Meter Authority Testing

NYISO will be offering an additional testing period for Meter Authorities during the week of July 28. During this testing period Meter Authorities will be able to test the Upload/Download templates as defined within this Test Plan as well as the Web applications. In addition to submitting data for the individual days specified within this document, Meter Authorities are also encouraged to simulate the process to be used to submit data for settlement adjustments.

Highlights

- Testing will begin on July 28
- Testing will also include access to Web Applications
- Upload/Download Templates
  - Exceptions: Monthly Wholesale_Verification & Versioning templates which will be made available as part of the Phase 3 deployment for Web-Based Reconciliation.
- Testing will include the 5 days, which were included in original testing phase as well as the submission of Settlement Adjustment data, preferably for the month of January 2003.

Daily conference calls will also be scheduled during the testing period to address any issues that may arise during testing.

1) Purpose

   To ensure that Meter Authorities are able to successfully transmit and receive data in the Web Based Reconciliation application, each Meter Authority are requested to continue uploading data using the defined templates. Each Meter Authority will be required to successfully complete testing prior to the deployment of the Web-Based Reconciliation application.

   The goal of the testing period is to get each Meter Authority familiar with the new meter data submission process as well as the Web-Based Reconciliation web applications. In order for the testing to be a success all Meter Authorities must submit Tie, Gen, and Load data for the specific days identified.

2) Testing Methodology - Upload/Download Templates

   Each Meter Authority will submit Tie, Gen, and Load bus data using the NYISO's upload/download process for the days identified. Once all the data has been submitted each Meter Authority should use the TIE_GEN_SUBZONE_DETAIL and LOAD_BUS_HOUR DETAIL download template to return all Gen's, Tie's, and load busses that impact their subzone for each of the days.

   Returned for each Gen and Tie will be the NYISO hourly-calculated value and the MA reported value. Returned for each load bus will be the Meter Authority reported MW value and the NYISO adjusted MW value. Each meter authority should also use the SUBZONE_LOAD download template to return the hourly subzone load and losses values for each of the MA's subzones. After the Meter Authority agrees with the calculated hourly subzone load values for the day they should upload agreement using the METER_AUTHORITY_AGREEMENT_FLAG.

Note: If another Meter Authority has not submitted a meter value for a particular Gen or Tie that impacts your subzone the MA reported field will be blank.

a) Upload Templates

    i)   TIE_GEN_SUBZONE_DATA   (page 1-1 of the User Guide)
    ii) LOAD_BUS_HOUR_DATA   (page 1-4 of the User Guide)
    iii) METER_AUTHORITY_AGREEMENT   (page 1-8 of the User Guide)

b) Test files should include actual data for the following dates:

    i)   April 7, 2002
    ii) October 27 2002
    iii) January 1, 2003
    iv) January 15, 2003
    v) January 31, 2003
    vi) Settlement Adjustment data for the month of January 2003.

c) Download Templates

    i)   TIE_GEN_SUBZONE_DETAIL   (refer to page 1-3 of the User Guide)

        (1) During Meter Authority Testing, the optional fields START_DATE and END_DATE will only return data for one day. During testing if you do not enter a START_DATE and END_DATE the application will only return data the day that is in the billing month.
        (2) During Meter Authority Testing, the optional fields VERSION and ADVISORY_ DATA will not be used.

    ii) LOAD_BUS_HOUR_DETAIL   (page 1-6 of the User Guide)

        (1) During Meter Authority Testing, the optional fields VERSION and ADVISORY_ DATA will not be used.

    iii) SUBZONE_LOAD   (page 1-7 of the User Guide)

        (1) During Meter Authority Testing, the report will only be available when a day is specified in the DATE field (MM/DD/YYYY).

d) Templates that are not available during MA Testing

    i)   Monthly WHOLESALE_VERIFICATION (which will be made available as part of the Phase 3 deployment for Web-Based Reconciliation)

3) File Size Limitations

Although the NYISO is evaluating removing the current 36,000 data row limitation, it is strongly recommended that Meter Authorities develop the necessary processes and procedures to upload daily files due to the limitations typically associated with session timeouts and the fact that the NYISO dynamically calculates the ISO calculated MWH value upon request. When data is uploaded to the NYISO Web-Based application, the information file will be processed online during the session. Upon completion of the online processing, an acknowledgment file will be transmitted back to the user. The time necessary to process the uploaded data is proportional to the size of the file that has been uploaded and therefore, can result in an elongated period of time if a large file is uploaded. During upload process, the user's session persists across

the Internet as an open, inactive session. Generally, browsers and firewalls consider open, inactive sessions longer then 5 minutes, to be an error such that they terminate the session at the client. This often results in an error message being generated at the client even though there is no problem at the NYISO. As a result, Meter Authorities are encouraged to upload daily files rather than attempting to upload data for an extended period of time (e.g., a week or more). For reliability and robustness of the systems developed by Meter Authorities, NYISO recommends that Meter Authorities submit files that can reasonably complete in less than 5 minutes including a sufficient tolerance.

For those Meter Authorities planning to upload data manually through a browser, or for those Meter Authorities developing automated systems in addition to a manual backup process, NYISO recommends that the following article be reviewed:

Microsoft's Knowledge Base Article – 18105, PRB: Internet Explorer Error "Connection Timed Out" When Server Does Not Respond Within Five Minutes.

http://support.microsoft.com/default.aspx?scid=http://support.microsoft.com:80/support/kb/articles/Q181/0/50.asp&NoWebContent=1

This article contains information about modifying the registry, which enables the user to change the default time-out setting for Internet Explorer®.

Meter Authorities that attempt to upload larger files may also need to investigate their firewall time-out parameters.

4) Testing Methodology - Web Applications

After the Meter Authority successfully uploads and downloads all meter data information it should then access the meter data reconciliation web screens. To access the web-based reconciliation pages the user first must log into the NYISO bidding and scheduling application by navigating to http://www.nyiso.com/oasis/index.html. Once there, the user must select either User Login or Admin Login (depending upon the privileges the user has).   For the purposes of MA testing we will assume the user has no administrative privileges.

Bidding and Scheduling
→ User Login
→ Admin Login Look & Feel now consistent with the MIS Bidding & Scheduling pages! (Login using your existing MIS Admin account.)
→ Upload/Download

After the user enters his or her User ID and Password a menu page will appear that will display all the links that the user has access to. If the user has been granted access to view and/or modify meter reconciliation data, then a menu link called Metering Reconciliation will appear in the link list at the top of the page. The user should select that link to enter the Metering Reconciliation application.

Once selected the user will see the Calculated Subzone Load page. This page is the default page when the user first enters the Metering Reconciliation application. By clicking on the "report type" button the user can access all the metering reconciliation query pages. The user should select the report type "SubZone Load".

In addition to the report type, the calculated Subzone load query page will enable the user to select the Billing Month, Start and End Dates, and the Subzone or Subzones of interest for viewing calculated subzone load data. Once the query parameters are selected the Subzone load page will display for each day in the date range the hourly ISO calculated subzone load and losses value for each selected subzone. If there are multiple days in the date range, each day will be displayed separately with its own MWh subtotal. A checkbox will enable the Meter Authority to indicate acceptance of the NYISO data.

Date/Time	ISO Calculated MWH	Losses (MWh)
01-DEC-2002 00:00:00	65.8178	5.51
01-DEC-2002 01:00:00	71.5960	5.51
01-DEC-2002 02:00:00	67.9883	5.51
01-DEC-2002 03:00:00	66.1126	5.51
01-DEC-2002 04:00:00	64.2527	5.51
01-DEC-2002 05:00:00	64.3877	5.51
01-DEC-2002 06:00:00	75.8684	5.51
01-DEC-2002 07:00:00	85.9617	5.51
01-DEC-2002 08:00:00	87.3126	5.51
01-DEC-2002 09:00:00	93.7651	5.51
01-DEC-2002 10:00:00	101.4694	5.51
01-DEC-2002 11:00:00	78.0311	5.51
01-DEC-2002 12:00:00	85.9503	5.51
01-DEC-2002 13:00:00	84.1502	5.51
01-DEC-2002 14:00:00	84.8896	5.51
01-DEC-2002 15:00:00	83.7733	5.51
01-DEC-2002 16:00:00	91.4859	5.51
01-DEC-2002 17:00:00	500.0000	5.51
01-DEC-2002 18:00:00	104.4003	5.51
01-DEC-2002 19:00:00	96.9589	5.51
01-DEC-2002 20:00:00	101.6689	5.51
01-DEC-2002 21:00:00	98.4676	5.51
01-DEC-2002 22:00:00	91.6832	5.51
01-DEC-2002 23:00:00	84.4575	5.51

Total: 2430.449 ☐ Agree?

Submit   Reset

The user should review the dates and hours displayed to verify the correct entries is displayed on the page. Once the user verifies that all the hours are displayed he/she should select on hour to view the details of the Subzone Load value. The date/hour link will bring the user to the Subzone Load detail page that displays all the Gen and Ties that are associated with the subzone.

Date/Time: 01-DEC-2002 17:00:00		Bill Date: 06-JAN-2003		Loss: 10		Calculated SubZone Load: 500	

Ptid	Ptid Name	Type	MA Reported MWH	ISO PTS MWH	Last Updated	Last Updated User
2502_	HARLEY DAVIDSON M32J	Tie	-134	129.8158	02-DEC-2002 17:08:05	
2502_	GOTHAM ATLANTIS RJ23	Tie	92	91.4292	02-DEC-2002 17:08:05	
2503_	HARLEY DAVIDSON G56L	Tie	-101	101.7066	02-DEC-2002 17:08:07	
2507_	ATLANTIS ELDORADO	Tie	15	26.9657	02-DEC-2002 17:08:12	
2520_	ACME ATLANTIS Y5407	Tie	-41	38.3258	02-DEC-2002 17:08:42	
2522_	ELDORADO ACME	Tie	-494.731	-492.1542	02-DEC-2002 17:08:42	
2522_	GOTHAM ELDORADO	Tie	17.731	-17.7617	02-DEC-2002 17:08:42	
2522_	HARLEY GOTHAM	Tie	18.231	-18.1798	02-DEC-2002 17:08:42	
2523_	ACME GOTHAM	Tie	-4.723	-.6542	02-DEC-2002 17:08:43	
2524_	SPRINGFIELD SHELBYVILLE	Tie	-28.676	28.5488	02-DEC-2002 17:08:43	
2526_	ACME SPRINGFIELD	Tie	17.705	8.7672	02-DEC-2002 17:08:44	
2527_	ACME SHELBYVILLE	Tie	0	9.0537	02-DEC-2002 17:08:44	

Displayed on the page will be each Tie Line and Generator that is associated with the subzone. Included for each point will be the MA reported MWh value, the NYISO PTS MWh value, the last updated time, and the user who made the update. If the user is authorized to submit meter data he/she will have the ability to modify the MA reported MWh values for all points that they are the meter authority for. The user should review all points associated with the subzone to verify that the values reported are accurate. Once the user reviews all the data they should submit a modification for a particular Gen or Tie. Once the change is submitted he/she should see the MA reported MWh value updated and also see that the Last Update and Last Update User fields were also updated. Note: The user can access the Subzone Load Detail page directly by selecting the page from the report type pick list.

The next step for the user is to see how the modification impacted the hourly subzone load value. The user should navigate back to the Calculate Subzone Load page and select Subzone Load Report. Once selected, the user should enter the same start and end date parameters as before and should see the same listing of hourly subzone load values. After all the values are displayed, the user should scroll to the hour that the update occurred in and review the impact of the update on the Subzone Load value. After all the hourly values have been reviewed the user should check the Agree box at the bottom of the page.

01-DEC-2002 18:00:00		104.4003	5.51	
01-DEC-2002 19:00:00		96.9589	5.51	
01-DEC-2002 20:00:00		101.6689	5.51	
01-DEC-2002 21:00:00		98.4676	5.51	
01-DEC-2002 22:00:00		91.6832	5.51	
01-DEC-2002 23:00:00		84.4575	5.51	
	Total:	2430.449	☐ Agree?	←

Submit   Reset

The Agree box verifies that at a point in time the meter authority is in agreement with the Gen and Tie values for a subzone. By selecting agree the user will be able to see if the hourly values for a day and/or days have changed by accessing the Subzone Load Verification report type. If the box for a particular day is not checked then either a Tie or Gen has been modified or the Agree box was never checked. This page is helpful for a Meter Authority to identify if a point within a subzone for which he/she is not the Metering Authority, has changed.

Log Out - Metering Generators - Metering Loads - Metering Reconciliation - Metering Subzones - Metering Ties - Organization Detail - User Detail -

Monthly Load Verification for SubZones

Query Criteria:

Query Type: SubZone Load Verification

Check All   Clear All

		SubZones						
Date	**Billing Date**	**North**	**Northeast**	**East**	**Southeast**	**South**	**Southwest**	**West**
12 / 1 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 2 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 3 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 4 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 5 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 6 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 7 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 8 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 9 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 10 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 11 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 12 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 13 / 2002	1 / 14 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 14 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 15 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍

Continued on next page

12 / 16 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 17 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 18 / 2002	1 / 21 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 19 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 20 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 21 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 22 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 23 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 24 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 25 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 26 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 27 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 28 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 29 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 30 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍
12 / 31 / 2002	1 / 6 / 2003	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍	☐ 🔍

[Submit] [Reset]

The steps described above walk a user through the process of a) reviewing his/her hourly subzone load values, b) submitting a modification to a particular Gen or Tie, and c) reviewing the impact of the changes on the hourly subzone load value. The next section will walk the user through the process of reviewing and modifying wholesale load bus data.

After the user has agreed on the Gen and Tie readings for a particular subzone he/she should navigate back to the Calculate Subzone Load query page and select the Wholesale Load Bus Detail report.

Calculated SubZone Load

Enter Query Parameters

Report Type:	Wholesale Load Bus Detail ▾	⟵
Billing Month:	Dec ▾ 2002 ▾	Show Invoice History
Start Date:	01 ▾	
End Date:	31 ▾	
SubZone:	All Selected ▾	

[SUBMIT]

This page will display for the subzone selected all load busses associated with that subzone. Associated with each load bus will be the MA reported MWh value, the NYISO calculated MWh value, the last time the MA reported MWh value was updated, and the User who updated the MA reported MWh value. The page will also display the sum of all the load buses and if the subzone is within tolerance. The tolerance value will be set for each subzone and will appear checked if the sum of the load busses and the calculated hourly subzone load fall within the tolerance range.

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Log Out - Metering Generators - Metering Loads - Metering Reconciliation - Metering Subzones - Metering Ties - Organization Detail - User Detail -

Wholesale Load Bus Detail

Query Criteria:

Query Type:	SubZone Wholesale Bus Loads	**PTID:**	12345
Start Date/Time:	01-JAN-02 05:00:00	**Name:**	Southern Northeast
End Date/Time:	01-JAN-02 05:00:00		

Date/Time: 01-JAN-02 05:00:00   **Bill Date:** 06-JAN-03

Ptid	Ptid Name	MA Reported MWH	Last Updated	Last Updated User
234_5_	QUARRY-PSL STD DELLCRK	0	19-OCT-02 14:45:47	
234_9_	SPRNGFLD-PSL STD SPRNGFLD	0	19-OCT-02 14:45:49	
345_2_	GPC KG GOTHAM	123.45	19-OCT-02 14:46:04	
345_1_	GPC-GRPTK12 KG GOTHAM	12.34	19-OCT-02 14:46:03	
345_4_	DF-PFJOBS KG GOTHAM	12	19-OCT-02 14:45:46	
345_4_	DF-DRJ-SU KG GOTHAM	0	19-OCT-02 14:45:46	
345_4_	DF-DRJ-NA KG GOTHAM	0	19-OCT-02 14:45:46	
345_5_	KES KG GOTHAM	12.345	19-OCT-02 14:45:46	
345_6_	SPRNGFLD KG GOTHAM	12.345	19-OCT-02 14:45:46	
345_7_	DF-APX KG GOTHAM	0	19-OCT-02 14:45:46	
345_8_	CEDS KG GOTHAM	12.345	19-OCT-02 14:45:46	
345_0_	QUARRY-CTR KG GOTHAM	12.345	19-OCT-02 14:45:46	
345_2_	GPC-SHIELD12 KG GOTHAM	12.345	19-OCT-02 14:45:46	
345_3_	SHELBY KG GOTHAM	0	19-OCT-02 14:45:46	
345_7_	FPLES KG GOTHAM	12.345	19-OCT-02 14:45:46	
789_2_	WIGRQZ XK GOTHAM	0	19-OCT-02 14:45:46	
789_2_	AEPQZ XK GOTHAM	0	19-OCT-02 14:45:46	
789_3_	PGETQZ XK GOTHAM	0	19-OCT-02 14:45:46	
789_3_	EKT-QZ XK GOTHAM	0	19-OCT-02 14:45:46	

Hourly Totals		12.345	Tolerance: 0.5
			Within Tolerance? ✔

Submit   Reset

From this screen the user should modify a load bus value. If the modification is large enough to cause the subzone to not be within tolerance the "Within Tolerance" checkbox will disappear. If the user sees that the "Within Tolerance" flag is not checked he/she should review the MA reported and ISO calculated columns to determine the reason for the subzone not being within tolerance. The tolerance level for each subzone is displayed above the "Within Tolerance" check box and is specific to each subzone.

5) Expectations for Meter Authorities

Prior to deployment of web-based reconciliation each Meter Authority must successfully complete the following requirements:
- Connect to the NYISO upload/download application
- Submit metering data using the TIE_GEN_SUBZONE_DATA and LOAD_BUS_HOUR_DATA upload template.
- Download metering data using the TIE_GEN_SUBZONE_DETAIL, LOAD_BUS_HOUR_DETAIL, and SUBZONE_LOAD download template
- Submit meter authority agreement flag for each of the days specified using the METER_AUTHORITY_AGREEMENT upload template.

6) Digital Certificates

In order to access the NYISO upload/download application all users need to apply for a digital certificate. This can be done by going to the Customer Relations section of the NYISO website or by contacting the NYISO Customer Relations Department. For testing purposes the specific user that will be performing the testing will need to apply for a digital certificate.

7) Test System Availability

   a. July 28 – 30
   b. Hours of Availability: 8:00 am – 5:00 pm

8) System Access

   Meter Authorities will continue to use the Password used during the first phase of Meter Authority testing. These fields must be used in order to successfully submit and retrieve test files. **As with all User IDs this information should be maintained confidential and not be shared**.

9) Detailed Information

   Refer to the Web Based Reconciliation User's Guide (dated June 11) for detailed information.

10) Contact Information

   For specific questions regarding web-based reconciliation testing please contact the following Customer Relations Personnel:

   Rick Brophy
   Phone number: 518-356-6267
   Email: rbrophy@nyiso.com

   Or

Frank Ciani
Phone number: 518-356-7529
Email: fciani@nyiso.com

Or

Customer Relations Group
Phone number: 518-356-6060

11) Error Code Listing

The following is a listing of new error codes that have been added as part of the Web Based Reconciliation application.

Error Number   The Error Number raised and returned to the user
Error Name   Name of Error - short label
Error Message   Actual text message returned to the user

<P1> in the Error Message this stands for Parameter 1. This is where we pass to the error message the ID that failed. You will see messages that have multiple parameters. We try to pass back as much information as possible to understand what the error was, and what record it occurred on.

Error Number	Error Name	Error Message
12505	rpGenUnitNonZeroMaxOperLimit	Group Gen. Unit must have max_summer/winter_oper_limit = 0
12506	NonGrpGenMaxOperLimit	'Non-Group Gen. Unit must have max_summer/winter_oper_limit >=2.0 and > phys._min_gen'
75000	UserNotAuthMsg	Error: User <P1> is not authorized to submit meter data for <P2> with PT ID: <P3>.
75001	MonthNotOpenMsg	Error: <P1> is currently Locked for submission of meter data. Please contact the NYISO if this date should not be locked. Where <P1> is the month in which the user is attempting to load.
75002	UserNotQualMsg	Error: User <P1> not Qualified to Submit Meter Data.
75003	TieNotQualMsg	Error: Tie <P1> not Meter Qualified.
75004	GenNotQualMsg	Error: Generator <P1> not Meter Qualified.
75005	SubzNotQualMsg	Error: Subzone <P1> not Meter Qualified.
75006	NullIdMsg	Error: Null <P1> ID IS Received.
75007	Not25HrDayMsg	Error: Hour 25 cannot be submitted for this date: "<P1>".
75008	NoInvoiceMsg	Error: Invoice not setup for month <P1>.
75009	NoInvDayMeterMsg	Error: Invoice day Meter versions not found for <P1>.
75010	NoInvDayMsg	Error: Invoice day versions not found for <P1>.
75011	BuszNotQualMsg	Error: Bus <P1> not Meter Qualified.
75012	NullMegaWatt	ERROR: PTID "<P1>" does not have valid Megawatt value.
75013	PtidNotInTable	Error: <P1> is not a valid <P2> PTID.
75014	UserNotAuthsubver	Error: User <P1> is not authorized to submit meter agreement flag for <P2> with PT ID: <P3>.
75015	NoMeterAuth	Error: Meter Authorty record missing for <P1>
100022	AddRemoveGenBillOrgMsg	Must be an ISO administrator to assign/remove the billing organization.
100023	AddRemoveLSEBillOrgMsg	Must be an ISO administrator to assign/remove the billing organization.
100049	AddRemoveLSEBillOrgMsg02	Cannot delete <P1> record with <P2>. The last existing <P3> record for an <P4> cannot be deleted.
100050	AddRemoveLSEBillOrgMsg03	Cannot delete <P1> record with <P2>. It is not the latest <P3> record.
100070	TieNotFoundMsg	Tie <P1> not found.
100071	OrgNotTiePrivMsg	User's organization is not metering authority for tie.
100072	OrgNotSubzPrivMsg	User's organization is not metering authority for subzone.
100073	InUpMeterAuthOrgPrivMsg	Must be either an ISO administrator or the organization's administrator to insert/update it's metering authority.
100074	InUpMeterAuthOrgType	<P1> can only be registered to an organization which is qualified to submit meter data.
100075	InUpMeterAuthOrgDup	This organization, <P1>, is already assigned as the metering authority for <P2>.
100076	InUpMeterAuthOrgUser	Cannot deactivated the organization as the bus's metering authority while user are still assigned to the bus
100077	MeterAuthOrgNotFound	Metering authority not found for, <P1>.
100078	OrgNotBusPrivMsg	User's organization is not metering authority for bus.
100080	GENLSENotAuth	Must be an ISO administrator to update <P1> LSEs.

Error Number	Error Name	Error Message
100081	GenLseNotFound	<P1> not found for <P2>: <P3> and LSE: <P4>.
100082	GenNotTyep12	Only type 12 generators can be assigned an LSE.
100083	BeforeDADRPEffDate	Cannot assign an LSE to a generator before the effective date of the DADRP program.
100084	DelNotAllowed	<P1> cannot be deleted for <P2>: <P3> and LSE: <P4>. End date is not NULL; cannot delete old relationships.
100085	CantUpdNotFirst	Can only update if one and only 1 record exists.
100086	CantDelFirst	<P1> cannot be deleted for <P2>: <P3> and LSE: <P4>. At least one relationship must exist.
100087	NoBillingOrg	Generator cannot be assigned to LSE that does not have a billing org.
100088	NoBillOrgorLims	Must assign a billing org and set generator limits before turning on bid flags.
100089	NoBillOrg	Must assign a billing org before turning on bid flag.
100090	GENLimNotAuth	Must be an ISO administrator to insert <P1>.
100091	GenLimNotFound	<P1> not found for <P2>: <P3>.
100092	BeforestartUp	Cannot have start effective date be before NYISO startup date: <P1>.
100093	CantBeActiveNoBillOrg	Active generators must have billing organization identification.
100094	DelGenLimNotAllowed	<P1> cannot be deleted for <P2>: <P3>. End date is not NULL; can not delete old relationships.
100095	x_GroupUnitCantBid	Group generators cannot have bid flags turned on.
100096	CantDelFirstGenLim	<P1> cannot be deleted for <P2>: <P3>. Atleast one relationship must exist.
100098	NoBillOrg2	Must assign a billing org before turning on <P1> bid flags.
100099	NoLimits	Generator must have winter/summer limits before turning on bid flags.
100106	Not Authorized	<P1> is not Generic User, or is Not Authorized for this action where <P1> is the username.
230072	ADD_LSE_BILLING_ORG072	To Insert <P1> record START_DATE must be GREATER than latest existing record start_date.
230073	ADD_LSE_BILLING_ORG073	The Organization with org_id = <P1> is already the latest billing org for this <P2>.
230074	ADD_LSE_BUS074	The LSE with lse_id = <P1> is already the latest lse for this bus.
230075	ADD_LSE_BUS075	To Insert LSE_BUSES record START_DATE must be GREATER than latest existing record start_date.
230103	UPDATE_USER4	Cannot inactivate the user. The User is currently a user of one or more ties. Must remove the tie(s) from the user before inactivating the user.
230104	UPDATE_USER5	Cannot inactivate the user. The User is currently a user of one or more subzones. Must remove the subzone(s) from the user before inactivating the user.
230110	ADD_TIESUBZ_USERS110	Must be an administrator of the organization to authorize user to submit meter data.
230111	ADD_TIE_USERS111	Tie must be active to authorize user to submit meter data.
230112	ADD_TIESUBZ_USERS112	User "<P1>" is not authorized to submit meter data for "<P2>".
230113	ADD_SUBZONE_USERS113	Subzone must be active to authorize user to submit meter data.
330019	IN_UP_BUSES	Must assign a Load Serving Entity for <P1> before turning on bid flags.
330041	DELETE_LSE1	Cannot delete/update Load Serving Entity ptid unless LOAD_SERVING_ENTITY_CRITICAL_UPDATES_ALLOWED is set to Y..
330110	INSERT_UPDATE_TIE110	Tie cannot have the same To subzone(<P1>) and From subzone(<P2>).

Error Number	Error Name	Error Message
330111	INSERT_UPDATE_TIE111	The PTID already exists and cannot be reused. It may be used currently or was used historically by a Tie or Generator.
330112	INSERT_UPDATE_TIE112	Tie cannot have both the To subzone (<P1>) and the From subzone (<P2>) be external.
330115	INSERT_UPDATE_TIE115	Must be an ISO administrator to add a tie.
330116	UPDEL_TIEGEN_SUBZ	Cannot inactivate or delete <P1> when meter MWs have previously been submitted.
330135	UPDATE_ADMINISTRATORS135	Cannot remove permission to administer MAs. Administrator is currently an administrator of a MA.
330149	'GenBillingOrgBackDate'	'GEN_BILLING_ORG START_DATE Can''t be BackDated if Global Parameter GEN_BILLING_ORG_BACKDATE_ALLOWED = N'
330178	UPDATE_ORGANIZATIONS178	Cannot change org_type_id from 8. Org is the current Meter Authority for a BUS, GEN, SUBZONE, or TIE.
330182	'UPDATE182'	'Metering Authority Effective Date cannot be backdated unless parameter ALLOW_METER_AUTHORITY_CHANGE is set to Y'