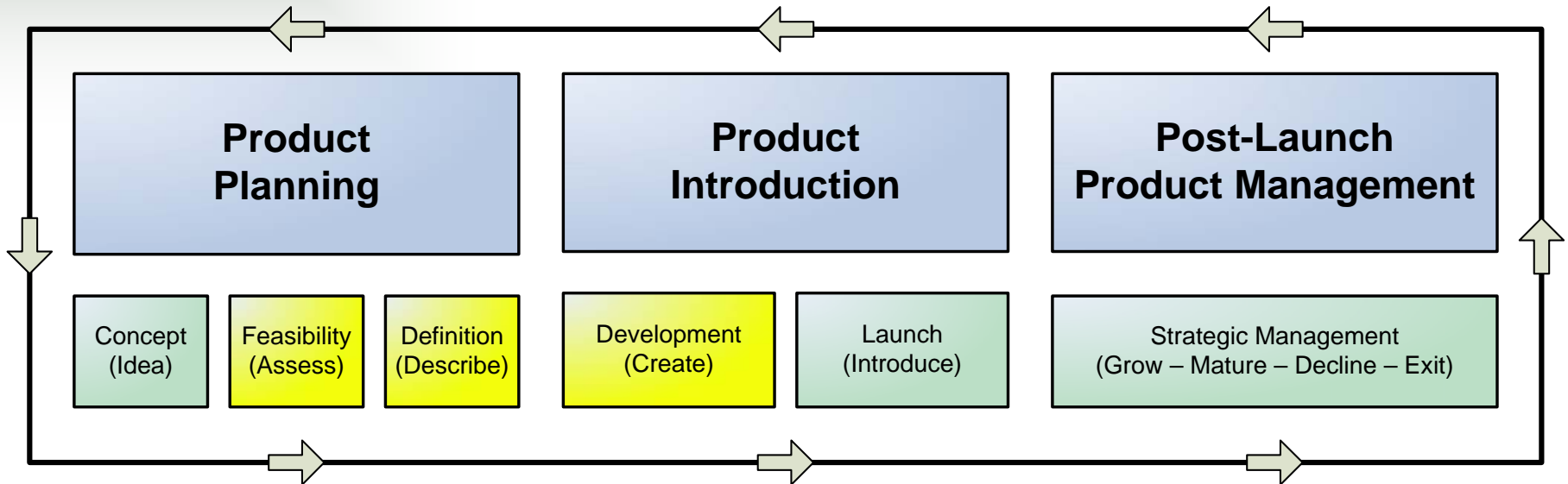


Web-Based Reconciliation Replacement (WBRR)

**Technical Conference
August 3, 2007**

Product Management Life Cycle



- ♦ Iterative Process
- ♦ Interactive Dialogue
- ♦ Interdependent Solutions

WBRR Priorities

- ✓ TOL Upload Redesign
- ✓ Verification of upload receipt by NYISO (echo back or acceptable replacement)
- ◆ Redesign of remaining upload and download templates
- ◆ Querying and Reporting

Project Guidelines

- ◆ Maintain all existing WBR functionality or provide equivalent replacement feature
- ◆ Conduct additional MP discussions of requirements for all changes and replacements
- ◆ Provide an open test environment for MPs to test changes and replacements for WBR, prior to each production deployment
- ◆ Notify MPs prior to the deployment of any changes to the test environment and production
- ◆ Obtain MP feedback following testing periods and production deployments
- ◆ Communicate progress on a monthly basis to BAWG

2007 Deliverables

February

- ✓ Deploy querying fix to enable results across multiple days

March

- ✓ Deploy TOL upload redesign to MP test environment

May

- ✓ Deploy TOL upload redesign to production

September

- ◆ Deploy remaining upload and download redesigns to MP test environment

October

- ◆ Deploy remaining upload and download redesigns to production

2007 Schedule

Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NYISO Release	NYISO Release			NYISO Release				NYISO Release	NYISO Release		
		Data Center Move	Data Center Move		System Load	System Load	System Load			SAS 70 SarBox	SAS 70 SarBox
	WBRR Release	WBRR Test		WBRR Release				WBRR Test	WBRR Release		
WBRR Discuss	WBRR Discuss	Test Discuss			Release Discuss			Test Discuss		Release Discuss	
BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report	BAWG Report

WBRR Phase 2 Overview

WBRR Phase 2 Overview

- ◆ Market Participant (MP) requirements
- ◆ Application name change
- ◆ Upload and download changes
- ◆ Marketplace changes
- ◆ Market Participant testing

MP Upload/Download Requirements

1. Provide improved response time for upload and download requests, as defined by the WBR requirements effort.
2. Provide a detailed response message indicating the success or failure of the WBR upload requests, essentially verifying the data has been transmitted from the MP's machine to the NYISO's machine.
3. Improve WBR's downloading capabilities by providing the ability to retrieve large quantities of data at one time without encountering errors.
4. Provide authorized parties the ability to download/view individual Gen/Tie data regardless of the MA designation.
5. Provide the MPs with auditable, traceable and verifiable data controls to support compliance verification and testing.

MP Web Interface Requirements

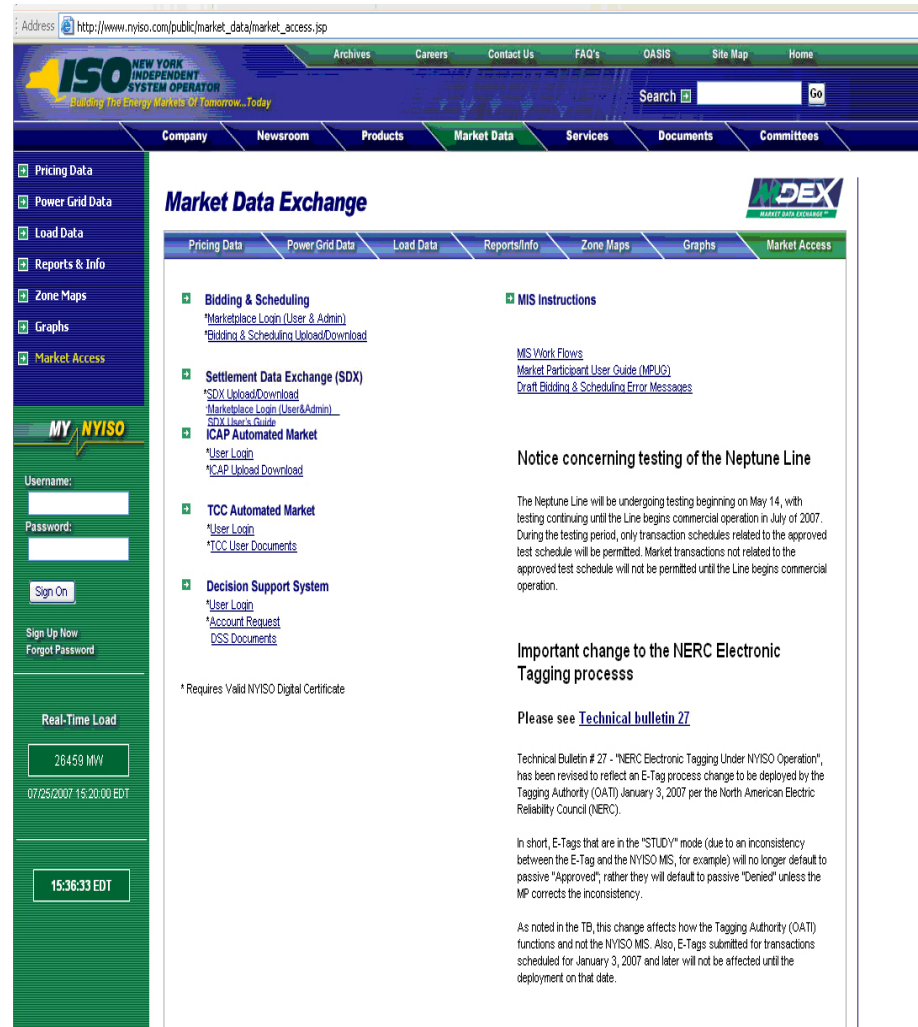
1. Provide users with the ability to select “All” or a combination of items contained in the drop down lists on all report types.
2. Query parameters on a WBR report should be retained when the user selects the browser’s back button.
3. Provide ability to print output to CSV file (added during the February 2007 MP Technical Conference).
4. Enable search by PTID or Generator Name for the Gen/Tie Detail Report.
5. Provide WBR users with the NYISO individually calculated components used in the subzone load calculation, by PTID. Include the totals for generator, interchange and losses.

WBR Renamed to SDX

- ◆ The Web-based Reconciliation (WBR) application is being renamed
- ◆ WBR functionality will be referred to as the Settlement Data Exchange (SDX)
- ◆ All settlement related upload and download templates will be included with SDX
- ◆ This includes all of the WBR templates plus additional settlement related templates
 - *LOAD_BUS_HOUR_DATA and DETAIL*
 - *TIE_GEN_SUBZONE_DATA and DETAIL*
 - *SUBZONE_LOAD*
 - *STATION_POWER REPORT*
 - *INVOICE_HIST*
 - *DAILY_REC_DOLLAR and MWH*

Market Data Exchange Updates

- ◆ All users will continue to access the NYISO's Bidding and Scheduling web address:
http://www.nyiso.com/public/market_data/market_access.jsp
- ◆ Added SDX links to Marketplace and the User Guide



The screenshot shows the NYISO Market Data Exchange website. The top navigation bar includes links for Archives, Careers, Contact Us, FAQ's, OASIS, Site Map, and Home. A search bar is located on the right. The main navigation bar includes links for Company, Newsroom, Products, Market Data, Services, Documents, and Committees. The Market Data section is highlighted.

The left sidebar contains a list of links: Pricing Data, Power Grid Data, Load Data, Reports & Info, Zone Maps, Graphs, and Market Access. Below this is a login section for MY NYISO with fields for Username and Password, a Sign On button, and links for Sign Up Now and Forgot Password. At the bottom of the sidebar, there is a Real-Time Load section showing 26459 MW and a timestamp of 07/25/2007 15:20:00 EDT, along with a 15:36:33 EDT timestamp.

The main content area is titled "Market Data Exchange" and features a sub-navigation bar with links for Pricing Data, Power Grid Data, Load Data, Reports/Info, Zone Maps, Graphs, and Market Access. The Market Access section is active, displaying a list of links for Bidding & Scheduling, Settlement Data Exchange (SDX), ICAP Automated Market, TCC Automated Market, and Decision Support System. Each link has a sub-link for User Login and a link for User Documents. A notice concerning testing of the Neptune Line is also displayed, along with an important change to the NERC Electronic Tagging process and a link to Technical Bulletin 27.

Market Data Exchange

Bidding & Scheduling
[*Marketplace Login \(User & Admin\)](#)
[*Bidding & Scheduling Upload/Download](#)

Settlement Data Exchange (SDX)
[*SDX Upload/Download](#)
[*Marketplace Login \(User & Admin\)](#)
[SDX User's Guide](#)

ICAP Automated Market
[*User Login](#)
[*ICAP Upload/Download](#)

TCC Automated Market
[*User Login](#)
[*TCC User Documents](#)

Decision Support System
[*User Login](#)
[*Account Request](#)
[DSS Documents](#)

* Requires Valid NYISO Digital Certificate

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

Notice concerning testing of the Neptune Line
 The Neptune Line will be undergoing testing beginning on May 14, with testing continuing until the Line begins commercial operation in July of 2007. During the testing period, only transaction schedules related to the approved test schedule will be permitted. Market transactions not related to the approved test schedule will not be permitted until the Line begins commercial operation.

Important change to the NERC Electronic Tagging process
 Please see [Technical bulletin 27](#)

Technical Bulletin # 27 - "NERC Electronic Tagging Under NYISO Operation", has been revised to reflect an E-Tag process change to be deployed by the Tagging Authority (OATI) January 3, 2007 per the North American Electric Reliability Council (NERC).

In short, E-Tags that are in the "STUDY" mode (due to an inconsistency between the E-Tag and the NYISO MIS, for example) will no longer default to passive "Approved"; rather they will default to passive "Denied" unless the MP corrects the inconsistency.

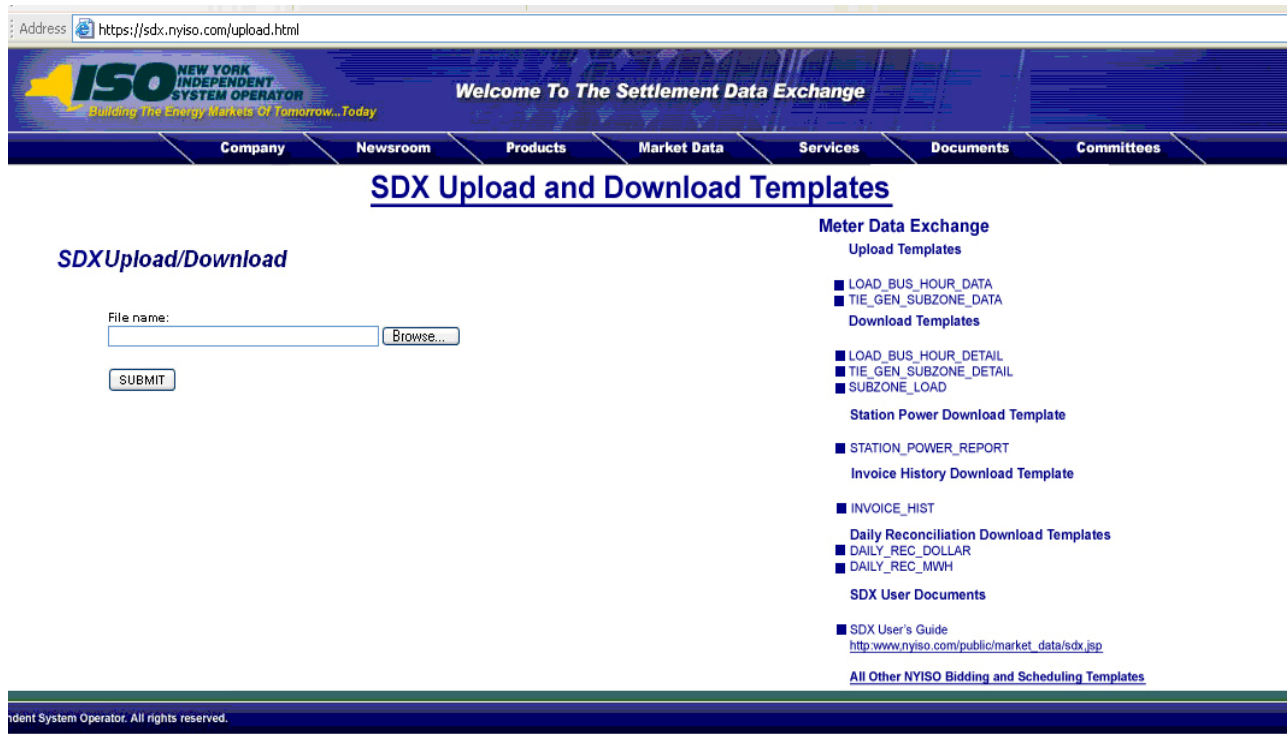
As noted in the TB, this change affects how the Tagging Authority (OATI) functions and not the NYISO MIS. Also, E-Tags submitted for transactions scheduled for January 3, 2007 and later will not be affected until the deployment on that date.

SDX Templates Under One URL

- ◆ New SDX Web URL introduced with Phase 1:
<https://sdx.nyiso.com/upload.html>
- ◆ SDX templates supported with Phase 1
 - *LOAD_BUS_HOUR_DATA*
 - *LOAD_BUS_HOUR_DETAIL*
- ◆ SDX templates supported with Phase 2
 - *All remaining SDX templates migrated to new URL*
 - TIE_GEN_SUBZONE_DATA and DETAIL
 - SUBZONE_LOAD
 - STATION_POWER_REPORT
 - INVOICE_HIST
 - DAILY_REC_DOLLAR and MWH

Market Data Exchange Updates

- ♦ Users will access all SDX Upload/Download templates from the same URL : <https://sdx.nyiso.com/upload.html>
- ♦ Added text and links for SDX upload and download supported templates



The screenshot shows a web browser window with the address bar displaying <https://sdx.nyiso.com/upload.html>. The page header features the ISO New York Independent System Operator logo and the text "Welcome To The Settlement Data Exchange". Below the header is a navigation menu with links: Company, Newsroom, Products, Market Data, Services, Documents, and Committees. The main content area is titled "SDX Upload and Download Templates". On the left, under the heading "SDX Upload/Download", there is a form with a "File name:" label, a text input field, a "Browse..." button, and a "SUBMIT" button. On the right, under the heading "Meter Data Exchange", there are sections for "Upload Templates" and "Download Templates". The "Upload Templates" section lists "LOAD_BUS_HOUR_DATA" and "TIE_GEN_SUBZONE_DATA". The "Download Templates" section lists "LOAD_BUS_HOUR_DETAIL", "TIE_GEN_SUBZONE_DETAIL", and "SUBZONE_LOAD". Below these are links for "Station Power Download Template", "STATION_POWER_REPORT", "Invoice History Download Template", "INVOICE_HIST", "Daily Reconciliation Download Templates", "DAILY_REC_DOLLAR", and "DAILY_REC_MWH". At the bottom of the right column, there is a link for "SDX User Documents" and a link to "SDX User's Guide" with the URL http://www.nyiso.com/public/market_data/sdx.jsp. A footer at the bottom of the page reads "Independent System Operator. All rights reserved."

SDX: Updated User Guide

- ◆ DRAFT WBR User Guide has been updated with Phase 2 Changes
- ◆ Changes include:
 - *WBR to SDX references*
 - *Document Renamed: Settlement Data Exchange User Guide*
 - *Removal of templates no longer supported*
 - *Updates to remaining WBR templates*
 - *Addition of templates moved from the MPUG*
 - *Listing of Upload/Download error messages*
 - *Marketplace updates for WBR Reporting*

Retired Bidpost Templates

The following templates will be retired in Phase 2:

- ◆ METER_AUTHORITY_AGREEMENT
 - *Associated e-mail notification will also be disabled*
- ◆ WHOLESALE_VERIFICATION
- ◆ SUBZONE_LOAD_CALC_STATIC – functionality replaced with SUBZONE_LOAD template

SDX: Summary of Bidpost Changes

Template Name	Request File: NEW Parameters	Request File: DELETED Parameters	Request File: CHANGED Parameters	Response File: NEW Parameters	Response File: DELETED Parameters	Response File: CHANGED Parameters
All SDX Templates		TIMEOUT				
LOAD_BUS_HOUR_DATA			MW value may not exceed 3 decimal places			
LOAD_BUS_HOUR_DETAIL		ADVISORY_DATA		SUBZONE_NAME		(1) VERSION = 0, (2) Change ordering of output by SUBZONE_NAME, (3) Add count for number of hourly mismatches (e.g. SDX-001=2)
TIE_GEN_SUBZONE_DATA	DATA_ROWS, DATA_SUM	PTS_DATA	(1) UPLOAD_RESPONSE (2) MW value may not exceed 3 decimal places	DATA_SUM	Echo back replaced with PTID MWh summation	Record detail replaced with PTID MWh summation
TIE_GEN_SUBZONE_DETAIL	METER_VERIFICATION	PTS_DATA, ADVISORY_DATA	(1) START_DATE and END_DATE fields verified against the BILLING_MONTH field, (2) SUBZONE_PTID - only one value permitted without Meter Verification option, (3) BILLING_MONTH (MM/YYYY)	BILLING_MONTH, START_DATE, END_DATE, SUBZONE_NUM, SUBZONE_NAME, SUBZONE_PTID, GEN_SUM, GEN_PTIDS, GROUP_UNITS, TIE_SUM, TIE_PTIDS, SZ_SUM, GROUP_GEN, INDV_UNITS		(1) VERSION = 0, (2) Requested data for the Subzone Owner will be returned; regardless of whether they are the MA of the generator or tie line
SUBZONE_LOAD	START_DATE, END_DATE, VERSION		(1) DATE renamed to BILLING_MONTH, (2) PTID renamed SUBZONE_PTID		Subzone load verified	
DAILY_REC_DOLLAR						Fix to Reported Black Start dollars
DAILY_REC_MWH						
STATION_POWER_REPORT		START_DATE, END_DATE				
INVOICE_HIST	BILLING_MONTH	START_DATE, END_DATE				Data returned based upon BILLING_MONTH and not billing day

User Guide Review of Bidpost Changes

1. Review upload template:
TIE_GEN_SUBZONE_DATA
2. Review download template:
TIE_GEN_SUBZONE_DETAIL
3. Any others?

SDX: Summary of Marketplace Changes

Marketplace WBR Pages	Supported in Phase 2	Additions to Report	Deletions to report	Changes to Report
Subzone Load Verification	no			Remove report and associated Monthly Load Verification for Subzones screen
ALL Reports	yes	(1) Print to CSV option: added to all reports, (2) Browser back button: original report criteria maintained		Show Invoice History: Changed the order of the output
Calculated Subzone Load Report	yes	(1) Add Gen/Tie total, (2) add subzone load formula to title of report: Calculated Subzone Load = (Sum of Generators and Ties) - Subzone Losses, (3) SUBZONE picklist allows one or more than one selection	Remove Approved Check Box and Submit/Reset buttons (corresponding to the removal of the MA Agreement template)	Reorder columns: Date/Time, Subzone Load, Gen/Tie Total, Subzone Losses
Subzone Load Detail Report	yes	(1) Add new column: Gen/Tie MWh, (2) Add totals to bottom of new column: Gen Total (MWh), Tie Total (MWh), Gen/Tie Total (MWh), (3) SUBZONE picklist allows one or more than one selection		Change the End Date default hour to 23 (from 0)
Gen/Tie Detail	yes	(1) Add TYPE to Report criteria page: 'Gen', 'Tie' or 'All', (2) Add ORDER BY to Report criteria page: 'PTID' or 'PTID Name', (3) PTID picklist allows one or more than one selection		(1) Regardless of whether the Subzone Owner requestor is the MA of the generator or tie line, the data shall be returned to the user, (2) Change the End Date default hour to 23 (from 0)
Tie Details Page	yes	New help text for determining sign convention for MA supplied data and PTS data		Sign Convention renamed to Flow Convention
Wholesale Load Bus Detail	yes	SUBZONE picklist allows one or more than one selection		Change the End Date default hour to 23 (from 0)

User Guide Review of Marketplace Changes

Review Metering Reconciliation Link Reports

1. Calculated Subzone Load Report
2. Subzone Load Detail Report
3. Gen/Tie Detail Report
4. Wholesale Load Bus Detail Report

SDX Phase 2 Questions to the MPs

1. Do the Bidpost and Marketplace changes meet your requirements for Phase 2?
2. Will the changes impact your ability to participate in the September testing for Phase 2?

WBRR

Market Participant Testing

Phase 2: September 2007

Market Participant Phase 2 Testing

MP Testing Requirement:

To provide a test environment for SDX users, to verify the quality and performance of NYISO WBR system enhancements and MP connectivity with NYISO, prior to deployments to production.

Upload/Download Templates available to test:

Uploads:

- ♦ LOAD_BUS_HOUR_DATA
- ♦ TIE_GEN_SUBZONE_DATA

Downloads:

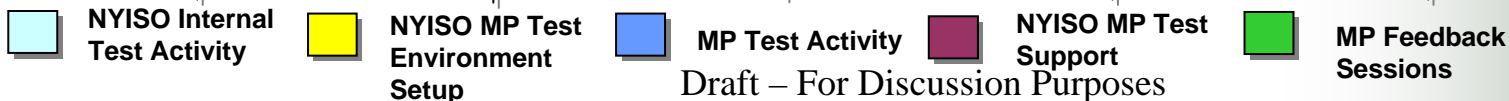
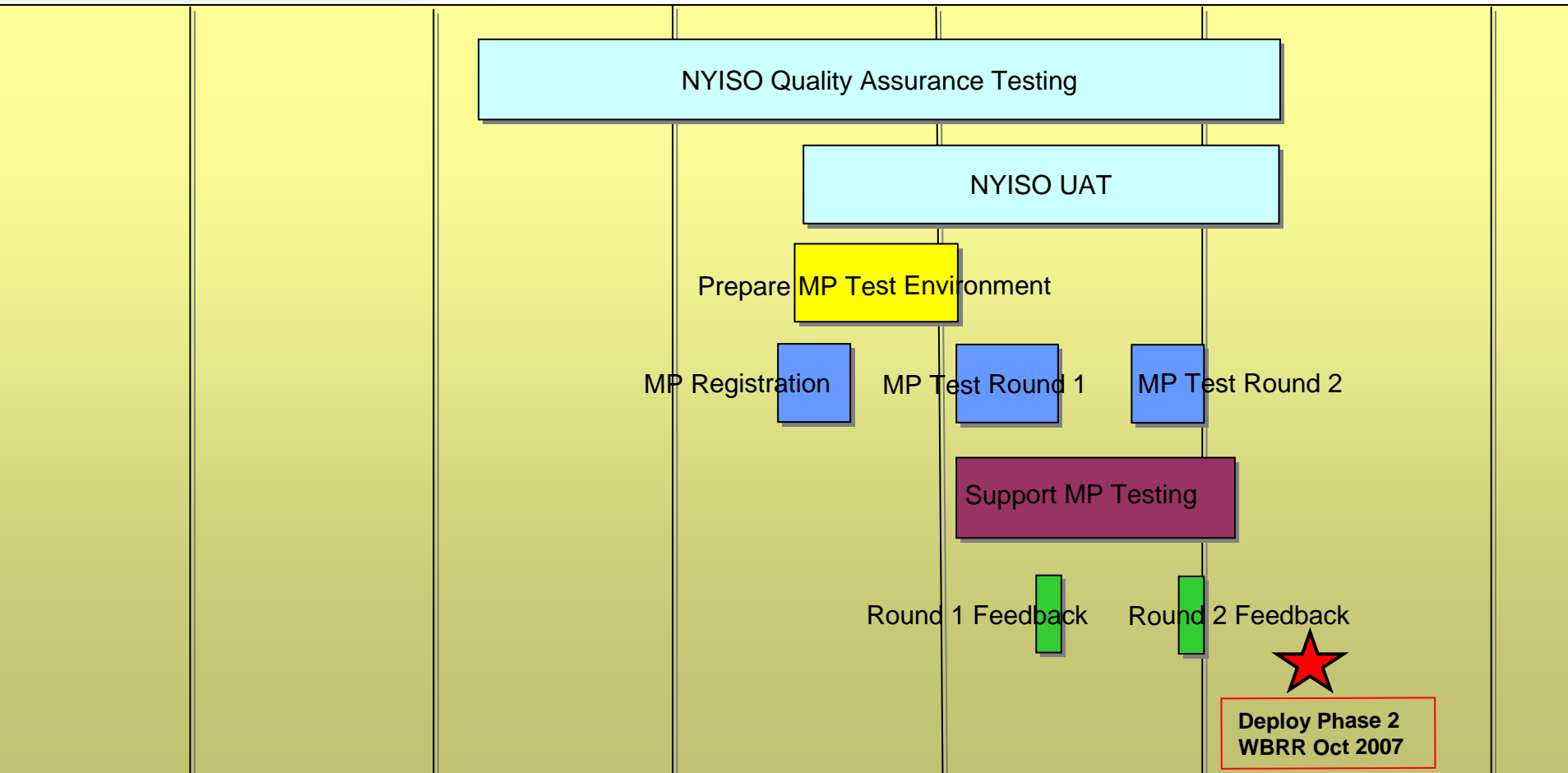
- ♦ LOAD_BUS_HOUR__DETAIL
- ♦ TIE_GEN_SUBZONE_DETAIL
- ♦ SUBZONE_LOAD
- ♦ STATION_POWER_REPORT
- ♦ INVOICE_HIST
- ♦ DAILY_REC_DOLLAR
- ♦ DAILY_REC_MWH

Marketplace Reports available to test:

- Calculated Subzone Load
- Subzone Load Detail
- Gen/Tie Detail
- Wholesale Load Bus Detail

Phase 2 Proposed MP Testing Schedule

May 07 June 07 July 07 August 07 September 07 October 07



Draft – For Discussion Purposes

Phase 2 MP Test Schedule

- ◆ **MP Test Registration**
 - *August 13, 2007 – August 17, 2007*
- ◆ **MP Test Time Frame**
 - *Round 1: September 5, 2007 through September 14, 2007*
 - *Round 2: September 24, 2007 through September 28, 2007*
- ◆ **MP Test Environment Availability**
 - *10AM to 3PM during the test period*
- ◆ **Pre-Testing Question and Answer Session**
 - *To Be Determined*
- ◆ **Round 1 Testing Feedback Conference Call**
 - *9AM Friday, September 14, 2007*
- ◆ **Round 2 Final Testing Feedback Conference Call**
 - *9AM Friday, September 28, 2007*

Phase 2 MP Testing Registration

- ♦ In order to obtain access to the MP test environment during the September test period all users must have an active production account and send a request to register during the week of **August 13, 2007 – August 17, 2007.**
- ♦ To register for testing:
 - *Send an email request identifying the User Name(s) currently used in NYISO's current production WBR system to:*
 - SJacon@nyiso.com and MMcLaughlin@nyiso.com
- ♦ NYISO will provide each registered user with password information prior to the beginning of the test period

Phase 2 MP Test Participation

- ◆ Registered MP users will be able to access the test environment using a special link on NYISO's website: www.NYISO.com
 - *Data from NYISO's production system will be used to create the test environment*
 - *MPs will be able to use the upload/download templates to exchange data for the following months:*
 - April 2006
 - August 2006
 - October 2006

Phase 2 MP Testing Proposed Plan

- ♦ **Round 1 (September 5, 2007 through September 14, 2007):**
 - **Week 1:**
 - Regression Testing of the following upload/download templates:
 - LOAD_BUS_HOUR_DATA
 - LOAD_BUS_HOUR_DETAIL
 - Initial Testing of the following upload/download templates:
 - STATION_POWER_REPORT
 - INVOICE_HIST
 - DAILY_REC_DOLLAR
 - DAILY_REC_MWH
 - Initial Testing of the following Marketplace reports:
 - Calculated Subzone Load
 - Subzone Load Detail
 - *Gen/Tie Detail*
 - *Wholesale Load Bus Detail*
 - **Week 2:**
 - Initial Testing of the following upload/download templates:
 - TIE_GEN_SUBZONE_DATA
 - TIE_GEN_SUBZONE_DETAIL
 - SUBZONE_LOAD
- ♦ **Round 2 (September 24, 2007 through September 28, 2007):**
 - All WBR Upload/Download templates available to test
 - Marketplace Reports
 - Performance Testing to be Determined

Phase 2 MP Test Communication

♦ MP Test Support

- *NYISO to provide an individual contact to support each registered tester during the testing period*
- *All critical issues will be listed as high priority and will be resolved as quickly as possible*
- *All other questions and issues will be prioritized and responded to no later than the next business day*
- *Daily test status updates will be sent to all registered testers at the close of each day*

♦ MP Testing Closeout

- *NYISO will hold two feedback sessions at the end of each round of testing to review all MP test questions and open issues. At that time NYISO will evaluate the need for any additional access to test environment*

Market Participant Testing

- ◆ Questions?
- ◆ Suggestions?

WBRR Project Phase 3

- ◆ Next Steps