital Certificate can be found in Section 4.4: Digital Certificates, of this manual.

6.2.5 MIS Data Model

The MIS Data model provides a flexible means for different organizations to manage their access to the MIS. There are six primary entities in the MIS model as shown in Exhibit 6.5.

Exhibit 6.5: MIS Data Model



The lines between boxes in Exhibit 6.5 denote relationships. These relationships need to exist for bids to be submitted against a generator or load. The following labels are used in the Exhibit:

- 1 means one and only
- 1,M means at least one but maybe more
- 0,1,M means zero, one, or many

The use of labels is intuitive based on the relationships described below.

	• •	administers zero one, or many generators administers zero, one, or many LSEs administers zero, one, or many organizations
A Generator:	• •	belongs to one or more organizations belongs with one or more users is administered by one or more administrators
	• •	belongs to one or more organizations is administered by one or more administrators may have one or more loads belonging to it
A User:	• •	may have zero, one, or many generators belonging to it may have zero, one, or many loads belonging to it belongs to one and only one organization
	•	belongs to one and only one LSE may belongs to zero, one, or many users

An Organization: •

- has zero, one, or many generators
- has zero, one, or many LSEs
- has one or more administrators assigned
- has zero, one, or many users assigned

6.2.6 Getting Started

One of the first decisions a NYISO Customer must make when signing on to the NYISO is to determine the best arrangement for managing the administration of the various Market Participant Users within the organization. The MIS design is very versatile; it provides the NYISO Customer's Organization with several options for establishing who can set up accounts and who can submit bids.

- The administration of organizations, generators, and LSEs may be done within the NYISO Customer or Guest Organization or be delegated to a third-party organization
- The administration of organizations, generators, and LSEs may be segmented with a different administrator assigned to one or more of each category
- Bids may be submitted by users within the company or users from third-party organizations such as power marketers
- Users can be authorized to submit bids for different markets for predefined combinations of generators, loads, and/or transactions, based on the generators and loads authorized to the user

Market Participant Administrator Classifications

When signing up with the NYISO, the NYISO Customer must supply the name(s) of the administrator(s) that will be managing access to the MIS. The NYISO, per the NYISO Customer's instructions, will assign the designated Market Participant Administrator(s) <u>one or more</u> of the following Market Participant Administrator classifications:

 This classification enables the Market Participant Administrator to access the following displays from the menu frame (See Exhibit 6.4): Administrators New Users Organization Users Organizations (full set of displays)
 This classification enables the Market Participant Administrator to access the following displays from the menu frame. Administrators New Users Organization Users Organizations (full set of displays) Users in Guest Organizations have the same access to displays as users in NYISO Customer Organizations; the only difference is that Guest Users have view-only access to the displays.
 This classification enables the Market Participant Administrator to access the following displays from the menu frame: Administrators Organizations (subset of displays only) Generators
 This classification enables the Market Participant Administrator to access the following displays from the menu frame: Administrators Organizations (subset of displays only) Load Serving Entities The next few sections look at each administrator classification and the display and task capabilities provided for each.

6.3 NYISO Customer or Guest Classification

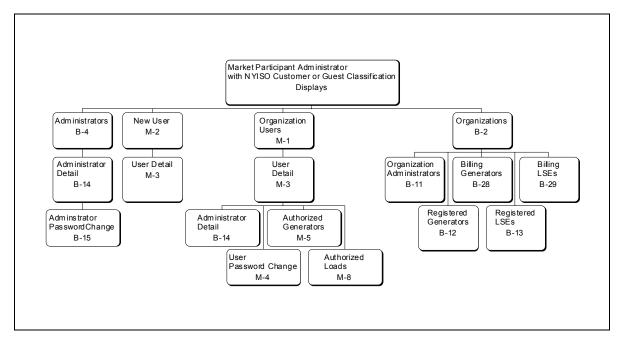
This section describes the MIS access that is provided to Market Participant Administrators with the NYISO Customer classification or Guest classification:

- Market Participant Administrators with the NYISO Customer classification can administer to organizations of the NYISO Customer type.
- Market Participant Administrators with the Guest classification can administer to organizations of the Guest type. Users in a Guest Organization can view displays but not change or enter data.

Market Participant Administrators with either classification have access to the same set of displays.

A Market Participant Administrator with the NYISO Customer or Guest classification has access to the following displays through the Administrator menu frame.

Exhibit 6.6: NYISO Customer or Guest Displays



Using these displays, the Market Participant Administrator with NYISO Customer or Guest classification can perform a variety of tasks ranging from assignment of new users to control of passwords. The tasks are as follows:

From the Administrators' displays (B-4, B-14, B-15)

Administrators' Displays and Tasks (See Section 6.3.1)

- View/change administrator contact information
 View assigned administrator classifications
- View current assignments of organizations, generators, and LSEs to administrators

	Change the administrator password
New Users' Displays and Tasks (See Section 6.3.2)	From the New Users' displays (M-2, M-3)Add new user contact information and bidding privileges
Organization Users' Displays and Tasks (See Section 6.3.3)	 From the Organization Users' displays (M-1, M-3, B-14, M-4, M-5, M-8) View individual users associated with organizations assigned to your administrator account View/change/delete user contact information and bidding privileges Overwrite user passwords View/add/remove generators authorized to a user View/add/remove loads authorized to a user
Organizations' Displays and Tasks (See Section 6.3.4)	 From the Organizations' displays (B-2, B-11, B-12, B-28, B-13, B-29) View/change contact information for organizations View market times and authorized-to-bid privileges Add/remove administrators currently assigned to an organization View registered generators associated with an organization View generators that the organization is registered to bill View registered LSEs associated with an organization View LSEs which the organization is registered to receive bills

6.3.1 Administrators' Displays and Tasks

Market Participant Administrators with the NYISO Customer or Guest classification can perform the following tasks through the Administrator displays shown as B-4, B-14, and B-15 in Exhibit 6.6.

- View/change administrator contact information
- View assigned administrator classifications
- View current assignments of organizations, generators, and LSEs to administrators
- Change the administrator password

View/Change Administrator Contact Information

```
Special Notes The Market Participant Administrator is permitted to change any of the contact information.
```

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Administrators" from the Administrator menu frame. This takes you to the Administrators display (B-4).
- **Step 3:** Select your "Administrator" Name from the Administrators display (B-4).

Step 4: Scroll to the following portion of the Administrators Detail Display (B-14).

Page Ref: B-14	
	Administrator Detail
Last Updated By: 1 Last Administrator Organization: ISO ADMINISTRATIVE	Update: 07/09/1999 15:42:48 Active: ビ
Name: ISO Administrator Primary Phone: 518-356-6000	Address: 3890 Carman Road Schenectady NY, 12303
Secondary Phone:	
FAX: 518-356-6118 E-Mail: ?	
Pager: ? Oracle User _{ISOADMIN} Name:	

Administrator Contact Information (B-14)

Step 5: View/change the "contact information." Then, initiate "SUBMIT" action. The MIS will confirm your changes.

View Assigned Administrator Classifications

Special Notes

The administrator classifications are described in Section 6.2.6. The Market Participant Administrator may not change any of these assignments; any changes must be submitted to the ISO Administrator.

- **Step 1:** Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- **Step 2:** Select "Administrators" from the Administrator menu frame.
- Step 3: Select your "Administrator" Name from the Administrators display (B-4).
- Step 4: Scroll to the following portion of the Administrator Detail Display (B-14).

Administrator Classifications

Allowed To Administer: 🔽	ISO	🗖 Direct Customer	🗖 Guest	🗖 Generator	🗆 Load Serving Entity
				Mem	0
SUBMIT RESET	DE	ELETE			

View Current Assignments of Organizations, Generators, and LSEs to Administrators

- Step 1: Login via the "Administrator Login Page" from "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Administrators" from the Administrator menu frame.
- Step 3: Select your "Administrator" Name from the Administrators display (B-4).
- Step 4: Scroll to the following portion of the Administrator Detail Display (B-14).

Organizations Currently Assigned

Name	Туре
NTERFACE ISO	INTERFACE
SO ADMINISTRATIVE	ADMINISTRATIVE
NY ISO Dispatchers	NYISO DISPATCHER

This section of the display lists all of the organizations, organization users, generators, and LSEs currently assigned to the administrator. The list of items depends on classifications assigned to the administrator.

- If only "NYISO Customer" is assigned, you will see only the organizations and organization users assigned to you.
- If only "Generator" is assigned, you will see only the generators assigned to you.
- If only "LSE" is assigned, you will see only the LSEs assigned to you.
- **Special Notes** If more than one classification is assigned, then the Market Participant Administrator will see all the items pertaining to the collective classifications.

Change the Administrator Password

- **Special Notes** The Market Participant Administrator must keep the password in a safe place. If the password is forgotten or lost, a new password must be obtained from the ISO Administrator.
 - Step 1: Login via the "Administrator Login Page" from "MIS Home Page." See Section 6.2.3 for the Login display.
 - Step 2: Select "Administrators" from the Administrator menu frame.
 - Step 3: Select your "Administrator" Name from the Administrators display (B-4).
 - **Step 4:** Scroll to the bottom of the Administrator Detail Display (B-14) and select <u>Change</u> <u>Password</u>. The following information appears:

Administrator Password Change (B-15)

Ad	ministrator Password Change
Organization: ADMINISTRATIVE	Type: ADMINISTRATIVE
New Password:	
Confirm New Password:	
	SUBMIT
	SOBMIT
	Organization: ADMINISTRATIVE

- Step 5: Enter a new password and then enter it again for confirmation.
- SUBMIT Password After the passwords have been entered, select SUBMIT. The MIS will confirm acceptance of the password.

6.3.2 New Users' Displays and Tasks

Market Participant Administrators with the NYISO Customer or Guest classification can perform the task of adding new users, contact information, and bidding privileges for a user in an organization. The task is performed using the New User displays shown as M-2 and M-3 in Exhibit 6.6.

Add New User Contact Information and Bidding Privileges

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "New User" from the Administrator menu frame.
- **Step 3:** Select the organization to which the new user is to be assigned. The pull-down menu will present you with a list of organizations to which you are permitted to assign users. After the selection is made, the New User display (M-2) is presented.

					New	User			
Organization: 🕟	ITERFACE ISC		Active: 🗆						
Name:	Joe Bloggs					Address:			
Primary Phone:	518-356-9999								
Secondary Phone:									
FAX:									
E-Mail:									
Pager:									
Oracle User Name:	BLOGGSJO								
					Bidding]	Privileges			
		DAM Generators	HAM Generators	Loads	DAM Transactions	HAM Transactions	Non-Firm Transactions	Update UC Data	
		1			Me	emo			
					Me	emo			*

New User Contact and Bidding Privileges (M-2)

- Step 4: Enter the new user contact information.
- **Step 5:** Select whether the account is to be active or inactive. This feature allows the Market Participant Administrator to enter some of the information now and wait until later before allowing the user to access the account.

Step 6:	 Select the bidding privileges to be assigned to the user. The selections are as follows: DAM Generators – The user is authorized to view/submit/change bids for generators in the day-ahead market (E-4, E-5, and E-7 in Section 7.4)
	• HAM Generators – The user is authorized to view/submit/change bids for generators in the hour-ahead market (E-4, E-5, and E-7 in Section 7.4)
	• DAM Transactions – The user is authorized to view/submit/change bids for transactions in the day-ahead market (H-4, H-5, H-2, H-3, H-6, and H-7 in Section 7.6)
	• HAM Transactions – The user is authorized to view/submit/change bids for transactions in the hour-ahead market (H-4, H-5, H-2, H-3, H-6, and H-7 in Section 7.6)
	• Loads – The user is authorized to view/submit/change bids for loads (F-5 and F-3 in Section 7.5).
	• Update UC Data – The user is authorized to view/change Generator Commitment Parameters for generators (E-2 in Section 7.3).
	• Non-Firm – The user is authorized to view/submit/change non-firm transactions (Section 7.6).
SUBMIT Entries	After all your entries have been made, select SUBMIT. The MIS will confirm your entries. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.
E Special Notes	There is additional information that needs to be entered for a new user. See Section 6.3.3 for the assignment of passwords, generators, and loads to a user.
	Selecting SUBMIT automatically calls up the User Detail display (M-3), which is discussed in Section 6.3.3.
	The organization to which the user belongs also has a set of Authorized-to-Bid privileges. These serve as the total set of possible bidding privileges that may be assigned to a user in that organization. For example, a user cannot be assigned the DAM Generator privilege if the organization is not authorized to bid DAM Units. We discuss more about what organizations can and cannot do in Section 6.3.4.

6.3.3 Organization Users' Displays and Tasks

Market Participant Administrators with the NYISO Customer or Guest classification can perform the following tasks through the Organization Users' displays shown as M-1, M-3, B-14, M-4, M-5, and M-8 in Exhibit 6.6.

- View individual users associated with organizations assigned to your administrator account
- View/change/delete user contact information and bidding privileges
- Overwrite user passwords
- View/add/remove generators authorized to a user
- View/add/remove loads authorized to a user

View of Individual Users Associated with Organizations Assigned to your Administrator Account

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organization Users" from the Administrator menu frame. The Organization Users display (M-1) is presented.
- **Step 3:** Select the organization to view the users that are associated with the organization. The pull-down menu will present you with a list of organizations for which you are permitted to view assigned users.

Select DISPLAY Select DISPLAY. The MIS responds by presenting a list of users associated with the selected organization at the bottom of the display.

Organization Users (M-1)

Page Ref: M-1		
		Organization Users
Select Organization: NYIS	Dispatchers 💌 DISPLAY	
Organization: NY ISO Dispa Type: NYISO DISPATCHEI		
Users		
	Name	Name
	ISO Senior Pool Bidding Dispa (ISO SPD2)	tcher ISO Senior Pool Guest Dispatcher (ISO_SPD1)

Special Notes

The individual user names in the Users' section of the display function as hyperlinks to the respective User Detail display (M-3). This is the same display that we used in Section 6.3.2 to add a new user.

View/Change/Delete User Contact Information and Bidding Privileges

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organization Users" from the Administrator menu frame. The Organization Users display (M-1) is presented.
- **Step 3:** Select the organization to view the users that are associated with the organization. The pull-down menu will present you with a list of organizations for which you are permitted to view assigned users.

Select DISPLAY Select DISPLAY. The MIS responds by presenting a list of users associated with the selected organization at the bottom of the display.

Step 4: Select the user name that you want to view. The name of each user acts as a hyperlink to the User Detail display (M-3) for that user.

Page Ref: M-3									
					User	Detail			
Organization: I	NTERFA	ACE ISC) Type:	INTERFACE	Updated By: <u>1</u>	Update	Time: 08/19/1998 1	2:51:43 Acti	ve: 🗆
37	line in					Address	. [
Name Primary Phone			E USER			Address	:		
Frimary Phone Secondar Phone	y	56-6000							
FAJ									
E-Mai						1			
Page									
Oracle Use Name	er ISOIN	TER							
					Bidding	Privilege	es		
				Generators	Transactions	Loads	Update UC Data	Non-Firm	
		ļ	DAM						
			HAM						
					Μ	[emo			
									×
SUBMIT	R	ESET	DELE	TE					
Change Passwore	<u>d Auth</u>	iorized G	enerators	Authorized L	oads				

User Detail (M-3)

- **Step 5:** View/change any of the user contact information.
- **Step 6:** View/change the active status of the account.
 - Prior to deleting a user (see next page), the Market Participant Administrator

should first take the user off active status. The user should then remain inactive until his/or her user's ID is cleared out of any active MIS records in the database.

- A "Delete" user account action may not be successful if the user's ID is still resident in an active MIS database record.
- **Step 7:** View/change the bidding privileges assigned to the user. The selections are as follows:
 - DAM Generators The user is authorized to view/submit/change bids for generators in the day-ahead market (E-4, E-5, and in E-7 Section 7.4)
 - HAM Generators The user is authorized to view/submit/change bids for generators in the hour-ahead market.(E-4, E-5, and in E-7 Section 7.4)
 - DAM Transactions The user is authorized to view/submit/change bids for transactions in the day-ahead market (H-4, H-5, H-2, H-3, H-6, and H-7 in Section 7.6)
 - HAM Transactions The user is authorized to view/submit/change bids for transactions in the hour-ahead market (H-4, H-5, H-2, H-3, H-6, and H-7 in Section 7.6)
 - Loads The user is authorized to view/submit/change bids for loads (F-5 and F-3 in Section 7.5).
 - Update UC Data The user is authorized to view/change Generator Commitment Parameters (E-2 in Section 7.3).
 - Non-Firm The user is authorized to view/submit/change non-firm transactions (Section 7.6).

To delete a user, select DELETE.

- The DELETE action will not be successful if the user's ID still resides in an active MIS record in the database.
- You will need to place the user's account in "inactive" status (See Item 7 above) for a period of time until his/her ID clears the database.
- **Special Notes** The organization to which the user belongs also has a set of Authorized-to-Bid privileges. These serve as the total set of possible bidding privileges that may be assigned to a user in that organization. For example, a user cannot be assigned the DAM Generator privilege if the organization is not authorized to bid DAM Units. We discuss more about what organizations can and cannot do in Section 6.3.4.

You can effectively make the user a guest (view-only access) by not checking any of the bidding privileges.

Overwrite User Passwords

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organization Users" from the Administrator menu frame. The Organization Users display (M-1) is presented.
- Step 3: Select the organization to view the users that are associated with the organization. The pull-down menu will present you with a list of organizations for which you are permitted to view assigned users.
- Step 4: Select the user name that you want to view. The User Detail display (M-3) for that user is presented.
- Step 5: Scroll to the bottom of the User Detail display and select Change Password. The MIS responds by presenting the User Password Change display (M-4) for that user.

Page Ref: M-4	ssword Cha	nge (M-4)		
_			\mathbf{U}_{2}	ser Password Change
Username:	ISO_SPD1	Organization:	NY ISO Dispatchers	Type: NY ISO
		Nor	v Password:	
		Confirm Nev		
			1	SUBMIT RESET

_

Step 6: Enter a password and then enter it again for confirmation.

After the passwords have been entered, select SUBMIT. The MIS will confirm SUBMIT Entries acceptance of the password. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.

View/Add/Remove Generators Authorized to a User

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organization Users" from the Administrator menu frame. The Organization Users display (M-1) is presented.
- **Step 3:** Select the organization to view the users that are associated with the organization. The pull-down menu will present you with a list of organizations for which you are permitted to view assigned users.
- **Step 4:** Select the user name that you want to view. The User Detail display (M-3) for that user is presented.
- **Step 5:** Scroll to the bottom of the User Detail display and select <u>Authorized Generators</u>. The MIS responds by presenting the Authorized Generators display (M-5) for that user.

Authorized Generators						
ser Name: CUSACKDE Organization Name: INTERFA	ACE ISO Type: INTERFACE					
urrently Authorized Generators						
Generator Name						
Add Generator	Remove Generator					
59TH STREET_GT_1						
	SUBMIT					

Authorized Generators (M-5)

- **Step 6:** To view the currently authorized generators for the user, scroll down through the list of Authorized Generators.
- **Step 7:** To add a generator, scroll to the bottom of the M-5 display to the "Add Generator" section. Use the pull-down menu to select the generator that you want to add to the authorized list. Use the "Ctrl" or "Shift" keys to select multiple generators if necessary.
- Step 8: To remove a generator from the authorized list, scroll to the bottom of the M-5 display to the "Remove Generator" section. Use the pull-down menu to select one or more generators that you want to remove from the authorized list.

SUBMIT Entries After the add/remove names have been entered, select SUBMIT. The list of Authorized Generators will refresh with the entered generators added and/or removed.

Special Notes The list of Add Generators in the pull-down menu contains the generators registered to the organization to which the user belongs that have not yet been selected for this user. Changes to the registered generators list must be made through the ISO

Administrator. The list of all registered generators for an organization may be viewed per the steps in Section 6.3.4.

View/Add/Remove Loads Authorized to a User

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organization Users" from the Administrator menu frame. The Organization Users display (M-1) is presented.
- Step 3: Select the organization to view the users that are associated with the organization. The pull-down menu will present you with a list of organizations for which you are permitted to view assigned users.
- Step 4: Select the user name that you want to view. The User Detail display (M-3) for that user is presented.
- **Step 5:** Scroll to the bottom of the User Detail display and select <u>Authorized Loads</u>. The MIS responds by presenting the Authorized Loads display (M-8) for that user.

Authorized Loads (M-8)

	Authorized Loads	
er Name: CUSACKDE Organization Nam	e: INTERFACE ISO Type: INTERFACE	1
rrently Authorized Loads		
Load Name	Sub-Zone Name	Zone Name
CE-GILBOA_CE_NY-CITY	CON ED NY CITY	N.Y.C.
CE-IP3_CE_NY-CITY	CON ED NY CITY	N.Y.C.
CEDS_CE_NY-CITY	CON ED NY CITY	N.Y.C.
CENT-HUD_CH_HUDSONVY	CENT HUD HUDSON VLY	HUD VL
CENT-HUD_CH_MOHAWKVY	CENT HUD MOHAWK VLY	MHK VL
CEPOLITI_CE_NY-CITY	CON ED NY CITY	N.Y.C.
CH-GILBOA_CH HUDSONVY	CENT HUD HUDSON VLY	HUD VL
SELECT_NM_CENTRAL	NMPC CENTRAL	CENTRL
SELECT_NY_CENTRAL	NYSEG CENTRAL	CENTRL
SELECT_NM_GENESEE	NMPC GENESEE	GENESE
WEST-POINT_OR_HUDSONVY	O&R HUDSON VLY	HUD VL
AGWAY_NM_WEST AGWAY_NM_WEST AGWAY_NM_NORTH AGWAY_NM_MOHAWKVY AGWAY_NM_CENTRAL	CE-IP3_C CEDS_C CENT-H CEPOLT	Remove Loads
AGWAY_NM_GENESEE		OA_CH_HUDSONVY

Step 6:	To view the currently authorized loads for the user, scroll down through the list of Authorized Loads.
Step 7:	To add a load, scroll to the bottom of the M-8 display to the "Add Loads" section. Use the pull-down menu to select the load(s) that you want to add to the authorized list.
Step 8:	To remove a load, scroll to the bottom of the M-8 display to the "Remove Loads" section. Use the pull-down menu to select the load(s) that you want to remove from the authorized list.
SUBMIT Entries	After the add/remove names have been entered, select SUBMIT. The list of Authorized Loads will refresh with the entered loads added and/or removed.
Special Notes	The list of Add Loads in the pull-down menu contains the loads registered to the organization to which the user belongs that have not yet been selected for this user. Changes to the registered loads list must be made through the ISO Administrator.
	Two hyperlinks (<u>User Detail</u> and <u>Authorized Units</u>) at the bottom of M-8 display are provided to link back to the User Detail display (M-3) for this user and to the Authorized Generators display (M-5) for this user.

6.3.4 Organization Displays and Tasks

Market Participant Administrators with the NYISO Customer or Guest classification can perform the following tasks shown as displays B-2, B-11, B-12, B-28, B-13, and B-29 in Exhibit 6.6.

- View/change contact information for organizations
- · View market times and authorized-to-bid privileges
- Add/remove administrators currently assigned to an organization
- View registered generators associated with an organization
- View generators which the organization is registered to bill
- View registered LSEs associated with an organization
- View LSEs which the organization is registered to receive bills

View/Change Contact Information for Organizations

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- **Step 2:** Select "Organizations" from the Administrator menu frame. The Organization display (B-2) is presented.
- **Step 3:** Select the organization to view the contact information that is associated with the organization. The pull-down menu will present you with a list of organizations that you are permitted to access.

Select DISPLAY Select DISPLAY. The MIS responds by presenting in the contact information for the selected organization.

Page Ref: B-2	
	Organizations
Organizations: Bob's Training Corp	PLAY
Organization: Bob's Training Corp Updated By: <u>1001</u> Update Time: 01/25/1999 17:10:24 Active:	Organization Type: DIRECT CUSTOMER -
Contact	
Name: Bob Logan	
Primary Phone: 518-356-6019	Address:
Secondary Phone:	
FAX:	
E-Mail: rlogan@nyiso.com	
Pager:	

Organizations' Information (B-2)

SUBMIT Entries

View/change the contact information. Then select SUBMIT at the bottom of display B-2. The MIS will confirm your changes.

Special Notes The NYISO Customer Administrator is permitted to change only the contact information. Deleting an organization or changing other information on this display must be performed by the NYISO Administrator.

View Authorized-to-Bid Privileges

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organizations" from the Administrator menu frame. The Organization display (B-2) is presented.
- **Step 3:** Select the organization to view the authorized-to-bid privileges that are associated with the organization. The pull-down menu will present you with a list of organizations that you are permitted to access.
- **DISPLAY Results** Select DISPLAY. The MIS responds by filling in the authorized-to-bid information for the selected organization. Scroll to the portion of the display showing the authorized-to-bid privileges.

A Market Times and Authorized-to-Bid Privileges

			Organiz	zations				
rganizations: Bob's	Training Corp	•	DISPLAY					
Drganization: Bob's	Training Corp Update Time: 01/	/25/1999 17:10:24 /	O. Active: 🗹	rganizatio	n Type: DIP	ECT CUSTO	MER 💌	
Contact								
Name: E Primary Phone: 5 Secondary T Phone: FAX: T]] -		Address:				
-	ogan@nyiso.com]						
Authorized to Bid: Service Level Agreem		HAM Units 🛛 🔽 DA Maximum Allowed M		₩ HAM	[Transactions	☞ Loads	🔽 Update UC	Data 🔽 Billing
		Memo						
	ization designed	i specifically for	r training pu	urposes o	only.	×		
	ization designed	a specifically for	r training pu	arposes o	only.	×		

Step 4: View the data. The authorized-to-bid selections are as follows:

• DAM Units – The organization is authorized to assign privileges to its users to submit/change bids for generators in the day-ahead market.

- HAM Generators The organization is authorized to assign privileges to its users to submit/change bids for generators in the hour-ahead market.
- DAM Transactions The organization is authorized to assign privileges to its users to submit/change bids for transactions in the day-ahead market.
- HAM Transactions The organization is authorized to assign privileges to its users to submit/change bids for transactions in the hour-ahead market.
- Loads The organization is authorized to assign privileges to its users to submit/change bids for loads.
- Update UC Data The organization is authorized to assign privileges to its users to change Generator Commitment Parameters.
- Billing The organization is eligible to be selected to receive bills for registered generators or LSEs. The actual selection of a generator's or LSE's billing organization is done by the Market Participant Administrator who is allowed to administer to Generators or LSEs. See Section 6.4.

The authorized-to-bid privileges are view-only for the Administrator. To change any of this information, or the Maximum Allowed Members limit, the Market Participant Administrator must contact the ISO Administrator.

Add/Remove Administrators Currently Assigned to an Organization

- **Step 1:** Login via the Administrator Login Page from the MIS Home Page. See Section 6.2.3 for the Login display.
- **Step 2:** Select "Organizations" from the Administrator menu frame. The Organizations display (B-2) is presented.
- **Step 3:** Select the organization that you want to access. The pull-down menu will present you with a list of organizations you are permitted to access.
- Select DISPLAY Results Select DISPLAY. The MIS responds by presenting the data for the selected organization.
 - Step 4: Scroll to the bottom of the display. Select <u>Organization Administrators</u>. The Organization Administrators display (B-11) is presented.

G Organization Administrators (B-11)

Page Ref: B-11		
	Organization Administrat	tors
Organization: INTERFACE ISO Type: INT	ERFACE	
Currently Assigned Administators		
	Name ISOADMIN	
Add Adminis EVANOSD, HAIGHTFR HURYSZB KLAPPKE KOPECKFF MAYOJO MORRISPE		Remove Administrator
	SUBMIT	
<u>Organizations</u>		

- **Step 5:** To add an administrator, scroll to the bottom of the display to the "Add Administrator" section. Use the pull-down menu to select one or more administrators that you want to add to the organization.
- **Step 6:** To remove an administrator, scroll to the bottom of the display to the "Remove Administrator" section. Use the pull-down menu to select one or more administrators that you want to remove from the organization.
- SUBMIT Entries After the add/remove names have been entered, select SUBMIT. The list of currently assigned administrators will refresh with the entered administrator names added and/or removed.

E Special Notes There is no check to prevent you from removing yourself as an administrator. If this is done, you will no longer have administrator access to the organization under this administrator account.

There is a hyperlink at the bottom of display B-11 to take you back to the Organizations display (B-2).

View Registered Generators Associated with an Organization

- **Step 1:** Login via the Administrator Login Page from the MIS Home Page. See Section 6.2.3 for the Login display.
- **Step 2:** Select "Organizations" from the Administrator menu frame. The Organizations display (B-2) is presented.
- **Step 3:** Select the organization that you want to access. The pull-down menu will present you with a list of organizations that you are permitted to access.

Select DISPLAY Select DISPLAY. The MIS responds by presenting the data for the selected organization.

Step 4: Scroll to the bottom of the display. Select <u>Registered Generators</u>. The Registered Generators display (B-12) is presented.

Registered Generators (B-12)

CT CUSTOMER Generator Name GLEN PARK HARZA MOOSERIVER HYDRAULIC_RACE_HYD INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD LOWERHUDSON
GLEN PARK HARZA MOOSERIVER HYDRAULIC_RACE_HYD INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD
GLEN PARK HARZA MOOSERIVER HYDRAULIC_RACE_HYD INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD
HARZA MOOSERIVER HYDRAULIC_RACE_HYD INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD
HYDRAULIC_RACE_HYD INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD
INTERNATIONLPAPER LINDEN COGEN LITTLE FALLSHYD
LINDEN COGEN LITTLE FALLSHYD
LITTLE FALLSHYD
—
LOWERHUDSON
N SALMONHYD
ONONDAGACOGEN
OSWEGATCHIEHYD
PYRITESHYD
RANKINE
SENECAENERGY
SENECA_OSWGOHYD
SYRACUSEPOWER
WATERTOWNHYD
Remove Units
ADK HOOSICKFALLS ADK RESOURCERCVRY ADK S GLENSFALLS BOB'S_GEN_TFALLS BOB'S_GEN_TFALNING BROOKLYN_NAVY_YARD BURROWSLYONSDAL CIBROPETRO
SUBMIT

Step 5:	View the list of Currently Authorized Units.
Special Notes	This is a view-only display for the Market Participant Administrator. Any additions or removals of units must be done through the ISO Administrator.
	There is a hyperlink at the bottom of display B-12 to take you back to the Organizations display (B-2).

View Generators Which the Organization is Registered to Bill

- **Step 1:** Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- **Step 2:** Select "Organizations" from the Administrator menu frame. The Organizations display (B-2) is presented.
- **Step 3:** Select the organization that you want to access. The pull-down menu will present you with a list of organizations that you are permitted to access.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the data for the selected organization.
 - **Step 4:** Scroll to the bottom of the display. Select <u>Billing Generators</u>. The Registered Generators display (B-28) is presented.

Billing Generators (B-28)

E	Billing Generators
anization Name: Bob's Training Corp Type: DIRECT CUSTC	DMER
rently Registered Units	
[Generator Name
ADK HOOSICK FALLS ADK RESOURCE RCVRY	
ADK S GLENS FALLS CARTHAGE PAPER CIBRO PETRO	
CORNELL DOGLVILLE HYD E CANADA MHWK HY	
FRANKLIN FALL HYD GENERAL MILLS	
<u>HYDRAULIC RACE HYD</u> LIITILE FALLS <u>HYD</u> N SALMON <u>HYD</u>	
NORTHSIDE 115 ANITEC OSWEGATCHIE HYD PYRITES HYD	
SENECA ENERGY SENECA OSWGO HYD SYRACUSE POWER	
WATERTOWN HYD	
Add Units H0_GEN_CHAT DC N.E_GEN_SANDY PD NYISO_LBMP_REFERENCE O.H_GEN_BRUCE PJM_GEN_KEYSTONE	Remove Units ADK HOOSICKFALLS ▲ ADK RESOURCERCVRY ▲ ADK S GLENS_FALLS ▲ CARTHAGEPAPER CBROPETRO CORNELL DOGLVILLEHYD
	SUBMIT

Step 5: View the assignments list of units registered for billing.

Special Notes This is a view-only display for the Market Participant Administrator. Any additions or removals of billing units must be done through the ISO Administrator.

There is a hyperlink at the bottom of display B-28 to take you back to the Organizations display (B-2).

View Registered LSEs Associated with an Organization

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- **Step 2:** Select "Organizations" from the Administrator menu frame. The Organizations display (B-2) is presented.
- **Step 3:** Select the organization that you want to access. The pull-down menu will present you with a list of organizations that you are permitted to access.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the data for the selected organization.
 - Step 4: Scroll to the bottom of the display. Select <u>Registered LSEs</u>. The Registered LSEs display (B-13) is presented.

Page Ref: B-13	
	Registered Load Serving Entities (LSE)
Organization	Name: Bob's Training Corp Type: DIRECT CUSTOMER
Currently Au	thorized LSEs
	LSE Name BOBSLSE
	Add LSEs Remove LSEs CONFED UPA NMPC NYSEG CENHUD OBR NYPA-1 SUBMIT
Organizations	

Registered LSEs (B-13)

Step 5: View the list of registered LSEs.

Special Notes This is a view-only display for the Market Participant Administrator. Any additions or removals of LSEs must be done through the ISO Administrator.

There is a hyperlink at the bottom of display B-13 to take you back to the Organizations display (B-2).

View LSEs from which the Organization is Registered to Receive Bills

- **Step 1:** Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Organizations" from the Administrator menu frame. The Organizations display (B-2) is presented.
- **Step 3:** Select the organization that you want to access. The pull-down menu will present you with a list of organizations that you are permitted to access.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the data for the selected organization.
 - **Step 4:** Scroll to the bottom of the display. Select <u>Billing LSEs</u>. The Billing LSEs display (B-29) is presented.

Page Ref. B-29	
Billin	g Load Serving Entities
Organization Name: Bob's Training Corp Type: DIRECT CUS	IOMER
Currently Registered LSEs	
	LSE Name
Add LSEs	Remove LSEs
BOBSLSE	
	SUBMIT
<u>Organizations</u>	

Billing LSEs (B-29)

Step 5: View the list of LSEs for which the organization is registered to receive bills.

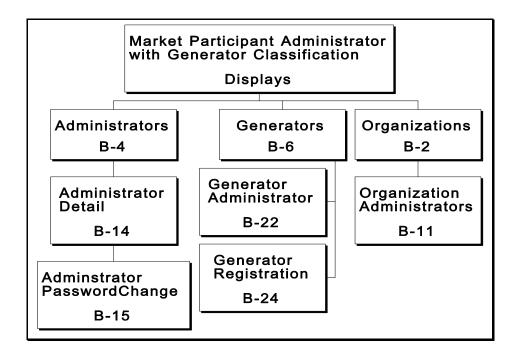
Expecial Notes This is a view-only display for the Market Participant Administrator. Any additions or removals of billing units must be done through the ISO Administrator.

There is a hyperlink at the bottom of display B-29 that takes you back to the Organizations display (B-2).

6.4 Generator Classification

This section describes the MIS access that is provided to Market Participant Administrators with the Generator classification.

Exhibit 6.7: Generator Displays



Using these displays, the Market Participant Administrator with Generator classification can perform a variety of tasks ranging from changing contact information to adding/removing administrators assigned to a generator. The tasks are described in terms of the display groups shown above:

- Administrator Displays and Tasks
- Generator Displays and Tasks
- Organization Displays and Tasks

6.4.1 Administrator Displays and Tasks

Market Participant Administrators with the Generator classification can perform the following tasks from the Administrators displays shown as B-4, B-14, and B-15 in Exhibit 6.7.

- View/change administrator contact information
- View assigned administrator classifications
- View current assignments of organizations, generators, and LSEs to administrators
- Change the administrator password

See Section 6.3.1 for a detailed description of these tasks.

6.4.2 Generator Displays and Tasks

Market Participant Administrators with the Generator classification can perform the following tasks from the Generators displays shown as B-6, B-22, and B-24 in Exhibit 6.7.

- View/change generator contact information
- View generator specifications and qualified-to-bid privileges
- Add/remove administrators currently assigned to a generator
- Add/remove organizations currently authorized to a generator

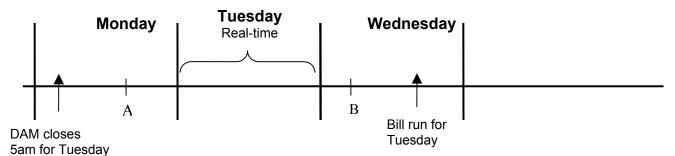
View/Change Generator Contact Information

- **Step 1:** Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Generators" from the Administrator menu frame. The Generators display (B-6) is presented.
- **Step 3:** Select the generator for which you wish to view the associated contact information. The pull-down menu will present you with a list of generators that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected generator.
 - Step 4: View/change contact information.

View/Change Billing Organization

The MIS Administrator of a facility may change that facility's billing organization at any time through the MIS web-form pages. Once the change is received, it will become effective at the start of the next day. If the new billing organization requires bills for that or previous days, it will need to notify the NYISO. The NYISO will then perform a manual re-bill for the new organization and charge a fee for this service.

The following time-line illustrates that the Day-Ahead Market (DAM), which closes at 5 AM (Monday), schedules the subsequent 24 hour period (Tuesday) and is billed with the Real-time Market one day later (Wednesday). If a billing organization change occurs at point A, then Monday's bill (run on Tuesday) is calculated for the old billing organization and the Tuesday bill (run on Wednesday) is calculated for the new billing organization.



If a billing organization change occurs at point B, then the bill for Tuesday and Wednesday (run on Wednesday and Thursday, respectively) is calculated for the old billing organization and the Thursday bill (run on Friday) would be calculated for the new billing organization.

Page Ref. B-6	
Ge	nerators
Select Generator: BOB'S_GEN_TRAINING	
Station Name: BOB'S Voltage Class: GEN	Generator Name: TRAINING Active:
Last Updated By: 1 Last Update: 01/11/1999 01:33:31	
EDC Area: 4 Billing Organization: None Selected	
Sub-Zone Name: NMPC CAPITAL SINCE Unit ID: 1	
Generator NON-UTILITY GENERATOR 💌 Type: Contact: Bob	Address:
Primary Phone: 518-35-6019	
Secondary Phone:	
FAX:	
E-Mail:	
Pager:	

Generator Contact Information (B-6)

SUBMIT Entries Select SUBMIT from the bottom of the page. The MIS will confirm your changes.

Updating Generator Physical Parameters

The Generator Administrator is permitted to change only the contact information on the display. The Generator Administrator must contact the ISO Administrator to change and/or update generators' physical parameters in the MIS. Most requests will be implemented within five days.

Some generator physical parameters are used in several NYISO software programs, and data verification is required to ensure consistency and accuracy. This requires coordination among NYISO departments. Given this requirement, Market Participants do not have the ability to directly update generators' physical parameters through the MIS.

If generator parameters need to be updated, the new data must be supplied to NYISO Customer Relations by fax, e-mail, or regular mail. It should be titled with the Generator point identifier (PTID) and "Generator Parameter Change" to flag the message as time sensitive. Customer Relations can be contacted as follows:

Fax: (518) 356-6146 E-mail: <u>market_relations@nyiso.com</u> Address: NYISO / Customer Relations / 5172 Western Turnpike / Altamont, NY 12009

The following parameters can be updated within three business days:

- Minimum generation (MW)
- Normal, emergency, and regulation response rates (MW/minute), with the restriction that they are greater than one percent of maximum operating capacity
- Maximum operating limits (MW) for winter or summer, only if they are to be decreased
- Unit Volt-Ampere Reactive (VAR) Capability, Leading
- Unit VAR Capability, Lagging
- Qualified Automatic Voltage Regulator, if supporting documentation is provided

The seasonal maximum operating limits for winter or summer can be increased to a generator's Proven Maximum Production Capability. This change must be made using the process described in Technical Bulletin #46, Bidding Above ICAP Dependable Maximum Net Capability in the Day-Ahead and Real-Time Markets.

The generator penalty factor parameter is updated through the Security Constrained Dispatch program, and the generator power factor parameter is supplied by Transmission Owners.

View Generator Specifications and Qualified-to-Bid Privileges

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Generators" from the Administrator menu frame. The Generators display (B-6) is presented.
- **Step 3:** Select the generator for which you wish to view the associated contact information. The pull-down menu will present you with a list of generators that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected generator.
 - **Step 4:** Scroll to the lower portion of the display.

PTID: 200000	TT :: TTAD
Max Summer Operating Limit: 100.0 Max Winter Operating Limit: 100.0	Unit VAR Capability Unit VAR Leading Lagging
Summer Installed Capacity Contracts: 50.0 Winter Installed Capacity Contracts: 50.0	MW MVAR MW MVAR
Physical Min MW: 5.00	
Emergency Response Rate: 1.0 (MW/MIN) Normal Response Rate: 1.0 (MW/MIN)	
Max Regulation Response Rate: 1.0 (MW/MIN)	
Penalty Factor: 1.0000 Power Factor: 1.00	
AVR Qualified:	
Qualified to Bid	
Day Ahead Market	Hour Ahead Market
🗖 Fixed Energy 🔲 Dispatch Energy	🗖 Fixed Energy 🔲 Dispatch Energy
🗖 Regulation Control	🗖 Regulation Control
🗖 10-Minute Non-Synch 🗖 10-Minute Spinning	🗖 10-Minute Non-Synch 🗖 10-Minute Spinning
🗖 30-Minute Non-Synch 🗖 30-Minute Spinning	🗖 30-Minute Non-Synch 🗖 30-Minute Spinning

Generator Specifications and Qualified-to-Bid Privileges

- **Step 5:** View the specification information at the top of the page and the qualified-to-bid privileges at the bottom.
- **Special Notes** The Market Participant Administrator is not permitted to change the generator specifications nor the qualified-to-bid privileges. The Market Participant Administrator must contact the ISO Administrator to change this information.

Add/Remove Administrators Currently Assigned to a Generator

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Generators" from the Administrator menu frame. The Generators display (B-6) is presented.
- **Step 3:** Select the generator for which you wish to view the associated contact information. The pull-down menu will present you with a list of generators that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected generator.
 - **Step 4:** Scroll to the bottom of the display. Select <u>Generator Administrators</u>. The Generator Administrators display (B-22) is presented.

Generator Administrators (B-22)

Page Ref: B-22			
	Gener	ator Administrators	
Generator Na	ne: BOB'S_GEN_TRAINING		
Currently Assi	gned Administrators		
	Name		
	Add Administrators	Remove Administrators	
	Angela Cadicamo-Schorr Barry W. Rogers Brian Gordon Bruce Metruck Byron Famsworth Jr. Carl Lazear Charles Saylor		
		SUBMIT	

- Step 5: View the list of currently assigned administrators.
- **Step 6:** To add an administrator, go to the bottom of the display to the "Add Administrators" section. Use the pull-down menu to select the administrators that you want to add to the currently assigned list.
- **Step 7:** To remove an administrator from <u>the</u> list, go to the bottom of the display to the "Remove Administrators" section. Use the pull-down menu to select the administrators that you want to delete from the authorized list.
- SUBMIT Entries When the add/remove names have been entered, select SUBMIT. The list of currently assigned administrators will refresh with the entered administrator names added and/or removed.
- Special Notes
 There is no check to prevent you from removing yourself as the administrator. If this is done, you will no longer have administrator access to this generator.
 Add/Remove Organizations Currently Authorized to a

Generator

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "Generators" from the Administrator menu frame. The Generators display (B-6) is presented.
- Step 3: Select the generator for which you wish to view the associated contact information. The pull-down menu will present you with a list of generators that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected generator.
 - **Step 4:** Scroll to the bottom of the display. Select <u>Generator Registration</u>. The Generator Registration display (B-24) is presented.

🔜 Generator Registratio	on (B-24)
-------------------------	-----------

Page Ref: B-24	Page Ref. B-24				
		Generator	Registration		
Generator N	ame: BOB'S_GEN_TRAINING				
Currently Au	thorized Organizations				
	Name Bob's Training Corp				
	Add Organization		Remove Organization		
	1st Rochdale Cooperative Group, Ltd. 3M Tonawanda ABB Electric Systems Consulting ACN Power, Inc. AES NY APX Advantage Energy	1	Bob's Training Corp		
		SU	ВМІТ		

- Step 5: View the list of currently assigned organizations.
- **Step 6:** To add an organization, go to the bottom of the display to the "Add Organization" section. Use the pull-down menu to select the organizations that you want to add to the currently authorized list.
- **Step 7:** To remove an organization from <u>the</u> list, go to the bottom of the display to the "Remove Organization" section. Use the pull-down menu to select the organizations that you want to delete from the authorized list.

SUBMIT Entries When the add/remove names have been entered, select SUBMIT. The list of currently assigned organizations will refresh with the entered organization names added and/or removed.

6.4.3 Organization Display and Tasks

Market Participant Administrators with the Generator classification can perform the following tasks through the Organization Users displays shown as B-2 and B-11 in Exhibit 6.7.

- View/Change contact information for organizations
- View market times and authorized-to-bid privileges
- Add/Remove administrators currently assigned to an organization

You will notice that the Market Participant Administrator with the Generator classification does not have access to the total set of Organization Users displays. (You can see the total set in Exhibit 6.4).

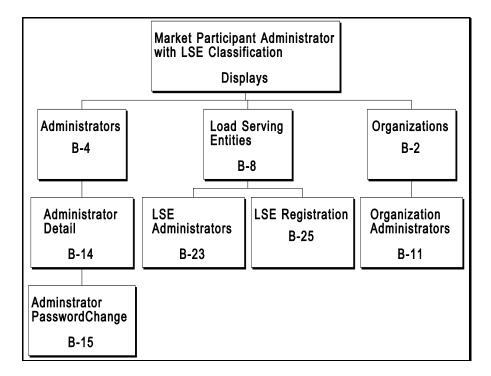
Only B-2 and B-11 can be accessed. The Market Participant Administrator will be blocked from accessing B-12, B-28, B-13, and B-29 if he/she tries to use the hyperlinks on B-2 and B-11 to access these displays.

See Section 6.3.4 for a detailed description of these tasks.

6.5 LSE Classification

This section describes the MIS access that is provided to Market Participant Administrators with the LSE classification.





Using these displays, the Market Participant Administrator with LSE classification can perform a variety of tasks ranging from changing contact information to adding/removing administrators assigned to an LSE. The tasks are described in terms of the display groups shown above:

- Administrator Displays and Tasks
- LSE Displays and Tasks
- Organization Displays and Tasks

6.5.1 Administrator Displays and Tasks

Market Participant Administrators with the LSE classification can perform the following tasks from the Administrators displays shown as B-4, B-14, and B-15 in Exhibit 6.8.

- View/change administrator contact information
- View assigned administrator classifications
- View current assignments of organizations, generators and LSEs to administrators
 - Change the administrator password

See Section 6.3.1 for a detailed description of these tasks.

6.5.2 LSE Administrator Displays and Tasks

Market Participant Administrators with the LSE classification can perform the following tasks from the LSE displays shown as B-8, B-23, and B-25 in Exhibit 6.8.

- View/change LSE contact information
- Add/remove administrators currently assigned to an LSE
- Add/remove organizations currently authorized to an LSE

View/Change LSE Contact Information and View Loads

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "LSEs" from the Administrator menu frame. The LSEs display (B-8) is presented.
- **Step 3:** Select the LSE for which you wish to view the associated contact information. The pulldown menu will present you with a list of LSEs that you are authorized to view.

Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected LSE.

LSE Contact Information (B-8)

Page Ref. B-8					
Load Serving Entities (LSE)					
Load Serving Entities: BOBSLSE DISPLAY					
Name: BOBSLSE PTID: 200000 Last Updated By: 1002 Last Update: 11/16/1998 17:13:03					
Qualified to Bid: 🗆 Active: 🔽 Billing Organization: None Selected					
Contact					
Name: Bob Logan]				
Primary Phone: 518-356-6019	Address:				
Secondary Phone:					
FAX:					
E-Mail:					
Pager:					
Memo					
Organization created just for training purposes only.					
	~				
Loads Owned					
SUBMIT RESET DELETE					
LSE Administrators LSE Registration					

Step 4: View/change contact information.

SUBMIT Entries

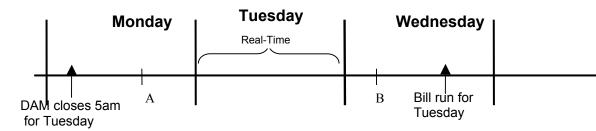
Select SUBMIT from the bottom of the page. The MIS will confirm your changes. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.

- Step 5: View loads owned by the LSE by reviewing the listing under Loads Owned.
- **Special Notes** The Market Participant Administrator is permitted to change only the contact information on the display. The Market Participant must contact the ISO Administrator to change any of the other information on the display.

View/Change Billing Organization

The MIS Administrator of a facility may change that facility's billing organization at any time through the MIS web-form pages. Once the change is received, it will become effective at the start of the next day. If the new billing organization requires bills for that or previous days, it will need to notify the NYISO. The NYISO will then perform a manual re-bill for the new organization and charge a fee for this service.

The following time-line illustrates that the Day-Ahead Market (DAM), which closes at 5 AM (Monday), schedules the subsequent 24-24-hour period (Tuesday) and is billed with the Real-time Market one day later (Wednesday). If a billing organization change occurs at point A, then Monday's bill (run on Tuesday) is calculated for the old billing organization and the Tuesday bill (run on Wednesday) is calculated for the new billing organization.



If a billing organization change occurs at point B, then the bill for Tuesday and Wednesday (run on Wednesday and Thursday, respectively) is calculated for the old billing organization and the Thursday bill (run on Friday) would be calculated for the new billing organization.

Add/Remove Administrators Currently Authorized to an LSE

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "LSEs" from the Administrator menu frame. The LSEs display (B-8) is presented.
- **Step 3:** Select the LSE that you wish to view the associated contact information. The pull-down menu will present you with a list of LSEs that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected LSE.
 - Step 4: Scroll to the bottom of the display. Select "<u>LSE Administrators</u>". The LSE Administrators display (B-23) is presented.

LSE Administrators

Page Ref: B-23			
	Load Serving En	tity (LSE) Administrators	
LSE Name: BOBSLS	E		
Currently Assigned A	dministrators		
Name LOG.	INBOB		
	Go To pgLSEAdmin.htm Add Admunistrators	Remove Administrators	
	ACKERMDE ADLERMAX ALVAREJA ARNOTIGA BEAUDOMA BEELEYTX BELLJERR		
		SUBMIT	

- Step 5: View the list of currently assigned administrators.
- **Step 6:** To add an administrator, go to the bottom of the display to the "Add Administrators" section. Use the pull-down menu to select the administrators that you want to add to the currently assigned list.
- Step 7: To remove an administrator from the list, go to the bottom of the display to the "Remove Administrators" section. Use the pull-down menu to select the administrators that you want to delete from the authorized list.
- SUBMIT Entries When the add/remove names have been entered, select SUBMIT. The list of currently assigned administrators will refresh with the entered administrator names added and/or removed.
- **Special Notes** There is no check to prevent you from removing yourself as an administrator. If this is done, you will no longer have administrator access to this LSE.

Add/Remove Organizations Currently Authorized to an LSE

- Step 1: Login via the "Administrator Login Page" from the "MIS Home Page." See Section 6.2.3 for the Login display.
- Step 2: Select "LSEs" from the Administrators Menu frame. The LSEs display (B-8) is presented.
- **Step 3:** Select the LSE that you wish to view the associated contact information. The pull-down menu will present you with a list of LSEs that you are authorized to view.
- Select DISPLAY Select DISPLAY. The MIS will respond by presenting the information for the selected LSE.
 - **Step 4:** Scroll to the bottom of the display. Select <u>LSE Registration</u>. The LSE Registration display (B-25) is presented.

	Load Serving Entity (LSE)	Registration
LSE Name	: BOBSLSE	
Currently A	Authorized Organizations	
	Name Bob's Training Corp	
	Add Organization	Remove Organization
	1st Rochdale Cooperative Group, Ltd. 3M Tonawanda ABB Electric Systems Consulting ACN Power, Inc. AES NY APX Advantage Energy	Bob's Training Corp 🗾

LSE Registration

- Step 5: View the list of currently assigned organizations.
- **Step 6:** To add an organization, go to the bottom of the display to the "Add Organization" section. Use the pull-down menu to select the organizations that you want to add to the currently authorized list.
- Step 7: To remove an organization from list, go to the bottom of the display to the "Remove Organization" section. Use the pull-down menu to select the organizations that you want to delete from the authorized list.
- SUBMIT Entries When the add/remove names have been entered, select SUBMIT. The list of currently assigned organizations will refresh with the entered organization names added and/or removed.

6.5.3 Organization Display and Tasks

Market Participant Administrators with the LSE classification can perform the following tasks through the Organization Users displays shown as B-2 and B-11 in Exhibit 6.8.

- View/change contact information for organizations
- View market times and authorized-to-bid privileges
- Add/remove administrators currently assigned to an organization

You will notice that the Market Participant Administrator with the LSE classification does not have access to the total set of Organization Users displays. (You can see the complete set in Exhibit 6.4).

Only B-2 and B-11 can be accessed. The Market Participant Administrator will be blocked from accessing B-12, B-28, B-13, and B-29 if he/she tries to use the hyperlinks on B-2 and B-11 to access these displays.

See Section 6.3.4 for a detailed description of these tasks.

7.0 Market Participant User Tasks

7.1 Introduction

Market Participant Users have two primary methods of interacting with the NYISO Market Information System (MIS). The methods are:

- 1. *Web-Based Market Interactions* where access is provided through a series of world-wide, web-based, interactive displays accessible on the Internet.
- 2. *Upload/Download Batch Procedures* where sets of data files are accessed or submitted through an upload/download process in the Internet.

This section addresses the first of these subjects, web-based market interactions. It focuses on the Market Participant User displays and tasks that can be performed by viewing data and initiating actions from these displays. Section 8 of this Guide discusses how these same tasks can be accomplished through upload/download procedures. Section 8 includes Data Dictionaries that describe all of the values that appear on the user displays and also defines which screen entries are mandatory and which are optional.

Section 6.2 provides additional information regarding Market Participant Administrators, Key Display Features, Secure Communications with the MIS, and the MIS Data Model. The Market Participant User should review Section 6.2 to obtain a better understanding of MIS integration.

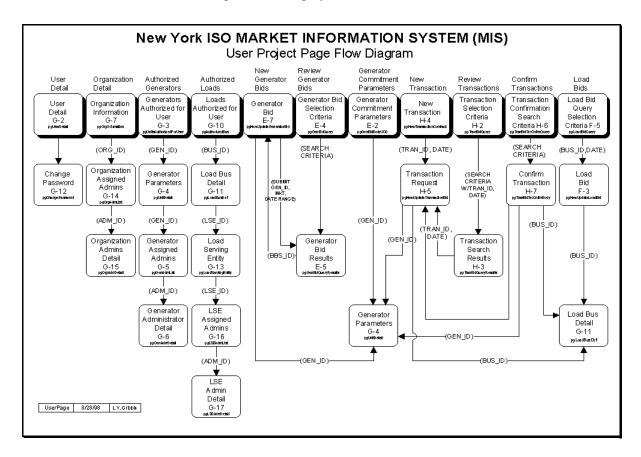
7.1.1 Market Participant User Display Overview

A Market Participant User is a NYISO Customer that is authorized, through its respective Market Participant Administrator, to submit and/or modify day-ahead and hour-ahead bids in the market. Each user's interaction with the MIS is limited to the set of generators, loads, and user permissions defined by the Market Participant Administrator. A Market Participant User may also be a Guest that has view-only privileges with the MIS.

An overview of the displays used by the Market Participant User is shown in Exhibit 7.1. A static copy of the User Project Page Flow Diagram and static copies of the displays to which it is linked are accessible through the NYISO Home Page located at www.NYISO.com. From this page, select <u>OASIS</u>, then select <u>Documentation</u>, then select <u>OASIS Bidding & Scheduling Example Pages</u>, then select <u>User Pages</u>, either in small or large format.

Definition: Market Participant User

Exhibit 7.1: **Market Participant User Display Overview**



Display Names and Page References	Each box represents a User display. The title of the display is shown inside the box. A unique identifier, or page reference, is shown below the display title. For example,
	 E-7 is the page reference for the Generator Bid display G-13 is the page reference for the Load Serving Entity display
	Page references are used internally by the NYISO to identify the function. They are displayed on both the User Project Page Flow Diagram and on actual displays, as well as in the descriptions of upload/download templates in Section 8, to tie the functions together. The page reference appears in the upper left corner of the actual display.
Menu Names	The name appearing above the top row of displays refers to the name appearing in the User menu frame that sits at the top of the display area. See Section 6.2.1, Key Display Features, for a general description of menu frame and display/results frame.
Navigation Alternative	 Exhibit 7.1 shows all the bid displays that are used to perform a particular process. The ability to move from display to display, using hyperlinks, is shown in part by the lines between boxes. For example, To "Review Generator Bids," the user must first access the Generator Bid Display (E-7). When a SUBMIT action is performed from this display, the Generator Bid Results Display (E-5) is automatically presented.
	• There is a line leading from the Generator Bid Results display (E-5) back to Generator
- 2	NYISO Market Participant User's Guide (Rev.: 0605/0123/20012002)

Bid display (E-7). This signifies that there are actions that can be performed on the Generator Bid Results display which hyperlink the user back to the Generator Bid display.

To keep the page flow diagram readable, not all possible hyperlinks between displays are shown. You should access the User Project Page Flow Diagram and step through the displays to see the full set of hyperlinks that connect them.

The same display may be used in more than one process. For example, the Generator Bid Results display (E-5) is used in both of the following processes:

- New Generator Bids
- Review Generator Bids

7.1.2 Key Display Features

Please refer to Section 6.2.1 for a description of selection and entry features, the validation process, SUBMIT actions, and the display layout.

7.1.3 Market Participant User Login

The Market Participant User logs in to the MIS through the User Login Page. The User Login Page is accessed through the MIS Home Page at www.NYISO.com. From this page, select <u>OASIS</u>, select <u>Bidding & Scheduling</u>, and select <u>User Login</u>. With the proper Digital Certificate, the User Login display (G-0) appears.

User Login (G-0)

	User Login
User Name: Password:	iso_spd1
	SUBMIT

SUBMIT Entries After the User Name and Password are entered, the Market Participant User selects SUBMIT. An error message will occur if the User Name and Password combination are not authorized.

When Login is completed, the Market Participant User is presented with the User menu frame.

묘 User Menu Frame

Authonized Generators - Authonized Loads - Confirm Transaction Bids - Generator Commitment Parameters - Load Bids - Log Out - New Generator Bid - New Transaction - Organization Detail - Review Generator Bids - Review Transaction Bids - User Detail -

The above frame shows the categories of displays that a Market Participant User is permitted to access. This is consistent with the list of displays shown across the top of the User Project Page Flow display in Exhibit 7.1. The list of displays may actually be fewer in number than what is shown above. Specific access depends on the user's bidding privileges.

The menu frame remains at the top of the screen throughout the time the user is logged in. The Market Participant User selects the desired displays from the menu frame. Selecting the <u>Log Out</u> hyperlink in the user menu frame allows a user to exit the MIS application. This clears the session and connection on the NYISO MIS server. Although log out is not mandatory, it is good practice for system security. The message "You Have Successfully Logged Out" will appear on your screen briefly, and the user's screen then automatically reverts to the NYISO home page.

Remaining Sections

The remaining parts of Section 7 describe the User displays and the tasks that are performed by the Market Participant User through the MIS. There are five main sections that correspond to the process names shown above the top row of boxes in Exhibit 7.1:

- User Administration (Section 7.2) This section describes the change password and view-only information that may be accessed through the displays accessible to the Market Participant User. The specific areas covered are:
 - % User Detail
 - % Change Password
 - % Organization Detail
 - % Authorized Generators
 - % Authorized Loads.
- Generator Commitment Parameters (Section 7.3) This section deals with the tasks that are performed through the displays associated with the Generator Commitment Parameters process.
- Generator & Ancillary Services Bids (Section 7.4) This section deals with the tasks that are performed through the displays associated with the following processes:
 - % New Generator Bids
 - % Review Generator Bids
- Load Bids (Section 7.5) This section deals with the tasks that are performed through the displays associated with the Load Bids process.
- Transaction Bids (Section 7.6) This section describes the tasks that are performed through the displays associated with the following processes:
 - % New Transactions
 - % Review Transactions
 - % Confirm Transactions

7.2 User Administration

The MIS contains several administrative displays for the Market Participant User to view detailed information about the user, organization, authorized generators, and authorized loads associated with the user's account.

Except for the ability to change passwords, the user has view-only access to these displays. To change any of the data, the Market Participant User must contact his/her assigned Market Participant Administrator. The Market Participant Administrator may be able to make the desired changes through specially assigned displays, or work through the ISO Administrator to implement the changes.

There are five basic tasks associated with the administration of the user's account:

- 1. View/Change User Detail (Section 7.2.1)
- 2. Change Password (Section 7.2.2)
- 3. View Organization Detail (Section 7.2.3)
- 4. View Authorized Generators (Section 7.2.4)
- 5. View Authorized Loads (Section 7.2.5).

For additional information on the relationships of administrators, users, organizations, generators, and loads to one another, see Section 6.2.5, MIS Data Model.

Login and MenuPrior to each task, the Market Participant User is required to Login and make a selectionFrame Selectionthrough the user menu frame. See Section 7.1.3 for further information on Login.

Authorization The user is authorized to view only user detail, organization detail, authorized generator, and authorized load information assigned to the Market Participant User's account. The MIS prevents unauthorized access to other user account information.

7.2.1 View/Change User Detail

The User Detail displays show the contact information and bidding privileges associated with the user. User Detail consists of the following displays:

- User Detail (G-2)
- Change Password (G-12).

The Change Password display is covered in Section 7.2.2.

The following steps describe how to access the User Detail display:

- Step 1: Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- Step 2: Select "User Detail" from the user menu frame. The User Detail (G-2) display is presented.

Description

User Detail (G-2)

			Use	r Detail			
U sername: ISO_	SPD1 Organization:	NY ISO Dispat	chers Type: Po	wer Exchan	ge Active: 🗹		
	Senior Pool Disp			Addre	ss: 3890 Carman Ro	ad	
Primary Phone:	8) 356-6000				Schenectady, N	Y 12303	
Secondary							
Phone:							
FAX: (51	8) 356-6118				,		
E-Mail:				-			
Pager:							
Pager:							
Pager:							
,	SET						
,	SET						
,	SET		Bidding	g Privileg	es		
,	SET	Generators	Bidding	g Privileg Loads	es Update UC Data	Non-Firm	
,	SET	Generators ☞				Non-Firm	
,			Transactions	Loads	Update UC Data		

This display shows the contact information and bidding privileges associated with the user's account.

- Step 3: The Market Participant may modify the contact information for his/her own account.
- **Step 4:** The bidding privilege assignments dictate the type of bids users may submit and modify. The user may not change any of these assignments; any changes must be submitted to the Market Participant Administrator:

If the DAM or HAM Generators privilege is not assigned, then the Market Participant User will not see the "New Generator Bids" option in the menu frame.

- If the DAM or HAM Transactions privilege is not assigned, then the Market Participant User will not see the "New Transaction," and "Confirm Transactions" options in the menu frame.
- **E** Special Notes To change the user password, see Section 7.2.2 below.

7.2.2 Change Password

Description The Change Password display allows the user to change his/her user account password. The following steps describe how to accomplish this task.

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- Step 2: Select "User Detail" from the user menu frame. The User Detail (G-2) display is presented.

Scroll to the bottom of the User Detail display and select <u>Change Password</u>. The User Password Change (G-12) display is presented.

User Password Change (G-12)

Page Ref: G-12
User Password Change
Username: ISO_SPD1 Organization: NY ISO Dispatchers Type: NY ISO
New Password:
Confirm New Password:
SUBMIT RESET

Type the new password. Type the password again for confirmation.

SUBMIT Password After you have entered the passwords, select SUBMIT and the MIS will process the password change. You may also elect to select RESET, which erases the passwords and allows you to start again.

7.2.3 View Organization Detail

Description The Organization Detail displays show the contact information, bid authorizations, assigned administrators, and administrator detail associated with your user account.

Organization Detail consists of the following displays:

- Organization Information (G-7)
- Organization Assigned Administrators (G-14)
- Organization Administrator Detail (G-16)

The following steps describe how to access these displays.

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Organization Detail" from the user menu frame. The Organization Information (G-7) display is presented.

	Organization	Information	(G-7)
--	--------------	-------------	-------

Page Ref: G-7							
			Orga	mization Information	ı		
Organization	n: NY ISO Dispa	tchers		Туре:	NY ISO	Active:	V
Contact							
P	Name: ?						
Primary P							
Secondary F				Address:			
	FAX:						
	-Mail:						
F	Pager:						
Service Leve	el Agreement: N	√A 200 Maxim	um Allowed M	embers: 100			
Authorized	DAM Units	HAM Units	Loads	DAM Transactions	s HAM Transaction	15	Update UC Data
to Bid:	V				v		V
Organization A	<u>.dministrators</u>						

This display shows information about the organization to which the user is assigned:

- A user can be associated with one and only one organization
- The authorized-to-bid privileges show the complete set of privileges that the Market Participant Administrator for this organization may assign to an individual user.
- **Step 3:** Scroll to the bottom of the display and select <u>Organization Administrators</u>. The Organization Assigned Administrators (G-14) display is presented.

G-14)

	Organization Assigned Administrators
Organization Name: NY ISO Dispate	chers
Currently Assigned Administators	
	Name ISO Administrator

This display lists the Market Participant Administrators assigned to the organization to which the user belongs:

- There may be more than one Market Participant Administrator associated with the organization
- Each Market Participant Administrator may be allowed to administer one or more classifications such as Generator or LSE. See Section 6.2.6 for additional information about these classifications.
- **Step 4:** Select the name of the Market Participant Administrator for which you want to view detailed information. The Organization Administrator Detail (G-15) display is presented.

GOrganization Administrator Detail (G-15)

Organization Name: NY IS	O Dispatchers	Active: 🗹
		Acuve. M
Name: ISO A	Administrator	Address:
Primary Phone: 518-3	356-6000	3890 Carmen Road
Secondary Phone:		Schenectady NY, 12303
FAX:		
E-Mail:		
Pager:		

This display shows the contact information associated with the Market Participant Administrator selected from the previous display:

- To select the organization administrator detail for a different Market Participant Administrator assigned to the organization, select <u>Organization Administrators</u> at the bottom of the page
- This action returns you to the Organization Assigned Administrators (G-14) display (see Step 4 above), from which you can make a different selection.

7.2.4 View Authorized Generators

Description The Authorized Generator displays show the names, contact information, and administrators associated with the generators for which the user is authorized to use.

Authorized Generators consists of the following displays:

- Generators Authorized for Users (G-3)
- Generator Parameters (G-4)
- Generator Assigned Administrators (G-5)
- Generator Administrator Detail (G-6).

The following steps describe how to access these displays:

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Authorized Generators" from the user menu frame. The Generators Authorized for User (G-3) display is presented.

Generators Authorized for User (G-3)

Generators Authorized for User						
r Name: iso_spd1						
rently Authorized Generators						
Generator Name	Generator Name					
ADIRONDACK 115 BOISE -KMN	HUNTLEY A 13A 67					
ALBANY 1 13A 1	HUNTLEY B 13B 68					
ALBANY 2 13B 2	HUNTLEY C 13C 63					
ALBANY 3 13C 3	HUNTLEY C 13C 65					
ALBANY 4 13D 4	HUNTLEY C 13C 66					
ALCOA 115 MEF -SITHE	HUNTLEY C 13C 64					
ALCOA 115 NM NTH NUG	HYATT 34 SENECA ENG					
ARTHUR KILL 20 ARTHR KL 2	INDECK -OSW 115 OSWEGO CG					

This display shows all the generators that the Market Participant User is authorized to access. The specific tasks that the user may perform with these generators are controlled by:

- The bidding privileges assigned to the user's account
- The qualified-to-bid privileges associated with the generator
- Step 3: Select the generator name for which you want to view parameter definitions. The Generator Parameters (G-4) display for the generator name that you selected is presented.

Generator Parameters (G-4)

Generator Name: Ge	n	Generator Type: Utility Gen NERC Unit					
Zone Name: Valley		Subzone Type: Mohawk Valley			Active:		
Group Name:		NYC MPM:		NYC		/C 10 Min Spin: 🗖	
Contact Information							
			Address	ABC Co. 29 Street			
Name: Cha Primary Phone: 123	arlie Brown		Address.	29 Street City, State	10245		
Secondary Phone: Nor				City, State	12345		
Fax: Nor							
and the second sec	rown@abc.c	com					
Pager:	Ū						
	PTID:	12345					
Max Summer Op		300.2					
Max Winter Op		300.1					
Summer Installed Capac		0.0					
Winter Installed Capac		400.0					
Physical Min Gen MW:		15.0					
Emergency Re	sponse Rate:	10.0 (MW/Min)					
Normal Res	oonse Rate 1:	3.0 (MW/Min)		Unit VAR	Capability	Unit VAR	Capability
	oonse Rate 1:	300.0 (MW)			ding		ging
				MW	MVAR	MW	MVAR
and the second	ponse Rate 2:	5.0 (MW/Min)					
Normal Res	ponse Rate 2:	350.0 (MW)					
Normal Res	oonse Rate 3:	1.0 (MW)					
Max Regulation Re	sponse Rate:	3.1 (MW/Min)					
	enalty Factor:	1.0					
F	ower Factor:	1.0					
А	VR Qualified:	J					
Jualified to Bid							
ALCONTRACTOR AND	Ahead Market				ur Ahead Mai	ket	
Fixed Energy	🗹 Dispat	ch Energy	🗹 Fixed	Energy	🗹 Dis	patch Energ	у
Regulation Control			🗹 Regula	ition Control			
🗖 10 Minute Non-Synch	🗹 10 Mir	iute Spinning	🗖 10 Mir	ute Non-Synch	I 10	Minute Spini	ning

This display shows the contact information, limits & response rates, Unit Mvar leading & lagging curve points, and qualified-to-bid privileges associated with the generator that you selected.

Step 4: Scroll to the bottom of the display and select <u>Generator Administrators</u>. The Generator Assigned Administrators (G-5) display is presented.

Generator Assigned Administrators (G-5)

Page Ref. G-5		
	Generator Assigned Administrators	
Generator Name: ALBANY 1_13A_1		
Currently Assigned Administators		
	Name	

This display lists the Market Participant Administrators assigned to the generator:

- There may be more than one Market Participant Administrator associated with the generator.
- **Step 5:** Select the name of the Market Participant Administrator for which you want to view detailed information. The Generator Administrator Detail (G-6) display is presented.

Generator Administrator Detail (G-6)

Page Ref: G-6		
		Generator Administrator Detail
Generator Name:	ARTHUR KILL_20_ARTHR KL 2	Active: 🗹
Name:	ISO Administrator	Address:
Primary Phone:	518-356-6000	3890 Carman Road
Secondary Phone:		Schenectady NY, 12303
FAX:	518-356-6118	
E-Mail:		
Pager:		
Generator Administra	tors	

This display shows the contact information associated with the Generator Administrator selected from the previous display:

- To select the generator administrator detail for a different Market Participant Administrator assigned to the generator, select <u>Generator Administrators</u> at the bottom of the page.
- This action returns you to the Generator Assigned Administrators (G-5) display (see Step 5 above), from which you can make a different selection.

7.2.5 View Authorized Loads

The Authorized Loads displays show the load bus names, LSEs, and LSE administrators associated with the load buses for which the user is authorized to use.

Authorized Loads consists of the following displays:

- Loads Authorized for User (G-10)
- Load Detail (G-11)
- Load Serving Entity (G-13)
- LSE Assigned Administrators (G-16)
- LSE Administrator Detail (G-17).

The following steps describe how to access these displays:

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Authorized Loads" from the User menu frame. The Loads Authorized for User (G-10) display is presented.

Loads Authorized for User (G-10)

Page Ref. G-10		
Loads	Authorized for User	
U ser Name: iso_spd1		
Currently Authorized Load Buses		
Bus Name	Sub-Zone Name	Zone Name
ASTORIA E 138 N.QUEENS	CON ED NY CITY	N.Y.C.
BRISTOL HL 115 TB1	NMPC CENTRAL	CENTRL
CENT HUD CHHV CENT HUD HUDSON VLY	CENT HUD HUDSON VLY	HUD VL
CENT HUD CHMV CENT HUD MOHAWK VLY	CENT HUD MOHAWK VLY	MHK VL
CON ED CEHV CON ED HUDSON VLY	CON ED HUDSON VLY	HUD VL
CON ED CEML CON ED MILLWOOD	CON ED MILLWOOD	MILLWD

This display shows all the loads that the Market Participant User is authorized to access. The specific tasks that the user may perform with these loads is controlled by the bidding privileges assigned to the user's account.

Step 3: Select the load name for which you want to view parameter definitions. The Load Detail (G-11) display for the load that you selected is presented.

📕 Load Detail (G-11)

	Load Detail	
	Loau Detail	
		А
oltage Class	Load Name	
	LILCO LONG ISLAND	
2		30-Minute
2	NGIL Sub Zone	LILCO LONG ISLAND

This display shows the LSE, zone, and sub-zone and the authorized-to-bid privileges associated with the load:

• The load is assigned to one, and only one, LSE.

Select the LSE name located in the LSE data field. The Load Serving Entity (G-13) display is presented.

Page Ref. G-13			
	Load Serving En	tity	
Name: FREEPORT	Qualified to Bid: 🔽	PTID: 168	Active:
Contact			
Name:	Addre	ss:	
Primary Phone:			
Secondary Phone:			
FAX:			
E-Mail:			
Pager:			
LSE Administrators			

Load Serving Entity (G-13)

This display shows the contact information of the LSE to which the load is assigned.

Step 5: Select <u>LSE Administrators</u> at the bottom of the page. The LSE Assigned

Administrators (G-16) display is presented.

LSE Assigned Administrators (G-16)

Page Ref. G-16		
	Load Serving Entity Assigned Administrators	
LSE Name: CONED		
Currently Assigned Administators		
	Name	
Load Serving Entity		

This display lists the Market Participant Administrators assigned to the LSE:

- There may be more than one Market Participant Administrator associated with the generator
- Market Participant Administrators are assigned to LSEs as opposed to individual loads
- You may also select <u>Load Serving Entity</u> from the bottom of the page. This will return you to the Load Serving Entity (G-13) display.
- **Step 6:** Select the name of the Market Participant Administrator for which you want to view detailed information. The LSE Administrator Detail (G-17) display is presented.

LSE Administrator Detail (G-17)

		LSE Administrator Detail	
SE Name: FREEP	DRT Active: 🗹		
Name:	ISO Administrator	Address:	
Primary Phone:	518-356-6000	3890 Carman Road	
Secondary Phone:		Schenectady NY, 12303	
FAX:	518-356-6118		
E-Mail:			
Pager:			
SE Administrators I	oad Serving Entity		

This display shows the contact information associated with the Generator Administrator selected from the previous display:

- To select the LSE administrator detail for a different Market Participant Administrator assigned to the generator, select <u>LSE Administrators</u> at the bottom of the page
- This action returns you to the LSE Assigned Administrators (G-16) display (See Step 6 above), from which you can make a different selection
- You may also select <u>Load Serving Entity</u> at the bottom of the page to return to the Load Serving Entity (G-13) display

7.3 Generator Commitment Parameters

The generator commitment parameters are different from the generator, load, and transaction bid data (covered in Sections 7.4 - 7.6) because they involve non time-varying data. This means that the changes that are made go into effect immediately and will affect the consideration of generator bids in the day-ahead and hour-ahead markets.

There are two basic tasks associated with viewing/changing generator commitment parameters:

- View/Change Generator Commitment Parameters (Section 7.3.1)
- View Generator Detail (Section 7.3.2).
- Users that are not authorized for any units will not see this menu option.

7.3.1 View/Change Generator Commitment Parameters

Introduction The Market Participant User has the ability to change generator parameters that are nontime-varying in nature. These changes can be made at any time and will go into effect with the next running of SCD or SCUC— whichever is first.

Prerequisites Before beginning the task of viewing/changing generator commitment parameters, you should make sure that the "Update UC Data" bidding privilege is assigned to your account (see Section 6.3.3, view/change/delete user contact information and bidding privileges).

The steps for viewing/changing generator commitment parameters are as follows:

- Step 1: Login via the User Login page from the MIS Home Page. For more detail on User Login, see Section 7.1.3.
- Step 2: Select "Generator Commitment Parameters" from the User menu frame. The Generator Commitment Parameters display (E-2) is presented.
- Step 3: Select the generator whose data you want to review:
 - The pull-down menu will present you with a list of generators that you are authorized to access
 - Select a Generator Name from the list

Select DISPLAY Select DISPLAY. The MIS responds by presenting the information for the selected generator in the display/results frame. The Generator name appearing just above the Minimum Run Time identifies the generator to which the information shown pertains.

Page Ref. E-2				
	Gene	rator Comm	itment Parameters	
Generator: ADIRONDACK_115_BOISE -KMN	▼ DISPL	AY		
Generator: ADIRONDACK 115 BOISE -K	MN	Last Change	By: ISO_SPD1	Last Changed Date: 07/31/1998 17:53:40
Minimum Run Time (hrs)	12.00			
Minimum Down Time (hrs)	2.00			
Maximum Stops per Day	9			
Start up Notification Time (hrs)	.00			
	St	artup Cost Cur	ve	
Hours Off-Line(hrs)	12.00	24.00	48.00	
Startup Cost (k\$)	200.00	400.00	600.00	
	Startup I	lotification Tin	ne Curve	
Hours to Start				
Hours Off Line				
SUBMIT RESET				

Generator Commitment Parameters (E-2)

Step 4: View/change run time, down time, stops per day, and notification time:

1. **Minimum Run time (hrs)** \boxtimes - This is the minimum amount of time that the unit must run if committed to run. This parameter is respected for the dispatch day, which ends at Midnight. The tariff specifically precludes committed generators from remaining on-line past the end of the Dispatch Day to fulfill minimum run time requirements. In fact, a subsequent SCUC will not schedule a Day-Ahead committed generator to remain on-line for a new dispatch day unless it is economic.

A generator which needs to remain on-line past the end of the Dispatch Day or Dispatch Hour to fulfill its minimum run time will have the responsibility to structure its bid in such a way as to continue to be economic as evaluated by SCUC or BME. If economic, the generator would be scheduled and would remain on-line.

For example, assume a generator intends to bid a start-up price of \$1,000, has a minimum generation level of 30 MW at \$600/hr, and has a minimum run-time of six hours. Thus, it would require $4,600 = (1,000 + 600/hr \times 6 hrs)$ to fully recover its start-up and minimum generation price bid.

If it were to start late in the day, it would need to structure it start-up and minimum generation bid such that it fully recovered \$4,600 in the Dispatch Day. In doing so, it would then be able to submit a low minimum generation price bid in BME for the Midnight and subsequent hours such that it remains scheduled on to complete its minimum run-time. Thus...

Bids that would allow recovery of \$4,600 in the Dispatch Day:

Start-Up Hour

Start-Up Price Bid

Min. Gen. Price Bid

7 PM	\$1,000	\$ 720
8 PM	\$1,000	\$ 900
9 PM	\$1,000	\$1,200
10 PM	\$1,000	\$1,800
11 PM	\$1,000	\$3,600

2. Minimum Down Time (hrs) 🗵- This is the minimum amount of time that the unit, once stopped, must remain down before being committed again.

3. **Maximum Stops Per Day** \boxtimes - This is the maximum number of times that a unit may be stopped and then started again in a single day. This number must be greater than or equal to one (1) and less than 10. The only stops that are counted are stops put in by the software. Bidding yourself off is not a stop that counts to the max stops per day value.

4. **Startup Notification Time (hrs)** \boxtimes - This is the time that notification must be given to a generator in advance of being asked to startup. The value inputted in this field indicates that the generator will be at their bid minimum generation level, will be synchronized to the electric grid and will be ready to receive base points. **I.E.** You have a value of 2.0 inputted. This means that in 2 hours from notification, which is the posting of results, your generator could be at their bid minimum generation level, on line, synchronized to the grids and ready to receive base points.

Special Note If you have values in both the Startup Notification Time and the Startup Notification Time Curve fields, the values in the curve will be used for evaluation.

Step 5: View/change start-up cost curve data \Box :

- Up to six pairs of points may be specified that define a piece-wise linear curve
- Each pair of points defines the hours off-line (hrs) and its corresponding Startup Cost (\$)
- The curve must be monotonically increasing. This means that as the number of Hours Off Line grows bigger, the larger the startup cost becomes.

Step 6: View/change startup notification time curve data □:

- Up to six pairs of points may be specified that define a piece-wise linear curve
- Each pair of points defines the Hours to Start and its corresponding Hours Off Line
- The curve must be monotonically increasing. This means that as the number of Hours Off Line grows bigger, the greater the Hours to Start must be.
- SUBMIT Entries After all your entries have been made, select SUBMIT. The MIS will confirm your entries. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.

Special Notes There are two additional fields that you should be aware of:

- Last Changed By Shows the name of the user that last made a change to this data
- Last Changed Date Shows the date and time when the last change was made

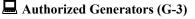
7.3.2 View Generator Detail

IntroductionThe Market Participant User has the ability to view the detailed specification information
about a generator. As with the generator commitment parameters, this data is also of a non
time-varying nature. The Market Participant User has view-only access to this data; he/she
must contact the Market Participant "Generator" Administrator to change any of this data.
The steps for viewing generator detail information are as follows:Step 1:Login via the User Login page from the MIS Home Page. For more detail on User Login, see

- Section 7.1.3.
- Step 2: Select "Authorized Generators" from the User menu frame. The Generators Authorized for User display (G-3) is presented.

Select the generator whose detailed information you want to review. This is a hyperlink that will bring up the Generator Detail (G-4) display pertaining to the generator you selected. For ease of presentation, the display is broken down into three sections as shown in Steps 4 - 6. In reality, this is one display.

Step 3: View the following generator specification and contact information:



'age Ref. G-3			
G	Senerators Authorized for User		
User Name: iso_spd1			
Currently Authorized Generators			
Generator Name	Generator Name		
ADIRONDACK 115 BOISE -KMN	HUNTLEY A 13A 67		
ALBANY 1 13A 1	HUNTLEY B 13B 68		
ALBANY 2 13B 2	HUNTLEY C 13C 63		
ALBANY 3 13C 3	HUNTLEY C 13C 65		
ALBANY 4 13D 4	HUNTLEY C 13C 66		
ALCOA 115 MEF -SITHE	HUNTLEY C 13C 64		
ALCOA 115 NM NTH NUG	HYATT 34 SENECA ENG		
ARTHUR KILL 20 ARTHR KL 2	INDECK -OSW 115 OSWEGO CG		

Generator Specification and Contact Information (G-4)

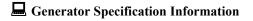
		Generator Parameters
Generator Name: A	LBANY 1_13A_1 NERC Unit ID:	Active: 🔽
Zone Name: CAPIT	L Subzone Name: NMPC CAPITAL	
Contact		
Name:	ISO ADMINISRTRATIVE STAFF	
Primary Phone:	777	
Secondary Phone:		Address:
FAX:		
E-Mail:		

Step 4: 1. NERC ID - This must be included if the unit is involved in an external or wheel through transaction.

2. Active Status - This indicates whether the generator is currently active in the MIS. Bids cannot be submitted for inactive units.

- 3. Zone Name This is the zone in which the generator is located.
- 4. Subzone Name This is the subzone in which the generator is located.

5. Name, Primary Phone, Secondary Phone, FAX, E-Mail, Pager, and Address - This information is self-explanatory.



PTID:	12345					
Max Summer Operating Limit:	300.2					
Max Winter Operating Limit:	300.1					
mmer Installed Capacity Contracts:	0.0					
Winter Installed Capacity Contracts:	400.0					
Physical Min Gen MW:	15.0					
Emergency Response Rate:	10.0 (MW/Min)					
Normal Response Rate 1:	3.0 (MW/Min)	Unit VA	R Capability	Unit VA	R Capability	
Normal Response Rate 1:	300.0 (MW)	L	Leading		Lagging	
		MW	MVAR	MW	MVAR	
Normal Response Rate 2:	5.0 (MW/Min)			1		
Normal Response Rate 2:	350.0 (MW)			- <u></u>		
Normal Response Rate 3:	1.0 (MW)					
Max Regulation Response Rate:	3.1 (MW/Min)					
Penalty Factor:	1.0					
Power Factor:	1.0					

PTID:	23571				
Max Summer Operating Limit:	95.0				
Max Winter Operating Limit:	95.0				
Summer Installed Capacity Contracts:	94.0				
Winter Installed Capacity Contracts:	94.0	Unit VAR Capability	y Leading	Unit VAR Ca	apability Lagging
Physical Min Gen MW:	10.0	MW M	VAR	MW	MVAR
Emergency Response Rate:	1.0 (MW/MIN)			L1	
Normal Response Rate:	1.0 (MW/MIN)				
Max Regulation Response Rate:	1.0 (MW/MIN)				
Penalty Factor:	1.0				
Power Factor:	1.0				
AVR Qualified:	V				

Step 5: View the following generator nameplate data:

1. **PTID** - This contains a unique pointer into the Oracle database.

2. **Max Summer Operating Limit** - This is the maximum value that may be bid for this generator during the 6-month summer period.

3. **Max Winter Operating Limit** - This is the maximum value that may be bid for this generator during the 6-month winter period.

4. **Summer Installed Capacity Contracts** - This is the amount of installed capacity committed for on this unit for the 6-month summer period.

5. Winter Installed Capacity Contracts - This is the amount of installed capacity committed for on this unit for the 6-month winter period.

6. **Physical Min Gen MW** - This is the lowest value that the Minimum Generation MW field may be set to in a generator bid.

7. Emergency Response Rate - This is the emergency response rate in MW/MIN.

8. **Normal Response Rate** - This is the normal response rate in MW/MIN and may be specified for up to three energy supply ranges.

Description

Response rates may be specified for up to three energy supply ranges. For example, the 0-50MW range may have a 0.2 MW/minute response rate, the 51-150MW range may have a response rate of 8 MW/minute and the range from 151MW to the maximum upper operating point may have a response rate of 2.2 MW/minute. Defining the three energy ranges and the response rate of 2.2 MW/minute. Defining the three energy ranges and the response rate for the ranges is at the discretion of the generator. It is the generator's responsibility, however, to ensure that the response rates specified are within the capability of the unit. When the Security Constrained Dispatch (SCD) program ramps a generator over multiple ranges encompassing more than one response rate within an SCD interval, the SCD program will use only the response rate from the initial range segment of that SCD interval. The SCUC and BME programs, which perform Day-Ahead and Hour-Ahead scheduling calculations respectively, use the explicit response rates for each megawatt segment.

9. Max Regulation Response Rate - This is the maximum regulation response rate in MW/MIN. As a generator owner you can bid 5 (minutes) X this response rate into the regulation market. I.E. In our example above, we have 1 MW/MIN. This means you can bid and be paid for providing 5 MWs into the regulation market. Your generator will be impacted by 10 MWs, 5 MWs plus and 5 MWs minus.

10. **Penalty Factor** - This is the factor for each bus that is used to compute the losses between points of injection and withdrawal.

11. Power Factor - This is the power factor at which the generator operates.

12. **AVR Qualified** - This indicates if the generator is qualified for automatic voltage regulation.

13. Unit Var Capability Leading - This is a table of MW and Mvar values that defines the capability curve in the leading direction:

- The MW points must be in increasing order
- The Mvar points must be in decreasing order from a positive Mvar number value to zero.

<u>14.1.</u> Unit Var Capability Lagging - This is a table of MW and Mvar values that defines the capability curve in the lagging direction:

• The MW points must be in increasing order

• The Mvar points must be in increasing order from a negative Mvar value to zero.

Step 6: View the following qualified-to-bid information.

📕 Generator Qualified-to-Bid Information

Qualified to Bid					
Day Ahead I	Market			<u>Hour Ahead Market</u>	
🔽 Fixed Energy	V	Dispatch Energy	v	Fixed Energy	Dispatch Energy
🗹 Regulation Co	ontrol		V	Regulation Control	
🔽 10-Minute No	on-Synch 🗹	10-Minute Spinning	v	10-Minute Non-Synch	10-Minute Spinning
🗹 30-Minute No	on-Synch 🗹	30-Minute Spinning	v	30-Minute Non-Synch	30-Minute Spinning
<u>Generator Administ</u>	rators				

This information is self-explanatory. A user that is qualified to submit bids for this generator is limited in bidding in the day-ahead and hour-ahead markets for the fixed/dispatch energy, regulation, and reserve categories shown as checked.

Special Notes The hyperlink at the bottom page provides access to the Generator Assigned Administrators Display (G-5) (see Section 7.2.4).

7.4 Generator and Ancillary Services Bids

There are two basic tasks associated with submitting and reviewing information associated with generator and ancillary services bids:

- Submit Generator Bids (Section 7.4.1)
- Change Generator Bids (Section 7.4.2)

Users that are not authorized for any units will not see these menu options.

ICAP Generator Bids in the Day-Ahead Market

ICAP generation units, if truly available, must have a Day Ahead Market (DAM) bid in the Market Information System (MIS) for the 10th day in the future. On a daily basis, the NYISO replicates this bid into the 11th day.

ICAP units are required to have bids into the Day Ahead Market (DAM) to satisfy the reliability requirements of the NYCA. Failure of an ICAP unit, that is truly available, to have bids into the DAM is a breach of the obligation for that unit to be available for DAM scheduling. All ICAP units must provide bids for each hour for the 10th day in the future into the MIS. The NYISO will replicate those bids into the 11th day.

The next day, bids that were 10 days in the future are now 9 days in the future and the bids that were 11 days in the future are now 10 days in the future. On this next day, the 10th day bid will be copied into the 11th day. As days pass, the bids roll down to the present, and day 11 bids are automatically created daily from day 10 bids.

If a bid already exists in day 11, then the day 10 bid will not be copied into day 11. In other words, the day 11 bid will not be overwritten by the day 10 bid. NYISO customers may overwrite their bids at any time and have full control over their bids up until the 5am closing for the DAM. NYISO customers may also delete their bids if the unit is truly out of service.

The NYISO will monitor the ICAP bidding process daily to insure the generation bids for ICAP supporting units adhere to this rule. All generators with missing bids in day 10 will be monitored by the NYISO to verify that outages truly exist for that day.

7.4.1 Submit New Generator Bids

Introduction

New bids for energy and for ancillary services are submitted through the same screens. We collectively refer to energy and ancillary services bids as Generator Bids throughout this section.

The process for submitting DAM and HAM bids are the same; however, Market Participant Users may be separately authorized to submit DAM generator bids and HAM generator bids.

There are rules for new generator bids:

- Your day-ahead generator bid must be submitted and have a status of "Validation Passed" by 5 AM on the day ahead of the bid date
- Your hour-ahead bid must be submitted and have a status of "Validation Passed" at least 9075 minutes ahead of the bid time
- Bids may be submitted up to 15 days in advance.

- **Prerequisites** Before beginning the task of submitting day-ahead or hour-ahead market energy bids, you should be aware of the following preconditions:
 - Certain authorizations must be present:
 - % The Market Participant User must have "DAM Units" and/or "HAM Units" bidding privilege assigned
 - % The unit must be qualified to bid in the energy, regulation, and/or reserve market
 - Generator Commitment parameters, which define the non-time varying data associated with generators, must be properly defined.

The steps for submitting new generator bids are as follows:

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "New Generator Bid" from the User menu frame. The Generator Bid display (E-7) is presented in the display/results frame. For ease of presentation, the display is broken down into three sections as shown in Steps 3 5. In reality, it is one display.

Generator and Market Specification Data (E-7)

Page Ref. E-7			
	Generato	r Bid	
Generator Name: ROSETON_2 Bid Date 08/04/1999_05:00 (mm/dd/yyyy hh.mm)	Num of Hours	Market DAM	Expiration (DAM Only) (mm/dd/yyyyy hh.mm)

Step 3: Enter the following generator and market specification data:

- 1. Generator Name 🖾 Select the name of the generator for which you want to submit a bid:
 - The pull-down menu lists the generators for which you are authorized to enter bids
 - If you do not select a Generator name, your bid will not pass the validation check and an error will be returned
- 2. Bid Date 🖾 Enter the date and the starting hour for this bid. This represents the effective date of the bid:
 - The format used should be mm/dd/yyyy hh:mm (where hh stands for hour using the 24 hour clock)
 - If you do not enter a date and hour, your bid will not pass the validation check and an error will be returned

- If you enter a date that has already passed, an error will be returned
- Bids may be submitted up to 15 days in advance
- 3. Number of Hours ⊠ Enter the number of hours which defines the span of time, starting from bid date and starting hour, for which the bid pertains:
 - You can enter any number of hours from 1 to 360 (default = 1)
 - If you do not enter any number, your bid will not pass the validation check and an error will be returned
- 4. **Market** ⊠ Select one of the following choices from the pull-down menu to define the market(s) that you are bidding into:
 - DAM (Day Ahead Market)
 - HAM (Hour Ahead Market)
 - BOTH (both DAM and HAM)

The default is BOTH.

5. Expiration (DAM Only) □ - Enter a date/time to indicate the last possible time the NYISO will consider the bid for possible supplemental resource evaluation (SRE).

The bid expiration date/time is significant because the ISO has the ability to commit a resource based on a rejected bid that has not yet expired. This commitment process is called the Supplemental Resource Evaluation (SRE), and it provides the ISO with a mechanism for committing resources for timeframes that are not covered by the Day Ahead, Hour Ahead, and real time evaluations.

Supplemental resource commitments may be required at any point after the dayahead unit commitment process has completed. The need would most generally arise due either to the unexpected withdrawal of a unit from service or to an unexpected change in either the load or the transmission topology. In the event that a supplemental resource commitment is required, bids that have not reached expiration time will be considered available for evaluation and may be committed.

Normally, the expiration date and time would be between the Day Ahead Market (DAM) close time and the last hour and a half of the bid date, if the unit were bid for the whole day.

Example - A bidder submits an energy bid into the DAM and no energy is scheduled. The bidder did not pay attention to the expiration date field, and left the field blank. By default, the bid status will be "unaccepted" and "unexpired." The bidder, thinking that the resource is now available, commits the generation resource to another market. The NYISO then conducts a SRE, which in turn commits the resource. As a result, the bidder has unwittingly committed their resource in two different markets.

- The field is optional for the DAM. Bids without an expiration entered do not expire and will be considered as available for a SRE run.
- The format used should be mm/dd/yyyy hh:mm (where hh stands for hour using the 24 hour clock starting with 00)
- Normally the expiration time would fall somewhere between the close of the DAM (0500 hours) and the last 90 minutes of the bid date and hour (2130 hours).

📕 Energy Bid and Bid Curve Data

Energy Bid							
Upper Operating Limit (MW)							
100.0	100.0						
Bid-Curve Format C Block Bid (3 Pairs Max) © Energy Co Pairs Max)	st Curve (6 💿	Unit Operations © On-Dispatch © Off-Dispatch			🗖 Zero Start-Up Cost		
		Bid Curve					
MW (Basepoint)	100.0						
\$/MW	25.6						

Step 4: Enter the following energy bid and bid curve data:

- 1. Upper Operating Limit 🖾 Enter the upper most limit of operation for the unit:
 - This value indicates the maximum net schedule
 - This value may not exceed the Maximum Operating Limit specified for the unit (See Section 7.3.2)
 - If you do not enter any number or enter a number greater than the max limit shown on the Generator Parameters display, your bid will not pass the validation check and an error will be returned

Special Note When evaluating units for the bid upper limit, the MIS will use the Lower of the Bid Upper Limit field or the last field of points (MW, \$/MW) on the bid curve. I.E. The unit bids 90 MW in the Upper Operating Limit field and the last point on their bid curve is 85 MW and \$30.00/MW. The MIS would interpret this to mean that you are only bidding 85 MWs as the upper limit of your unit. However, when the unit is registered for the ELR/CLR program, the MIS ignores the Upper Operating Limit and uses the last point on the bid curve.

Bidding
Above ICAP
DMNCThe NYISO allows generators to operate above their ICAP Dependable Maximum Net
Capability (DMNC) and to bid that energy into the DAM and Real-Time Markets. The
amount of generation that can be bid is limited to the Proven Maximum Production
Capability.

Proven Maximum Production Capability is defined as the maximum production demonstrated during the appropriate contiguous period (per Section 4.2.2 of the *NYISO Installed Capacity Manual*), or during the current capability period, or during either of the prior two capability periods. For hydro-electric units, the Proven Maximum Production Capability may also be based on other historical production data that is deemed acceptable by the NYISO.

ICAP DMNC is a generator's Proven Maximum Production Capability that has been weather or streamflow adjusted during the appropriate contiguous period. This adjustment results in significant deratings for combined cycle and hydroelectric plants.

To change the Proven Maximum Production Capability, documentation of production test data must be submitted to the NYISO Resource Reliability Department by fax or regular mail. The Operations Department can be reached as follows:

Fax: (518) 356-6119

Address: NYISO / Operations Department / 3890 Carman Road / Schenectady, NY 12303

	Maximu above, ti of the do confirm 2. Min	Im Product: the value with commentation the change nimum Gen run should the	onduct a review ion Capability. ill normally be on. A customere via e-mail or neration (MW the bid be acce e may not be le	If approp updated v r represent telephone. 7) 🖾 - Ent pted:	riate docum vithin five l ative from er the minir	nentation i business da NYISO C num amou	s submitted as ays of NYISO ustomer Relat int of generatio	described 's receipt ions will on that must
	•	If you do	not enter any n be returned	umber, yo	ur bid will	not pass th	e validation cl	neck and an
🖹 Special Note	a fixed u	unit and ca	nimum limit an nnot submit a minimum and	bid curve.	If the unit	has a bid	curve provide	
			trained Unit Co l minimum and				in not model a	unit with a
	The foll	owing exar	nples show ho	w SCUC v	will interpre	ets some co	onditions:	
	A)	Min. Gen. 150	Upper Limit 150	Bid Curve	OP. Reserv 0	e Regulat 0	ion	
		supplied s	his is a valid b to is considered twatts depending	l off-dispa	tch; It wou	ld be dispa	atched at eithe	r 150 or
	B)	Min. Gen. 100	Upper Limit Bi 200	id Curve O no	P. Reserve 1 50	Regulation 25		
		supplied s and energ MW Op. 1	his is a valid b o is considered y is awarded th Reserve, and 5 ne 200 MW up	l off-dispa nen the uni 0 MW Re	tch; if full it would be gulation (25	operating i scheduled	reserve, full re l at 100 MW e	gulation nergy, 50
	C)	Min. Gen. 100	Upper Limit Bi 200	id Curve O yes	P. Reserve 1 200	Regulation 200		
		supplied a fit in it op and 40 M	his is a valid b and is consider erating range v W Regulation rating limit.	ed on-disp vhich mig	atch; SCUC ht be 120 N	C awarded IW energy	the unit sched , 40 MW Op.	lules that Reserve,
	D)	Min. Gen. 200	Upper Limit 200	Bid Curv yes	ve OP. Rese 200	rve R	egulation 200	
		<u>Result:</u> T limits are	his is an invali the same.	-	e a curve is	provided	and Min and U	Jpper

3. Minimum Generation Cost (\$) 🗵 -Enter the cost for the minimum generation

	 segment. The NYISO Market Information System recognizes a generator's bid at minimum generation level (\$/hour) as the generator's total cost for supplying service at that level: The number you enter in dollars and cents may include a decimal point and up to two decimal digits
	• If you do not enter any number, your bid will not pass the validation check
	• The value you place in this field represents the bid for (1) one hour of operation at your bid Minimum Generation MWs field.
	• The generator minimum cost per hour that is entered into the MIS should reflect the total cost of running the generator at its minimum operating point, and not the incremental cost above the generator's bid. This cost will be compared to the revenue that the generator would receive from the energy and Ancillary Services markets. Generators who understate their minimum generation costs by not including all fuel, O&M, and other expense may not recover expenses.
Bid Production Cost Guarantee	A generator scheduled to run at its minimum generation level is paid for energy at Locational Based Marginal Pricing (LBMP) rates plus Ancillary Services revenue. If the total revenue is less than the unit's minimum generation bid, then a Bid Production Cost Guarantee (BPCG) payment is made. The BPCG payment is equal to the shortfall between LBMP revenue for energy and Ancillary Services scheduled and supplied, and the bid cost to supply such services over the 24-hour day.
Example	The table below shows three generators who are selected to supply minimum generation levels over a ten-hour period. Each generator operates at a 10 MW minimum generation level and receives no Ancillary Service payments or penalties. With a LBMP of \$20/MWh, each generator could receive \$2000 from the energy market (i.e. 10 MW x 10 hours x 20 \$/MWh).

		Energy Bid	Minimum Generation Bid	Energy Market Value	Minimum Generation Cost for 10 Hours
Generator	А	\$15/MWh	\$250/hour	\$2000	\$2500
Generator	В	\$15/MWh	\$150/hour	\$2000	\$1500
Generator	С	\$15/MWh	\$90/hour	\$2000	\$900

Generators B and C receive the \$2000 since the energy market value is greater than the minimum generation costs. Generator A receives its minimum generation cost of \$2500, since it is greater than the energy market value.

The generators' energy bids of \$15/MWh are not significant for the calculations above, but they are important nonetheless. If Generator C expected its minimum generation of \$90/hour to be added to its energy bid, then it may not be receiving enough money to cover all expenses for running at minimum generation. If Generator C incurred costs of \$2400 [(\$90/hour x 10 hours) + (10 MW x 10 hours x \$15/MWh) = \$2400], it would be \$400 short, since it would collect only \$2000. Generator B would exactly cover its costs, since it set its minimum generation of \$150/hour equal to its energy bid (10 MW x \$15/MWh).

	4. Bid Curve Format ⊠ - Entry in this field defines the characteristic shape of the bid curve data entered below. You must select one or the other of the following:
	• Select "Block Bid (3 Pairs Max)" and you will be allowed to make up to 3 Bid Curve entries in the Bid Curve section. The bid curve will take the shape of a staircase function.
	• Select "Energy Cost Curve (6 Pairs Max)" and you will be allowed to make up to 6 Bid Curve entries in the Bid Curve section. The bid will take on the shape of a piece-wise linear curve function.
	• Bids are ordered from left to right and must be monotonically increasing
	5. Selecting "Zero Start-Up Cost" causes SCUC not to consider start-up cost when committing this unit. Units that are supporting bilateral transactions are not eligible to receive start-up cost reimbursement. If the option is not selected, start-up cost is considered in committing the unit even though the unit is not eligible to receive start-up cost reimbursement.
🖹 Special Notes	Items 6 and 7 below refer to the entry of individual basepoints and associated cost.
	 6. MW Basepoint □ - Enter the basepoint in MW: Failure to enter a curve will result in evaluation of the unit operating at the minimum generation point and will ignore any data entered for the bid curve.
	 7. \$/MW □ - Enter the \$/MW for the associated basepoint: The number you enter for \$/MW in dollars and cents may include a decimal point and up to two decimal digits
	• The number of entries you can make is specified by your choice in the Bid-Curve Format. If Block Bid is selected, up to three pairs of MW and \$/MW entries may be made. If Energy Cost Curve is selected, up to six pairs of MW and \$/MW entries may be made.
	• If you make more entries than you are allowed to make (based on your selection under the Bid-Curve Format), then the extra entries will not be read by the MIS. This error will prevent your bid from passing the validation test.
	9 Unit On sustions [V] Calcot the targe of unit expension:

- 8. Unit Operations \boxtimes Select the type of unit operation:
 - If you select:
 - % On-Dispatch the Security Constrained Dispatch program will compute the base point for the unit
 - % Off-Dispatch the Security Constrained Dispatch program will be treat the unit as a fixed schedule ramped over the hour.
 - If you do not make a selection, your bid will not pass the validation check and an error will be returned.

🗖 Ancillary Services Data

	Ancillary Services					
Item	MWs	\$/MW				
10 Minute Spinning Reserves	50.0	43.0				
10 Minute Non-Synchronized Reserve						
30 Minute Spinning Reserve	29.6	24.9				
30 Minute Non-Synchronized Reserve						
Regulation						
SUBMIT RESET						
	Schedule (Only applicable a					
	Schedule (Only applicable a Bid Status	ter DAMHAM posting) Bid Date		Ma	rket Select	•d
Generator Name	Bid Status Scheduled MWs (Based on Unit,	Bid Date Date & Market Displayed,				
Generator Name	Bid Status	Bid Date Date & Market Displayed,	g Avail		on-Disp	on-Cont

Step 5: Enter the following Ancillary Services Data:

- MW \square Enter the number of MWs for each reserve and regulation category that you want to bid:
 - % For regulation MWs, the value indicates the ability to move both up and down by the total MWs bid. This is 5 Minutes X your Regulation Response Rate.
 - % For reserve MWs, the value is inputted as either 10 or 30 minutes X your response rate.
- S/MW □ Enter the cost for each reserve and regulation categories in which you want to bid:
 - % The number you enter for \$/MW in dollars and cents may include a decimal point and up to two decimal digits.
- SUBMIT Bid After all your entries have been made, select SUBMIT and the MIS will check your entries to see if they pass a validation test. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.
 - **Step 6:** Check the results of the validation process which are presented in the Generator Bid Results (E-5) display.

Generator Bid Results (E-5)

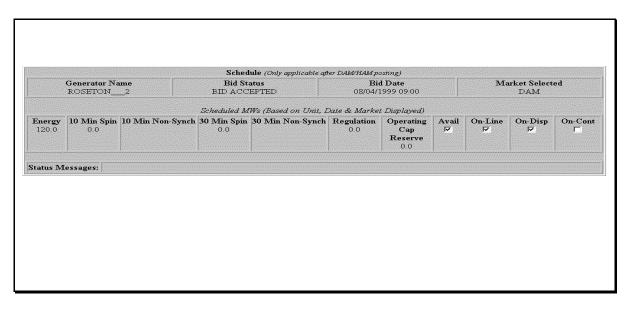
			Gene a bug in Internation wean the page till if you cannot	e and the	r 5, there start of fi	may be a signi he table. Please							
		Bid Identification					5	Schedules (M	Ŵ				e 1 4
Gene	erator	Date	Status	Market	Energy	10 Min Spin	10 Min Non- Synch	30 Min Spin	30 Min Non- Synch	Regulation	Operating Cap Reserve	Delete Bid	Select for Deletion
RUSSELL	STATION	04/01/2001 23:00 EDT	<u>BD</u> <u>ACCEPTED</u>	DaM	162.0	0.0		0.0		14.0	0.0	DELETE	🗆 Delete
RUSSELL	STATION	04/01/2001 23:00 EDT	VALIDATION PASSED	DAM								DELETE	□ Delete
RUSSELL	STATION	04/01/2001 23:00 EDT	<u>BD</u> <u>ACCEPTED</u>	EaM	162.0	0.0		0.0		14.C	0.0	DELETE	🗆 Delete
		SELECTA		her of 1 LEAR		eturned: 3	ETE SELEC	TED					

- The MIS will return to you in the display/results frame page, a record of the bid data you have entered.
- A separate record is provided for each hour. This means that if you entered a bid for 24 hours, you will get a separate record for each hour in the 24-hour period.
- An immediate indication of VALIDATION PASSED or VALIDATION FAILED will appear in the Status column. If a bid constraint is violated, or a validation error is discovered, a software error message will be generated.
- The user can click on the Bid Status (displayed as a hyperlink) to display a window containing associated validation and/or constraint messages, if any. Lists of all these messages may be viewed as follows: from the NYISO home page, select <u>OASIS</u>, then select <u>Prices & Public Information</u>, then select either <u>Validation Messages</u> or <u>Constraint Messages</u>.
- There are additional results presented on display E-5 that are not explained here. They will be covered in Section 7.4.2.

Special Notes While you should check all data to make sure it represents the data you intended to enter, you need to check the Status Column to see if your bid passed validation:

- If the Status is, VALIDATION PASSED, then your bid has passed the screening to determine if all required data has been entered
- If the Status is, VALIDATION FAILED, then your bid has either incorrect or missing data and you should go back to the Generator Bid (E-7) display and correct your error.
- **Step 7:** After the DAM/HAM closing and posting, the accepted generator bid information is available at the bottom of the Generator Bid (E-7) display (Schedule section).

Generator Bid



Data in the schedule section of E-7 is only filled in after DAM/HAM posting to indicate what the MIS expects the generator to produce for that hour. The status messages at the very bottom of E-7, however, will be visible immediately after the generator bid is processed.

7.4.2 Review/Change Generator Bids

Bids for energy and bids for ancillary services are changed through the same screens Introduction discussed in Section 7.4.1. We collectively refer to energy and ancillary services bids as Generator Bids throughout this section. The process for submitting DAM and HAM bid changes is the same; however, Market Participant Users may be separately authorized to submit DAM generator bids and HAM generator bids. The capability to change a previously submitted bid depends on the current date and time relative to the particular market you are submitting the bid: Your day-ahead generator bid changes must be completed and have a status of "Validation Passed" by 5 AM of the day ahead of the bid date Your hour-ahead generator bid changes must be submitted and have a status of "Validation Passed" 9075 minutes ahead of the bid time Bids may be changed up to 15 days in advance. Before beginning the task of changing day-ahead or hour-ahead market energy bids, you Prerequisites should be aware of the following preconditions: Certain authorizations must be present: % The Market Participant User must have "DAM Units" and/or "HAM Units" bidding privileges assigned % The unit must be qualified to bid in the energy, regulation, or reserve markets Generator Commitment parameters, which define the non-time varying data associated with generators, must be properly defined. The steps for reviewing/changing generator bids are as follows: Login via the User Login page from the MIS home page. For more detail on User Login, see Step 1: Section 7.1.3. Select "Review Generator Bids" from the User menu frame. The Generator Bid Selection Step 2: Criteria (E-4) display is presented in the display/results frame. Using this display, you will be able to search for generator bids that meet specific criteria. **Generator Bid Selection Criteria (E-4)** Dogo Dof E 4

Generator Nan	ne: RUSSELL_4		Market: @	BOTHCDAMCI	MAH		
tart Date: 07	/04/1999 00:00	End Date:	07/04/1999 11:0	00 (mm/dd/yyyy hh:	mi)		
status: None S	elected	💌 Numbe	er of Rows:				
tatus: None S	elected	Numbe	er of Rows:				
itatus: None S	elected	 Number 	er of Rows:	Solost Bid Typos			
Status: None S		_		Select Bid Types	20 Minute Spinning	20 Minute	
tatus: None S	ielected Dispatchable Energy	Fixed Energy	er of Rows:		30-Minute Spinning Reserve	30-Minute Non Sync Reserve	Regulation

Enter the following selection criteria data: Step 3:

- 1. Generator Name \Box Select the name of the generator for which you want to review bid information data.
 - The pull-down menu lists the generators for which you are authorized to change bid data
 - Select the generator from the pull down menu. Only one generator may be selected for a given search
 - By selecting the "None Selected" option, you are telling the search program that the generator name does not matter in the search criteria. However, only the generators that you are authorized to change will be returned when the search criteria is submitted.
- 2. Market ⊠ You must select one of the following choices to define that markets that you want to review generator bids:
 - DAM (Day Ahead Market)
 - HAM (Hour Ahead Market)
 - BOTH (both DAM and HAM)

The default is BOTH.

- 3. **Start Date** \Box Enter the start date for the bid(s) you desire:
 - The format is mm/dd/yyyy hh:mm (where hh stands for hour using the 24-hour clock)
 - If you do not enter a Start Date, you are telling the search program that Start Date and hour does not matter in the search criteria:
- 4. End Date \Box Enter the end date for the bid(s) you desire:
 - The format is mm/dd/yyyy hh:mm (where hh stands for hour using the 24-hour clock)
 - If you do not enter an End Date, you are telling the search program that the End Date and hour do not matter in the search criteria.
- 5. **Status** \Box Select from the pull-down menu one of the following statuses for the bids you want to retrieve:
 - The statuses are as follows (see explanation in Reasons to Review Generator Bids, below):
 - % VALIDATION PASSED
 - % VALIDATION FAILED
 - % EVALUATING
 - % BID ACCEPTED
 - % BID REJECTED
 - If you select "None Selected" the search program will not use this component in the in the search criteria.
- 6. Number of Rows 🗆 Enter the maximum number of "hits" to be returned that meet your search criteria:
 - If nothing is specified, a maximum default is used and up to 500 rows could be returned.
- 7. Select Bid Types \Box Check the energy, reserve, and regulation categories to be returned in the search criteria.
- **DISPLAY Results** After all the desired entries have been made, select DISPLAY, and the MIS will submit your search request and return a list of all bid records that meet the search criteria. You may also

elect to RESET the entries, which is equivalent to an UNDO in Microsoft.

Step 4: Check the results of the search criteria that are presented in the Generator Bid Results (E-5) display:

		o a bug in Interne ween the page till		r 5, there	may be a signi	ficant amount						
		wear the page li				ficant amount						
		if you cannot	alew ize									
	Bid Identification					5	Schedules (M	W)				Select
Generator	Date	Status	Market	Energy	10 Min Spin	10 Min Nan- Synch	30 Min Spin	30 Min Non- Synch	Regulation	Operating Cap Reserve	Rid.	for Deletion
RUSSELL STATION	04/01/2001 23:30 EDT	BD ACCEPTED	DaM	162.0	0.0		0.0		14.0	0.0	<u>DELETE</u>	Delete
	04/01/2001 23:00 EDT 04/01/2001 23:00 EDT	ACCEPTED		162.0	0.0		0.0		14.0			□ Delete

Generator Bid Results (E-5)

• The MIS retrieves and presents in the results page, all of the generator bids that meet the search criteria that you have entered

- The results page is identical to the one presented after submitting a new generator bid
- The results of your search criteria are presented on an hourly basis.
 - % For example, if you asked to view a particular generator bid entered for a 24 hour period, you will receive 24 entries showing the bid data for each hour
- There are navigation buttons at the bottom of the screen.
 - % FIRST takes you to the top of the list
 - % NEXT scrolls a full screen's worth of data down
 - % PREV scrolls a full screen's worth of data up
 - % LAST takes you to the bottom of the list
 - % SELECT ALL selects all of the generator bids displayed on the visible portion of the E-5 display
 - % CLEAR ALL clears the visible portion of the E-5 display
 - % DELETE SELECTED deletes the generator bid(s) selected in the right-hand column (Select for Deletion)
- If the bid has been accepted in either the DAM or HAM, the "Schedules (MW)" section of the display will be populated. This shows you exactly what has been submitted and accepted by the MIS.
- **Step 5:** Delete bid if this is the desired action. If not, proceed to Step 6:
 - A single generator bid for one hour may be deleted by selecting the DELETE hyperlink in the corresponding row
 - One or several generator bids for multiple hours may be deleted by checking the corresponding Delete checkbox(es) in the rightmost column and then selecting DELETE SELECTED at the bottom of the display
 - Only bids that have not reached the evaluation stage may be deleted.
 - There is no need to delete bids when bids require modification. This feature is only

useful if the Market Participant User does not want any bid for a particular interval.

- **Step 6:** To continue with the changing bid process, select the Generator Name next to the hour whose bid you want to change. This calls up the Generator Bid display (E-7) in the display/results frame with the appropriate bid data and schedule for the date and hour.
 - You cannot make any bid modifications through the Generator Bid Results (E-5) display, except to delete a bid per Step 5 above; instead, you must execute Step 6, which brings you back to the Generator Bid (E-7) display where modifications can be made.

Generator Bid Modifications (E-7)

				Gener	ator Bid					
enerator	Name: ROSE	TON 2								
		Bid Date	_	Num of Hou	rs Market	Е	xpiration	(DAM Only	7)	
	08/04/1	.999 05:00 (mm/	ld/yyyy hh:mm)	1	DAM 💌			(mm/dd/yy	yy hh:mm)	
				Ener	gy Bid					
Uppe	r Operating 560.0	Limit (MW)		Minimum Ge	eneration (MW	Ŋ			Generation	Cost (\$)
C Block B	id (3 Pairs M	ve Format ax) © Energy Cost s Max)	Curve (6		J nit Operations Dispatch ^C Off-I			□ Ze	ero Start-Up	Cost
				Bid	Curve					
AW (Base	point)	120.0	220.0) [3	20.0	420.0		520.0	5	60.0
MW		6.5	7.2	- 6	.0	8.5		9.3	1	2.0
			1							
tem			Ancillary S	Services	đ	/MW				
	Spinning Rese			20.0		5.0				
				20.0	I	5.0				
	Non-Synchron				[
30 Minute :	Spinning Rese	rve		20.0		5.0				
30 Minute I	Non-Synchron	nized Reserve			[
Regulation				20.0	ſ	10.0				
SUBMIT	RESET									
	Generator N		Scher Bid St	lule (Only applica	ble after DAM/HA	M posting) Bid Date		M	arket Select	. d
	ROSETON_		BID ACC		08/	04/1999 09:00		1414	DAM	cu
			Schadulad M	IWs (Based on U	wit Data & Ma	nhat Disnlawed)				
Energy 120.0	10 Min Spin 0.0	10 Min Non-Syr			البليل ومشروع محمد والتركي والمراجع والمراجع		بمرديه والمتحد والمريد	On-Line ☑	On-Disp ₽	On-Con

- The bid date is initialized to the date and hour of the hour you selected from the Generator Bid Results (E-5) display
- The Num of Hours data field is initialized to one, indicating that the data you modify applies only to the hour entered in the bid date
- At this point, you make your changes and initiate a SUBMIT action similar to the

procedure for entering data for a new generator bid, as described starting with Step 6 in Section 7.4.1.

- SUBMIT Bid After all your changes have been made, select SUBMIT, and the MIS will check your entries to see if they pass a validation test. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.
 - Modifications of bids in the EVALUATING or ACCEPTED status are not permitted
 - Modifications to bids previously validated must be resubmitted for validation.
 - Step 7: Check the results of the validation process which are presented in the Generator Bid Results (E-5) display.
 - **Step 8:** After the DAM/HAM closing and posting, the accepted generator bid information is available at the bottom of the Generator Bid display (E-7). These values show what the generator is expected to produce for the selected hour. The status messages field at the very bottom of the display is updated as soon as the bid is processed to display validation and constraint error messages, if any, associated with the bid.

Alternative Approaches for Changing Bid Data

Changing generator bid data is just like submitting a new generator bid except the bid template is already filled out for you and you are doing it for one hour at a time. However, you are not restricted in Step 6 to changing only one hour's worth of data at a time:

- Once you reach Step 6, you may change the bid date and Num of Hours value
- This replaces any bid data for the hours specified, that you may have submitted previously.

There is also a way to use the bid data for one generator for a given date as the starting point for a second generator at a different date:

- Once you reach Step 6, you can use the pull-down menu next to the Generator Name to select a different unit. You may also change the bid date
- The data does not change unless you continue and change it. A SUBMIT action can be initiated, and will submit the bid data for the generator name and bid date that you have entered.

Reasons to Review Generator Bids

The Generator Bid Results display (E-5) not only provides the means to modify generator bid data, it also serves as the primary mechanism for calling up and reviewing the status of your bid before, during, and after the evaluation process. It is incumbent upon you to check your bids as they move through the stages of verification, evaluation, and acceptance/rejection.

The following are sample instances where you might want to check on the status of your generator bid:

- Before the day-ahead or hour-ahead market closes, you may want to verify that your bids have passed all of the validation checks. If not, actions can be taken prior to market close to get bids to the Validation Passed status so that they will be evaluated (status will be VALIDATION PASSED or VALIDATION FAILED)
- After the day-head or hour-ahead market closes, you may want to verify that your bids are currently being evaluated (status will be EVALUATING)
- After the posting of day-ahead or hour-ahead market results, you may want to confirm

Special Notes

whether a portion or all of your bids have been accepted or whether the NYISO could not meet the bid request at this time (status will be BID ACCEPTED or BID REJECTED).

Hyperlinks

The Market Participant User is able to access a detailed view of the generator bid data through hyperlinks on the Generator Bid Results display (E-5):

- This is done by selecting the generator name on the Generator Bid Results display.
- This brings up the Generator Bid display (E-7) with information already populated on the display.

7.5 Load Bids

There are two basic tasks associated with submitting and reviewing information associated with load bids:

- Submit New Load Bids (Section 7.5.1)
- Review/Change Load Bids (Section 7.5.2).

Users that are not authorized for any loads will not see this menu option.

7.5.1 Submit New Load Bids

Load bids are entered for the day-ahead market only; you are not permitted to enter load bids in the hour-ahead market.

Rules for new load bids are as follows:

- Your load bid must be submitted and have a status of "Validation Passed" by 5 AM on the day ahead of the bid date.
- Load forecast data should be supplied seven days in advance to support Reliability Evaluation Studies associated with the Security Constrained Unit Commitment.
- Bids may be submitted up to 15 days in advance of the close of the DAM.

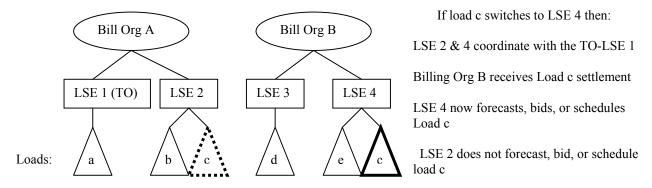
Prerequisites Before beginning the task of submitting load bids, you should make sure that the "Load" bidding privilege is assigned to your user account. You also must make sure that your load has been established in the MIS. Each NYISO Customer that has load will inform the NYISO of the load and the load will be modeled in the MIS with a unique ID, a link to an LSE, and a link to one of the ISO sub-zones. These loads must be modeled 30 days in advance of taking service under the ISO.

Each LSE has one associated Billing Organization. Bills and invoices are calculated for each Billing Organization and include the settlements for the associated LSE(s) and load(s). If a retail access load customer changes from one LSE to another LSE then it is the responsibility of the LSEs to coordinate the change with themselves and the Transmission Owner (TO) so that each LSE forecasts, bids, and schedules the changed load accurately.

Within each sub-zone, the Transmission Owner (TO) must certify that the LSEs have met their requirements and can conduct business in that sub-zone. The ISO will ask for verification that all LSEs, with their associated loads, that are modeled in the MIS are certified by the TO.

The load names specified in the NYISO MIS represent the customers that have a certain amount of load (one megawatt or greater - individual or aggregated). Individual retail customers, meters, or accounts are not tracked by the ISO. The ISO does not need to know if accounts or customers switch providers. The ISO only needs to know which providers are certified. The TO and the LSE must coordinate activities when customers switch providers to ensure that the load is not missed or double counted.

Introduction



The following diagram below helps explain how a load change may occur.

The ISO only needs to know that LSE 2 & 4 are certified by the TO. If only a partial load is switched then only that amount is coordinated between parties. If load is incorrectly bid or scheduled then, after actual metering is determined, the billing will be adjusted for loads that are off schedule. See Section 7.5.1, *Load Forecasting*.

The steps for submitting new load bids are as follows:

- Step 1: Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Load Bids" from the User menu frame. The Load Bid Selection Criteria display (F-5) is presented in the display/results frame.

Load Bid Selection Criteria (F-5)

Page Ref: F-5			Load Bid Selection Criteria
	Bus Name: Date:	ASTORIA E_138_N.QUEENS (mm/dd/yyyy)	×
			DISPLAY

Step 3: Enter the following query information to set up the template for entering the load bid:

- 1. Load Name \boxtimes Select the name of the load for which you want to submit a bid:
 - The pull-down menu lists the loads for which you are authorized to enter bids
 - Select the load name from the pull-down menu. Only one load may be selected.
- 2. Date 🖾 Enter the Date for the 24 hour period you wish to enter a new load bid:
 - This date represents the effective date of the bid
 - The format is mm/dd/yyyy.

- **DISPLAY Load Profile** Once you have entered the Load Name and Date, select DISPLAY, and the MIS will present the Load Bid display (F-3) for you to complete.
 - **Step 4:** Continue with completing the information for the load bid by entering the load information described below:
 - The actual Load Bid display has been truncated in the picture below to show only the data fields that are relevant to new load bids. The remaining fields will be discussed in Section 7.5.2 as they become relevant.
 - Load bids may only be submitted in the DAM.

Load Bid Profile (F-3)

					Load	Bid		
Load I	Name: LS	E-NM-B_NM	_GENESEE			Date: 07/02/1999		
LSE-N	M-B NM	GENESEE	3			Interruptible Type: Ւ	lone Selected	
Time	Forecast	Fixed Bid	Price Cap #1	Price Cap #2	Price Cap #3	Interrupt Price Cap	Interrupt Fixed	Bid Status
	MW	MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	
00:00	100.0	100.0						VALIDATION PASSED
								VALIDATION
01:00	100.0	100.0	l		ļ			PASSED
		100.0			· · · · · · · · · · · · · · · · · · ·			VALIDATION
02.00	1100.0						J	PASSED
02:00	100.0	100.0	I I					

- 1. Load Name 🖾 Verify that load name <u>appearing below</u> the Load Name field is the same as what you entered in the Load Bid Query Selection Criteria display:
 - The use of the pull-down menu of load names is reviewed in the Change Load Bid task described in Section 7.5.2.
- 2. **Date** \boxtimes Enter the date for the load bid profile:
 - The format is mm/dd/yyyy
 - If you do not enter a date, your bid will not pass the validation check and an error will be returned.
- 3. Interruptible Type 🗵 Select the type of interruptible reserve:
 - You must make one of the following selections which describes the contribution of the load toward reserves:
 - % 10-Minute Interruptible For reserve purposes, the load is considered interruptible within 10 minutes
 - % 30-Minute Interruptible For reserve purposes, the load is considered interruptible within 30 minutes

- % None Selected The load is not interruptible.
- If you do not make a selection, the MIS will default to None Selected.
- **Special Notes** This service will not be initially available through the NYISO. It will become available only after loads are metered and performance tracking is implemented.
 - **Step 5:** Complete the information for the load bid by entering the load profile information described below. Data may be entered for any or all hours of the 24-hour profile:
 - Time This pre-configured field identifies the particular hour in the profile:
 - The format for the target time is hh:mm, on a 24-hour scale. The first hour is 0, the last hour is 23.
 - Both 23 and 25 hour days are supported to accommodate the changes to daylight savings time:
 - % On 23 hour days, no entry for Hour 02:00 will be shown
 - % On 25-hour days, two entries for Hour 02:00 will be shown.
 - Forecast MW 🗖 Enter the forecasted MW value for the load:
 - This field can not be null, a minimum value of zero is required.
 - The Market Participant User should submit the load forecast for seven days in advance.

The value in this field should equal the sum of Bilateral Transactions, Fixed MW bid, Price Capped Loads and the expected Real- Time market energy required to serve your load.

Load Forecasting

The load forecast predicts the level of Load at a point of withdrawal for each hour. In the Security Constrained Unit Commitment (SCUC) program, the load forecast for all the loads within a zone are summed to determine a zonal forecast which, if deemed credible, would be used in determining a unit commitment schedule. These load forecasts are also used to allocate the metered zonal load among the LSEs for billing calculations. Final billing adjustments will be made months later after final meter reading has been reported.

If your organization has utilized two loads to schedule energy for your total sub-zonal load but have submitted the load forecast for both loads in only one of the loads then the energy proportioned to each load will not coincide with your Fixed Bids and Bilaterals.

If you have scheduled a bilateral into a load without submitting the corresponding forecast then the billing program would assume that the load is off schedule and the bilateral energy is sold back into the LBMP market. If you submit a forecast that includes the load to be served via the Bilateral of another load your bill will show purchases off the LBMP market. The daily bill then accounts for these actions and the adjustments to correct the bill will not be made until actual metered values are received two months later.

Example 1:

An organization's total sub-zonal load for an hour is 2000 MW. The organization is using one load/sink to schedule the energy needed to satisfy the total sub-zonal load.

Organization has entered a load bid of 1500 MW in the DAM (Bid accepted in MIS)

	- Organizatio	n has entered firm transaction #1 for 200 MW firms schedule & 200 MW scheduled in MIS) n has entered firm transaction #2 for 100 MW firms schedule &100 MW scheduled in MIS)
Forecast 1:	2000 MW	
Result 1:	200 MW purch 200 MW Purch	ased in the Day Ahead LBMP Market ased in the Real-Time Market based in bilateral market with transaction #1 based in bilateral market with transaction #2
Total 1: 2000 M	W	
three loads/sinks	to schedule the en	oad for an hour is 2000 MW. The organization is using nergy needed to satisfy the total sub-zonal load. in the DAM (Bid accepted in MIS)
		m firm transaction for 200 MW (200 MW scheduled) m firm transaction for 100 MW (100 MW scheduled)
Forecast 2:	Load/sink #2 ent	ters a forecast load of 1700 MW ters a forecast load of 200 MW ters a forecast load of 100 MW
Result 2: Market	Load/sink #1	1500 MW purchased in the Day Ahead LBMP
		200 MW purchased in the Real-Time Market (RTM)
	Load/sink #2	200 MW received through firm transaction 0 MW is purchased/sold in the RTM
	Load/sink #3	100 MW received through firm transaction 0 MW is purchased/sold in the RTM
Total 2: 2000 M	W	
Forecast 3:	Load/sink #2 do	ters a forecast load of 2000 MW esn't enter a forecast load esn't enter a forecast load
Result 3: Market	Load/sink #1	1500 MW purchased in the Day Ahead LBMP
Warket		500 MW purchased in the RTM
	Load/sink #2 LSE co	200 MW received through firm transaction nsidered "Off-Schedule", 200 MW sold into RTM
	Load/sink #3 LSE co	100 MW received through firm transaction nsidered "Off-Schedule", 100 MW sold into RTM
Total 3: 2000 M		

Updating Forecast MW

After the day-ahead market closes, the load forecast portion of the load bid can be updated until 12:00 noon after the bid date, to reflect the actual real-time load. The value in this field is used for billing purposes. The more accurate your value is in this field, the less that billing adjustments will be made when actual meter readings are rendered.

- Fixed Bid MW \Box This is the minimum amount that a forward contract will be generated for. More load may be contracted for depending on the Price Cap data entered. This field can not be null, a minimum value of zero is required.
- Price Cap □ Enter the MW and \$/MW values that define the price you are willing to pay for predefined increments of load beyond the amount of load shown in the Fixed Bid MW field:
 - Only three price caps may be submitted per load:
 - % The MW points are blocks associated with the \$/MW values
 - % The \$/MW value must be in increasing order from Price Cap #1 to Price Cap # 3

Traditionally, LSEs purchase fixed blocks of energy in the Day-Ahead Market regardless of the zonal Day-Ahead LBMP price. Zonal Price Capped Load Bidding allows an LSE to submit a bid for a block of energy, on a per zone basis, and to specify the price (\$/MWh) it is willing to pay for that block. If the zonal Day-Ahead LBMP for energy is below the bid price cap specified, the LSE would purchase the block of energy. If the zonal Day-Ahead LBMP is above the bid price cap, the LSE would not purchase the additional block of energy. If the zonal Day-Ahead LBMP for energy equals the bid price cap, the LSE would purchase an amount of energy somewhere between zero and the entire block of Price Capped Load. Since the Priced Capped Load is at the marginal price, the amount of energy purchased will depend on the Security Constrained Unit Commitment (SCUC) process and its most economic secure solution.

For each zone served, an LSE may submit a bid for up to three price-capped load blocks in addition to its bid for a fixed block of energy for purchase regardless of price. The price for each subsequent price-capped load block must be higher than the previous block. The fixed bid and up to three Price Capped Load bids are separate, distinct, and additive load bids and each represents a unique block of load.

Example:

Zonal Price

Capped

Bidding

Load

Assume an LSE bids 100 MW as fixed Day-Ahead energy; a 20 MW block at a price cap of 25 \$/MWh; a 30 MW block at a price cap of 27 \$/MWh; and a 50 MW block at a price cap of 29 \$/MWh.

If the resulting Day-Ahead LBMP for energy is 24 \$/MWh (see first results column in example table on page 2), a price that is below all three Price Capped Load bids, the LSE will be scheduled to purchase 200 MW at the Day-Ahead price of 24 \$/MWh.

If the resulting Day-Ahead Energy LBMP is 30 \$/MWh (see last column in example table below), or a price that is above all three price caps, the LSE will be scheduled to purchase 100 MW at the Day-Ahead price of 30 \$/MWh. The LSE will not be scheduled to purchase any of its price-capped energy blocks because the Day-Ahead LBMP of 30 \$/MWh is above what the LSE bid for this energy. Should the LSE actually consume 200 MWs in real time in these hours, it must serve the load through bilateral arrangements or pay the Real-Time price for the additional 100 MWs.

The resulting Day-Ahead load schedules are also shown in the example table below for cases where the Day-Ahead LBMPs are 26, 27, and 27.50 \$/MWh.

	Day-Al	nead Bid		Resultir	ng Day-Ahead	Schedule	
	Amount MW	Price Cap \$/MWh	If LBMP = \$24/MWh	If LBMP = \$26/MWh	If LBMP = \$27/MWh	If LBMP = \$27.50/MWh	If LBMP \$30/MW
Fixed Bid Block	100		100 MW	100 MW	100 MW	100 MW	100 MM
rice Cap Bid Block #1	20	25	20 MW	0	0	0	0
rice Cap Bid Block #2	30	27	30 MW	30 MW	0	0	0
Price Cap Bid Block #3	50	29	50 MW	50 MW	50 MW	50 MW	0
Total	200		200 MW @\$24/MWh	180 MW @\$26/MWh	150 MW @\$27/MWh	150 MW @\$27.50/MWh	100 MV @\$30/M
Note: The LBMP the LBMP used in LBMPs used in sc the load busses wh of the generator bu	billing hedulin nile the	the Price g Priced	d Capped I Capped Lo	Loads. Thi ads are bas	s difference ed on the w	e is because t veighted aver	the zona

- **Special Notes** Market Participants interested in utilizing Zonal Price Capped Load Bids must contact their NYISO Customer Representative to register for this service and to have the Zonal Price Capped Load bus(ses) modeled in the MIS.
 - Interrupt Price Cap \Box Enter the MW and \$/MW that define the price and amount you are willing to have your load associated with price caps curtailed:
 - The type of reserve that the bid is good for is based on the interruptible type selected in Step 4 above.
- **Special Notes** This is not a service that is biddable until proper metering and performance tracking is available for loads to verify curtailment when called upon.
 - Interrupt Fixed \Box Enter the MW and \$/MW that define the price and amount you are willing to have your load associated with Fixed Bid MW curtailed:
 - The type of reserve that the bid is good for is based on the interruptible type selected in Step 4 above.
- **Special Notes** This is not a service that is biddable until proper metering and performance tracking is available for loads to verify curtailment when called upon.
- SUBMIT Bid After you have entered all the data, select SUBMIT, and the MIS will check your entries to see if they pass the validation test:
 - As a result of the SUBMIT action, the Load Bid (F-3) display is refreshed to show the Bid Status (displayed as a hyperlink). The user can click on the status hyperlink to display a window showing constraint and/or validation messages, if any. For a listing of these messages, refer to the NYISO web site (from the www.nyiso.com home page, select <u>OASIS</u>, select <u>MIS Instructions</u>, then select either <u>Validation Messages</u> or Bid <u>Constraint Messages</u>).
 - **Step 6:** Check the results of the validation process via the bid status fields for each hour of the profile:

• The actual Load Bid display has been truncated in the picture below to show the Bid Status. The remaining fields will be discussed in Section 7.5.2 as they become relevant:

					Load	Bid		
Load I	Name: LS	E-NM-B_NM	_GENESEE			Date: 07/02/1999		
LSE-N	M-B NM	GENESEE	1			Interruptible Type: 📐	lone Selected	
Time	Forecast	Fixed Bid	Price Cap #1	Price Cap #2	Price Cap #3	Interrupt Price Cap	Interrupt Fixed	Bid Status
	MW	MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	
								TIAT TO A THOSE
00:00	100.0	100.0						VALIDATION PASSED
01:00	100.0	100.0						VALIDATION
		······			·····			PASSED VALIDATION
	100.0	100.0						PASSED
02:00	1.0010							

Load Bid Validation Check (F-3)

- An immediate indication of VALIDATION PASSED or VALIDATION FAILED will appear after the bid is submitted:
 - % If the Status is VALIDATED PASSED, then your bid has passed the screening to determine if all required data has been entered
 - % If the Status is VALIDATION FAILED, then your bid has either incorrect or missing data and you should go back and correct your error.
- Special Notes While you should check all data to make sure it represents the data you intended to enter, you need to check the Bid Status for each hour to see if your bid was accepted for consideration.

7.5.2 Change Load Bids

IntroductionLoad bids are entered and changeable in the day-ahead market only; you are not permitted to
enter load bids in the hour-ahead market. The capability to change a previously submitted bid
depends on the current date and time relative to the particular market you are submitting the
bid.• Your load bid changes must be completed and have a status of "Validation Passed" by
5AM of the day ahead of the bid date.• The load forecast portion of the bid may be modified up to noon of the day after the day
being bid.PrerequisitesBefore beginning the task of changing load bids, you should make sure that "Loads" bidding
privilege is assigned to your user account. You also must make sure that your load has been
established in the MIS by following the directions in Section 7.5.1, Prerequisites.

The steps for changing load bids are as follows:

- **Step 1:** Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Load Bids" from the User menu frame. The Load Bid Selection Criteria display (F-5) is presented in the display/results frame.

Load Bid Selection Criteria (F-5)

Page Ref: F-5			
			Load Bid Selection Criteria
	Bus Name:	ASTORIA E_138_N.QUEENS	T
	Date:	(mm/dd/yyyy)	
			DISPLAY

Step 3: Enter the following query information to establish access to the desired load bid profile:

- Load Name I Select the name of the load for which you want to change a bid:
 The pull-down menu lists the loads for which you are authorized to enter bids
 - Select the load name from the pull-down menu. Only one load may be selected.
- 2. Date ⊠ Enter the Date for the 24-hour period that you wish to recall.
 This date represents the effective date of the bid
 - The format is mm/dd/yyyy.

Image: DISPLAY Load
ProfileAfter you have entered the Load Name and Date, select DISPLAY, and the MIS will retrieve
the load profile for the load name and specified date on the Load Bid display (F3).

Load Bid Display with Schedule (F-3)

					Load	Bid		
Load I	Name: LS	E-NM-B_NM	_GENESEE			Date: 07/02/1999		
LSE-N	IM-B NM	GENESE	3			Interruptible Type: 🛙	None Selected	
Time	Forecast	Fixed Bid	Price Cap #1	Price Cap #2	Price Cap #3	Interrupt Price Cap	Interrupt Fixed	Bid Status
	MW	MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	MW \$/MW	
00:00	100.0	100.0						VALIDATION PASSED
01:00	100.0	100.0						VALIDATION PASSED
					· · · · · · · · · · · · · · · · · · ·			VALIDATION
	100.0	100.0	I	l	I I		I	PASSED
02:00			1	1				

- The load profile shows what was bid to MIS. If the bid has been accepted, the user will also see the following three additional fields:
 - % Price Cap
 - % Inter Fixed MW
 - % Inter Price Cap MW.
- These fields show the price cap and interruptible MW values that the MIS has already accepted. Fixed bid MW values are not shown as part of the schedule. This is because all fixed bid MW values are automatically accepted.

Step 4: Change the profile information as desired:

- The Market Participant User may change and resubmit any part of the bid prior to the evaluation stage. The bid may not be modified if it is in the EVALUATING or ACCEPTED status.
- The user may elect to use this profile as a starting point for a different load name, date, and load type. If so, the user changes these fields. The user then initiates the SUBMIT action, which submits the profile for the specified load name, date, and load type.
- Modifications to bids previously validated must be resubmitted for validation.

SUBMIT Bid Changes After you have entered all the data, select SUBMIT and the MIS will check your entries to see if they pass the validation test:

- If you have left any hours blank, these hours will not be updated when the bid is resubmitted
- As a result of the SUBMIT action, the Load Bid (F-3) display is refreshed to show the Bid Status.

You may also elect to DELETE ALL entries that delete all of the displayed load bids.

Step 5: Check the results of the validation process via the bid status fields for each hour of the

profile.

Deleting Bids

Special Notes

Load bids are not explicitly deleted; rather, a new load profile is resubmitted and overwrites the load data previously entered.

Reasons to Review Load Bids

The Load Bid display (F-3) not only provides the means to modify load bid data, it also serves as the primary mechanism for calling up and reviewing the status of your bid before, during, and after the evaluation process. It is incumbent upon you to check your bids as they move through the stages of verification, evaluation, and acceptance/rejection.

The following are sample instances where you might want to check on the status of your load bid:

- Before the day-ahead or hour-ahead market closes, you may want to verify that your bids have passed all of the validation checks. If not, actions can be taken prior to market close to get bids to the Validation Passed status so that they will be evaluated (status will be VALIDATION PASSED or VALIDATION FAILED)
- After the day-head or hour-ahead market closes, you may want to verify that your bids are currently being evaluated (status will be EVALUATING)
- After the posting of day-ahead or hour-ahead market results, you may want to confirm whether a portion or all of your bids have been accepted or whether the NYISO could not meet the bid request at this time (status will be BID ACCEPTED or BID REJECTED).

Updating Forecast MW

After the day-ahead market closes, the load forecast portion of the load bid can be updated until 12:00 noon after the bid date to reflect the actual real-time load.

7.6 Transaction Bids

Transaction bids can be submitted as:

	 Firm Day Ahead Market (DAM) Transaction Bids, Firm Hour Ahead Market (HAM) Transaction Bids, or Non-Firm Transaction Bids. External Energy LBMP sales (external Gen Bid) External Energy LBMP purchase (external Load Bid) Wheel Throughs (proxy bus to proxy bus)
Transaction Confirmation	Each transaction must have a source and a sink. If the Market Participant User, or the NYISO Customer that he/she is representing, does not have the authority to commit generation or load for a transaction, then the entered transaction needs to be confirmed through the MIS by the authorized Market Participant Users for either or both the source and the sink.
Preauthorization	Confirmation is an explicit step that must be performed by Market Participant Users that are authorized for the source and sink. Users with authority over the source do not have to be (and more often are not) the same as the users with authority over the sink.
	There are situations where the Market Participant User who is entering the transaction may, in addition, be authorized to confirm for either the source and/or sink. In this case, we say the user is preauthorized to confirm for the source and/or sink.
	The MIS recognizes preauthorization. Therefore, when the Market Participant User submits the transaction, the source or sink or both over which he/she has confirmation authority will be automatically confirmed. In this case an explicit step of confirmation is not necessary; the MIS does it automatically.
Tasks	There are three basic tasks associated with submitting and reviewing information associated with transaction bid:
	 Submit New Transaction Bids (Section 7.6.1) Review/Change Transaction Bids (Section 7.6.2) Confirm Transaction Bids (Section 7.6.3).
	Users not authorized for a single generator or load will not see the confirm transaction bid.
	7.6.1 Submit a New Transaction Bid New bids for DAM firm, HAM firm, and non-firm transactions are submitted through identical screens; however, there are some differences:
	• Market Participant Users may be separately authorized to bid DAM Firm Transactions, HAM Firm Transactions, and/or Non-Firm Transactions
	• Your day-ahead transaction bid must be submitted and confirmed by 5 AM of the day ahead of the bid date
	• Your hour-ahead transaction bid must be submitted and confirmed <u>9075</u> minutes ahead of the bid time.
	• For External generator bids you must select the appropriate Proxy bus as the source and the NYISO Reference Bus as the sink.
	• For External load bids you must select the NYISO Reference bus as the source and the appropriate Proxy bus as the sink.

• Each system connected to the NYISO is represented by one proxy bus that can serve multiple generators (sources) and multiple loads (sinks). In order to consider all transactions for each external system on an equal basis, only one proxy bus is used for each system. External transaction bids are submitted against the Marcy Bus, NYISO's internal reference bus. This reference bus is used to calculate all marginal loss and congestion costs in the system.

The Marcy LBMP reference bus designation is: NYISO_LBMP_REFERENCE.

To place bids for imports, the appropriate bus from the following table should be used.

Control Area	Source Proxy Bus
Hydro Quebec	HQ_GEN_CHAT DC
ISO New England	NE_GEN_SANDY PD
Ontario Independent Market	OH_GEN_BRUCE
Operator	
PJM Interconnection	PJM_GEN_KEYSTONE

To place bids for exports, the appropriate bus from the following table should be used.

Control Area	Sink Proxy Bus
Hydro Quebec	HQ_LOAD_CHAT
ISO New England	NE_LOAD_SANDY PD
Ontario Independent Market	OH_LOAD_BRUCE
Operator	
PJM Interconnection	PJM_LOAD_KEYSTONE

The energy and congestion components of the LBMP rates for each proxy bus are calculated against the Marcy reference bus. These calculations are made in the same manner as for other buses in the NYISO system. The loss component of the LBMP rates is calculated for each proxy bus using delivery factors that are based on the weighted average of all boundary buses represented by that proxy bus.

- **Prerequisites** Before beginning the task of submitting transactions bids, you should make sure that the "DAM Transactions," "HAM Transactions," and/or "Non-Firm" bidding privilege is assigned to your user account.
 - The confirmation step must be performed by the agent of the source and/or the sink_{5_2} unless you are preauthorized to confirm for the source and/or sink. We discuss confirmation in Section 7.6.3.</sub>

The steps for submitting new transaction bids are as follows:

- Step 1: Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "New Transaction" from the User menu frame. The New Transaction display (H-4) is presented.

■ New Transaction (H-4)

Proxy Buses

Page Ref: H-4				
			m	
		Ne	w Transaction	
Date (mm/dd/yyyy)	Market	NERG	C Priority	
	DAM 💌	None Selecte	ed 💌	
				1
Source		Sink		
None Selected	None S	elected	•	
User Ref:				
NERC TAG (Optic	onal For Internal Tra	nsactions)	FIRM T	RANSACTION TYPE ONLY
SCA PSE	Unique #	RCA	Internal	/ Export Transaction Priority
SUBMIT				

- **Step 3:** Enter the following information as a starting point for defining the new transaction:
 - 1. **Date** \boxtimes Enter the Date for the bid:
 - The Date represents the effective date of the new transaction
 - The format is mm/dd/yyyy
 - If you do not enter a date, your bid will not pass the validation check, and an error will be returned
 - If you enter a date that has already passed, an error will be returned. Bids may be submitted up to 15 days in advance.
 - 2. Market \boxtimes Select one of the following choices from the pull-down menu to define the market that you are bidding into:
 - DAM (Firm, Day-Ahead Market)
 - HAM (Firm, Hour-Ahead Market)
 - NONFIRM. Selecting this means that your transaction will only be settled in the real-time market.

The default is DAM.

- 3. **NERC Priority** \boxtimes Select the NERC priority from the pull-down menu.
 - If the entered transaction is <u>non-firm</u>, select one of the following NERC priorities from the pull-down menu:
 - % NON-FIRM SECONDARY
 - % NON-FIRM HOURLY
 - % NON-FIRM DAILY
 - % NON-FIRM WEEKLY
 - % NON-FIRM MONTHLY
 - % NON-FIRM NETWORK.

- If you are entering a firm transaction, select FIRM (F-7) from the pull-down menu.
- 4. Source \boxtimes Select the generator which is to be the source:
 - The pull-down menu lists the valid sources that you may select. This list shows all of the sources in the NYISO model.
 - If you do not select a source name, your bid will not pass the validation check and an error will be returned.
- 5. Sink \boxtimes Select the load which is to be the sink:
 - The pull-down menu lists the valid sinks that you may select. This list shows all of the sinks in the NYISO model.
 - If you do not select a sink name, your bid will not pass the validation check and an error will be returned.
- 6. User Ref \Box This field holds an alphanumeric ID that you assign to the transaction for ease of tracking. It is unique per transaction.
- Step 4: A NERC Electronic Tag (ETAG) is required for all transactions that enter or exit the New York Control Area (NYCA). A tag is not required for transactions completely within the NYCA. NERC Electronic Tagging (ETAG) requirements must be followed to ensure that the NERC Transmission Loading Relief (TLR) procedure is supported under NYISO operation. These requirements are in accordance with NERC Policy 3, NERC Policy 9 and various references in the New York ISO Tariff and involve any transactions with the New York Control Area that are imports, exports, and wheel-throughs. The NYISO and the neighboring control areas recognize that the use of a transaction identifier, consistent and compliant with ETAG, is the most meaningful method of coordinating interchange transactions.

The NYISO calls this transaction identifier the 'NERC tag identifier' and must be provided to the NYISO with each transaction. The NERC tag identifier consists of the following components:

- Sending Control Area (SCA) (for exports, this is 'NYIS')
- Purchasing/Selling Entity (PSE)
- Unique ID Number (user defined, alphanumeric)
- Receiving Control Area (RCA) (for imports, this is 'NYIS')

If required, enter the following NERC Tag information:

- 1. SCA \boxtimes Enter the sending control area:
 - For exports, this is NYIS
 - The field is limited to four characters.
- 2. **PSE** \boxtimes Enter the Purchaser/Seller entity name. This field is limited to six characters.
- 3. Unique # ⊠ Enter the unique ID number. This field is limited to seven alpha-numeric characters.
- 4. **RCA** \boxtimes Enter the code for the receiving control area:

- This code is used for imports, exports and wheels through
- The field is limited to four characters.

The Purchasing Selling Entity must also be a NYISO Customer and is the party responsible for submitting the anticipated transaction schedule into the ETAG system. There are also timing considerations with submitting a transaction into the MIS and submitting the associated ETAG. The timing options available depend on whether the transaction is Day Ahead or Hour Ahead.

Day Ahead Market:

An ETAG is not required prior to submitting a Day Ahead Market transaction or the posting of Day Ahead results at 11 AM. Since a transaction request in the MIS indicates the maximum energy profile that may be accepted, it may be premature for the Purchasing Selling Entity to submit the associated ETAG before the Day Ahead Market results are posted if the maximum is not scheduled.

An ISO customer may elect to submit ETAGs after the Day Ahead Market results are posted. However, in accordance with NERC Policy, the associated ETAG for Day Ahead transactions must be submitted no later than 10 PM to not be considered late.

Hour Ahead Market:

Since all accepted Day Ahead transaction requests are re_evaluated in the Hour Ahead Market, the final hourly energy profile may differ from results determined in the Day Ahead Market. For the NYISO Hour Ahead Market (HAM), all accepted DAM transaction requests become HAM requests to be re_evaluated. In other words, the HAM will evaluate all new HAM transactions and accepted DAM transaction requests. All new HAM transaction requests will require a NERC tag identifier to be provided in the MIS at the time of transaction request submission. For the HAM, this time requirement is no later than ninety minutes prior to the hour the schedule is to become active.

The HAM results will be posted 30 minutes prior to the hour and the ISO and affected control areas will "check out" all the accepted HAM transactions. In accordance with NERC Policy, the associated ETAG for Hour Ahead transactions must be submitted no later than twenty minutes prior to the hour to not be considered late.

ETAG Revisions:

Until NERC ETAG revisions are allowed, PSE's desiring to revise an ETAG may do so by creating a new ETAG. The original NERC tag identifier may then be referenced in the comment field of the new ETAG.

- **Step 5:** Enter the following information for firm transactions:
 - 1. Firm Transaction Internal/Export Transaction Priority (Values 1 100 Accepted) □:
 - Enter a Transaction Priority (from 1 to 100) for transactions tied to an internal source
 - This field is only completed for an internal generator serving firm transactions
 - The priority is used to define the order in which transactions are to be applied to a generator's bid curve:
 - % Priority order is typically established by the person or entity responsible for submitting the generator bid curve
- SUBMIT Entries After you have completed entry of the data, select SUBMIT and the MIS will check your entries to see if they pass the validation test.

Step 6: Check the results of the validation process <u>which that</u> are presented in the Transaction Request display (H-5).

Scheduling of External Transactions A Non-Firm Transaction means you are not willing to pay congestion. This means if there is congestion on the system, your transaction will not flow. A Non-Firm transaction that is submitted prior to the close of the DAM will be evaluated in the DAM but there will be no forward contract established. The actual transaction will be reevaluated in the HAM and only settled in real-time. The resulting status will be "ADVISORY ACCEPTED or REJECTED." After the HAM posting, if you have an "ADVISORY ACCEPTED" status and a corresponding MW schedule, then your transaction should flow in real-time provided no congestion appears on the system in real-time.

☐ Transaction Request (H-5)

			11 anjac	tion i	request	(11.0)					
cgo Rof H	H-2										
						Transactio	on Request				
	Da	ite	Marke	DT	NI	ERC Priority		Source	- The second sec	Sink	
04/01/20	01	(mm/dd/yyyy)	HAM	-	F	IRM (F-7)	M.E.	GEN SAND	Y PD N YI	30 lbmp r	EFERENCE
esult in th ald one. Y	he crea lou aho	; either of the abov dion of a new hid ould only change : fel a new bid on ar	without chang these paramete	ing the to if							
			NERC	TAG	(Optional	For Internal T	ransactions)	FD	RM TRANSACT	ION TYPE O	NLY
Transa <u>II</u>)		User Ref	SCA		PSE	Unique Nur	n RCA		Transaction	n Priority	
1081	79	EMERGENC	Y NE		NYISO	1	NYPP				
			TRANSA	TION	PROFIL	<u>.E</u>			SC	THEDULES	
Start Time	Me	rket Energ	y Request (MW)		k Price Cap (\$)	Decremental Dollars	Rid Status	Select for Submit	Scheduled Energy (MW)	Buyer Confirmed	Seller Confirmer
00-00	ΗA	м					<u>BID</u> ACCEPTED		0 0	r	Y
01:00	ΗA	м					<u>BID</u> ACCEPTED		0 6	r	Y
03-00	ΗA	м					<u>BID</u> ACCEPTED		0 C	r	Υ
04:00	TTA	м					<u>BID</u> ACCEPTED		0 C	Y	Y
05.00	TTA	м		Γ			<u>BII)</u> ACCEPTED		0 C	Ŷ	Y
ດພະບານດ	ΤΤ)	3.6					BID				-

		t <mark>ernet Explore</mark> vorites <u>T</u> ools									
÷.,	. ⇒		\$	<u>a</u> .	<u> </u>	🖪 · 🥔	W . 🗉	9			
Back ddress 🧔	Forward	Stop Rel .45/pgLoginCont	fresh H troller isn	iome Search	Favorites History	Mail Print	Edit Discuss F	eal.com			▼ ∂Go Lir
j											
							irm Transaction B Bid - New Transa				
							Contracts User I				
	Date			Market		C Priority		ource		Sink	
11/20/20		/dd/yyyy)		АМ 🔽	_	M (F-7)	GEN_2	4065_РЈМ	1ST-RC	DCHDALE_C	E_NY-CITY
				parameters wi changing the o							
ne. You	ı should onl	y change the:	se parai	neters if you							
vant to r	nodel a nev	v bid on an e:	xisting o	ne.							
			N	FDC TAC	(Optional Fo	n Intomal T	ansactions)	ттрал тт	DANGACTT	ON TYPE O	ANTE XZ
Trons	action			EKC IAG	(Optional F				KANSAC II	ON TIPE O	
П		User Ref		SCA	PSE	Unique Num	RCA		Transaction	1 Priority	
5108	3912 .	КЈКЈКЈК.	J	A	A	А	A				
					Mu	lti-Hour Blo	ck Transactions				
					Mi	nimum Run T	ime (hours) 10				
				Sin	k Price Cap		Decremental I	Jollars			
	Ene	rgy Reque	est		For Exports) (Use F	or Imports and V		hs) HA	M Bid Price	;
Γ		Set For All I	Hours		Set For All Ho	urs	Set F	or All Hours		Set For All H	ours
			Т	RANSACT	TON PROFI	1			S	CHEDULES	\$
6 44			F	Sink	n	HAM		Select for	Scheduled	D	C - N
Start Time	Marke	t Reques	Energ t AVV	r Price	Decrement Dollar		Bid Status	Submit	Energy	Buyer Confirmed	Seller Confirmed
I MIL		reques	. (111 .	'' Cap (\$)	Dona	(\$/MWh)			(MW)	Commence	Committee
00:00	DAM		10.0		11.00		WAITING			N	Y
	177 1111	_	1.0.0		<u></u>		CONFIRMATIO			- 11	
	DAM		10.0		11.00		WAITING CONFIRMATIO			N	Y
)1:00	TAL FILL		1.0.0		I		A 12 YO M LET D MA A 1112 Y				

- Step 7: Note the following items in the display that the MIS has presented and is truncated for discussion purposes:
 - A profile for 24 hours midnight-to-midnight is presented
 - The MIS assigns a unique transaction ID which is shown in the Transaction ID field
 - For firm import or wheel-through transactions, the Market Participant User may complete the "Import/Wheel Through Decremental Dollars"
 - For Import Transactions the Dec Bid value is treated the same as an incremental energy bid from a generator. If the LBMP at the source (external proxy) bus is less than or equal to the Dec Bid, then the transaction is not scheduled and the energy is not imported into the NYCA. If the LBMP rate equals the Dec Bid, the transaction is on the margin and may not be scheduled if there are multiple transactions bid at that rate.

It should be noted that once a valid import transaction is submitted in either the Day-Ahead Market or the Real-Time Market, it is binding financially, even if the physical transaction is cut.

Examples: If Dec Bid = \$30, and the LBMP rate = \$31, the transaction is scheduled. If Dec Bid = \$30, and the LBMP rate = \$29, the transaction is not scheduled.

% For Wheel Through Transactions the Dec Bid currently must be NEGATIVE. The Dec Bid for a wheel-through transaction is compared to the transaction's congestion cost. That congestion cost is the difference between the congestion cost at the sink bus and the congestion cost at the source bus. (Real congestion is designated as a negative number.)

This type of evaluation only occurs for wheeled transactions, since the concept of replacement energy for the reduction in one end of a wheel-through transaction does not exist.

If the transaction's congestion cost is greater than the Dec Bid, then the transaction is scheduled. If the transaction's congestion cost is less than the Dec Bid, then the transaction is not scheduled, and the energy is not wheeled through the NYCA. If the transaction's congestion cost equals the Dec Bid, the transaction is on the margin and may not be scheduled if there are multiple transactions bid at that rate.

Examples: Dec Bid = -\$30Congestion at the source bus = -\$20Congestion cost at the sink bus = -\$40Then the transaction congestion cost = -\$40 - (-\$20) = -\$20, and The transaction is scheduled

Dec Bid = -\$30Congestion at the source bus = -\$5Congestion cost at the sink bus = -\$40Then the transaction congestion cost = -\$40 - (-\$5) = -\$35, and The transaction is not scheduled.

- The Starting Time is shown along the left column:
 - % The format for the target time is HH:MM, on a 24-hour scale. The first hour is 0, the last 23.
 - % Both 23-hour and 25-hour days are supported to accommodate the daylight savings time change:
 - On 23-hour days, no entry for hour 02:00 will be shown
 - On 25-hour days, two entries for hour 02:00 will be shown
- The Bid Status column will be blank since we have not yet submitted the bid for validation
- There are more fields in the display than are shown in the picture above, since the schedule information is not relevant when submitting a new transaction bid. We discuss these fields in Section 7.6.2 below.
- Step 8: Complete the transaction profile by entering the following information:
 - Minimum Run Time (hours)-Enter the minimum number of hours that the transaction must run for it to be accepted. In other words, if the transaction will not be accepted for that minimum run time, then the transaction should not be accepted.
 - If the user enters a minimum run time, the bid must include a constant MW amount

and constant bid price for all hours of the bid.

- The user may use the shortcut field provided. The Energy Request field associated with the Set for All Hours button will allow the user to quickly enter a constant energy bid for all hours. The functionality is the same for the **Sink Price Cap**, Decremental Dollars and HAM Bid Price fields.
- If the user does not wish to enter a Multi-Hours block transaction, the user can leave these fields blank and enter a transaction profile manually.
- 1. Energy Request (MW) 🖾 Enter the amount of energy for the target hour, expressed in MW over one hour.
- When submitting transaction schedules in the MIS, any transaction with zero megawatts will not be validated for the Day Ahead and Non-Firm Markets. For the hour Ahead Market, a transaction with a zero megawatt bid will be allowed provided there was a prior non-zero megawatt Day Ahead Market transaction for the same sink, source, and time period.

On the MIS web-form page, if no transaction has been scheduled for a particular hour then the variables for that hour will be displayed with blanks. With the download method, if no transaction has been scheduled then no rows will be returned for the hour requested in the upload file. The ISO will not be able to supply a zero megawatt transaction request as a way of indicating to MIS Users that a schedule does not exist.

A Day Ahead Market transaction can be canceled before the Day Ahead Market closes and the Security Constrained Unit Commitment (SCUC) program is run. In order to cancel that transaction and not have it evaluated in the SCUC program, a MIS User must set the transaction's confirmation to 'N' when using a download file or delete the transaction when using the web-form page. The SCUC program will only evaluate transactions that have their confirmations set to 'Y'. A transaction that is submitted into the Day Ahead Market (DAM) can be changed and updated to another positive integer value greater than zero.

If a non-zero transaction is submitted into the Hour Ahead Market (HAM) and needs to be excluded from a Balancing Market Evaluation (BME) then this transaction can be canceled in like manner. In order to cancel this HAM transaction, a MIS User must set that transaction's confirmation to 'N' when using a download file or delete the transaction when using the web-form page.

For the HAM market, a zero megawatt transaction is allowed provided there is a nonzero DAM bid. This is the only way a previously accepted DAM bid can be scheduled to zero. Otherwise, no HAM transactions of zero megawatts can exist in the MIS.

2. Sink Price Cap - Enter the price under which you want the transaction to be valid for each hour:

- Only Internal NYCA and Export transactions may use this feature. For Exports this is a required field. For Internal transactions this is an optional parameter for a qualified load. The qualified load is the same as a Price Capped Load and needs to follow all of the requirements that are found under Price Caps in Section 7.5.1 of this manual.
 - The scheduling of export transactions is based on the sink price cap bid. If the Locational Based Marginal Pricing (LBMP) rate, or the "strike price", at the sink (external proxy) bus is less than the sink price cap, then the transaction is scheduled. If the LBMP rate is greater than the sink price cap, then the

Special Notes

transaction is not scheduled, and the energy is not exported. If the LBMP rate equals the sink price cap, the transaction is on the margin and may not be scheduled if there are multiple transactions bid at that rate.

The LBMP strike price is determined in Pass #4, the Forecast Load Re_dispatch Pass, of Security Constrained Unit Commitment.

It should be noted that once an export transaction, which is the equivalent of a purchase from the LBMP market, is accepted and scheduled in the Day-Ahead Market, it is binding financially, even if the physical transaction is cut. The curtailed MWs are sold back into the Real-Time Market by the Transmission Customer at the Real-Time LBMP rate. For bilateral export transactions, the Transmission Usage Charge (TUC) will be refunded if the NYISO curtails the transaction. If the Transmission Customer curtails the transaction by reducing the schedule in the Hour-Ahead Market, the TUC will be balanced based on the differential between the Day-Ahead and Real-Time LBMP rates.

Examples:

If the sink price cap =\$30, and the LBMP rate = \$25, the transaction is scheduled

If the sink price cap =\$30, and the LBMP rate = \$35, the transaction is not scheduled

- SUBMIT Bid After you have completed the profile, select SUBMIT, and the MIS will check your entries to see if they pass the validation test. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft.
 - **Step 9:** The Transaction Request display will refresh to show the Bid Status for each hour in the profile. Check the results of the validation process. The following are possible statuses that may appear:
 - VALIDATION FAILED The bid has failed the validation check and must be corrected and resubmitted
 - WAITING CONFIRMATION The bid has passed all MIS checks but either the source or sink has not been confirmed. The confirmation process is described in Section 7.6.3.
 - VALIDATION PASSED The bid has passed all MIS checks and the source and sink have been confirmed. The only time this status would show immediately after entering a new transaction is if the Market Participant User entering the transaction is also authorized to confirm both the source and sink.

The user can click on the Bid Status (displayed as a hyperlink) to display a window containing associated validation and/or constraint messages, if any. Lists of all these messages may be viewed as follows: from the NYISO home page, select <u>OASIS</u>, then select <u>MIS Instructions</u>, then select either <u>Validation Messages</u> or Bid <u>Constraint</u> <u>Messages</u>. The following table shows several types of transactions, their associated market, and associated messages they would receive as they are processed from submission to either acceptance or rejection. Read down each column for transaction types, associated market or product, and possible MIS messages.

ransaction Type:	а	b	С	d	е
Firm	✓	✓	√	✓	
Non-Firm					1
Internal NYCA	1				1
Wheel through NYCA		✓			1

Transaction Messages

Export out of NYCA			1		1			1		
Import into NYCA				~	~				*	
Market or product:										
Day Ahead (DAM)	✓	 ✓ 	′ 🗸	✓						
Hour Ahead (HAM)						✓	✓	✓	✓	
Non-Firm (NF)					1					
MIS Messages (in caps):										note
WAITING CONFIRMATION	1	 ✓ 	′ √	✓	✓	✓	✓	✓	✓	(1)
VALIDATION FAILED	√	</td <td>· 🗸</td> <td>✓</td> <td>1</td> <td>✓</td> <td>1</td> <td>✓</td> <td>✓</td> <td>(2)</td>	· 🗸	✓	1	✓	1	✓	✓	(2)
VALIDATION PASSED	✓	</td <td>1</td> <td>✓</td> <td>1</td> <td>✓</td> <td>1</td> <td>✓</td> <td>✓</td> <td>(3)</td>	1	✓	1	✓	1	✓	✓	(3)
EVALUATING (SCUC)	1	1	′ √	✓						(4)
EVALUATING (BME)						✓	1	✓	✓	(5)
EVALUATING (NFE)					1					(6)
BID REJECTED based on SPC	✓	1		✓						(7)
BID REJECTED based on Dec.bid		~	•	~			✓		✓	(8)
BID REJECTED based on CC & limits					1					(9)
ADVISORY ACCEPTED		~	· √	✓	1		✓	✓	✓	(10)
Dispatcher confirmation needed		~	· 🗸	~	1		✓	~	✓	(11)
BID ACCEPTED	✓	 ✓ 	· √	✓	✓	✓	✓	✓	✓	(12)
Copied to HAM		~	· 🗸	✓						(13)
Scheduled can be modified		~	· 🗸	✓			1	✓	✓	(14)
Email notification		~	′ √	~			✓	~	✓	(15)

Description of Possible Transaction Types (a-j)

Possible Type	Description
а	Firm, Internal NYCA, DAM
b	Firm, Wheel through NYCA, DAM
С	Firm, Export Out of NYCA, DAM
d	Firm, Import into NYCA, DAM
0	Non-Firm, Internal NYCA, Wheel through NYCA,
e	Export out of NYCA, Import into NYCA, Non-Firm
f	Firm, Internal NYCA, HAM
h	Firm, Wheel through NYCA, HAM
i	Firm, Export Out of NYCA, HAM
j	Firm, Import into NYCA, HAM

The following notes, for the above table, provide further information on the message processing:

- 1. Transaction is submitted and needs confirmation.
- 2. Transaction not evaluated if sink and source are not confirmed.
- 3. Transaction is to be evaluated if sink and source are confirmed.
- 4. Evaluation occurs after DAM closes.
- 5. Evaluation occurs after HAM closes.
- 6. Evaluation of Non-Firms can occurs after either DAM or HAM closes.
- 7. Transaction is rejected if the sink's LBMP is greater than or equal to the Sink Price Cap.
- 8. Transaction is rejected if the source Bus' LBMP is less than the transaction's Decremental Bid submitted.

For Description of Possible Transaction Types, See Table.

	9. Transaction is rejected if the associated congestion cost is greater than zero or there is a physical limitation across an interface.
	10. For dispatcher confirmation/curtailment.
	11. Dispatcher uses Interchange Scheduler program in evaluating external transactions.
	12. BID ACCEPTED is the final approval for any transaction to be scheduled.
	13. Only scheduled value is copied from DAM to HAM. A bid, which produces a VALIDATION FAILED message, is not copied since a transaction must have a bid to be valid. However, when a HAM schedule is shown without a HAM bid then this transaction can be identified as one that was copied from the DAM and not submitted directly into the HAM by a user.
	14. Dispatcher can alter schedules, even to zero megawatts.
	15. E-mail notification will be sent only if the transaction's schedule is modified.
E Scheduling of External Transactions	External load and generation bids that are approved through the Security Constrained Unit Commitment or Balance Market Evaluation process will be scheduled and passed to the interchange scheduler (IS+), so the schedule will be considered in the calculation of the Desired Net Interchange. External generation bids do not have a defined Point Of Withdrawal (POW), and external load bids do not have a defined Point Of Injection (POI). Because POWs and POIs are an IS+ requirement, a default point has been defined as the Marcy LBMP for external transactions.
	The schedules must be coordinated with the control area that the bid is coming from, as is done with any external transaction. The NYISO views these schedules as binding financial commitments in the Day-Ahead Market (DAM), regardless of whether they are accepted by the external control area.
■ Transaction Contract Owner & TUC Charge	The Transmission Customer organization responsible for the Transmission Usage Charge (TUC) associated with a transaction is the organization that initially defines the transaction using the New Transaction (H-4) display in the Market Information System. This organization is the customer of record for that transaction and the owner of the transaction contract.
	As the transaction owner, that organization, and only that organization, can delete the transaction contract from the MIS by checking the delete box for the contract on the Transaction Contract Review page (Page Ref. H-8). A contract cannot be deleted if there are active bids associated with it. Until the contract is deleted in the MIS, the transaction owner retains liability for any TUCs associated with it.
	An organization that owns transaction contracts can view a listing of all of those contracts in the MIS. This can be done by selecting the <i>Review Transaction Contracts</i> option on the Transaction Contract Review page in the MIS (Page Ref. H-8).
	The transaction owner organization can also change the point of contact for receiving information on the contract within its organization to ensure that the appropriate individual is notified of transaction curtailments. This can be done by having the individual who should be the point of contact click the <i>reassign</i> check box on the MIS Transaction Contract Review page (Page Ref. H-8) and submit the change.
	After a transaction has been created, any authorized party can submit transaction schedule information on an hourly basis. This is done on the MIS Transaction Request page (Page Ref. H-5). Submitting schedule information does not change transaction ownership.

Changing transaction ownership requires two separate actions, one by the organization that wants to own the transaction and the other by the organization currently owning the transaction. The organization that wants to own the transaction should create a new transaction on the MIS New Transaction page (Page Ref. H-4) with the same Source, the same Sink, and a different User Reference number (User Ref.). After the details associated with this new transaction are entered on the MIS Transaction Request page (Page Ref. H-5), and the transaction is accepted, the new organization owns that transaction, as reflected on the MIS Transaction Contract Review page (Page Ref. H-8). The original organization should delete the original transaction on the MIS Transaction Contract Review page (Page Ref. H-8) to prevent inadvertent scheduling and assignment of TUCs.

It is not necessary to create a new contract for different schedules; the party scheduling the transactions only needs to use the same transaction User Ref. <u>Over_over</u> time. This is especially important if the transaction involves Grandfathered Rights or selected PURPA contracts. These contracts are identified by their User Ref. for their billing calculations, and the User Ref. should not change without coordination with the NYISO.

Parties who make bilateral contracts between each other should coordinate who initially enters the transaction into the MIS so that the proper party receives the TUC bill.

7.6.2 Review/Change Transaction Bids

Changes to DAM firm, HAM firm, and non-firm transactions are made through identical Introduction screens; however, the are some important differences: Market Participant Users may be separately authorized to bid/change DAM Firm Transactions, HAM Firm Transactions, and Non-Firm Transactions Your day-ahead transaction bid changes must be submitted and confirmed by 5 AM of the day ahead of the bid date Your hour-ahead transaction bid changes must be submitted and confirmed $\frac{9075}{100}$ minutes ahead of the bid time. Before beginning the task of changing transactions bids, you should make sure that the **Prerequisites** "DAM Transactions," "HAM Transactions," and/or "Non-Firm" bidding privilege is assigned to your user account. The confirmation step (discussed later in Section 7.6.3) must be performed by the agent of the source and/or the sink, unless you are preauthorized to confirm for the source and/or sink. The steps for reviewing/changing a transaction bid are as follows: Step 1: Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3. Step 2: Select "Review Transaction" from the User menu frame. The Transaction Selection Criteria

display (H-2) is presented.

Transaction Selection Criteria (H-2)

		Transactio	n Selection Criteria	a	
		11 unsucitor	a succusi cintin	-	
Start Time: 06/30/1999	(mm/dd/yyyy hh:n	ni) Stop Time:		(mm/dd/yyyy hh:mi)	
Transaction ID:		Market:	ALL 🔄		
Source ID: None Selecter	d 💌	Sink ID:	None Selected		
User Ref.		Status:	None Selected		
Number of Rows:		Nerc Priority	None Selected		
		N	ERC TAG		
	SCA	PSE	Unique #	RCA	
DISPLAY RESET					

Step 3: Enter the following search criteria to retrieve desired transaction bids:

- 1. **Start Time** \Box Enter the start time for the bid(s) you want to retrieve. The format is mm/dd/yyyy hh:mm (where hh stands for hour using the 24 hour clock).
- 2. Stop Time □ Enter the stop time for the bid(s) you want to retrieve. The format is mm/dd/yyyy hh:mm (where hh stands for hour using the 24 hour clock).
- 3. Transaction ID \Box Enter the unique number assigned by the MIS that identifies the transaction that you want to retrieve.
- 4. **Market** □ Select one of the following choices from the pull-down menu to define the market of the transaction that you want to retrieve:
 - ALL
 - DAM (Firm, Day-Ahead Market)
 - HAM (Firm, Hour-Ahead Market)
 - NON-FIRM.

The default is ALL.

- 5. Source ID □ Select the generator which that is to be the source. The pull-down menu lists the valid sources that you may select.
- 6. Sink ID Select the load which that is to be the sink. The pull-down menu lists the valid sinks that you may select.
- 7. User Ref □ Enter the User ID that identifies the transaction for ease of tracking. It is unique per transaction.

- 8. **Status** Select from the pull-down menu one of the following statuses for—the transactions that you want to retrieve:
 - The statuses that are possible are as follows (for an explanation, see Reasons to Review Transaction Bids, below):
 - % ADVISORY ACCEPTED
 - % ADVISORY REJECTED
 - % BID ACCEPTED
 - % BID REJECTED
 - % EVALUATING
 - % VALIDATION FAILED
 - % VALIDATION PASSED
 - % WAITING CONFIRMATION.
 - If you select "None Selected," the search program will not use Status in the search criteria.
 - 9. Number of Rows \Box Enter the maximum number of "hits" that you want to be returned to meet your search criteria. If none is entered, then you could have 500 rows returned.
 - 10. NERC Priority □ Select from the pull-down menu one of following NERC priorities that defines the transactions that you want to retrieve:
 - None Selected
 - NON-FIRM SECONDARY
 - NON-FIRM HOURLY
 - NON-FIRM DAILY
 - NON-FIRM WEEKLY
 - NON-FIRM MONTHLY
 - NON-FIRM NETWORK
 - FIRM (F-7).

The default is None Selected.

- **Step 4:** Continue with specifying your search criteria by entering the following NERC Tag information if appropriate:
 - 1. **SCA** \Box Enter the sending control area. The field is limited to four characters.
 - 2. **PSE** \Box Enter the Purchaser/Seller entity name. The field is limited to six characters.
 - 3. Unique # □ Enter the unique ID number. The field is limited to seven alpha-numeric characters.
 - 4. **RCA** □ Enter the code for the receiving control area. The field is limited to four characters.
- Solution DISPLAY Results After you have entered the desired the search parameters, select DISPLAY and the MIS will submit your request and return a list of the desired records. You may also elect to select RESET, which is equivalent to an UNDO in Microsoft.

Step 5: Check the results of the search criteria which-<u>that</u> are presented in the Transaction Search Results (H-3) display:

Transaction Search Results (H-3)

			ha te along in Entrarcé e between the page title	lan Search Results Daglieur 5, thurs may be singed and Constant of the table Dears are the Encourse to the table							
TIME			П				Sched	ules			Select
Start	Marker	Transaction	a Source	Sink	Status	Scheduled Energy (MW)	Decremental	Buyer Confirmed	Seller Confirmed		acters for Deletion
PC 2012300 EC	HAM	13475	NK_GEN_SAVEY ED	NAZOTEMO PRESENCE	BE: ACCEPTED	0.0		ř	Y	DELEID	🗆 Delete
PACE2012800320	HAN	163430	NE_GEN_SANDY ID	CH_LOAD_BRUCE	BE: ACCEPTED	0.C		Y	Y	DELETE	🗆 D ellette
Prozentero en	HAN	163831	N.EGEN_SANDY PD	FIR_LOAD_REFELONE	BU: ACCEPTED	ac		Y	r	DFLETE	□ Delete
Number of rows returned: 6 SELECT ALL OLEAR ALL DELETE SELECTED											

- The MIS retrieves all of the transaction bids that meet the search criteria, up to the Maximum Row value that was specified
- Each bid is shown on a separate line
- There are navigation buttons at the bottom of the screen:
 - % FIRST takes you to the top of the list
 - % NEXT scrolls a screen's worth of data down
 - % PREV scrolls a screen's worth of data up
 - % LAST takes you to the bottom of the list
 - % SELECT ALL selects all of the transaction bids dispatched on the visible portion of the H-3 display
 - % CLEAR ALL clears the visible portion of the H-3 display
 - % DELETE SELECTED deletes the transaction bid(s) selected in the right-hand column
- If any bid has been already accepted in either the DAM or HAM, the "Schedules" section of the results display will be populated. This shows you exactly what has been submitted and accepted by the MIS. The additional fields are as follows:
 - % Scheduled Energy (MW) the MW energy accepted for the transaction
 - % Buyer Confirmed a Y or N depending on whether the buyer confirmed the sink
 - % Seller Confirmed a Y or N depending on whether the seller confirmed the source.
- Step 6: Select a bid for deletion if this action is desired. If not, proceed to Step 7:
 - A single transaction bid for one hour may be deleted by selecting the <u>DELETE</u> hyperlink in the corresponding row of the transaction
 - One or several transaction bids for multiple hours may be deleted by checking the corresponding Delete checkbox(es) in the rightmost column. By choosing the box at the bottom of page shown as "SELECT ALL," all the transactions shown would be selected for deletion. Then by selecting "DELETE SELECTED" at the bottom of the display, all transactions that have a check mark would be deleted.

- Bids may not be deleted if they are in the EVALUATING or ACCEPTED state
- There is no need to delete bids when bids are modified. This feature is only useful if the Market Participant User does not want any bid for a particular interval.
- **Step 7:** To continue with the changing bid process, select the corresponding Start source/date hyperlink in the row of the transaction that you want to change. This calls up the Transaction Request (H-5) display in the display/results frame, with the appropriate bid data and schedule for the date and hour:
 - You cannot make any bid modifications through the Transaction Search Results (H-3) display, except to delete a transaction bid per Step 6 above; instead, you must execute Step 7, which brings you to the Transaction Search Request (H-5) display, where modifications can be made:

	Date		Market		RC Priority		Source		Sink	
04/01/200					1RDA (F-7)	M.E.	GEN SAND	YPD MTE	SO LBMP R	EFERENCE
esult in th delone, Y	a metion ou should	e of the above t famew bid wit mly change the new bid on an a	huul changin 190 parameters	e the						
			NERC 1	IAG (Optional	For Internal Ti	ansactions)	FI	RM TRANSACT	ION TYPE O	NLY
Transar ID	tion	lser Ref	SCA	PSE	Unique Nun	RCA		Transactio	n Priority	
10847	79 EM	ERGENCY	NE	NYISO	1	NYPP				
				TON PROFIL	Ľ		Select for		THEDULES	
Start Time	Marke	Energy	Request (MW)	Sink Price Cap (\$)	Decremental Dollars	Bid Status	Suhmit	Scheduled Energy (MW)	Buyer Confirmed	Seller Confirmed
00-00	нам					<u>bid</u> ACCEPTED		0 0	Y	Y
01-00	нам					<u>BID</u> ACCEPTED		0.0	v	v
03.00	нам					<u>BID</u> ACCEPTED		0 C	r	r
04.00	παμ					<u>BTD</u> ACCEPTED		0 C.	Y	γ
ບ່ວ່າມັບ	TTAM					BID ACCEPTED		00	v	γ
05:00	IIAM			in a set of the set of		<u>BID</u> ACCEPTED		0.0	Y	Y

Transaction Request Results (H-5)

- The bid information will be filled in for the transaction bid that you selected
- At this point, you make your changes and initiate a SUBMIT action similar to the procedure for submitting a new transaction bid, as described starting with Step 5 in Section 7.6.1.

SUBMIT Bid After all your changes have been made, select SUBMIT and the MIS will check your entries to see if they pass a validation test. You may also elect to RESET the entries, which is equivalent to an UNDO in Microsoft:

- Modifications of bids in the EVALUATING or ACCEPTED status are not permitted.
- Modifications to bids previously validated must be resubmitted for validation.

Check the results of the validation process when the Transaction Request (H-5) display is refreshed with the updated bid status.

Changing Transaction Bids for the Current Day in the Hour-

Ahead Market

Transaction bids for future hours in the current day can be added or changed up until 9075 minutes before the hour. Bids can be modified either by uploading changes to specific hours, or by using the MIS web pages. Modifications to transaction bids must have a status of validation passed when the HAM for each hour closes, or the revised transaction will not be evaluated by the Balancing Market Evaluation.

When using the MIS web pages to make changes to transaction bids in the HAM, the following process must be used.

- **Step 1:** Select the Review Transaction Bids link.
- **Step 2:** Enter the transaction number or other criteria to locate the desired transaction bid and click submit.
- **Step 3:** On the Transaction Search Results page, click on the first future hour that needs to be changed. This will bring up the transaction profile for all hours of the day.
- **Step 4:** Near the top of the Transaction Request display, confirm that HAM is selected in the field labeled Market.
- Step 5: If the transaction is an export, clear the Import/Wheel Through Decremental Dollars field.
- Step 6: For the hours that have already posted or expired, clear the MW and the Sink Price Cap Dollar fields.
- Step 7: Make the desired changes to the future-hour bids. Submit the update.

Reasons to Review Transaction Bids

The Transaction Search Results display (H-3) serves as the primary mechanism for calling up and reviewing the status of your transaction bid before, during, and after the evaluation process. It is incumbent upon you to check your bids as they move through the stages of verification, evaluation, and acceptance or rejection.

The following are sample instances where you might want to check on the status of your transaction bid:

- Before the day-ahead or hour-ahead market closes, you may want to verify that your bids have passed all of the validation checks and have been confirmed. If not, actions can be taken prior to market close to get bids to the Validation Passed status so that they will be evaluated (status will be VALIDATION PASSED, WAITING CONFIRMATION, or VALIDATION FAILED)
- After the day-head or hour-ahead market closes, you may want to verify that your bids are currently being evaluated (status will be EVALUATING)
- After the posting of day-ahead or hour-ahead market results, you may want to review whether a portion or all of your <u>firm</u> transaction bids have been accepted or whether the NYISO could not meet the bid request at this time (status will be BID ACCEPTED, ADVISORY ACCEPTED, or BID REJECTED)
- For <u>firm</u> transactions that are Advisory Accepted (occurs with transactions having an external piece), you may want to periodically review the status to see that NYISO operations has agreement from neighboring control areas. (status will be updated to BID ACCEPTED with agreed amount always reflected in the hour-ahead market)

- For <u>firm</u> transactions with external pieces that have been BID ACCEPTED in the dayahead market, you may want to review the re-evaluated hour-ahead market schedule after they have become BID ACCEPTED to get the balancing market scheduled amount.
- After posting the day-ahead market results, you may want to review whether a portion or all of- your <u>non-firm</u> transaction bids are likely to be accepted or rejected based upon expected congestion in real-time (status will be ADVISORY ACCEPTED or ADVISORY REJECTED)
- Special Notes Non-firm bids with the status ADVISORY REJECTED do not have be resubmitted to be considered in the hour-ahead market, but will be considered along with non-firm bids that were ADVISORY ACCEPTED.
 - After posting the hour-ahead market results, you may want to review whether a portion or all of your <u>non-firm</u> transaction bids were accepted or rejected based upon expected real-time congestion (status will be ADVISORY ACCEPTED or ADVISORY REJECTED).

Non-firm bids with the status ADVISORY REJECTED do not have be resubmitted to be considered in the hour-ahead market, but will be considered along with non-firm bids that were ADVISORY ACCEPTED. They have a lower chance of being ultimately successful, however.

• After the hour-ahead market closes, you may want to verify that your <u>non-firm</u> transaction bids (that were either ADVISORY ACCEPTED or ADVISORY REJECTED from the day-ahead market evaluation) are now very likely to be accepted or rejected (status will be ADVISORY ACCEPTED or ADVISORY REJECTED)

7.6.3 Confirm Transaction Bids

For a transaction to become valid, it must be confirmed by the party who is responsible for the source and the party who is responsible for the sink. This confirmation must occur prior to the market close. The confirm transaction bids display is specific to transactions whose confirmation status you could change and is not a substitute for the transaction review display as it may not show all bids you are authorized to see.

The following steps should be performed to confirm a transaction or to find out if there are transactions waiting for your confirmation:

- Step 1: Login via the User Login page from the MIS home page. For more detail on User Login, see Section 7.1.3.
- **Step 2:** Select "Confirm Transactions" from the User menu frame. The Transmission Confirmation Selection Criteria display (H-6) is presented.

Transaction Confirmation Selection Criteria (H-6)

Page Ref: H-6						
	Trar	saction Confirm	ation Selection (Criteria		
					_	
Start Time:	(n	nm/dd/yyyy hh:mi)	Stop Time:		(mm/dd/yyyy hh:mi)	
Transaction ID:			Market:	ALL 💌		
Source ID:	None Selected		Sink ID:	None Selected	×	
User Ref:			Bid Status:	None Selected		
Seller Status:	None Selected 💌		Buyer Status:	None Selected 💌		
Number of Rows:			NERC Priority:	None Selected		
	504		RC Tag	DGA		
	SCA	PSE	Unique #	RCA		
		DISPLAY	RESET			
		DISPLAT	KESEI			

- **Step 3:** Enter the following query information to define the search criteria for retrieving the desired transaction:
 - 1. **Start Time** □ Enter the start date and time for the group of transaction bids you want to retrieve. The format is mm/dd/yyyy hh:mm.
 - 2. **Stop Time** \Box Enter the stop date and time for the group of transaction bids that you want to retrieve. The format is mm/dd/yyyy hh:mm.
 - 3. **Transaction ID** □ Enter the unique number assigned by the MIS that identifies the transaction that you want to retrieve.
 - 4. **Market** □ Select one of the following choices from the pull-down menu to define the market of the transaction that you want to retrieve:
 - ALL
 - DAM (Firm, Day-Ahead Market)

- HAM (Firm, Hour-Ahead Market)
- NONFIRM.

The default is ALL.

- 5. **Source ID** □ Select the generator which-that is to be the source. The pull-down menu lists the valid sources that you may select.
- 6. Sink ID Select the load which that is to be the sink. The pull-down menu lists the valid sinks that you may select.
- 7. User Ref □ Enter the User ID that identifies the transaction for ease of tracking. It is unique per transaction.
- 8. Bid Status 🗆 Select from the pull-down menu one of the following statuses:
 - None Selected
 - VALIDATION FAILED
 - VALIDATION PASSED
 - WAITING CONFIRMATION.
- 9. Seller Status 🗆 Select from among the following seller confirmation statuses:
 - None Selected
 - Confirmed
 - Not Confirmed.
- 10. **Buyer Status** \Box Select from among the following buyer confirmation statuses:
 - None Selected
 - Confirmed
 - Not Confirmed.
- 11. **Number of Rows** □ Enter the maximum number of "hits" you want to be returned that meet your search criteria. If none is entered, then 500 rows could be returned.
- **Step 4:** Continue with specifying your search criteria by entering the following NERC Tag information if appropriate:
 - 1. **SCA** \Box Enter the sending control area. The field is limited to four characters.
 - 2. **PSE** \Box Enter the Purchaser/Seller entity name. The field is limited to six characters.
 - 3. Unique # □ Enter the unique ID number. The field is limited to seven alpha-numeric characters.
 - 4. **RCA** □ Enter the code for the receiving control area. The field is limited to four characters.
- **DISPLAY Results** After you have completed entry of the search criteria, select DISPLAY and the MIS will submit your request and return a list of the desired records.
 - **Step 5:** Check the results of the search criteria which that are presented in the Confirm Transactions (H-7) display.

Confirm Transactions (H-7)

age Ref: H-7											
				Confirm '	Transactio	ns					
					Source				Sink		
Start Time	Transaction Id	Bid Status	User Ref	Name	Confirmed	Change To	Select for Change	Name	Confirmed	Change To	Select for Change
08/28/1999 00:00:00	107936	VALIDATION PASSED	ASHOKAN GEN	ASHOKAN	Y			<u>NYPA-</u> SENYJ15 CE NY- <u>CITY</u>	Y	N	
08/28/1999 00:00:00	107936	VALIDATION PASSED	ASHOKAN GEN	ASHOKAN	Y	N		<u>NYPA-</u> SENYJ15 CE NY- <u>CITY</u>	Y		
08/28/1999 01:00:00	107936	VALIDATION PASSED	ASHOKAN GEN	ASHOKAN	Y			<u>NYPA-</u> SENYJ15 CE NY- <u>CITY</u>	Y	N	
08/28/1999 01:00:00	107936	VALIDATION PASSED	ASHOKAN GEN	<u>ashokan</u>	Y	N		<u>NYPA-</u> SENYJ15 CE NY- <u>CITY</u>	Y		
08/28/1999 02:00:00	107936	VALIDATION PASSED	ASHOKAN GEN	ASHOKAN	Y			<u>NYPA-</u> SENYJ15 CE NY- <u>CITY</u>	Y	N	
FIRST	NEXT P	REV LAST									
	LECTALL SOUR		CLEAR ALL	SOURCES	SELEC	T ALL SIN	VKS	CLEAR ALL SIN	KS		
U	PDATE CHECKEE	DBIDS									

The MIS retrieves all of the transaction bids that meet the search criteria, up to the Maximum Row value that was specified:

- Each transaction bid is shown on a separate line
- There are navigation buttons at the bottom of the screen:
 - % FIRST takes you to the top of the list
 - % NEXT scrolls down a screen²=s worth of data
 - % PREV scrolls up a screen=<u>'</u>s worth
 - % LAST takes you to the bottom of the list
 - % SELECT ALL SOURCES selects all of the checkboxes in the Source column
 - % CLEAR ALL SOURCES unchecks all of the checkboxes in the Source column
 - % SELECT ALL SINKS selects all of the checkboxes in the Sink column
 - % CLEAR ALL SINKS unchecks all of the checkboxes in the Sink column
 - % UPDATE CHECKED BOXES toggles the confirmation status of all the items checked in both the Source and Sink columns.
- **Step 6:** View the source confirm status and initiate a confirm action for those transactions that you are authorized to confirm. The following data fields are used to accomplish this task:
 - 1. Source Confirmed Identifies whether the source has been confirmed or not:
 - A "Y" or "N" will appear in this field
 - This field is not enterable.
 - 2. **Source Change To** Identifies those transactions which you are authorized to change the source confirmation status:
 - If the field is blank, it signifies that you are is not authorized to change the source confirmation status
 - Selecting the Y or N appearing in this column changes the confirmation status:

- % Selecting Y changes the N to a Y and denotes the source is confirmed
- % Selecting N changes the Y to an N and denotes the source is not confirmed
- 3. Select for change Allows the user to select multiple sources to allow their status to be toggled with the UPDATE CHECKED BIDS button.
- **Step 7:** View the sink confirm status and initiate a confirm action for those transactions that you are authorized to confirm. The following data fields are used to accomplish this task.
 - 1. Sink Confirmed Identifies whether the sink has been confirmed:
 - A "Y" or "N" will appear in this field
 - This field is not enterable.
 - 2. Sink Change To Identifies those transactions which you are authorized to change the sink confirmation status:
 - If the field is blank, it signifies that you are not authorized to change the status.
 - Selecting the Y or N appearing in this column changes the confirmation status.
 - % Selecting Y changes the N to a Y, and denotes the sink is confirmed
 - % Selecting N changes the Y to an N, and denotes the sink is not confirmed
 - 3. Select for change Allows the user to select multiple sinks to allow their status to be toggled with the UPDATE CHECKED BIDS button.
 - The confirmation status may not be changed for transactions that are in the EVALUATING or ACCEPTED state.

Special Notes The source name and sink name fields contain hyperlinks to the associated Generator Parameters (G-4) display and Load Bus Detail (G-11) display, respectively.

7.7 Virtual Bidding

7.7.1 Registration Requirements

All current and prospective NYISO Customers wishing to participate in Virtual Bidding must register with the NYISO a minimum of 60 days prior to participation. To register, both current and prospective NYISO Customers must download the customer registration packet that is located on the NYISO Web site at: http://www.nyiso.com/services/relations/cregistration/pdf/nyiso_reg.pdf.

Prospective NYISO Customers must complete and submit the packet per the instructions included. Current NYISO Customers must update and submit Sections B, F, I, and Addendum A of the packet to reflect their intent to place Virtual Bids and the locations at which they intend to bid. For both Prospective and Current Customers, the ability to participate in Virtual Bidding will be strictly conditioned upon fulfilling and maintaining the specific Virtual Bidding creditworthiness requirements detailed in the customer registration packet.

7.7.2 Introduction to Virtual Bidding

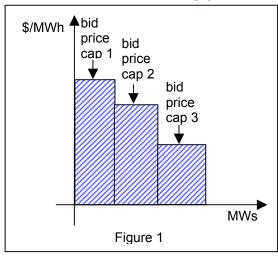
Virtual Bidding is the submission of bids for the financial purchase or sale of energy, rather than or in addition to the physical delivery or purchase of energy in the NYISO-administered energy markets. Virtual Bidding enables qualified NYISO Customers to:

- Buy energy (Virtual Load) in the Day-Ahead Market (DAM) at day-ahead prices and sell it in the Real-Time (RT) Market at real-time prices and;
- Sell energy (Virtual Supply) in the DAM at day-ahead prices and buy energy to cover the sale in the RT market at real-time prices (Virtual Supply).

Virtual Load and Virtual Supply transactions are financial transactions only and have no effect on real time physical energy consumption.

Virtual Load Bidding

A Virtual Load bid is an offer in the DAM to acquire a specific amount of energy, for a particular hour, in a specific NYCA zone, at or below a specific price. A Virtual Load differs from a physical load because the bidding entity does not intend to consume the energy it seeks to buy in the DAM; rather, the bidder intends to sell the energy in the RT market. With respect to the DAM, there is no difference between a Physical Load and a Virtual Load. In RT, however, the physical load will consume energy (to the extent that



it has not over-bid in the DAM), whereas the Virtual Load will not actually consume energy. A physical load that buys more energy in the DAM than it consumes in RT is indistinguishable in its effects from a Virtual Load.

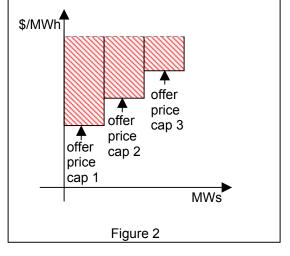
Virtual Load must be bid in the DAM as zonal price-capped load. Virtual Load offers for up to three price-capped energy blocks may be bid per zone for each hour of the day. The Virtual Load bidder must specify the amount of energy it is willing to purchase and the maximum amount that it is willing to pay for that energy for each block of energy desired. The Virtual Load will purchase the block(s) of energy if the day-ahead zonal market-clearing price is equal to or less than the bid price cap(s) specified. **Figure 1** graphically illustrates the three price dependent bids to purchase energy.

For additional information on zonal price capped load bidding see Section 7.5.1.

Virtual Supply Bidding

A Virtual Supply bid is an offer in the DAM to supply a specific amount of energy, for a particular hour, in a specific NYCA zone, at or above a specific price. A Virtual Supply bid differs from a physical generation bid because the bidding entity will not generate the energy it seeks to sell in the DAM; rather, the bidder intends to buy the energy in the RT market to fulfill its supply obligation. The Virtual Supplier cannot provide ancillary services and does not qualify for ICAP payments.

Virtual Supply must be offered in the DAM as zonal price-capped blocks of energy and up to three price-capped blocks may be offered per zone for each hour of the day. The Virtual Supplier will sell the block(s) of energy if the day-ahead zonal market-clearing price is equal to or greater than the offer price. **Figure 2** graphically illustrates the three price dependent offers to sell energy.



Virtual Supply and Virtual Load bids may not be combined as a single bid. Each will have a separate bid form.

Physical Load and Physical Supply Bidding

Existing bidding rules for physical load and physical supply are not affected by the virtual load and virtual supply bidding rules outlined in this section.

7.7.3 Submitting Virtual Bids in the Day-Ahead Market

The submission of virtual load and virtual supply bids requires that the bidder be registered with the NYISO to place virtual bids. Please refer to Section 7.7.1 for information pertaining to registration requirements.

Entering Virtual Load or Virtual Supply Bids via the Interactive MIS Bid Screens

- **Step 1:** Login via the User Login page from the MIS home page (See Section 7.1.3).
- Step 2: Select "Virtual Load Bids" or "Virtual Supply Bids" as appropriate from the User Menu frame.

Step 3:	Virtual Bus \boxtimes -Select the name of the virtual load or virtual supply bus for which you want to submit a bid. The drop-down menu lists the virtual busses for which you are authorized to enter bids. Only one virtual load or virtual supply bus name may be selected.
Step 4:	Date ⊠ -Enter the date for the 24-hour period that you wish to enter a bid for. The date represents the effective date of the bid. The date format is: mm/dd/yyyy.
Step 5:	Display -Select "Display" to access the Virtual Load (Figure 3) or Virtual Supply (Figure 4) Bid Display. This selected screen will be automatically populated with the appropriate date and virtual bus name information.

💻 Virtual Load Bid Selection Criteria

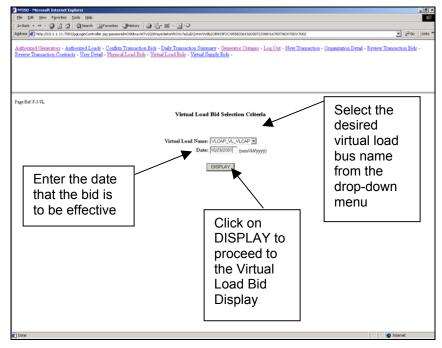


Figure 1 – Virtual Load Bid Selection Criteria Display

L Virtual Supply Bid Selection Criteria

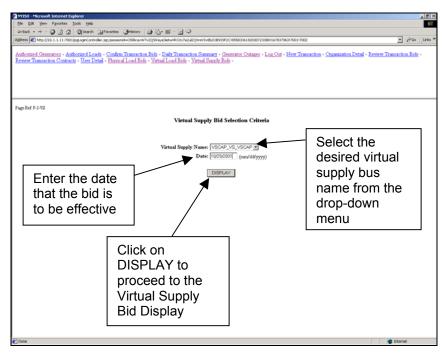


Figure 2 – Virtual Supply Bid Selection Criteria Display

Entering a Virtual Load Bid

The Virtual Load Bid Display enables the bidder to enter Virtual Load bids for all hours of the day, beginning with hour beginning 00:00 and ending with hour beginning 23:00. Virtual Load bids for each hour are entered in the fields identified as "Price Cap #1", "Price Cap #2", and "Price Cap #3". In these fields you should enter the MW and \$/MW values that define the price that you are willing to pay for the desired increments of virtual load. The price bid for each successive price cap must be higher than the preceding price cap. The price capped Virtual Load bids are accepted as follows:

- If the LBMP at the selected virtual load bus is below the \$/MW value bid as Price Cap #1, then an amount of Virtual Load equal to the sum of Price Cap #1, Price Cap #2 and Price Cap #3 are purchased.
- If the LBMP at the virtual load bus is between the \$/MW value bid as Price Cap #1 and Price cap #2, then an amount of virtual load equal to the sum of Price Cap #2 and Price Cap #3 are purchased.
- If the LBMP at the virtual load bus is between the \$/MW value bid as Price Cap #2 and Price Cap #3, then an amount of virtual load equal to that specified for Price Cap #3 is purchased.
- If the LBMP at the virtual load bus is greater than the \$/MW value bid as Price Cap #3, then no virtual load is purchased.
- The default values for these fields are null.

: $\mathbf{MW} \boxtimes$ -Enter the number of MW for each price cap.

Step 1:

- **Step 2:** \$/**MW** is -Enter amount per MW that you are willing to pay.
- **Step 3: Submit** -Click the **Submit** button to submit your bid to the MIS.

📕 Virtual Load Bid Display

	ted General	tors - Autho	rized Lo	ads - Cont	irm Trans	action Bid	s - Daily 7	Fransaction	<u>1 Summary</u> - Ger	erator Outages	- Log O	ut - New Transaction - Org	anization Detail - R	eview Transact	tion Bids -
									rtual Supply Bid						
age Ref	F-3-VL														
									Virtual Los	d Bid					
Vintera	I Lood No.	me: VLCAP	2 10 10	CAR					p.	te: 10/29/2001	launde	(dimme)			
	P VL VL		_***_**							erruptible Typ					
Virtua	l MWh Su	m for all zo	nes: 19	70.00								l zones: 2500.00			
Time		Fixed Bid		Cap #1		Cap #2		Cap #3	Interrupt Pric			Bid Status		chedule	
	MW	MW	MW	\$/MW	MW	\$/MW	MW	\$/MW	MW \$/1	AM NW	\$/MW			Fixed Inter I IW	Price Cap MW
00:00			10.0	20.00	20.0	30.00	30.0	40.00				VALIDATION PASSED			
01:00			10.0	20.00	20.0	30.00	30.0	40.00				VALIDATION PASSED			
_			20.0	30.00	30.0	31.00	32.0	40.00				VALIDATION PASSED			
02:00			20.0	20.00	21.0	30.00	30.0	40.00				VALIDATION PASSED			
02:00			30.0	20.00	40.0	30.00	50.0	45.00				VALIDATION PASSED			
					-	30.00	70.0	40.00				VALIDATION PASSED			
03:00			40.0	20.00	60.0							VALIDATION PASSED			
03:00 04:00				20.00	20.0	30.00	30.0	40.00				VALIDATION PROSED			
03:00 04:00 05:00			40.0			30.00	30.0	40.00				VALIDATION PASSED			
03:00 04:00 05:00 06:00			40.0	20.00	20.0		-								
03:00 04:00 05:00 06:00 07:00			40.0	20.00	20.0	36.00	13.0	140.00				VALIDATION PASSED			
03:00 04:00 05:00 06:00 07:00 08:00			40.0 10.0 11.0 10.0	20.00 24.00 60.00	20.0	36.00 80.00	13.0	140.00				VALIDATION PASSED VALIDATION PASSED			

Figure 3

Entering a Virtual Supply Bid

The Virtual Supply Bid Display enables the bidder to enter virtual supply bids for all hours of the day, beginning with hour beginning 00:00 and ending with hour beginning 23:00. Virtual supply bids for each hour are entered in the fields identified as "Price Cap #1", Price Cap #2, and Price Cap #3. In these fields you should enter the MW and \$/MW values that define the price that you are willing to accept for the desired increments of virtual supply. The price offered for each successive price capped bid must be higher than the preceding price cap. The price capped virtual supply bids are accepted as follows:

 If the LBMP at the virtual supply bus is above the \$/MW value bid as Price Cap #3, then an amount of virtual supply equal to the sum of Price Cap #1, Price Cap #2 and Price Cap #3 are sold.

- If the LBMP at the virtual supply bus is between the \$/MW value bid as Price Cap #3 and Price Cap #2, then an amount of virtual supply equal to the sum of Price Cap #1 and Price Cap #2 are sold.
- If the LBMP at the virtual supply bus is between the \$/MW value bid as Price Cap #2 and Price Cap #1, then an amount of virtual supply equal to that specified for Price Cap #1 only is purchased.
- If the LBMP at the virtual supply bus is less than the \$/MW value bid as Price Cap #1, then no virtual supply is sold.
- The default values for these fields are null.
- **Step 1: MW** \boxtimes -Enter the number of MW for each price cap.
- **Step 2: \$/MW** Enter amount per MW that you are willing to sell.
- Step 3: Submit -Click the Submit button to submit your bid to the MIS

☐ Virtual Supply Bid Display

		ernet Explorer															_ 6
		orites <u>I</u> ools				0.71 -											
		과 과 @s .11:7001/pgl.og														- da	Link
iss jeel hi	etp://10.1.1	.11:7001JpgLog	Incontroller.jsp); [50550018]=	KU HURE BALW	rvagorrayeox	SWAROXC78	ouzognevovo	8208935P2CR	558336182030	/23366/16/63	796317001	7002			<u> </u>	Jun
ionzed (Generator nsaction C	<u>z - Authorize</u> Contracts - <u>U</u>	<u>ed Loads</u> - <u>C</u> ser Detail - ;	Conhrm Ti Physical I	ransacho Load Bid	<u>n Bods</u> - <u>Da</u> 5 - <u>Virtual I</u>	uly Transa Load Bids	- <u>Virtual S</u>	<u>nary</u> - <u>Gene</u> upply <u>Bids</u> -	r <u>ator Outage</u>	<u>s - Log Ou</u>	- <u>New (</u>	<u>fransaction</u> - 9	<u>Drgamzabon I</u>	<u>)etail</u> - <u>Review</u>	Transaction Bid	<u>s</u> -
Ref. F-3-	-93																
								Virt	ual Supply	y Bid							
tual Su	pply Nan	ne: VSCAP	VS_VSCAP						Date	: 10/29/2001	(mm/dd	/yyyy)					
CAP V	IS VSCA	UP.							Inter	ruptible Ty	pe: None :	Selected	¥				
tual M	Wh Sum	for all zone:	s: 1970.00						Virtu	al MWh Li	mit for all	zones: 2	500.00				
me Fo	precast	Fixed Bid	Price Ca	ap #1	Price	Cap #2	Price	Cap #3	Interrupt	Price Cap	Interrup	t Fixed	Bid Status		Schedul	e	
	MW	MW	MW \$	WMM8	MW	\$/MW	MW	\$/MW	MW	\$/MW	MW	\$/MW		Price Cap		Inter Price Ca	ap
	_					_						_			MW	MW	_
00		,		_					_								
00																	
00									_								
:00																	
:00																	
:00																	
00																	
:00		Í															
:00																	
.00				- i													
.00																	
				-			<u> </u>										
:00																	

Figure 4

Special Notes

The "Virtual Load Name" or "Virtual Supply Name", "Date", and "Price Cap #" bid fields are the only fields on the Virtual Load and Virtual Supply Bid Displays (Figures 3 & 4) that are accessible to the bidder. The "Interruptible Type",

"Forecast MW", "Fixed Bid MW", "Interrupt Price Cap", and "Interrupt Fixed" fields are reserved for physical load bids and are not used in the virtual bidding process.

All Virtual Bidders should pay special attention to the "Virtual MWh sum for all zones" and the "Virtual MWh limit for all zones" fields. These fields appear on the Physical Load Bid Display as well as the Virtual Load and Virtual Supply Bid Displays (if the billing entity does not participate in virtual trading, then these fields will be zero on the Physical Load Bid Display). The purpose of these fields is as follows:

• "Virtual MWh sum for all zones" – This field displays the MWh sum of all virtual bids for this billing entity processed as of that instant for the bid date, including uploaded bid files if any. For each virtual load or virtual supply bid with three incremental MW values the sum of the three values is used. If the billing entity has both virtual load and virtual supply bids entered for the same zone for the same hour, then the greater of the summed MW values of the two bids for that hour will be used (see Example 1). This number must not be greater than the value displayed in the "Virtual MWh limit for all zones" field when the market closes at 5AM. If this number is greater, then all virtual bids submitted by the billing entity for that day will be voided. It is the bidders responsibility to ensure that this condition is met.

				Virtual I	Load		١	Virtual S	upply		
Billing Org.	Zone	Hour	Block 1	Block 2	Block 3	Sum	Block 1	Block 2	Block 3	Sum	Max
Ajax Power	J	1	89	2	75	166	97	77	2	176	176
Ajax Power	J	14	20	18	1	39	46	85	16	147	147
Ajax Power	K	1	23	5	78	106	71	59	68	198	198
Ajax Power	K	13	45	47	61	153	16	20	49	85	153

Virtual MWh Sum for all zones= 674

Example 1 – Calculation of "Virtual MWh sum for all zones"

- "Virtual MWh limit for all zones" This field displays the daily virtual bidding limit applicable to the billing entity. The MWh limit posted is proportional to the collateral established based upon terms of the NYISO "Financial Assurance Policy and Procedures for Virtual Transactions".
- SUBMIT Bid When the virtual load or virtual supply bid form is complete select "SUBMIT" (located at the bottom of the display) to submit the bid. The MIS will immediately check the validity of the bid and automatically refresh the display (including the "Virtual MWh sum for all zones" field), indicating the status of the bid. An immediate indication of "Validation Passed" or "Validation Failed" will appear in the "Bid Status" field.

Step 1: Check the results of the validation process which are presented.

• If the status is "Validation Passed", then the bid has passed the screening to determine if all required data has been entered.

- If the status is "Validation Failed", then the bid has either incorrect or missing data and you must review the display and correct any errors or omissions and re-submit.
- The Bid Status of each individual hour must be checked to verify that the bid has passed the Validation Test for each hour for which a bid was submitted.
- Recheck the "Virtual MWh sum for all zones".

Special Notes The Validation Test verifies only that the data entered is correct and complete. This test does not indicate acceptance or rejection of the bid with respect to the Day-Ahead Market. This evaluation will take place following the 5AM market closing. All bids must be submitted by the 5AM Day-Ahead Market closing time.

7.7.4 Changing a Virtual Load or Virtual Supply Bid

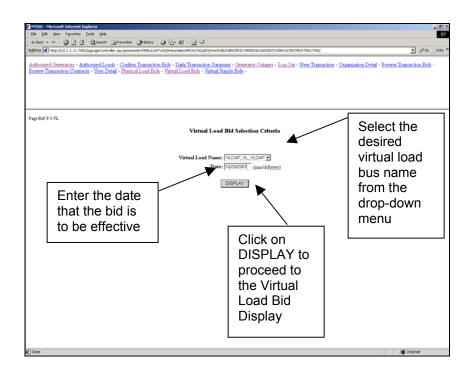
Virtual load and virtual supply bids may be changed at any time up to the Day-Ahead Market closing time of 5AM for the day that the bid is to be effective. To change a virtual load or virtual supply bid, follow the instructions in the section above concerning entering virtual load and virtual supply bids to access the appropriate bid display.

Step 1:	Login via the User Login page from the MIS home page (See MPUG, Section 7.1.3).
Step 2:	Select "Virtual Load Bids" or "Virtual Supply Bids" as appropriate from the User Menu frame.
Step 3:	Virtual Bus \boxtimes -Select the name of the virtual load or virtual supply bus for which you want to submit a bid. The drop-down menu lists the virtual busses for which you are authorized to enter bids. Only one virtual load or virtual supply bus name may be selected.
Step 4:	Date \boxtimes - Enter the date for the 24-hour period that you wish to enter a bid for. The date represents the effective date of the bid. The date format is: mm/dd/yyyy.
Step 5:	Display -Select "Display" to access the Virtual Load (Figure 3) or Virtual Supply (Figure 4) Bid Display. This selected screen will be automatically

populated with the appropriate date and virtual bus name information.

Day-Ahead Market. This evaluation will take place following the 5AM closing. All bids must be submitted by the 5AM Day-Ahead Market closed

Load Bid Selection Criteria



This will display the previously submitted bid information for the selected date and virtual bus. Changes may be made and resubmitted on this display. Upon submission of the revised bid information the MIS will respond with the Bid Status. Be sure to re-check the "Virtual MWh Sum for all zones" when changes are made to bids to ensure compliance with the "Virtual MWh Limit for all zones".

Checking the Final Status of Virtual Load and Virtual Supply Bids

The Security Constrained Unit Commitment software evaluates all valid bids following the close of the Day-Ahead Market. During the evaluation, the Bid Status will be listed as "Evaluating". Following the evaluation process the results of the Day-Ahead Market process are posted to the bids forms as "Bid Accepted" or Bid Rejected" in the Bid Status field. Bidders may check the status of the submitted bids by repeating the procedure for accessing the appropriate bid form outlined in Section 7.7.3.

- A "Bid Accepted" status indicates that the bid for that hour has been accepted and the schedule for that hour is displayed in the "Schedule" field in the "Price Cap" column.
- A "Bid Rejected" status means that the bid was not accepted and no energy was purchased or sold in the Day-Ahead Market for that hour.

7.7.5 Load Supply Virtual bids via the Upload/Download Batch Procedure

This Technical Bulletin assumes a prior knowledge of the NYISO Upload/Download Batch Procedures. For additional information please refer to Section 8 of the NYISO Market Participant User's Guide.

The Upload/Download Batch Procedure requires that all information for a bid be prepackaged into files, which are then submitted electronically to the NYISO MIS. Similarly, the MIS packages all responses into a file, which is then retrieved by the bidder. This interface provides for the quick and efficient transfer of large amounts of bid and schedule data between NYISO Customers and the NYISO.

The data that is prepared by the bidder, or that is returned to the bidder by the MIS in response to a bid or query is a text file consisting of multiple records, each with one or more comma separated value fields. This type of file is known as comma separated value, or CSV.

The Upload/Download Batch process supports the following virtual bidding functions:

- Virtual bidders can submit bids for virtual load and/or virtual supply
- MIS responds to the bids
- Virtual bidders can query the MIS to obtain the status of virtual bids submitted
- MIS responds to the query
- Virtual bidders can delete a bid
- MIS responds to the deletion

The Upload/Download template used to submit both virtual load and virtual supply bids is defined in Section 8.2.3 of this manual. As with the bid screens described previously, the load data submission parameters template (Note: the "Submit Loads Data Dictionary", defined in Section 8.2.3 of this manual, is used to support both virtual load and virtual supply bids) includes fields that are not used in virtual bidding. These fields are left blank in the CSV file and include:

Forecast MW Interruptible Type Interruptible fixed cost Interruptible capped cost Fixed MW Interruptible fixed MW Interruptible capped MW

Virtual load, virtual supply, and physical load bids may be mixed in the same upload file. The identity of the bus, not the format of the data, determines if the bid is for virtual load, virtual supply, or physical load.

To change a bid the bidder repeats the process described above, submitting the revised bid data.

To delete a bid submitted via the Upload/Download Batch Procedure the "Delete Load Bids" template is used. This template is defined in Section 8.2.7 of this manual and supports the deletion of the specified virtual load or virtual supply bid.

Virtual Bid Limit Status Query

All Virtual Bidders have a credit limit established per the terms of the NYISO "Financial Assurance Policy and Procedures for Virtual Transactions". Both the

The Upload/Download Templates

Changing a Virtual Bid Through the Upload/Download Batch Process

Deleting a Virtual Bid Through the Upload/Download Batch Process

current amount of Virtual Bids (in MWh) submitted and the bidders Virtual Bidding limit (in MWh) are available for review by the bidder via the Upload/Download Batch Procedure. Table 1 represents the data dictionary that supports this function.

Variable Name	Value	Mandatory
USER ID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY TYPE	CREDIT_CHECK	Y
LOAD_AREA_BUS	Name or PTID exactly as shown in the MIS	Y
DATE	MM/DD/YYYY	Y
	Table 1 – Bid limit query data dictionary	

Input File Example:

USERID=testupld&PASSWORD=testupld&QUERY_TYPE="CREDIT_CHECK"& LOAD_AREA_BUS=900321&DATE=08/21/2001

Output File Example:

TIME_STAMP=09/25/2001 11:02 BID_TYPE=CREDIT_CHECK DATA_ROWS=1 "BUS - 900321 38 TEST BUS - 21", 900321, 08/21/2001, 1200, 3000

This CSV output file corresponds to the following information: load name, load PTID, Date, Credit used, Credit limit

Special Notes The value returned as "Credit used" represents the sum of all virtual bids for all zones placed by the billing entity for the bid effective date, at the time reported and also includes bids submitted via the interactive bid displays, if any. For each virtual load or virtual supply bid with three incremental MW values the sum of the three values is used. If the billing entity has both virtual load and virtual supply bids entered for the same zone for the same hour, then the greater of the summed MW values of the two bids for that hour will be used (see Example 1). *This number must not be greater than the value returned as "Credit limit" when the market closes at 5AM. If this number is greater, then all virtual bids submitted by the billing entity for that day will be voided. It is the bidders responsibility to ensure that this condition is met.*

Downloading Virtual Load and/or Virtual Supply Schedules

To download the Day-Ahead schedule for accepted virtual load and/or virtual supply bids refer to Section 8.3.3 of this manual.

7.8 Preschedules

The preschedule request process enables Market Participants to request a preschedule for import, export, and wheel transactions that can span from a single hour to several months. Acceptance of a preschedule request within the New York Control Area is determined by the availability of adequate hourly ramping and transmission capacity related to the affected external interface(s). Both the MIS bid screens and the upload/download processes offer tools that enable the Market Participant to submit, monitor the status of, and manage preschedule requests.

7.8.1 Submitting a New Preschedule

Step 1: Login via the User Login page from the MIS home page.

Step 2: Select *Preschedule* from the User Menu frame (see Figure 1).

Bidding and Scheduling Display



Figure 1

The *New Preschedule* screen that appears (Figure 2) enables the user to enter the Source, Sink, User Reference and transaction priority. For convenience, drop down menus are available for filling in the Source and Sink fields.

The User Ref is a user assigned identifier that aids in uniquely identifying and tracking a preschedule. The User Ref may consist of up to 50 alpha and/or numeric characters and, when assigned to a specific source and sink combination, defines a specific contract. A given User Ref may also be assigned to preschedules that use a different source or sink to identify a different contract. To identify a preschedule that uses the same source and sink as a separate contract from a previously confirmed preschedule, the user should assign a unique User Ref.

Step 3: Enter the following transaction data:

1. Source \boxtimes -Select a source from the drop down menu.

- **2.** Sink \boxtimes Select a sink from the drop down menu.
- **3.** User Reference 🗵 Enter a user Reference number.

Step 4: Submit – Click on the Submit button.

Rew Preschedule Display

		Page Ref: X-1
New Preschedule		
Source	HQ_GEN_CHAT DC	í.
Sink	HQ_LOAD_CHAT	1
User Ref		
Market	DAM	
NERC Priority	Firm (F-7)	
Transaction Priority	N/A	
SUBMIT		
0004111		

The information entered on this form will be automatically transferred to the *Preschedule Request* form (Figure 3).

Creating a Preschedule Request Profile	The <i>Preschedule Request</i> form enables the user to input individual preschedule profile patterns. Individual preschedule profile patterns, when combined or "stacked" can create a complex, aggregate preschedule profile that spans up to all hours available for preschedule requests.
	To enter a profile pattern for a preschedule the user must:
Step 1:	Start and End Dates – Enter the start and end dates for the profile pattern. For convenience a pop-up calendar is available by clicking on the icon immediately adjacent to the "Start Date" and "End Date" fields. Clicking on the desired date on the calendar will automatically transfer that date to the respective field.
Step 2:	Days of the Week \boxtimes – Select the days of the week that the preschedule profile pattern applies to. The days of the week may be individually selected, or Monday to Friday ("Mon to Fri") or "All 7 Days" may be selected. Click on the appropriate check box to select the appropriate day or days.
Step 3:	Start and End Hours is - Enter the desired Start Hour and End Hour using the drop down menu selections adjacent to the "Start Hour" and "Stop Hour" fields.
Step 4:	# of MWs - Enter the desired number of MWs in the " # MW" field.
Step 5:	Preschedule Reference - Enter a "Preschedule Reference" designator. Individual preschedule profile patterns entered with the same "Prescheduled Reference" designator will be "bundled" (see Attachment B) as a single preschedule request for evaluation, and will be accepted or rejected as a single

request. The "Prescheduled Reference" designator can include up to 50 letters and/or numbers selected by the user.

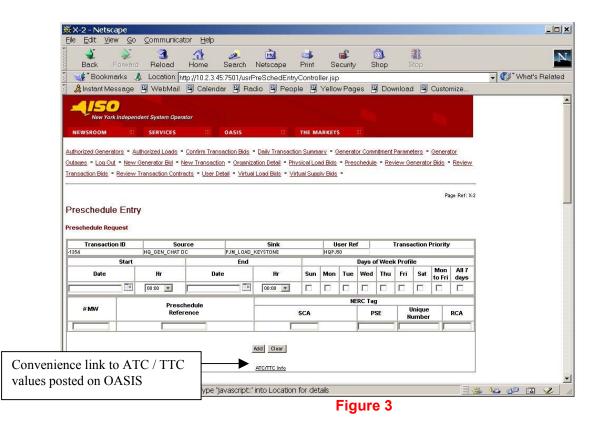
- Step 6: **Queue Status** \boxtimes - Select the desired queuing status. The queuing status selected for a given "Prescheduled Reference" designator will apply to all profiles that share the same "Prescheduled Reference" designation. Selecting "Queued" will place the preschedule request in a queue (after the request is submitted for evaluation) to be periodically re-evaluated in the event that the request is not accepted in the initial evaluation. Selecting "Non-queued" will subject the preschedule request to a single evaluation. If the preschedule request is rejected in the single evaluation it will be discarded by the MIS and not re-evaluated in the periodic re-evaluation process. Rejected preschedule requests may be manually resubmitted at any time up until the preschedule request submission deadline (2:00 PM on the day before the 5:00AM close of the transaction date DAM). Once a queuing status is selected for a given Preschedule Reference designator, then all profile patterns identified with the same Preschedule Reference designation will have the same queuing status. The Queuing Type fields will be not be accessible to subsequent profile pattern entries with the same Preschedule Reference designation.
- **Special Notes** The queuing feature referred to in this section will not be available for the initial deployment of prescheduling. The queuing feature will be made available as soon as the NYISO's request to implement it is approved by FERC. The NYISO will advise the Marketplace when the queuing feature will be activated.

Until the queuing feature is activated, preschedule requests that are rejected must be manually resubmitted for re-evaluation. Upon activation of the queuing feature, Market Participants will have the ability to select queued status for previously rejected preschedule requests, allowing the requests to be automatically reevaluated.

- **Step 7:** NERC Tag □ Enter the NERC Tag into the appropriate "SCA", "PSE", "Unique Number", and " "RCA" fields.
- Step 8: Add ⊠ Clicking on the "Add" button transfers the data that was entered through the process described above to the "Your Current Request" section of the screen. This feature stores preschedule request profile patterns prior to submission for evaluation. The "Add" button does not submit the transaction request for evaluation. The "Clear" button clears all data entry fields on the "Prescheduled Transaction Entry" form.

Special Notes The order in which individual profile patterns grouped by a specific Preschedule Reference designator are entered is critical to the resulting aggregate preschedule request profile. In all cases, where new information is entered for a previously defined hour, the last entry will specify the MWs desired for that hour.

📕 Preschedule Entry Display



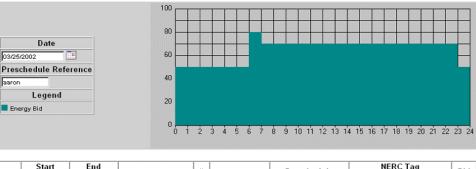
Your Current Reauest

"Your Current Request" is a virtual shopping cart feature that serves as a staging area for individual preschedule request profile patterns as the aggregate preschedule request is being created. Individual preschedule request profile patterns defined in the data entry process may be added to "Your Current Request" as they are completed. "Your Current Request" lists each individual profile pattern entered and includes a description of the profile pattern. "Your Current Request" also specifies the user supplied "Preschedule Reference" designator that identifies profile patterns that are to be combined for evaluation as a single preschedule.

The chart included in the "Your Current Request" feature (Figure 4) represents an aggregate representation of the profile patterns defined through the data entry process and added to "Your Current Request" under a common Preschedule Reference designator. The chart displays a compilation of profiles on an hour-by-hour basis for the "Date" and "Preschedule Reference" designator specified, and serves as a graphical user tool to verify that the preschedule request for a specific hour of a specific day is entered as intended. To use the chart, select the date to be reviewed from the pop-up calendar adjacent to the date field and enter the desired Preschedule Reference designator.

W Your Current Request Display

Your Current Request



	Star	t	End			#		Preschedule		Bid				
Clear	Date	Hr	Date	Hr	Day of Week	мw	Queuing Type	Reference	SCA	PSE	Unique Number	RCA	Status	
	3/25/2002	00:00	3/29/2002	05:00	Mon, Tue, Wed, Thu, Fri	50	Queued	Aaron	1	2	3	4		
	3/25/2002	06:00	3/29/2002	06:00	Mon, Tue, Wed, Thu, Fri	80	Queued	aaron	1	2	3	4		
	3/25/2002	07:00	3/29/2002	22:00	Mon, Tue, Wed, Thu, Fri	70	Queued	aaron	1	2	3	4		

Submit Submit w/out Eval Clear Selected Items Clear All

Figure 4

Your Current Request offers the following options:

- 1. **Submit** \square Submits the preschedule request for evaluation.
- 2. Submit w/out Eval \boxtimes Allows the user to store the preschedule request for later access without submitting it for evaluation.
- 3. Clear Selected Items 🖾 Allows the user to selectively delete individual profile pattern. The "Clear Selected Items" command will delete Start "Your Current Request" entries that are Clear identified for deletion by selecting the Date "Clear" (see Figure 5) field on the left end of the "Your Current Request" table.
- 4. Clear All \boxtimes Deletes all entries in "Your Current Request".

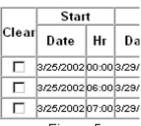


Figure 5

7.8.2 Managing Submitted Preschedule Requests

To review a submitted preschedule request select "Preschedule" from the User Menu frame and enter the appropriate information for the preschedule request to be reviewed. When the *Preschedule* screen appears, scroll down to the "Your Query Results" section of the screen. All of the preschedule requests previously submitted for the source and sink specified will be listed in the "Your Query Results" section (see Figure 6).

Query Results Display

.

Your Query Results



100	Τ	Т	Т	Т	Τ	Т	Т	Т	Т		Т	Т	Т	Т	Τ	Т	Т	Т	Т	Τ	Т	Т	Т	٦
80																								
60																								-
40																								
20																								
0 6	i	2	ż	4	5	Ġ	ż	ś	ģ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Start End		#	0	Broochedule	Preschedule Ref		NEF	₹C Tag					
Date	Hr	Date	Hr	мw		Reference	Status	SCA	PSE	Unique Nubers	RCA	Bid Status	Messages
04/01/2002	00:00 EST	04/01/2002	05:00 EST	50	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/01/2002	06:00 EST	04/01/2002	06:00 EST	80	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/01/2002	07:00 EST	04/01/2002	22:00 EST	70	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/01/2002	23:00 EST	04/01/2002	23:00 EST	50	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/02/2002	00:00 EST	04/02/2002	05:00 EST	50	Queued	test1	VALIDATION PASSED	1	з	2	4	VALIDATION PASSED	
04/02/2002	06:00 EST	04/02/2002	06:00 EST	80	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/02/2002	07:00 EST	04/02/2002	22:00 EST	70	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
04/02/2002	23:00 EST	04/02/2002	23:00 EST	50	Queued	test1	VALIDATION PASSED	1	з	2	4	VALIDATION PASSED	
04/03/2002	00:00 EST	04/03/2002	05:00 EST	50	Queued	test1	VALIDATION PASSED	1	3	2	4	VALIDATION PASSED	
h i na naan	ha aa mar	h . no nooo	he ee not	000		114	har parton pagers		~	~ 1			
									/	`			



The "Your Query Results" table lists the individual profile patterns previously submitted for evaluation and includes the profile pattern description plus a status indication, and a messages field. Possible statuses include:

Validation Failed	The preschedule request has failed the validation check and must be corrected and resubmitted.
Waiting Confirmation	The preschedule request has passed all MIS checks but either the source or sink has not been confirmed.
Validation Passed	The preschedule request has passed all MIS checks and the source and sink have been confirmed.

Evaluating	The preschedule request is currently being evaluated.
Presched Queued	The preschedule request has been evaluated and was not accepted due to an ATC and/or ramping capacity violation. Because the user specified that the request be queued when the request was submitted, the request is in the queue for periodic re-evaluation. (See Note 1)
Presched Rejected	The preschedule request was rejected due to an ATC and/or ramping capacity violation. The request will not be periodically re-evaluated because the user specified that the request be non-queued. The request may, however, be manually resubmitted for evaluation.
Presched Confirmed	The preschedule request was accepted.
Presched Mkt Closed	The preschedule request is no longer valid because the first hour of the preschedule request has passed and the preschedule request was not accepted by that time.

The status indication will be the same for all profile patterns that are grouped under a common Preschedule Reference label.

The "Messages" field will display specific information concerning the preschedule request such as "User is not authorized to change transaction group status" or "Cannot change transaction group status while the evaluation is running". Messages will also indicate the specific reason that a preschedule request was not accepted such as "Preschedule bid failed evaluation for ATC".

The chart included in "Your Query Results" (see Figure 6) displays a compilation of the profile patterns submitted on an hour-by-hour basis for the "Date" and "Preschedule Reference" specified, and serves as a graphical user tool to verify the aggregate preschedule request. The chart also provides specific information concerning any ATC and or ramping capacity violations, indicating the hour and magnitude of the violation. To use the chart, select the date to be reviewed from the pop-up calendar adjacent to the date field and enter the desired Preschedule Reference designator.

7.8.3 To Change a Submitted Preschedule Request

- Step 1: Select 🗵 "Preschedule" from the User Menu frame
- **Step 2: Enter** \Box -the following data:
 - 1. Appropriate Source,
 - 2. Appropriate Sink
 - 3. User Ref information for the preschedule request to be changed.

The rules governing changes to a preschedule request are a function of the current status of the preschedule request; either "Prescheduled Confirmed" or "Preschedule Queued"

Step 3: To change a preschedule request with a "Presched Confirmed" status:

- 1. **Enter** \Box -the desired change(s) as a new individual profile pattern(s).
- 2. **Preschedule Reference** □ Enter the Preschedule Reference designator that the change(s) applies to.
- 3. **Queue Type** ⊠– Select the desired queuing type (Queued or Nonqueued).
- 4. **Submit** Is the preschedule request for evaluation.

The change request will be evaluated as a new preschedule request. If accepted, the changes will be added to the specified Preschedule Reference designator. If the changes are not accepted, the original preschedule request remains intact.

- **Step 3:** To change a preschedule request with a "Presched Queued" or "Preschedule Rejected" status:
 - 1. **Enter** \Box the desired change(s) as a new individual profile pattern(s).
 - 2. **Preschedule Reference** Enter the Preschedule Reference designator that the change(s) applies to.
 - 3. **Queue Type** ⊠ Select the desired queuing type (Queued or Non-queued).
 - 4. **Submit** \boxtimes -the preschedule request for evaluation.

The preschedule request, including the changes, will be evaluated as a new preschedule request and will be placed at the bottom of the queue stack.

To change a preschedule request with a "Presched Mkt Closed" status it is necessary to re-enter the preschedule request with the desired modifications.

Preschedule requests may not be modified while the MIS is performing the periodic evaluation. A message in the "Messages" field will indicate this condition.

7.8.4 Preschedule Requests Using Upload/Download

Preschedule requests may be submitted and managed using the upload/download process. Templates for submitting, and deleting preschedule requests, as well as the associated response templates are included in Chapter 8. These templates should only be used for preschedule requests.

Preschedule requests submitted through the upload/download process may also be managed via the interactive MIS preschedule request features. The section above entitled "Managing submitted preschedule requests" explains this process.

The MIS will not recognize the "Queue Flag" fields until the queuing feature is activated.

8.0 Upload/Download Batch Procedures

8.1 Introduction

In Section 7 we describe an interactive method for entering bids into NYISO MIS, and for retrieving schedule information after markets settle. The method is based on the use of interactive Web Browser technology.

In this section we describe equivalent functionality for bid submission and retrieval of schedule information using an application program interface developed by the Market Participant. This method requires that all information submitted for a bid be prepackaged into files, which are then sent to the NYISO MIS. Similarly, on return, the MIS packages all responses into a file, which is then retrieved by the Market Participant. This interface is provided for quick, efficient transfer of large amounts of bid and schedule data between NYISO Customers and NYISO. The method is particularly suitable when NYISO Customers already have the data required by the MIS in electronic format, or are planning to develop applications to create such data.

The Market Participants should also review Section 7 to better visualize the information that is exchanged with the MIS.

- **CSV File** The data that is prepared by the Market Participant or is returned by the MIS in response to Market Participant's bid or a query is a text file consisting of multiple records, each with one or more comma separated value fields. This type of file is known as comma separated value, or CSV.
- **Templates** There are six functions supported by these files:
 - 1. Market Participant submits bids for generation, load, or transactions.
 - 2. MIS responds to the bids.
 - 3. Market Participant submits a query to obtain status of generation, load, or transaction schedules.
 - 4. MIS responds to the query.
 - 5. Market Participant deletes a generator, load or transaction bid
 - 6. MIS responds to the deletion.

These functions are common to generation, loads and transactions, but the format of files for each of these types is different.

We describe each type of data as a template; e.g., generator bid/response template or generator query/response template:

• Bids and the corresponding responses are described in the Upload Templates section (Section 8.2).

	• Queries and the corresponding responses are described in the Download Templates section (Section 8.3).
	Responses to bids are automatic; i.e. the Market Participant does not have to issue a query after submitting a bid to get a response with information about the status of the bid.
Access to Public Information	Public information such as NYISO load forecast, ATC/TTC values, LBMP prices, etc. are not accessible through the upload/download templates. Instead, this information is accessible through the MIS. From the NYISO home, select <u>OASIS</u> , then <u>Prices & Public Information</u> . This takes you to the LBMP Results page, which allows selection of information in HTML format. A hyperlink at the bottom of this page takes you to the LBMP Results Download page (results in CSV format). These capabilities are described in Section 5, OASIS.
File Exchange vs. Data Stream	We describe the upload/download interface in terms of file exchanges. However, although this information may be an actual file on the client side (where Market Participant prepares and submits information), it is received on the server side (where the MIS functions reside) as a stream, and then processed and stored into a database. Thus, on the MIS side it is not stored as a file.
	It is likely that some Market Participants will actually develop their own applications to output the information as a stream instead of creating the file first. The template information is described as if it was a file only because it simplifies the explanation, and because streams are often stored in files.

8.1.1 Upload and Download Process

Using Upload/Download Batch interface requires selecting Upload/Download through a series of hyperlinks from the NYISO home page. A Web Browser or a customer application that supports authentication and encryption is required to gain access.

From the NYISO home page located at <u>www.NYISO.com</u>, select <u>OASIS</u>, then select <u>Bidding & Scheduling</u>, then select <u>Upload/Download</u>. With the proper Digital Certificate, the MIS Upload/Download display appears (see Exhibit 8.1).

Exhibit 8.1: MIS Upload/Download Display



The user then selects a file from his/her local disk by typing a file name or using the (file) Browse button available with Netscape 4.x and MS Explorer 4.x, or equivalent. When the user clicks on the SUBMIT button, the input file is sent to the web server (method = 'POST'), where it is received by the MIS interface program.

An MIS application processes the information in the template and generates a response. The browser receives and displays the CSV text response, which can then be saved as a file if desired on the Market Participant's local computer.

This procedure is compatible with the two popular Web Browsers, Internet Explorer version 4.x, and Netscape Navigator 4.x.

8.1.2 Overview of Templates

There are two types of templates: upload templates and download templates. The upload template is discussed first.

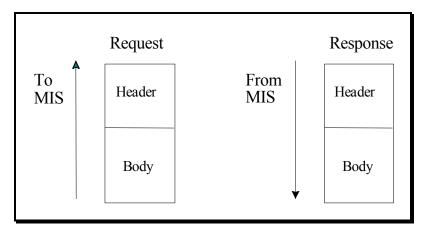
Upload Template

There are eight upload templates:

- Generator Bid
- Generator Commitment Parameters
- Load Bid
- Transaction Bid
- Confirm Transaction Bid
- Delete Generator Bid
- Delete Load Bid
- Delete Transaction Bid.

Each upload template is divided into an upload request and upload response. Each request and response has a header and footer as shown in Exhibit 8.2. Let's look at the upload request first.

Exhibit 8.2: Upload Template



The header of the upload request is delimited by ampersands (&) that separate the various records of the header. All upload requests require a four- record header as follows:

1. BID_TYPE	Indicates the type of information requested or bid that is being supplied
2. USERID	To log on to MIS
3. PASSWORD	To log on to MIS
4. DATA ROWS	The number of records that follow

Valid BID_TYPE values are:

- GEN_BID Generator Bids
- UC_DATA Generator Commitment Parameters

NYISO Market Participant User's Guide (Rev.: 0605/0123/20012002) Sec. 8.0: Upload/Download Batch Procedures

	 TRAN_BID – Transa CONFIRM_TRAN_ DELETE_GEN_BID DELETE_LOAD_BD DELETE_TRAN_BD The body of the upload read the set of the se	 CONFIRM_TRAN_BID – Transaction Bid Confirmation DELETE_GEN_BID – Generator Bid Deletion DELETE_LOAD_BID – Load Bid Deletion 						
Upload Response	The response to an upload request contains a three-record header as follows.							
	1. TIME_STAMP	An indication of the time that the MIS processed information						
	2. BID_TYPE	An indication of the type of information requested or bid that is being supplied (See valid bid types above)						
	3. DATA ROWS	The number of records that follow						
	The body of the upload response is defined for each bid type in Sections 8.2.1 - 8.2.5.							

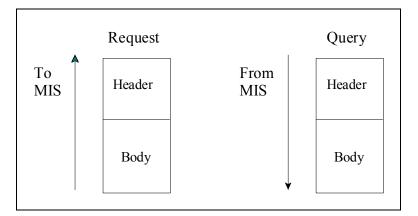
Download Template

There are five download templates. They are as follows:

- Generator Bids and Schedule
- Generator Commitment Parameters
- Load Bids and Schedule
- Transaction Bids and Schedules
- Transaction Confirmation Status.

Each download template is divided into an upload request and upload response. Each request and response has a header and footer as shown in Exhibit 8.3.

Exhibit 8.3: Download Template



Download Query	The header of the download query is delimited by ampersands (&) that separate the various records of the header. All download queries require a three-record header as follows:							
	1. USERID	To log on to MIS						
	2. PASSWORD	To log on to MIS						
	3. QUERY_TYPE	Indicates the type of information requested or bid that is being supplied.						
	Valid QUERY_TYPE values are:							
	 GEN_SCH – Generator Bids and Schedules U_COMM – Generator Commitment Parameters LOAD_SCH – Load Area Bus Schedules TRAN_SCH – Transaction Bid and Schedules TRAN_CFRM – Transaction Confirmation Status. 							
	The body of the downloa	ad query is defined for each bid type in Sections 8.3.1 - 8.3.5.						
Download Response	The response to a download request contains a three-record header, as follows:							
	1. TIME_STAMP	An indication of the time that the MIS processed information						
	2. BID_TYPE	An indication of the type of information requested (See valid bid types above)						
	3. DATA ROWS	The number of records that follow.						

The body of the upload response is defined for each bid type in Sections 8.3.1 - 8.3.5.

8.1.3 Section Organization Sections 8.2 and 8.3 describe the upload and download templates. The material in each subsection is organized as described below:

Section Title	This is the title or action associated with process. For example, the title of Section 8.2.1 is Submit Generator Bids.		
Data Dictionary	For each parameter used in a bid or returned with a response, a definition is supplied as to what the parameter is. Two data type formats are provided:		
	• a CHAR(x) format indicates a variable length string with maximum number of characters equal to 'x'		
	• a NUM(x,y) format indicates a maximum of 'x' digits excluding decimal point and sign, with 'y' digits of precision		
	% For example, NUM(5,1) has limits of -9999.9 to 9999.9. A NUM format without 'x' and 'y' indicates an unrestricted numeric (practical limits for these is NUM(8,0) or lower).		
Template Body Submission Fields	The title line identifies the parameters being submitted. For example, the first title line in Section 8.2.1 is "Generator Bid Submission Parameters (E-7)." The reference in parentheses, such as "E-7," indicates the Market Participant User display that corresponds to the template. The displays are described in detail in Section 7.		
	Following the title is an ordered, comma-separated list of fields that must appear in the template. Required parameters are shown in bold under the submission section of the template. Optional parameters allow null (no characters between commas) to be supplied.		
Template Body Response Fields	The title line identifies the parameters contained in the response and the corresponding display. For example, in Section 8.2.1, the title is "Generator Bid Response Parameters (E-7)."		
	Following the title is an ordered, comma-separated list of fields that the MIS will return in response to a particular submission.		
Input File Example	This section shows an example of an input file (submission), in CSV format.		
Output File Example	This section shows an example of an output file (response), in CSV format.		

8.2 Upload Templates

Note: The Data Dictionary sections below are not intended to be used for showing the order of the parameters. An ordered list of parameters that the program expects and returns is provided in the templates under the submission and response sections. Required parameters are shown in bold under the submission section of the template.

8.2.1 Submit Generator Bids Data Dictionary

BID	TYPE=GEN BID

Parameter	Data Type	Description
Generator	NUM(6,0)	Name or PTID for the generator exactly as shown in the MIS.
Date & time	CHAR(16)	Starting time of bid (MM/DD/YYYY HH24:00).
Duration	NUM(3)	Number of hours the bid is good for.
Market	CHAR(4)	Markets bid is good for (DAM or HAM).
Expiration	CHAR(16)	Time generator bid is no longer available for consideration in DAM supplemental commitments (MM/DD/YYYY HH24:00).
Upper operating limit	NUM(5,1)	Maximum MWs that the generator can supply.
Zero start-up cost	CHAR(1)	A flag indicating a start-up cost of zero should be substituted for the normal start-up cost supplied in the commitment bid for times specified with this bid.
On-dispatch	CHAR(1)	A flag indicating if the generator will be following SCD basepoints (Y or N)
Fixed min. gen. (MW)	NUM(5,1)	Lower operating limit for the unit.
Fixed min. gen. Cost (\$)	NUM(7,2)	Bid cost for the unit to reach the minimum operating point.
Bid curve format	CHAR(1)	Indicate if curve supplied is of a block bid (3 pair max. step function) or energy cost curve format (6 pairs max) (B or C).
Dispatch curve W(1-6)	NUM(5,1)	1-6 MW points of a dispatch curve.
Dispatch curve \$/MW(1-6)	NUM(6,2)	1-6 \$/MW points of a dispatch curve

10 min non-synch mw	NUM(5,1)	MWs of non-synchronous capacity bid to satisfy NY ISO 10 minute total reserve requirement.
10 min non-synch cost	NUM(6,2)	Cost / MW of non-synchronous capacity bid to satisfy NY ISO 10 minute total reserve requirement.
10 min spinning mw	NUM(5,1)	MW of spinning capacity bid to satisfy NY ISO 10 minute spinning reserve requirement.
10 min spinning cost	NUM(6,2)	Cost per MW of spinning capacity bid to satisfy NY ISO 10 minute spinning reserve requirement.
30 min non-synch mw	NUM(5,1)	MWs of non-synchronous capacity bid to satisfy NY ISO operating reserve requirement.
30 min non-synch cost	NUM(6,2)	Cost / MW of non-synchronous capacity bid to satisfy NY ISO operating reserve requirement.
30 min spinning mw	NUM(5,1)	MW of spinning capacity bid to satisfy NY ISO operating reserve requirement.
30 min spinning cost	NUM(6,2)	Cost per MW of spinning capacity bid to satisfy NY ISO operating reserve requirement.
Regulation MWs	NUM(5,1)	MW of generation bid to respond to AGC signals.
Regulation cost	NUM(6,2)	Cost per MW of generation bid to respond to AGC signals.
Bid id	NUM	A unique identifier identifying the bid.
Sched energy	NUM(5,1)	Scheduled generator energy.
Sched 10 min non- synch	NUM(5,1)	Scheduled 10 minute non-synchronized reserve (MW).
Sched 10 min spinning	NUM(5,1)	Scheduled 10 minute spinning reserve (MW).
Sched 30 min non- synch	NUM(5,1)	Scheduled 30 minute non-synchronized reserve (MW).
Sched 30 min spinning	NUM(5,1)	Scheduled 30 minute spinning reserve (MW).
Sched regulation	NUM(5,1)	Scheduled regulation (MW).
Forecasted reserve	NUM(5,1)	Additional capacity that the ISO has reserved to satisfy the ISO load forecast above market participant day ahead load purchases.
Sched available stat	CHAR(1)	Scheduled generator availability status (Y, N, or null).

Sched on-line stat	CHAR(1)	Scheduled generator on-line status (Y, N, or null).
Sched on-dispatch stat	CHAR(1)	Scheduled generator on-dispatch status (Y, N, or null).
Sched on-control stat	CHAR(1)	Scheduled generator on-control status (Y, N, or null).
Bid status	CHAR(20)	Current status of the bid (validation failed, validation passed, accepted, etc.)
Message	CHAR(1000)	Validation messages providing bid details.

Generator Bid Submission Parameters (E-7)

generator, date & time, duration, market, expiration, upper operating limit, spare, spare, zero start-up cost, on-dispatch, fixed min. gen. (MW), fixed min. gen. cost (\$), bid curve format, dispatch curve MW(1-6), dispatch curve \$/MW(1-6), 10 min non-synch mw, 10 min non-synch cost, 10 min spinning mw, 10 min spinning cost, 30 min non-synch mw, 30 min non-synch cost, 30 min spinning mw, 30 min spinning cost, regulation MWs, regulation cost

Generator Bid Response Parameters (E-7)

generator name, generator PTID, date & time, market, expiration, upper operating limit, spare, spare, zero start-up cost, on-dispatch, fixed min. gen. (MW), fixed min. gen. cost (\$), bid curve format, dispatch curve MW(1-6), dispatch curve \$/MW(1-6), 10 min non-synch mw, 10 min non-synch cost, 10 min spinning mw, 10 min spinning cost, 30 min non-synch mw, 30 min non-synch cost, 30 min spinning mw, 30 min spinning cost, regulation MWs, regulation cost, bid id, sched energy, sched 10 min non-synch, sched 10 min spinning, sched 30 min non-synch, sched 30 min spinning, sched regulation, forecasted reserve, sched available stat, sched on-line stat, sched on-dispatch stat, sched on-control stat, bid status, message

Generator Bid Examples

Input File Example

BID_TYPE=GEN_BID&

USERID=testupId&

PASSWORD=testupId&

DATA_ROWS=2&

8 – 10

900302,06/30/1999 00:00,2,HAM,06/29/1999 22:30,500,,,,N,Y,200,5000,B,100,200,300,,,,,10,20,30,,,,100,10,200,10,300,15,,,150,10

SUBZ_900101_38_GEN - 900301,06/30/1999 00:00,1,DAM,06/29/1999 22:30,500,,,N,Y,200,5000,B,100,200,300,,,,10,20,30,,,,100,10,200,10,,,300,10,150,10

BID_TYPE=GEN_BID

DATA ROWS=3

"SUBZ_900101_38_GEN - 900302",900302,"06/30/1999 00:00","HAM","",500,"","","N","Y",200,5000,"B",100,200,300,,,,10,20,30,,,,100,10,200, 10,300,15,,,150,10,255259,,,,,,,,",",",","VALIDATION FAILED","30 Minute Non-Synch Reserve Not able to start in time. Start up notification time is .5 hours.Generator not qualified to bid HAM 10 minute non-synchronized reserve.HAM 10 Minute Spinning Block Reserve Bid must be = $1 \& \leq =$ Emergency Response Rate.HAM regulation bid MW outside limits."

"SUBZ 900101 38 GEN - 900302",900302,"06/30/1999

01:00", "HAM", "", 500, "", "", "N", "Y", 200, 5000, "B", 100, 200, 300, ..., 10, 20, 30, ..., 100, 10, 200, 10, 300, 15, ..., 150, 10, 255260, ..., ",", ",", "VALIDATION FAILED", "30 Minute Non-Synch Reserve Not able to start in time. Start up notification time is .5 hours. Generator not qualified to bid HAM 10 minute non-synchronized reserve. HAM 10 Minute Spinning Block Reserve Bid must be = $1 \& \leq$ Emergency Response Rate. HAM regulation bid MW outside limits."

"SUBZ_900101_38_GEN - 900301",900301,"06/30/1999 00:00","DAM","06/29/1999 22:30",500,"","","N","Y",200,5000,"B",100,200,300,,,,10,20,30,,,,100,10,200,10,,,300,10 ,150,10,255261,,,,,",","","VALIDATION FAILED","DAM 10 Minute Spinning Block Reserve Bid must be = 1 & <= Emergency Response Rate.DAM regulation bid MW outside limits.Generator not qualified to bid DAM 10 minute non-synchronized reserve."

8.2.2 Submit Generator Commitment Parameters Data Dictionary

BID_TYPE= UC_DATA

Parameter	Data Type	Description
Generator	NUM or CHAR(32)	Name or PTID for the generator shown in MIS.
Min. run time	NUM(5,2)	Minimum hours in a dispatch day a unit must run once started by the ISO.
Min. down time	NUM(5,2)	Minimum hours in a dispatch day a unit must be down was decommitted by the ISO.
Max. stops per day	NUM(3,0)	Number of times a unit can be decommitted in a dispatch day.
Start-up notification	NUM(5,2)	The time it takes for a generator to reach its own min gen level after notification from the NYISO is given.
Start-up bid time (1- 6)	NUM(5,2)	Start-up cost curve, hours off-line.
Start-up bid cost (1- 6)	NUM(7,2)	Start-up cost curve, \$ to start.
Notification hours to start (1-6)	NUM(5,2)	Start-up notification time curve, hours to start.
Notification hours off line (1-6)	NUM(5,2)	Start-up notification time curve, hours off-line.
Commitment id	NUM	Unique identifier identifying the commitment data being supplied.
Update user	CHAR	MIS user that supplied the current data.
Update time	CHAR(16)	Time bid was submitted to MIS (MM/DD/YYYY HH24:00)

Generator Bid Parameters (E-2)

generator, min. run time, min. down time, max. stops per day, start-up notification, start-up bid time (1-6), start-up bid cost (1-6), notification hours to start (1-6), notification hours off line (1-6)

Generator Commitment Response Parameters (E-2)

generator name, generator PTID, min. run time, min. down time, max. stops per day, start-up notification, start-up bid time (1-6), start-up bid cost (1-6), notification hours to start (1-6), notification hours off line (1-6), commitment id, update user, update time

	Generator Commitment Example		
Input File Example	ID_TYPE=UC_DATA&		
	USERID=testupld&		
	PASSWORD=testupId&		
	DATA_ROWS=2&		
	"SUBZ_900101_38_GEN - 900301",5,2,2,1,1,2,3,4,5,6,11000,12000,13000,14000,15000,16000,1,2,3,4,5,6,1,2,3,4,5,6 6		
	900302,5,2,2,1,1,2,3,4,5,6,11000,12000,13000,14000,15000,16000,1,2,3,4,5,6,1,2,3,4,5,6		
Output File Example	TIME_STAMP=08/04/1998 11:02		
	BID_TYPE=UC_DATA		
	DATA_ROWS=2		
	"SUBZ_900101_38_GEN - 900301",900301,5,2,2,1,1,2,3,4,5,6,11000,12000,13000,14000,15000,16000,1,2,3,4,5,6,1 ,2,3,4,5,6,105756,"TESTUPLD","08/04/1998 11:02"		
	"SUBZ_900101_38_GEN -		

900302["],900302,5,2,2,1,1,2,3,4,5,6,11000,12000,13000,14000,15000,16000,1,2,3,4,5,6,1 ,2,3,4,5,6,105757,"TESTUPLD","08/04/1998 11:02"

8.2.3 Submit Loads

Data Dictionary

BID_TYPE=LOAD_BID

Parameter	Data Type	Description
Load	NUM or CHAR(32)	Name or PTID for a load exactly as shown in the MIS.
Date & time	CHAR(16)	Starting time of bid (MM/DD/YYYY HH24:00). For transition from daylight savings time to standard time, time 2:00 is automatically repeated. The second hour 2:00 can be overwritten by entering a time of 25:00.
Forecast MW	NUM(6,1)	Forecasted MWs to be consumed.
Fixed MW	NUM(6,1)	Fixed MWs that are to be procured from the DAM
Price cap 1 MW	NUM(6,1)	Fixed block of dispatchable load based on associated price.
Price cap 1 dollar	NUM(6,2)	Dispatchable load dollars per MW.
Price cap 2 MW	NUM(6,1)	Fixed block of dispatchable load based on associated price.
Price cap 2 dollar	NUM(6,2)	Dispatchable load dollars per MW.
Price cap 3 MW	NUM(6,1)	Fixed block of dispatchable load based on associated price.
Price cap 3 dollar	NUM(6,2)	Dispatchable load dollars per MW.
Interruptible type	CHAR(10)	Flag indicating load will interrupt in 10 or 30 minutes for purpose of satisfying ISO reserve requirement (10MIN or 30MIN)
Interruptible fixed MW	NUM(6,1)	Interruptible load bid MW, associated with the fixed MW bid, available for satisfying reserve requirement.
Interruptible fixed cost	NUM(6,2)	Cost for interruptible fixed load bid.
Interruptible capped MW	NUM(6,1)	Interruptible load bid MW, associated with the price capped MW bid, available for satisfying reserve requirement.
Interruptible capped cost	NUM(6,2)	Cost for interruptible capped load bid.
Bid id	NUM	A unique identifier identifying the bid.

Sched price capped	NUM(6,1)	Scheduled energy associated with the price capped bid (MW).
Sched interruptible fixed	NUM(6,1)	Amount of fixed load that as been scheduled as available to interrupt (MW).
Sched interruptible capped	NUM(6,1)	Amount of price capped load that has been scheduled as available to interrupt (MW)
Bid status	CHAR(20)	Current status of the bid (validation failed, validation passed, accepted, etc.)
Message	CHAR(1000)	Validation messages providing bid details.

Load Data Submission Parameters (F-3)

load, date & time, forecast MW, fixed MW, price cap 1 MW, price cap 1 dollar, price cap 2 MW, price cap 2 dollar, price cap 3 MW, price cap 3 dollar, interruptible type, interruptible fixed MW, interruptible fixed cost, interruptible capped MW, interruptible capped cost

Load Data Response Parameters (F-3)

load name, load PTID, date & time, forecast MW, fixed MW, price cap 1 MW, price cap 1 dollar, price cap 2 MW, price cap 2 dollar, price cap 3 MW, price cap 3 dollar, interruptible type, interruptible fixed MW, interruptible fixed cost, interruptible capped MW, interruptible capped cost, bid id, sched price capped, sched interruptible fixed, sched interruptible capped, bid status, message

Load Bid Examples

Input File Example BID_TYPE=LOAD_BID&

USERID=testupld&

PASSWORD=testupId&

DATA_ROWS=2&

900321,08/08/1998 00:00,300,300,350,20,450,25,,,30MIN,250,10,400,20

Output File Example TIME_STAMP=08/04/1998 11:04

BID_TYPE=LOAD_BID

DATA_ROWS=2

"BUS - 900321_38_TEST_BUS - 21",900321,"08/08/1998 00:00",300,300,350,20,450,25,,,"30MIN",250,10,400,20,105718,,,,,"VALIDATION PASSED","" "BUS - 900322_38_TEST_BUS - 22",900322,"08/08/1998 00:00",300,300,,,,,,,"10MIN",250,10,,,105719,,,,,"VALIDATION PASSED",""

8.2.4 Submit Transactions

Data Dictionary

BID_TYPE=TRAN_BID

Parameter	Data Type	Description
Date & time	CHAR(16)	Starting time of bid (MM/DD/YYYY HH24:00). For transition from daylight savings time to standard time, time 2:00 is automatically repeated. The second hour 2:00 can be overwritten by entering a time of 25:00.
Source	NUM(6,0)	Generator name or PTID for the generator exactly as shown in the MIS that is source for transaction.
Sink	NUM(6,0)	Load name or PTID for a load exactly as shown in the MIS that is sink for transaction.
Market	CHAR(9)	Markets bid is good for (DAM, HAM, or NON-FIRM).
Sending control area	CHAR(4)	Sending control area specified in the NERC Tag.
Pse	CHAR(6)	Purchase selling entity specified in the NERC Tag.
Pse number	CHAR(7)	Unique number assigned by PSE that is specified in the NERC TAG
Receiving control area	CHAR(4)	Receiving control area specified in the NERC Tag.
Nerc priority	NUM	NERC Priority of transaction. 1-6 used for non-firms. 7 is used for firms.
User reference	CHAR(16)	A reference used by the user to uniquely identify this transaction.
Transaction priority	NUM(2,0)	Ranking of this transaction relative to other transactions tied to same generator. 1 is last to be curtailed. Equal priorities are cut on a prorata basis.
Bid energy MW	NUM(5,1)	Fixed block of energy MW supported by transaction.
Sink price cap dollar	NUM(6,2)	Dollar value used to cut transaction based on energy value at sink.
Decremental dollar	NUM(6,2)	Decremental dollar value associated with transaction.
Bid id	NUM	A unique identifier identifying the bid.
Transaction id	NUM	A unique identifier identifying the static contract data associated with the bid.

Seller confirm flag	CHAR(1)	Flag indicating if seller has agreed to transaction bid.
Buyer confirm flag	CHAR(1)	Flag indicating if buyer has agreed to transaction bid.
Sched energy	NUM(5,1)	Schedule amount of energy (MW)
Bid status	CHAR(20)	Current status of the bid (validation failed, validation passed, accepted, etc.)
Message	CHAR(1000)	Validation messages providing bid details.

Transaction Bid Submission Parameters (H-5)

date & time, source, sink, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar

Note: For transactions, required parameters and those required to be null are based on the transaction type and location of the generator and load. The bold parameters are required and required null parameters are shown deleted.

1. Firm internal date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar,

where market = HAM or DAM and NERC Priority = 7.

2. Firm export date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar,

where market = HAM or DAM, sending control area = NYPP, and NERC Priority = 7.

3. Firm import date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference,, bid energy MW, , decremental dollar

where market = HAM or DAM, receiving control area = NYPP, and NERC Priority = 7.

4. Firm wheel-through date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference,, bid energy MW, , decremental dollar

where market = HAM or DAM and NERC Priority = 7.

5. Non-firm internal transaction	date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference,, bid energy MW, ,	
	where market = NON-FIRM and NERC Priority = 1-6.	
6. Non-firm import, export, and wheel- through transaction	date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference,, bid energy MW, ,	
	where market = NON-FIRM and NERC Priority = 1-6.	
7. External Generator Bid into LBMP Market	date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference,, bid energy MW, , decremental dollar	
	where sink = NYISO LBMP Reference, market = HAM or DAM, receiving control area = NYPP, and NERC Priority = 7.	
8. External Load Bid into LBMP Market	date & time, source, sink, market, sending control area, pse, pse number, , receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar,	
	where source = NYISO LBMP Reference, market = HAM or DAM, sending control area = NYPP, and NERC Priority = 7.	
Note:	NYISO LBMP Reference and all external sources and sinks provided in a transaction request are automatically confirmed.	
	Transaction Bid Response Parameters (H-5) date & time, source name, source PTID, sink name, sink PTID, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, bid id, transaction id, seller confirm flag, buyer confirm flag, sched energy, bid status, message	
Note:	There is one example for each type: internal, non-firm, and external	
Input File Example	BID_TYPE=TRAN_BID& USERID=testupId& PASSWORD=testupId& DATA_ROWS=3&	
	06/30/1999 00:00,SUBZ_900101_38_GEN - 900301,900320,DAM,,,,,7,1001,1,301.0,1.00,	
	06/30/1999 00:00,900301,BUS - 900324_38_TEST_BUS - 24,NON- FIRM,HQ,HQ100,100H,5,NIMO,6,1006,,301.0,1.00,	
	06/30/1999 00:00,900307,900320,HAM,HQ,HQ100,100H,,NIMO,7,1008,,301.0,1.00,2	

Output File Example	TIME_STAMP=06/23/1999 15:37
	BID TYPE=TRAN BID
	DATA ROWS=3
	"06/30/1999 00:00", "SUBZ 900101 38 GEN - 900301", 900301, "BUS -
	900320 38 TEST BUS -
	20",900320,"DAM","","","",7,"1001",1,301,1,,255256,107439,"N","Y",,"WAITING
	CONFIRMATION","Buyer automatically confirmed.Transaction Seller not Confirmed."
	"06/30/1999 00:00", "SUBZ 900101 38 GEN - 900301", 900301, "BUS -
	900324 38 TEST BUS -
	24",900324,"NONFIRM","HQ","HQ100","100H",,"NIMO",6,"1006",,301,1,,255257,107
	503, "Y", "Y", "VALIDATION PASSED", "Buyer automatically confirmed. Seller
	automatically confirmed."
	"06/30/1999 00:00", "SUBZ 900103 38 GEN - 900307", 900307, "BUS -
	900320 38 TEST BUS -
	20",900320,"HAM","HQ","HQ100","100H",,"NIMO",7,"1008",,301,1,2,255258,107506,
	"Y", "N", "WAITING CONFIRMATION", "Transaction Buyer not Confirmed.Seller
	automatically confirmed."
	automaticany commined.

8.2.5 Confirm Transaction Bids

Data Dictionary

BID_TYPE=CONFIRM_TRAN_BID

Parameter	Data Type	Description
Bid id	NUM	Unique identifier identifying the bid.
Transaction id	NUM	A unique identifier identifying the static contract data associated with the bid.
Date & time	CHAR(16)	Day and time of bid (MM/DD/YYYY HH24:00).
Who	CHAR(1)	Indicates buyer or seller (B or S).
Confirm status	CHAR(1)	Status of confirmation the bid should be set to (Y or N).
Sink confirm status	CHAR(1)	Status of sink confirmation.
Source confirm status	CHAR(1)	Status of source confirmation.
Bid status	CHAR(20)	Current status of the bid (validation failed, validation passed, accepted, etc.)
Message	CHAR(1000)	Validation messages providing bid details.

Transaction Bid Confirmation Parameters (H-7)

bid id, transaction id, date & time, who, confirm status

Note: Recommended confirmation method is to enter all three parameters or just bid id. Optionally, the transaction id and date & time without bid id may be entered to confirm a transaction.

Note: NYISO LBMP Reference and all external sources and sinks provided in a transaction request are automatically confirmed.

Transaction Bid Confirmation Response (H-7)

bid id, transaction id, date & time, sink confirm status, source confirm status, bid status, message

Transaction Bid Confirmation Examples

Input File Example

BID_TYPE=CONFIRM_TRAN_BID& USERID=testupId& PASSWORD=testupId&

DATA_ROWS=2&

,104197,08/08/1998 00:00,S,N

105727,,,B,N

 Output File Example
 TIME_STAMP=08/04/1998 11:07

 BID_TYPE=CONFIRM_TRAN_BID
 DATA_ROWS=2

 105725,104197,"08/08/1998 00:00","Y","N","WAITING CONFIRMATION",""

 105727,104237,"08/08/1998 00:00","N","Y","WAITING CONFIRMATION",""

8.2.6 Delete Generator Bids

Data Dictionary

BID_TYPE=DELETE_GEN_BID

Parameter	Data Type	Description
Bid id	NUM	Unique identifier identifying the bid.
Generator	NUM or CHAR(32)	Name or PTID for the generator exactly as shown in the MIS.
Date & time	CHAR(16)	Day and time of bid (MM/DD/YYYY HH24:00).
Market	CHAR(4)	Markets bid is good for (DAM or HAM).

Delete Generator Bid Confirmation Parameters

Bid id, generator, date & time, market

Note: Recommended deletion method is to enter all three parameters or just bid id. Optionally, the generator and date & time without bid id may be entered to delete a bid.

Delete Generator Bid Confirmation Response (E-5)

generator name, generator PTID, date & time, market, expiration, upper operating limit, spare, spare, zero start-up cost, on-dispatch, fixed min. gen. (MW), fixed min. gen. cost (\$), bid curve format, dispatch curve MW(1-6), dispatch curve \$/MW(1-6), 10 min non-synch mw, 10 min non-synch cost, 10 min spinning mw, 10 min spinning cost, 30 min non-synch mw, 30 min non-synch cost, 30 min spinning mw, 30 min spinning cost, regulation MWs, regulation cost, bid id, sched energy, sched 10 min non-synch, sched 10 min spinning, sched 30 min non-synch, sched 30 min spinning, sched regulation, forecasted reserve, sched available stat, sched on-line stat, sched on-dispatch stat, sched on-control stat, bid status, message

Delete Generator Bid Confirmation Examples

Input File Example	BID_TYPE=DELETE_GEN_BID& USERID=testupId& PASSWORD=testupId& DATA_ROWS=1& ,900302,06/30/1999 00:00,HAM
Output File Example	TIME_STAMP=06/23/1999 15:39 BID_TYPE=DELETE_GEN_BID DATA_ROWS=1 "SUBZ_900101_38_GEN - 900302",900302,"06/30/1999 00:00","HAM","",500,"","","N","Y",200,5000,"B",100,200,300,,,,10,20,30,,,,100,10,200, 10,300,15,,,150,10,255259,,,,,,,,,",",","VALIDATION FAILED","30 Minute Non- Synch Reserve Not able to start in time. Start up notification time is .5 hours.Generator

not qualified to bid HAM 10 minute non-synchronized reserve.HAM 10 Minute Spinning Block Reserve Bid must be = 1 & <= Emergency Response Rate.HAM regulation bid MW outside limits."

8.2.7 Delete Load Bids

Data Dictionary

BID_TYPE=DELETE_LOAD_BID

Parameter	Data Type	Description
Bid id	NUM	Unique identifier identifying the bid.
Load	NUM or CHAR(32)	Name or PTID for a load exactly as shown in the MIS.
Date & time	CHAR(16)	Day and time of bid (MM/DD/YYYY HH24:00).

Delete Load Bid Confirmation Parameters

Bid id, load, date & time

Note: Recommended deletion method is to enter all three parameters or just bid id. Optionally, the load and date & time without bid id may be entered to delete a bid.

Delete Load Bid Confirmation Response (F-3)

load name, load PTID, date & time, forecast MW, fixed MW, price cap 1 MW, price cap 1 dollar, price cap 2 MW, price cap 2 dollar, price cap 3 MW, price cap 3 dollar, interruptible type, interruptible fixed MW, interruptible fixed cost, interruptible capped MW, interruptible capped cost, bid id, sched price capped, sched interruptible fixed, sched interruptible capped, bid status, message

Delete Bid Confirmation Examples

BID_TYPE=DELETE_LOAD_BID&
USERID=testupld&
PASSWORD=testupId&
DATA_ROWS=1&
,900321,06/30/1999 00:00
TIME_STAMP=06/23/1999 15:46
BID_TYPE=DELETE_LOAD_BID
DATA_ROWS=1
"BUS - 900321_38_TEST_BUS - 21",900321,"06/30/1999 00:00",300,300,350,20,450,25,,,,"",,,,,255262,,,,,"VALIDATION PASSED",""

8.2.8 Delete Transaction Bids

Data Dictionary

BID_TYPE=DELETE_TRAN_BID

Parameter	Data Type	Description	
Bid id	NUM	Unique identifier identifying the bid.	
Transaction id	NUM	A unique identifier identifying the static contract data associated wit the bid.	
Date & time	CHAR(16)	Day and time of bid (MM/DD/YYYY HH24:00).	
Market	CHAR(4)	Market bid is good for (DAM, HAM, or NON-FIRM).	

Delete Transaction Bid Confirmation Parameters

Bid id, transaction id, date & time, market

Note: Recommended deletion method is to enter all three parameters or just bid id. Optionally, the transaction id and date & time without bid id may be entered to delete a bid.

Delete Transaction Bid Confirmation Response (H-3)

date & time, source name, source PTID, sink name, sink PTID, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, bid id, transaction id, seller confirm flag, buyer confirm flag, sched energy, bid status, message

Delete Bid Confirmation Examples

Input File Example	BID_TYPE=DELETE_TRAN_BID&
	USERID=testupld&
	PASSWORD=testupId&
	DATA_ROWS=3&
	,107439,06/30/1999 00:00,DAM
	255257,107503,06/30/1999 00:00,NON-FIRM
	255258,,,
Quinut Filo Exampla	TIME STAMP-06/23/1000 15:48

Output File Example TIME_STAMP=06/23/1999 15:48

BID_TYPE=DELETE_TRAN_BID

DATA_ROWS=3

"06/30/1999 00:00","SUBZ_900101_38_GEN - 900301",900301,"BUS -900320_38_TEST_BUS -20",900320,"DAM","","",",",7,"1001",1,301,1,,255256,107439,"N","Y",,"WAITING CONFIRMATION","Buyer automatically confirmed.Transaction Seller not Confirmed."

"06/30/1999 00:00","SUBZ_900101_38_GEN - 900301",900301,"BUS -900324_38_TEST_BUS -24",900324,"NONFIRM","HQ","HQ100","100H",,"NIMO",6,"1006",,301,1,,255257,107 503,"Y","Y",,"VALIDATION PASSED","Buyer automatically confirmed.Seller automatically confirmed."

"06/30/1999 00:00","SUBZ_900103_38_GEN - 900307",900307,"BUS -900320_38_TEST_BUS -20",900320,"HAM","HQ","HQ100","100H",,"NIMO",7,"1008",,301,1,2,255258,107506, "Y","N",,"WAITING CONFIRMATION","Transaction Buyer not Confirmed.Seller automatically confirmed."

8.2.9 Submit Prescheduled Transactions

Data Dictionary

BID_TYPE=PRESCHED_TRAN_BID

Parameter	Data Type	Description	
Date & time	CHAR(16)	Starting time of bid (MM/DD/YYYY HH24:00). For transition from daylight savings time to standard time, time 2:00 is automatically repeated. The second hour 2:00 can be overwritten by entering a time of 25:00.	
Source	NUM(6,0)	Generator name or PTID for the generator exactly as shown in the MIS that is source for transaction.	
Sink	NUM(6,0)	Load name or PTID for a load exactly as shown in the MIS that is sink for transaction.	
Market	CHAR(9)	Markets bid is good for (DAM).	
Sending control area	CHAR(4)	Sending control area specified in the NERC Tag.	
PSE	CHAR(6)	Purchase selling entity specified in the NERC Tag.	
PSE number	CHAR(7)	Unique number assigned by PSE that is specified in the NERC TAG	
Receiving control area	CHAR(4)	Receiving control area specified in the NERC Tag.	
NERC priority	NUM	NERC Priority of transaction. "1-6" used for non-firms. "7" used for firms.	
User reference	CHAR(16)	A note that the user follows to uniquely identify the transaction.	
Transaction priority	NUM(2,0)	Ranking of this transaction relative to other transactions tied to same generator. 1 is last to be curtailed. Equal priorities are cut on a pro-rata basis.	
Bid energy MW	NUM(5,1)	Fixed block of energy MW supported by transaction.	

Sink price cap dollar	NUM(6,2)	Dollar value used to cut transaction based on energy value at sink.	
Decremental dollar	NUM(6,2)	Decremental dollar value associated with transaction.	
Group Reference	CHAR(50)	Unique identifier used to reference a group of bids that should be evaluated together.	
Queue Flag	CHAR(1)	Flag indicating if the bid should be queued or not. (See Note 2)	
Bid id	NUM	A unique identifier identifying the bid.	
Transaction id	NUM	A unique identifier identifying the static contract data associated with the bid.	
Seller confirm flag	CHAR(1)	Flag indicating if seller has agreed to transaction bid.	
Buyer confirm flag	CHAR(1)	Flag indicating if buyer has agreed to transaction bid.	
Sched energy	NUM(5,1)	Schedule amount of energy (MW)	
Bid status	CHAR(20)	Current status of the bid (validation failed, validation passed, accepted, etc.)	
Message	CHAR(10 00)	Validation messages providing bid details.	

Prescheduled Transaction Bid Submission Parameters

date & time, source, sink, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, spare, spare, Group Reference, Queue Flag, spare, spare, spare, spare, spare

Prescheduled Transaction Bid Response Parameters

date & time, source name, source PTID, sink name, sink PTID, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, bid id, transaction id, seller confirm flag, buyer confirm flag, sched energy, spare, spare, Group Reference, Queue Flag, spare, spare, spare, spare, spare, bid status, group status, message

Input File Example

BID TYPE=PRESCHED TRAN BID&

USERID=testupld&

PASSWORD=testupId&

DATA_ROWS=2&

06/30/1999 00:00,SUBZ_900101_38_GEN -900301,900320,DAM,,,,,7,1001,1,301.0,1.00,,2,,1234,Y,,,,,,

06/30/1999 01:00,SUBZ_900101_38_GEN -900301,900320,DAM,,,,,7,1001,1,301.0,1.00,,2,,1234,Y,,,,,

Output File Example TIME

TIME_STAMP=06/23/1999 15:37

BID_TYPE=PRESCHED_TRAN_BID

DATA_ROWS=2

"06/30/1999 00:00","SUBZ_900101_38_GEN -900301",900301,"BUS - 900320_38_TEST_BUS -20",900320,"DAM","","","",7,"1001",1,301,1,,255256,107439 ,"Y","Y",,2,,"1234","Y",,,,,,"VALIDATION PASSED","WAITING CONFIRMATION",""

"06/30/1999 01:00","SUBZ_900101_38_GEN -900301",900301,"BUS - 900320_38_TEST_BUS -20",900320,"DAM","","","",7,"1001",1,301,1,,255256,107439 ,"Y","Y",,2,,"1234","Y",,,,,"VALIDATION PASSED","WAITING CONFIRMATION",""

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	PRESCHED_TRAN_SCH	Y
MARKET_TYPE	DAM	Y
DATE	MM/DD/YYYY	Y
BID_ID	Returned in response	Ν
TRANSACTION_ID	Returned in response	Ν
SOURCE	Generator name or PTID shown in MIS	Ν
SINK	Load name or PTID shown in MIS	Ν
STATUS	Pick one from list (see Section 7.5.2, Reasons to Review Transaction bids)	Ν
SENDING_CONTROL_AREA	As defined in bid	Ν
PSE	As defined in bid	Ν
PSE_NUMBER	As defined in bid	Ν
RECEIVING_CONTROL_ AREA	As defined in bid	Ν
NERC_PRIORITY	As defined in bid	Ν

Prescheduled Transaction Bids and Schedules Data Dictionary

USER_REFERENCE	As defined in bid	Ν
GROUP_REFERENCE	As defined in bid	Ν
QUEUE_FLAG	As defined in bid (See Note 2)	Ν

Prescheduled Transaction Bids and Schedule Response Parameters

date & time, source name, source PTID, sink name, sink PTID, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, bid id, transaction id, seller confirm flag, buyer confirm flag, sched energy, spare, spare, Group Reference, Queue Flag, spare, spare, spare, spare, spare, bid status, group status, message

Input File Example USERID=testupId&PASSWORD=testupId&QUERY_TYPE=PRESCHED_TRAN_SCH &DATE=08/08/1998&MARKET_TYPE=DAM

 Output File Example
 TIME_STAMP=08/04/1998 11:06

 BID_TYPE=PRESCHED_TRAN_SCH

 DATA_ROWS=1

 "08/08/1998 00:00","SUBZ_900101_38_GEN - 900301",900301,"BUS - 900320_38_TEST_BUS - 20",900320,"DAM","","",",",",7,"1001",1,301,1,,105725,104197,"Y","Y",,,1234,"Y",,,,"VALIDATION PASSED","VALIDATION PASSED","

Submit Group Confirmation Data Dictionary BID TYPE=GROUP CONFIRM

Parameter	Data Type	Description
Group reference	CHAR(50)	Unique identifier used to reference a group of bids that should be evaluated together.
Transaction ID	NUM	A unique identifier identifying the static contract data associated with the bid.
Evaluate Flag	CHAR(1)	Flag indicating if the group should be scheduled for evaluation.
Queue Flag	CHAR(1)	Flag indicating if the group should be queued or not. (SEE NOTE 2)
Bid Status	CHAR(20)	Validation messages providing bid details.

Input File Example

Submit Group Confirmation Parameters group reference, transaction id, evaluate flag, queue flag, spare, spare, spare, spare,

spare, spare

	Note: In certain cases the Group Reference and Transaction ID supplied can represent more than one group. If this occurs only the last group entered will be displayed or confirmed. To view all group statuses, use the GROUP_STATUS download template.
	Submit Group Confirmation Response group reference, transaction id, evaluate flag, queue flag, group status, spare, spa
Input File Example	Group Confirmation Examples BID_TYPE=GROUP_CONFIRM&
	USERID=testupld&
	PASSWORD=testupId&
	DATA_ROWS=2&123456,45678,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	123457,45678,Y,N,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Output File Example	TIME_STAMP=08/04/1998 11:07
	BID_TYPE=GROUP_CONFIRM
	DATA_ROWS=2
	123456,45678,"Y","N","VALIDATION PASSED",,,,,,,,,,,,,,,

Group	Status	Data L	Dictionary
-------	--------	--------	------------

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	GROUP_STATUS	Y
TRANSACTION_ID	Returned in response	Y
GROUP_REFERENCE	As defined in bid	Y
QUEUE_FLAG	As defined in bid (See Note 2)	N

Group Status Response Parameters

group reference, transaction id, evaluate flag, queue flag, group status, spare, spare

Group Status Examples

8.3 Download Templates

8.3.1 Generator Bids and Schedules

Data Dictionary

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	GEN_SCH	Y
MARKET_TYPE	DAM or HAM	Y
DATE	MM/DD/YYYY	Y
GENERATOR	Name or PTID exactly as shown in the MIS	Ν
STATUS	Pick one from list (see Section 7.3.2, Reasons to Review Generator Bids)	Ν

Generator Bids and Response Parameters (E-7)

generator name, generator PTID, date & time, market, expiration, upper operating limit, spare, spare, zero start-up cost, on-dispatch, fixed min. gen. (MW), fixed min. gen. cost (\$), bid curve format, dispatch curve MW(1-6), dispatch curve \$/MW(1-6), 10 min non-synch mw, 10 min non-synch cost, 10 min spinning mw, 10 min spinning cost, 30 min non-synch mw, 30 min non-synch cost, 30 min spinning mw, 30 min spinning cost, regulation MWs, regulation cost, bid id, sched energy, sched 10 min non-synch, sched 10 min spinning, sched 30 min non-synch, sched 30 min spinning, sched regulation, forecasted reserve, sched available stat, sched on-line stat, sched on-dispatch stat, sched on-control stat, bid status, message

Generator Bids and Schedules Example

Input File Example USERID=testupId&PASSWORD=testupId&QUERY_TYPE=GEN_SCH&MARKET_T YPE=DAM&DATE=06/30/1999&GENERATOR=SUBZ_900101_38_GEN - 900301

Output File Example TIME_STAMP=06/23/1999 16:03

BID_TYPE=GEN_SCH

DATA_ROWS=1

"SUBZ_900101_38_GEN - 900301",900301,"06/30/1999 00:00","DAM","06/29/1999 22:30",500,"","","N","Y",200,5000,"B",100,200,300,,,,10,20,30,,,,100,10,200,10,,,300,10 ,150,10,255261,,,,,,,,"","","","VALIDATION FAILED","DAM 10 Minute Spinning

Block Reserve Bid must be ≥ 1 & $\leq =$ Emergency Response Rate.DAM regulation bid MW outside limits.Generator not qualified to bid DAM 10 minute non-synchronized reserve."

8.3.2 Generator Commitment Parameters

Data Dictionary

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	U_COMM	Y
GENERATOR	Generator name or ptid	Ν

Generator Commitment Response Parameters (E-2)

generator name, generator PTID, min. run time, min. down time, max. stops per day, start-up notification, start-up bid time (1-6), start-up bid cost (1-6), notification hours to start (1-6), notification hours off line (1-6), commitment id, update user, update time

Generator Commitment Example

 Input File Example
 USERID=testupId&PASSWORD=testupId&QUERY_TYPE="U_COMM"&GENERAT OR=900301

 Output File Example
 TIME_STAMP=08/04/1998 11:02

 BID_TYPE=U_COMM
 DATA_ROWS=1

 "SUBZ_900101_38_GEN -900301",900301,5,2,2,1,1,2,3,4,5,6,11000,12000,13000,14000,15000,16000,1,2,3,4,5,6,1 ,2,3,4,5,6,105756,"TESTUPLD","08/04/1998 11:02"

8.3.3 Load Bids and Schedules

Data Dictionary

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	LOAD_SCH	Y
DATE	MM/DD/YYYY	Y
LOAD_AREA_BUS	Name or PTID exactly as shown in the MIS	N
STATUS	Pick one from list (see Section 7.4.2, Reasons to Review Load Bids)	Ν

Load Bids and Schedule Response Parameters (F3)

load name, load PTID, date & time, forecast MW, fixed MW, price cap 1 MW, price cap 1 dollar, price cap 2 MW, price cap 2 dollar, price cap 3 MW, price cap 3 dollar, interruptible type, interruptible fixed MW, interruptible fixed cost, interruptible capped MW, interruptible capped cost, bid id, sched price capped, sched interruptible fixed, sched interruptible capped, update user id, update time, bid status, message

Load Bids and Schedule Example

 Input File Example
 USERID=testupId&PASSWORD=testupId&QUERY_TYPE=LOAD_SCH&DATE=08/ 08/1998

 Output File Example
 TIME_STAMP=08/04/1998 11:05

 BID_TYPE=LOAD_SCH
 DATA_ROWS=2

 "BUS - 900321_38_TEST_BUS - 21",900321,"08/08/1998 00:00",300,300,350,20,450,25,,,,"30MIN",250,10,400,20,105718,,,,,"VALIDATION PASSED",""

 "BUS - 900322_38_TEST_BUS - 22",900322,"08/08/1998 00:00",300,300,,,,,,,,"10MIN",250,10,,,105719,,,,,"VALIDATION PASSED",""

8.3.4 Transaction Bids and Schedules

Data Dictionary

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	TRAN_SCH	Y
MARKET_TYPE	DAM, HAM, or NON-FIRM	Y
DATE	MM/DD/YYYY	Y
BID_ID	Returned in response	Ν
TRANSACTION_ID	Returned in response	Ν
SOURCE	Generator name or PTID shown in MIS	N
SINK	Load name or PTID shown in MIS	Ν
STATUS	Pick one from list (see Section 7.5.2, Reasons to Review Transaction bids)	N
SENDING_CONTROL_AREA	As defined in bid	Ν
PSE	As defined in bid	N
PSE_NUMBER	As defined in bid	Ν
RECEIVING_CONTROL_AREA	As defined in bid	Ν
NERC_PRIORITY	As defined in bid	Ν
USER_REFERENCE	As defined in bid	N

Transaction Bids and Schedule Response Parameters (H-7)

date & time, source name, source PTID, sink name, sink PTID, market, sending control area, pse, pse number, spare, receiving control area, nerc priority, user reference, transaction priority, bid energy MW, sink price cap dollar, decremental dollar, bid id, transaction id, seller confirm flag, buyer confirm flag, sched energy, bid status, message

Transaction Bids and Schedule Response Examples

Input File Example	USERID=testupId&PASSWORD=testupId&QUERY_TYPE=TRAN_SCH&DATE=08/ 08/1998&MARKET_TYPE=DAM
Output File Example	TIME_STAMP=08/04/1998 11:06
	BID_TYPE=TRAN_SCH
	DATA_ROWS=1
	"08/08/1998 00:00","SUBZ_900101_38_GEN - 900301",900301,"BUS - 900320_38_TEST_BUS - 20",900320,"DAM","","","",7,"1001",1,301,1,,105725,104197,"Y","Y",,"VALIDATI ON PASSED","Buyer automatically confirmed."

8.3.5 Transaction Confirmation Status

Data Dictionary

Variable Name	Value	Mandatory
USERID	Oracle account user name	Y
PASSWORD	Oracle account password	Y
QUERY_TYPE	TRAN_CFRM	Y
DATE	MM/DD/YYYY	Ν
STATUS	Bid status (VALIDATION FAILED, VALIDATION PASSED, or WAITING CONFIRMATION)	Ν
BUYER_CONFIRMED	Flag selecting all bids whose buyers have confirmed (Y/N)	N
SELLER_CONFIRMED	Flag selected all bids whose sellers have confirmed (Y/N)	Ν

Transaction Bids and Schedule Response Parameters (H-7)

bid id, transaction id, date, sink confirm status, source confirm status, bid status, message

Transaction Bids and Schedule Response Examples

Input File ExampleUSERID=testupId&PASSWORD=testupId&QUERY_TYPE=TRAN_CFRM&DATE=0
6/30/1999&STATUS=WAITING CONFIRMATION&SELLER_CONFIRMED=N

Output File Example TIME_STAMP=06/23/1999 16:06

BID_TYPE=TRAN_CFRM

DATA_ROWS=1

255263,107439,"06/30/1999 00:00","Y","N","WAITING CONFIRMATION",""