

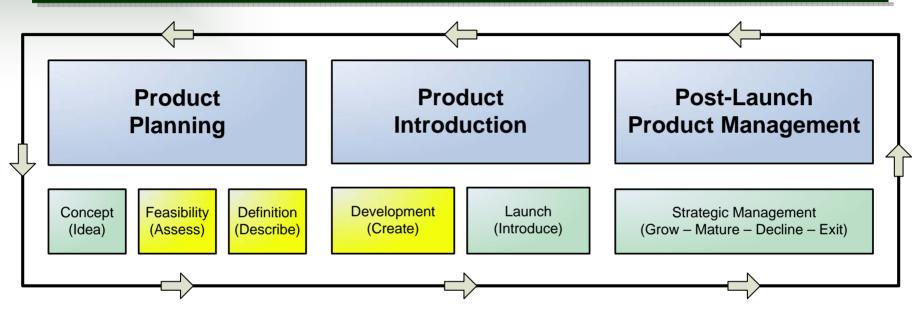
Web-Based Reconciliation Replacement (WBRR)

Technical Conference February 23, 2007

Draft – For Discussion Purposes



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	Мау	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 Overview

Draft – For Discussion Purposes



WBRR Overview

- Transmission Owner Load (TOL) Upload
 - Market Participant (MP) Requirements
 - Current Functionality
 - Proposed Functionality
 - Questions
- TOL Download
 - MP Requirements
 - Current Functionality
 - Proposed Functionality
 - Questions
- NYISO Architectural Updates
- MP Testing
- Remaining Upload and Download Templates



Phase 1 Deliverables

- Current Issues:
 - Performance issues with the TOL upload and the response back
 - Performance issues with the TOL download
- With these proposed enhancements:
 - Migration to NYISOs New Architectural Framework for Upload and Download
 - Improved performance for TOL Upload
 - Load Verification for TOL Download
 - New checks and balances on data delivery with NYISO
 - MW data checks and balances on load data
 - Row count
 - Summation
 - Verification



WBRR TOL Upload

Phase 1

Draft – For Discussion Purposes



TOL Upload: MP Requirements

Specific MP Requests:

- 1. Provide improved response time for upload requests, as defined by the WBR requirements effort
- 2. Reduce the occurrence of timeout errors received during the transmission of a Transmission Owner Load (TOL) file via the load_bus_hour_data upload request
- 3. Reduce the occurrence of security errors received during the transmission of a TOL file via the load_bus_hour_data upload request



TOL Upload: MP Requests (Cont.)

Specific MP Requests (Cont.):

- 4. Improve performance to enable the upload and NYISOgenerated verification of an entire monthly TOL file without having to split the file into smaller pieces
 - Note: NYISO MPs submit monthly data sets which range from 3,700 to 173,000 data rows, therefore NYISO will support a TOL upload data set which is in compliance with all other upload/download templates; 50,000 rows per submit
- 5. Provide the MPs with auditable, traceable and verifiable data controls to support compliance verification and testing
- 6. 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



TOL Upload: Template Description

- Upload Name: Load_bus_hour_data
- Description: Enables a Metering Authority to submit their load bus data to NYISO



TOL Upload: Request Parameters – Current

Current Request Parameters Supported

- *BID_TYPE required*
- USERID required
- PASSWORD required
- DATA_ROWS required
- UPLOAD_RESPONSE optional; defaults to N
- Data Elements Submitted for each Row of Data:
 - Date_hour required
 - Bus PTID required
 - Hourly MW Value required



Example: Current TOL Upload Request

Request File Example of Current TOL Upload.... **BID_TYPE**=LOAD_BUS_HOUR_DATA& **USERID**=youruser& **PASSWORD**=yourpassword& DATA ROWS=8& **UPLOAD_RESPONSE**=Y& 12/1/2005 0:00,9999999,53 12/1/2005 1:00,9999999,48 12/1/2005 2:00,9999999,46 12/1/2005 3:00,999999,44 12/1/2005 4:00,9999999,44 12/1/2005 5:00,9999999,46 12/1/2005 6:00,9999999,53 12/1/2005 7:00,9999999,59



TOL Upload: Proposed Request Parameter – New

New Request Parameter

DATA_SUM – optional parameter

- Represents the sum of MWs in the file
- Provides validation that the value specified matches the sum of all MW values included in file
 - If the values do not match, the entire file will be rejected with an appropriate error message
 - If the values match, the file will continue to be processed



Example: TOL Upload Request with Data_sum

Request File Example of TOL Upload with Proposed Field: **BID TYPE**=LOAD BUS HOUR DATA& **USERID**=youruser& **PASSWORD**=yourpassword& DATA ROWS=8& **DATA SUM**=800& **UPLOAD_RESPONSE**=N& 12/1/2005 0:00.9999999.100 12/1/2005 1:00,9999999,100 12/1/2005 2:00,9999999,100 12/1/2005 3:00.9999999.100 12/1/2005 0:00,999991,100 12/1/2005 1:00,999991,100 12/1/2005 2:00,999991,100 12/1/2005 3:00,999991,100



TOL Upload: Response Parameters – Current

Current Response Parameters:

- TIME_STAMP processing time of file
- BID_TYPE confirmation of 'Load_bus_hour_data' bid type
- DATA_ROWS Number of Data Rows Processed



Example: Current TOL Upload - Response

Response Example of Current TOL Upload with Upload_response=N: *TIME_STAMP=07/1/2006 10:34*& *BID_TYPE=LOAD_BUS_HOUR_DATA*& *DATA_ROWS=8*&



TOL Upload: Proposed Response Parameter – New

New Response Parameter

- DATA_SUM
 - Represents the total sum of MWs processed in the request
 - Provided in every response for TOL Upload; independent of the DATA_SUM of the Request File
 - 4th Header in Response
 - TIME_STAMP
 - BID_TYPE
 - DATA_ROWS
 - DATA_SUM



TOL Upload: Proposed Request and Response - Change

- Change to Parameter
 - UPLOAD_RESPONSE
- Request File
 - Valid Entries: Y or N
 - Optional Field
- Response
 - Response Currently Includes:
 - N: 3 header rows
 - Y: 3 header rows and each data row submitted is echoed back
 - Proposed Change to Response:
 - N: 4 header rows
 - Y: 4 header rows and sum of all MW values sent, listed by PTID



Example 1: Proposed TOL Upload

Request with upload_response=Y: BID_TYPE=LOAD_BUS_HOUR_DATA& USERID=youruser& PASSWORD=yourpassword& DATA_ROWS=8& DATA_SUM=800& UPLOAD_RESPONSE=Y& 12/1/2005 0:00,999999,100 12/1/2005 2:00,999999,100 12/1/2005 3:00,999999,100 12/1/2005 0:00,999999,100 12/1/2005 1:00,9999991,100 12/1/2005 2:00,999991,100 12/1/2005 3:00,999991,100

Response:

TIME_STAMP=07/1/2006 10:34& BID_TYPE=LOAD_BUS_HOUR_DATA& DATA_ROWS=8& DATA_SUM=800& 999999,400 999991,400



Example 2: Proposed TOL Upload

Request with upload_response=N:

BID_TYPE=LOAD_BUS_HOUR_DATA& USERID=youruser& PASSWORD=yourpassword& DATA_ROWS=8& DATA_SUM=800& UPLOAD_RESPONSE=N& 12/1/2005 0:00,9999999,100 12/1/2005 1:00,9999999,100 12/1/2005 2:00,999999,100 12/1/2005 0:00,999999,100 12/1/2005 1:00,9999991,100 12/1/2005 2:00,999991,100 12/1/2005 3:00,999991,100

Response:

TIME_STAMP=07/1/2006 10:34& BID_TYPE=LOAD_BUS_HOUR_DATA& DATA_ROWS=8& DATA_SUM=800&



TOL Upload Summary: Request File

- New Optional Field: DATA_SUM
 - *MP indicates the total sum of MWs sent in the file*
 - File processed if DATA_SUM value matches
 - File rejected if DATA_SUM value does not match
- Change to Optional Field: UPLOAD_RESPONSE Meaning of Y and N values have been changed
 - *N: to provide 4 record header*
 - Y: to provide 4 record header and NYISO calculated sum of hourly MW values by PTID



TOL Upload Summary: Response

- New Field: DATA_SUM
 - NYISO indicates the total sum of MWs processed from the upload
 - 4th field added to the header of the response
 - Always returned as part of the response independent of the DATA_ROWS field in the request file



TOL Upload Questions to MPs

- 1. Are there any questions regarding these changes to the TOL Upload?
- 2. Do the changes meet your requirements for the TOL Upload?
- 3. Will the changes impact your ability to participate in the March testing?



WBRR TOL Download

Phase 1

Draft – For Discussion Purposes



TOL Download: MP Requirements

Specific MP Requests :

- 1. Provide improved response time for download requests, as defined by the WBR requirements effort
- 2. Improve WBR's downloading capabilities by providing the ability to retrieve large quantities of data at one time without encountering errors
 - Note: NYISO will support a TOL download which is in compliance with all other upload/download templates; 50,000 rows per request



TOL Download: Template Description

- Upload Name: Load_bus_hour_detail
- Description: Enables Metering Authorities and Load Serving Entities (LSEs) to verify their load bus data from NYISO



TOL Download: Request Parameters – Current

Current Request Parameters Supported

- USERID required
- PASSWORD required
- QUERY_TYPE required
- BILLING_MONTH required
- PTID optional, supports up to 10 load bus entries
- START_DATE optional
- END_DATE optional
- VERSION optional
- ADVISORY_DATA optional
- UPDATE_TIME_START optional
- UPDATE_TIME_END optional



TOL Download: Template Updates to Optional Fields

 The START_DATE and END_DATE fields must be within the month specified in the BILLING_MONTH field; otherwise request is rejected



Example: Current TOL Download

Request File Example of Current TOL Download:

USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005&



TOL Download: Proposed Request Parameters – New

New Request Parameters

- 1. SUBZONE_PTID optional parameter
 - Value submitted represents a single subzone
 - Provides simplified method of obtaining all user eligible load bus values within a subzone
 - Provides 'echo back' functionality row by row output of data previously submitted to NYISO



Example: TOL Request with SUBZONE_PTID

Request File Example of TOL Download: USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005& SUBZONE_PTID=11111&



TOL Download: Proposed Request Parameters – New

New Request Parameters (continued)

2. LOAD_VERIFICATION – optional parameter

- Provides comparison between the TO submitted load and the NYISO calculated subzone load
 - Provides summary and detailed data analysis
- Used in lieu of ALL other optional parameters
 - Other optional parameters ignored
- Valid Entries: Summary or Detail



Examples: TOL Request with LOAD_VERIFICATION

Request File Examples of TOL Download: USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005& LOAD_VERIFICATION=SUMMARY&

> USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005& LOAD_VERIFICATION=DETAIL&



TOL Download: Response Parameters – Current

Current Response Parameters

- TIME_STAMP processing time of file
- BID_TYPE confirmation of 'Load_bus_hour_data' bid type
- DATA_ROWS Number of Data Rows Processed



Example: Current TOL Download Response

 Response Example of Current TOL Download with request for PTID=11111:

TIME_STAMP=02/07/2007 17:12 BID TYPE=LOAD BUS HOUR DETAIL

DATA_ROWS=744

- "05/01/2006 00:00", "05/01/2006", 0, 11111, "CITY1", 1100, "09/18/2006 15:40", "USER1", "N"
- "05/01/2006 01:00", "05/01/2006",0, 11111, "CITY1", 1100, "09/18/2006 15:40", "USER1", "N"
- "05/01/2006 02:00", "05/01/2006", 0, 11111, "CITY1", 1100, "09/18/2006 15:40", "USER1", "N"
- "05/01/2006 03:00", "05/01/2006", 0, 11111, "CITY1", 1100, "09/18/2006 15:40", "USER1", "N "

Up to 744 rows



TOL Download: Proposed Response Fields – Overview

Additional Response Fields:

- Only returned when LOAD_VERIFICATION (optional field) is included in the Request File
- Includes standard header fields plus two new header fields
- Includes one or more sets of 6 additional data fields
- Includes new data detail at the monthly load bus level



TOL Download: Proposed Response Parameters - New

Header Field:

- BILLING_MONTH Month being Verified
- **SUBZONE_NUM** Number of subzones returned in the data section

Data Fields – Repeats for each subzone

- **SUBZONE_PTID** PTID for subzone
- MLOAD Monthly total subzone load; NYISO calculated
- BUS_SUM Monthly total of meter supplied load busses within the subzone
- **DELTA** Difference between MLOAD and BUS_SUM
- HOURS_MATCH indicates whether each hour of the month matches between Hourly LOAD and Hourly BUS_SUM; returns Y or Error Message of 1st hour found in error
- **BUS_PTIDS** Number of load busses included in the BUS_SUM

Data Detail (only when LOAD_VERIFICATION=DETAIL):

 Each row includes: Load Bus PTID, Load Bus Name, Monthly MW Sum



Example 1: Proposed MA TOL Download – Summary

- Request where MA user authorized to view 1 subzone (all bus's)
 - Request: USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005& LOAD_VERIFICATION=SUMMARY&
- Response:

TIME_STAMP=12/21/2006 09:09 BID_TYPE=LOAD_BUS_HOUR_DETAIL DATA_ROWS=8 BILLING_MONTH=10/2005 SUBZONE_NUM=1 SUBZONE_PTID=11111 MLOAD=2000.000 BUS_SUM=2000.000 DELTA=0 HOURS_MATCH=Y BUS_PTIDS=2



Example 2: Proposed MA TOL Download – Detail

- Request where MA user authorized to view 1 subzone (all bus's)
- Request:

USERID=youruser& PASSWORD=yourpassword& QUERY_TYPE=LOAD_BUS_HOUR_DETAIL& BILLING_MONTH=10/2005& LOAD_VERIFICATION=DETAIL&

• Response:

TIME_STAMP=12/21/2006 09:09 BID_TYPE=LOAD_BUS_HOUR_DETAIL DATA_ROWS=10 BILLING_MONTH=10/2005 SUBZONE_NUM=1 SUBZONE_PTID=11111 MLOAD=2000.000 BUS_SUM=2000.000 DELTA=0 HOURS_MATCH=Y BUS_PTIDS=2 999992, BUS_A1,1000.000 999993.BUS A2,1000.000



Example 3: Proposed MA TOL Download – Detail with Multiple Subzones

 Request where MA user authorized to view 7 subzones (LOAD_VERIFICATION=DETAIL)

Response:

TIME STAMP=12/21/2006 09:09 BID TYPE=LOAD_BUS_HOUR_DETAIL DATA ROWS=58 BILLING MONTH=10/2005 SUBZONE NUM=7 SUBZONE PTID=11111 **MLOAD**=2000.000 BUS SUM=2000.000 **DELTA=0.000** HOURS MATCH=Y BUS PTIDS=2 100101.BUS A1.1000.000 100102.BUS B1.1000.000 SUBZONE PTID=22222 **MLOAD**=2000.000 BUS SUM=2000.000 **DELTA=0.000** HOURS MATCH=Y BUS PTIDS=2 100999,BUS A2,1000.000 100991,BUS B2,1000.000

...



Example 4: Proposed MA TOL Download – Summary with Error

- Error shows difference at the hourly level between Load Bus Sum and Subzone Load Calculation; MA user is authorized to see all bus values
- **Response: (SUMMARY)** ٠ TIME STAMP=12/21/2006 09:09 BID TYPE=LOAD BUS HOUR DETAIL DATA ROWS=14 BILLING MONTH=10/2005 SUBZONE NUM=2 SUBZONE PTID=10001 **MLOAD**=2000.000 BUS SUM=2000.000 **DELTA**=0.000 HOURS MATCH=Y SUBZONE PTID=10002 **MLOAD**=2000.000 BUS SUM=1800.000 **DELTA=200.000** HOURS MATCH=N WBR-001 Hourly mismatch for 10/01/2005 00:00, Hourly Mload <200.000> vs Bus Sum <0.000>



Example 5: Proposed MA TOL Download – Detail with Error

- Error shows difference at the hourly level between Load Bus Sum and Subzone Load Calculation; MA user is authorized to see all bus values
- **Response: (DETAIL)** ٠ TIME STAMP=12/21/2006 09:09 BID TYPE=LOAD BUS HOUR DETAIL DATA ROWS=16 BILLING MONTH=10/2005 SUBZONE NUM=2 SUBZONE PTID=10001 **MLOAD**=2000.000 BUS SUM=2000.000 **DELTA**=0.000 HOURS MATCH=Y 100999.BUS A1.1000.000 100991,BUS B1,1000.000 SUBZONE PTID=10002 **MLOAD**=2000.000 BUS SUM=1800.000 **DELTA=200.000** HOURS MATCH=N WBR-001 Hourly mismatch for 10/01/2005 00:00, Hourly Mload <200.000> vs Bus Sum <0.000>



Example 6: Proposed LSE TOL Download – Summary

- Request where LSE user authorized to view their own busses (3 across 3 Subzones) (LOAD_VERIFICATION=SUMMARY)
- Response:

TIME_STAMP=12/21/2006 09:09 BID_TYPE=LOAD_BUS_HOUR_DETAIL DATA_ROWS=11 BILLING_MONTH=10/2005 SUBZONE_NUM=3 SUBZONE_PTID=11111 HOURS_MATCH=Y BUS_PTIDS=1 SUBZONE_PTID=22222 HOURS_MATCH=Y BUS_PTIDS=1 SUBZONE_PTID=33333 HOURS_MATCH=Y BUS_PTIDS=1



Example 7: Proposed LSE TOL Download – Summary with Error

 Error shows difference at the hourly level between Load Bus Sum and Subzone Load Calculation; LSE user is only authorized to see LSE's bus values

Response: (SUMMARY) TIME STAMP=12/21/2006 09:09 **BID TYPE**=LOAD BUS HOUR DETAIL DATA ROWS=8 BILLING MONTH=10/2005 SUBZONE NUM=2 SUBZONE PTID=10001 HOURS MATCH=Y SUBZONE PTID=10002 HOURS MATCH=N WBR-001 Hourly mismatch for 10/01/2005 00:00



Example 8: Proposed LSE TOL Download – Detail with Error

 Error shows difference at the hourly level between Load Bus Sum and Subzone Load Calculation; LSE user is only authorized to see LSE's bus values

Response: (DETAIL) TIME STAMP=12/21/2006 09:09 **BID TYPE**=LOAD BUS HOUR DETAIL **DATA ROWS**=9 BILLING MONTH=10/2005 SUBZONE NUM=2 SUBZONE PTID=10001 HOURS_MATCH=Y 100999,BUS A1,1000.000 SUBZONE PTID=10002 HOURS MATCH=N WBR-001 Hourly mismatch for 10/01/2005 00:00



TOL Download Summary: Request File

- New Optional Fields:
 - SUBZONE_PTID provides load data for one subzone
 - LOAD_VERIFICATION provides load analysis by subzone
- Updated Optional Fields:
 - START_DATE
 - END_DATE



TOL Download Summary: Response

Expanded response for LOAD_VERIFICATION only

- New Header Fields:
 - BILLING_MONTH
 - SUBZONE_NUM
- New Repeatable Fields (for each subzone in file):
 - 1. SUBZONE_PTID
 - 2. MLOAD
 - 3. BUS_SUM
 - 4. DELTA
 - 5. HOURS_MATCH
 - 6. BUS_PTIDS

New Detail Format (for LOAD_VERIFICATION=DETAIL only):

- Load Bus PTID
- Load Bus Name
- Monthly MW Sum



TOL Download Question to MPs

- 1. Are there any questions regarding these changes to the TOL Download?
- 2. Do the changes meet your requirements for the TOL Download?
- 3. Will the changes impact your ability to participate in the March testing?



WBRR Architectural Changes

Phase 1 and Phase 2

Draft – For Discussion Purposes



NYISO Architectural Changes: Delivery

- Architectural Changes to be introduced in conjunction with each Web Based Reconciliation Replacement Delivery
 - Phase 1:
 - TOL Upload
 - TOL Download
 - Phase 2:
 - Remaining Templates



NYISO Architectural Changes: Timeout Parameter

TIMEOUT parameter in request files:

- Current Usage
 - Optional parameter for all uploads and downloads
 - Allows user to set a time limit for subsequent uploads or downloads to wait, when a subsequent template of the same type and userid is submitted
- Issue with Current Usage
 - Has the potential to produce system instability and unreliability
 - Has the potential to result in poor performance for other system users
- Proposed Solution
 - Remove functionality which supports queuing of the same template for the same user
 - 2nd request must not be submitted until 1st request completes



NYISO Architectural Changes: Data Rows

DATA_ROWS Parameter in Request Files:

- Proposed Functionality
 - Request file will not be processed when value of row count in header does not match number of data rows submitted
 - File will not be processed and an error message will be returned



NYISO Architectural Changes: Error Messages

Error Messages:

- Improved Error Messages and Meaning
- Example of Current Error Message
 - ORACLE error--
 - At data row 1.

ORA-20998: Error: User XXXXXX is not authorized to submit meter data for Bus with PT ID:999999. In INSERT_HRLY_BUS_LOAD_DATA from INSERT_HOURLY_BUS_LOAD_UP_DN.

ORA-06512: at "BIDBOX.RAISE_ERROR", line 260

ORA-06512: at line 1.

Example of Proposed Error Message

 Upload/Download Error--WBR-01006: User XXXXX not authorized for PTID 999999.



WBRR Market Participant Testing

Phase 1: March 2007

Draft – For Discussion Purposes

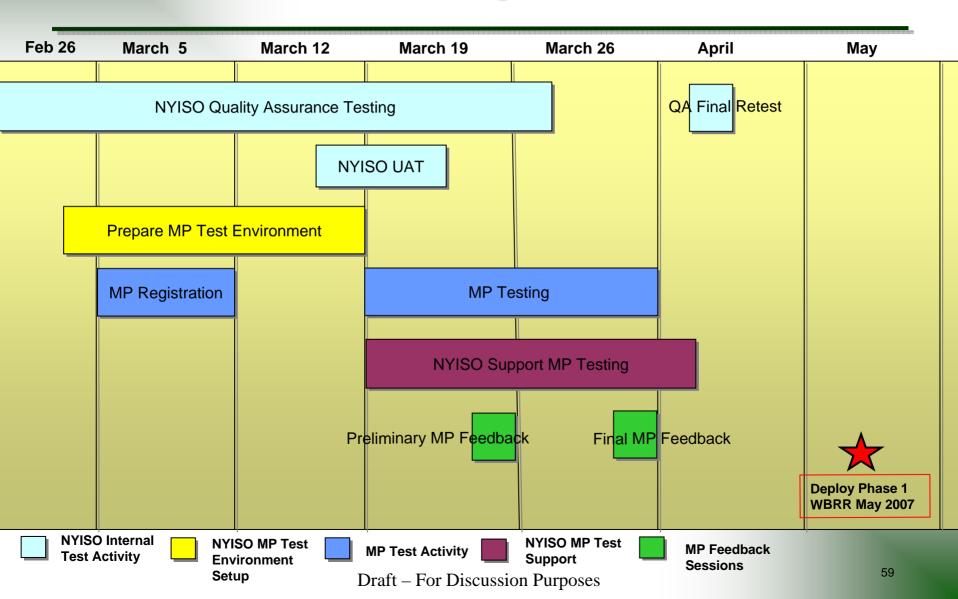


Market Participant Phase 1 Testing

- MP Testing Requirement:
 - To provide a test environment for WBR 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:
 - Upload: Load_bus_hour_data
 - Download: Load_bus_hour_detail
- Marketplace will not be available during this phase of MP testing



Phase 1 WBRR Testing Schedule





Phase 1 MP Test Schedule

- MP Testing Time Frame
 - March 19, 2007 through March 30,2007
- MP Test Environment Availability
 - 10AM to 2PM Monday through Friday during this test period
- Week 1 Testing Feedback Conference Call
 - 9AM Friday March 23, 2007
- Week 2 Testing Feedback Conference Call
 - 9AM Friday March 30, 2007



Phase 1 MP Testing Registration

- In order to obtain access to the MP test environment during the March test period all users must register
- To register for testing:
 - Send an email request identifying the User Name(s) currently used in NYISO's current production WBR system to:
 - <u>SJacon@nyiso.com</u> and <u>MMcLaughlin@nyiso.com</u>
- NYISO will provide each registered user with password information prior to the beginning of the test period



Phase 1 MP Test Participation

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



Phase 1 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

MP Testing Closeout

 NYISO will hold two feedback sessions at the end of each week 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



WBRR Market Participant Testing

Phase 2 – September 2007

Draft – For Discussion Purposes

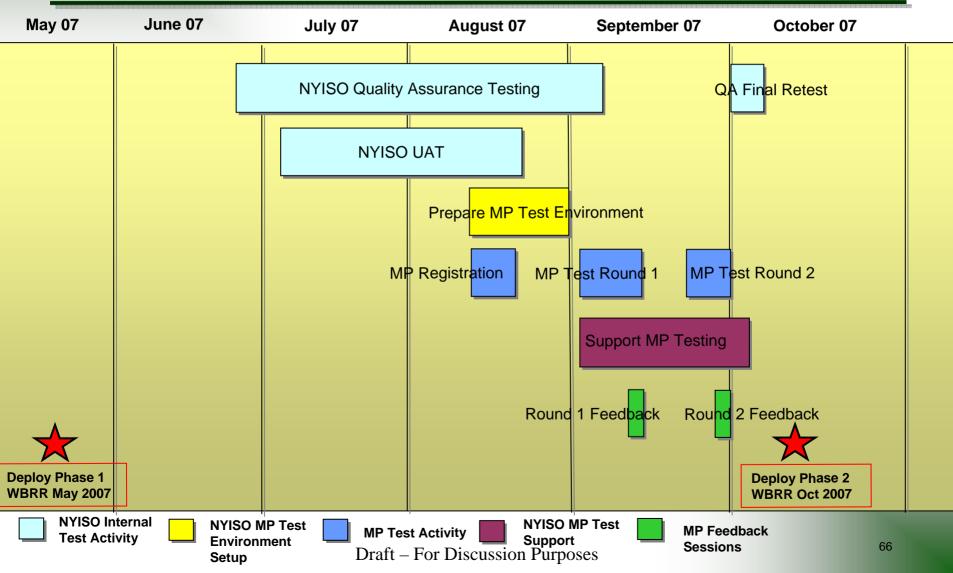


Phase 2 MP Testing

- Upload/Download Templates available to test:
 - Uploads:
 - TIE_GEN_SUBZONE_DATA
 - METER_AUTHORITY_AGREEMENT
 - SUBZONE_LOAD
 - INVOICE_HIST
 - Downloads:
 - TIE_GEN_SUBZONE_DETAIL
 - WHOLESALE_VERIFICATION



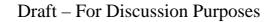
Phase 2 Proposed MP Testing Schedule





Market Participant Testing

Questions?





WBRR Remaining Templates

Phase 2

Draft – For Discussion Purposes



WBRR: Phase 2 Overview

- WBRR: Remaining Templates
 - MP Requirements
 - Tie Gen Subzone: Upload and Download
 - Metering Authority Agreement
 - Subzone Load Download
 - Invoice History
 - Wholesale Verification



Remaining Templates: MP Requirements

Specific MP Requests :

- 1. Provide improved response time for upload requests, as defined by the WBR requirements effort
- 2. Provide the MPs with auditable, traceable and verifiable data controls to support compliance verification and testing
- 3. 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



Remaining Templates: MP Requirements (Cont.)

Specific MP Requests (Cont.):

- 4. Provide improved response time for download requests, as defined by the WBR requirements effort
- 5. Improve WBR's downloading capabilities by providing the ability to retrieve large quantities of data at one time without encountering errors
 - Note: NYISO will support a TOL download which is in compliance with all other upload/download templates; 50,000 rows per request
- 6. Provide authorized parties the ability to download individual Gen/Tie data regardless of the MA designation.



Tie Gen Subzone Data: Upload Template

- **Upload Name:** TIE_GEN_SUBZONE_DATA
- **Description:** Enables a meter authority to upload tie line, generator, and subzone hourly MW values to the NYISO.



Tie Gen Subzone Data - Questions

- Are there any issues or concerns with this template?
- Would your company like to recommend any changes?



Tie Gen Subzone Detail: Download Template

- Download Name:
 TIE_GEN_SUBZONE_DETAIL
- **Description:** Enables a generator or meter authority to download their tie line, generator and subzone hourly MW data for a specified time within a month.



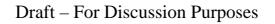
Tie Gen Subzone Detail - Questions

- Are there any issues or concerns with this template?
- Would your company like to recommend any changes?



Meter Authority Agreement: Upload Template

- Upload Name:
 METER_AUTHORITY_AGREEMENT
- **Description:** Enables the metering authority to indicate agreement with the subzone load calculation for a given subzone





Meter Authority Agreement - Questions

- NYISO data shows that one Metering Authority is currently using this template
- Are there any issues or concerns with this template?
- Would your company like to recommend any changes?
- With the Shortened Settlement Cycle process changes, is this template still necessary?



Subzone Load: Download Template

- Download Name: SUBZONE_LOAD
- Description: Enables a metering authority to download its Subzone Load data



Subzone Load – Download Information

- NYISO has provided an additional template for obtaining data
 - *New template:* STATIC_SUBZONE_LOAD
 - Both templates currently supported
- STATIC_SUBZONE_LOAD provides significant performance improvements



Subzone Load – Questions

- SUBZONE_LOAD
 - Are there any issues or concerns with this template?
- STATIC_SUBZONE_LOAD
 - Are there any issues or concerns with this template?
 - Would your company like to recommend any changes?



Invoice History: Download Template

- Upload Name: INVOICE_HIST
- **Description:** Enables a user to download invoice history data for a specified date range



Invoice History - Questions

- Are there any issues or concerns with this template?
- Would your company like to recommend any changes?



Wholesale Load Verification: Download Template

- Download Name:
 WHOLESALE_VERIFICATION
- Description: Enables a meter authority to download wholesale load data for each specified subzone if their wholesale loads match their calculated subzone load value



Wholesale Load Verification - Information

- NYISO data shows that this template has not been used since September 2005
- With TOL Download Verification, additional detail on loads will be available
- NYISO Proposes to remove this template, pending MP feedback on the TOL download enhancements