

Part 4 - Resource and MP Level Shortfall Data Demand Response Information System (DRIS) Training for October 2014 Deployment

Julie Pelletier

Product Business Analyst

New York Independent System Operator

Thursday, October 16, 2014 9:30am - 11:30am

Wednesday, October 29, 2014 1:30pm - 3:30pm

Web Ex - Rensselaer, NY

Training Topics

- ◆ Part 1: Introduction to DRIS
 - *DRIS User Requirements*
 - *User Privileges*
 - *Access to DRIS*

- ◆ Part 2 : SCR Change of Status
 - *Change of Status Functionality*
 - *Types of Change of Status*
 - *Viewing Change of Status in DRIS*
 - *Reporting Change of Status*
 - *Change of Status Summary*

- ◆ Part 3: Incremental ACL Verification
 - *Import Process*
 - *Managing Exceptions*
 - *Monthly Top Hours*
 - *Incremental ACL Screen*

- ◆ Part 4: Resource and MP Level Shortfall Data
 - *Viewing Shortfall Data*
 - *Shortfall Summary Screen*
 - *Greatest Deficiency*
 - *Shortfall Type*
 - *RIP Portfolio Performance Shortfall*
 - *Summary of RIP Portfolio Performance Shortfall*

- ◆ Part 5: Updates to DRIS Functionality
 - *Provisional ACL Summary Screen*
 - *Current Functionality*
 - *“No Verified Data”*
 - *Provisional ACL Details Screen*
 - *Resource Responses to Event*
 - *“Failure to Report”*
 - *“Failure to Report to 2nd Test”*
 - *View Event Response Details*

- ◆ Part 6 : Deployment
 - *Additional Training Sessions*
 - *Deployment Activities*

Shortfall Types

- ◆ **Incremental ACL Shortfall** - A shortfall calculation which applies to an SCR resource that enrolls with an Incremental ACL. This calculation identifies a shortfall when the resource's net ACL is greater than the Verified ACL.
- ◆ **Provisional ACL Shortfall** - A shortfall calculation which applies to an SCR resource that enrolls with a Provisional ACL. This calculation identifies a shortfall when the resource's Provisional ACL is greater than the Verified ACL.
- ◆ **Change of Status Shortfall** - A shortfall calculation which applies to an SCR resource that reports a SCR Change of Status. This calculation identifies a shortfall when the capability of the resource has been oversold.

Shortfall Data Functionality

- ◆ DRIS allows MPs that enroll resources with either a Change of Status, Incremental ACL and/or Provisional ACL to do the following:
 - *View resource level Change of Status Shortfall data*
 - *View resource level Incremental ACL Shortfall data*
 - *View resource level Provisional ACL Shortfall data*

- ◆ View shortfall type and the kW data which contribute to the Greatest Deficiency

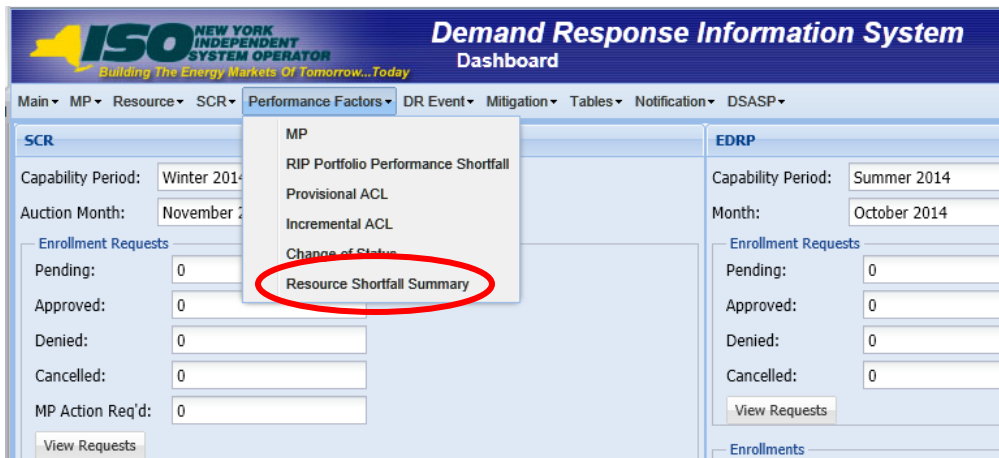
Greatest Deficiency as defined in Section 4.12.4.3.2 of the Installed Capacity Manual

Greatest Deficiency - Where a single SCR's participation in the ICAP/SCR program gives rise to more than one potential shortfall within the Capability Period, the NYISO shall assess to the RIP the greatest deficiency charge for the Capability Period for the single SCR. The greatest deficiency charge for the Capability Period shall be the greatest sum of the monthly deficiency charges calculated for the single SCR from among the specific shortfall types identified under Section 5.14.2.3 of the *NYISO Services Tariff*.

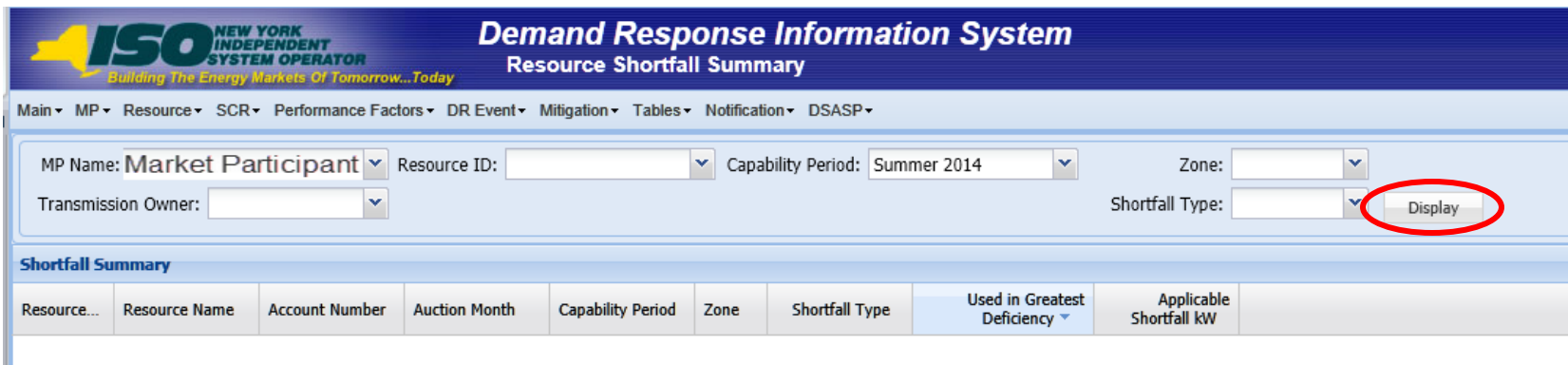
Shortfall Summary Screen

- ◆ Users may view the Shortfall Summary screen once the DRIS calendar event for viewing resource level shortfall(s) is open
 - *Allows users to view resource level shortfall information*
 - *Displayed information includes shortfalls incurred by the resource for one or all month(s) in the Capability Period*
 - *Users can further narrow the search by specific resource, zone or Transmission Owner*
 - *Ability to search by specific resource shortfall type*
 - *Data can be exported to Excel*

View Resource Shortfall Summary Screen

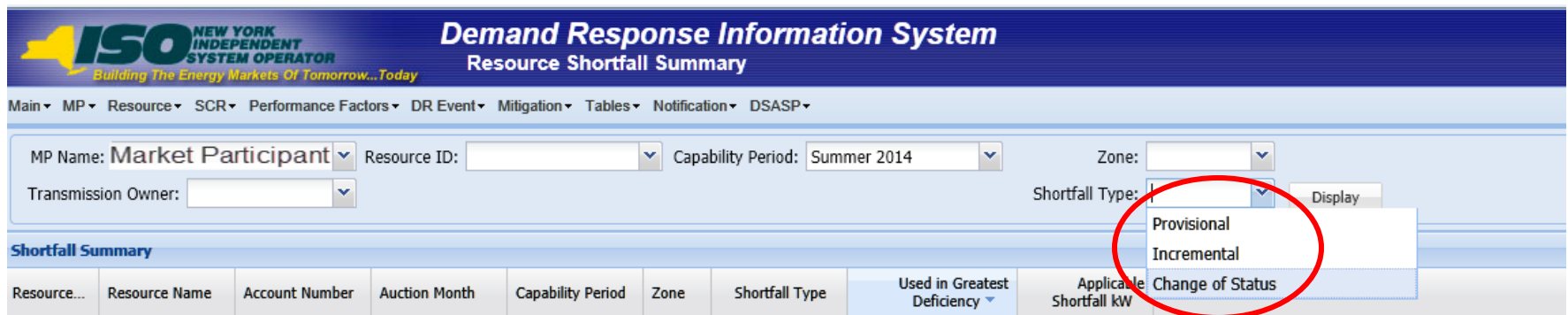


- ◆ From the “Performance Factors” menu, select “Resource Shortfall Summary”
- ◆ Optionally choose the “Capability Period” and “Resource ID”
- ◆ Click “Display”



Shortfall Type

- ◆ The user can further narrow the search by choosing the Shortfall Type to view specific information
- ◆ Resource must have incurred the selected Shortfall for at least one month in the Capability Period



Demand Response Information System
Resource Shortfall Summary

Main ▾ MP ▾ Resource ▾ SCR ▾ Performance Factors ▾ DR Event ▾ Mitigation ▾ Tables ▾ Notification ▾ DSASP ▾

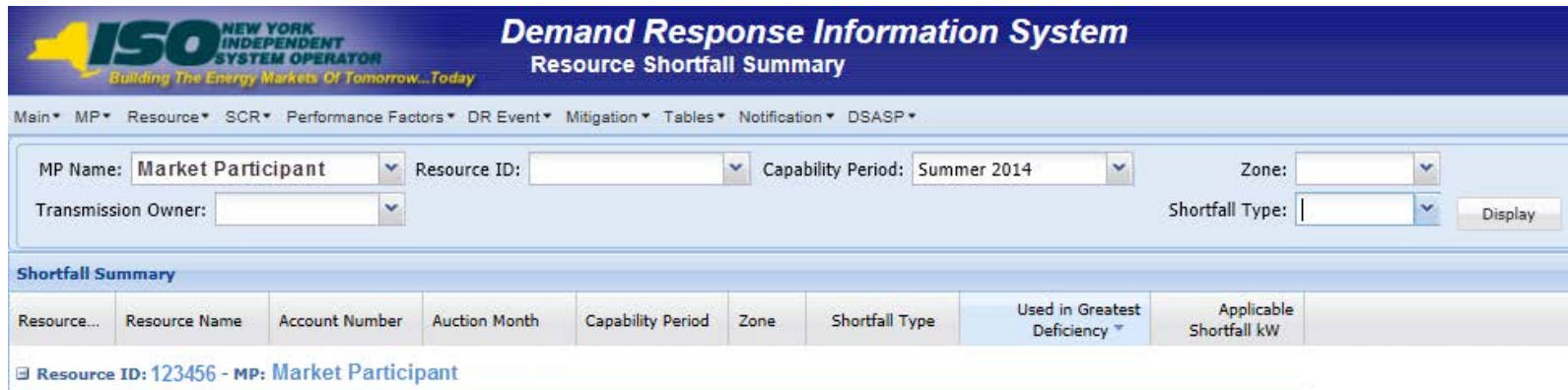
MP Name: Market Participant ▾ Resource ID: ▾ Capability Period: Summer 2014 ▾ Zone: ▾
Transmission Owner: ▾ Shortfall Type: ▾ Display

Shortfall Summary

Resource...	Resource Name	Account Number	Auction Month	Capability Period	Zone	Shortfall Type	Used in Greatest Deficiency ▾	Applicable Shortfall kW	Change of Status

Shortfall Summary Screen

- ◆ System displays data in the Shortfall Summary Screen for the resources meeting the filter criteria chosen



Demand Response Information System
Resource Shortfall Summary

Main * MP * Resource * SCR * Performance Factors * DR Event * Mitigation * Tables * Notification * DSASP *

MP Name: Resource ID: Capability Period: Zone:

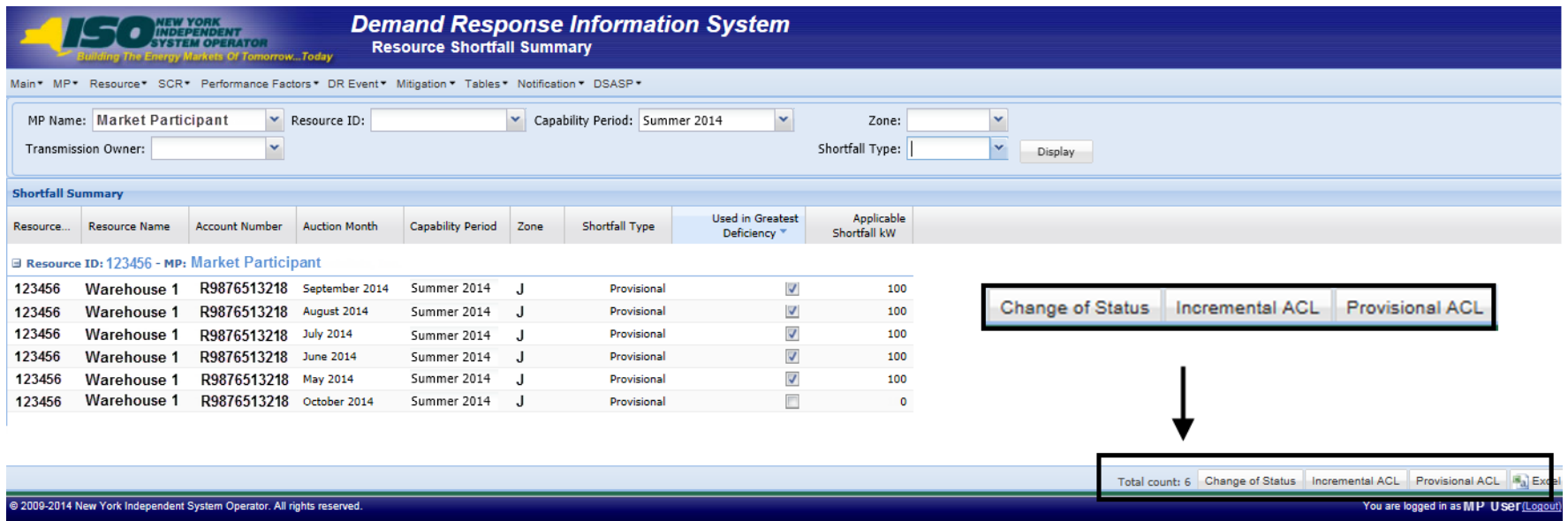
Transmission Owner: Shortfall Type:

Resource...	Resource Name	Account Number	Auction Month	Capability Period	Zone	Shortfall Type	Used in Greatest Deficiency	Applicable Shortfall kW
<input checked="" type="checkbox"/>	Resource ID: 123456 - MP: Market Participant							

- ◆ To view the details of the resource Shortfall Summary, click the corresponding row in the grid to expand the record

View Shortfall Details

- ◆ The system expands the record within the frame, where additional resource Shortfall kW summary information is displayed
- ◆ The user may navigate to the individual shortfall details page(s) for resources enrolled with either a COS, Incremental ACL or Provisional ACL by selecting the resource and the applicable button in the lower right hand corner of the screen



Demand Response Information System
Resource Shortfall Summary

Main ▾ MP ▾ Resource ▾ SCR ▾ Performance Factors ▾ DR Event ▾ Mitigation ▾ Tables ▾ Notification ▾ DSASP ▾

MP Name: Resource ID: Capability Period: Zone: Transmission Owner: Shortfall Type:

Shortfall Summary

Resource...	Resource Name	Account Number	Auction Month	Capability Period	Zone	Shortfall Type	Used in Greatest Deficiency	Applicable Shortfall kW
Resource ID: 123456 - MP: Market Participant								
123456	Warehouse 1	R9876513218	September 2014	Summer 2014	J	Provisional	<input checked="" type="checkbox"/>	100
123456	Warehouse 1	R9876513218	August 2014	Summer 2014	J	Provisional	<input checked="" type="checkbox"/>	100
123456	Warehouse 1	R9876513218	July 2014	Summer 2014	J	Provisional	<input checked="" type="checkbox"/>	100
123456	Warehouse 1	R9876513218	June 2014	Summer 2014	J	Provisional	<input checked="" type="checkbox"/>	100
123456	Warehouse 1	R9876513218	May 2014	Summer 2014	J	Provisional	<input checked="" type="checkbox"/>	100
123456	Warehouse 1	R9876513218	October 2014	Summer 2014	J	Provisional	<input type="checkbox"/>	0

Total count: 6

© 2008-2014 New York Independent System Operator. All rights reserved. You are logged in as MP User

Change of Status Incremental ACL Provisional ACL



Total count: 6 Change of Status Incremental ACL Provisional ACL Export

View Shortfall Field Definitions

- ◆ **Shortfall Type** – the enrollment type associated with the Capability Period and month selected for the determined Shortfall (ex: Change of Status, Incremental and Provisional)
- ◆ **Used in Greatest Deficiency** – Used to indicate the specific monthly shortfall value which is associated with the Greatest Deficiency
- ◆ **Applicable Shortfall kW** – The kW value of the shortfall based on the applicable shortfall calculation and resource's monthly sales for the Capability Period and month selected

Summary

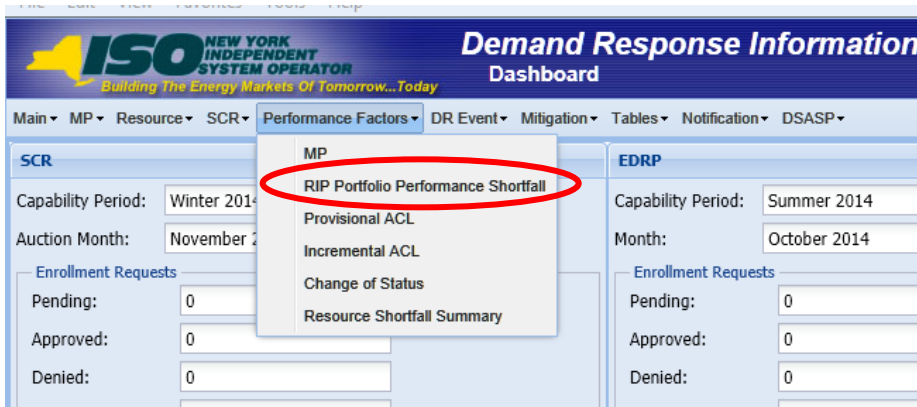
- ◆ DRIS provides the MP with a snapshot of the resource-level calculated shortfalls for each enrollment type (Change of Status, Incremental, Provisional)
- ◆ One Shortfall type will be flagged as the “Greatest Deficiency” determined, which can be viewed on this screen
- ◆ The MP can view the individual shortfall details for the selected resource
- ◆ It is the responsibility of the MP to report any applicable resource COS data into DRIS and report any applicable resource Verification data attributable to an enrollment with either an Incremental ACL or Provisional ACL, within their respected timeframes

RIP PORTFOLIO PERFORMANCE SHORTFALL

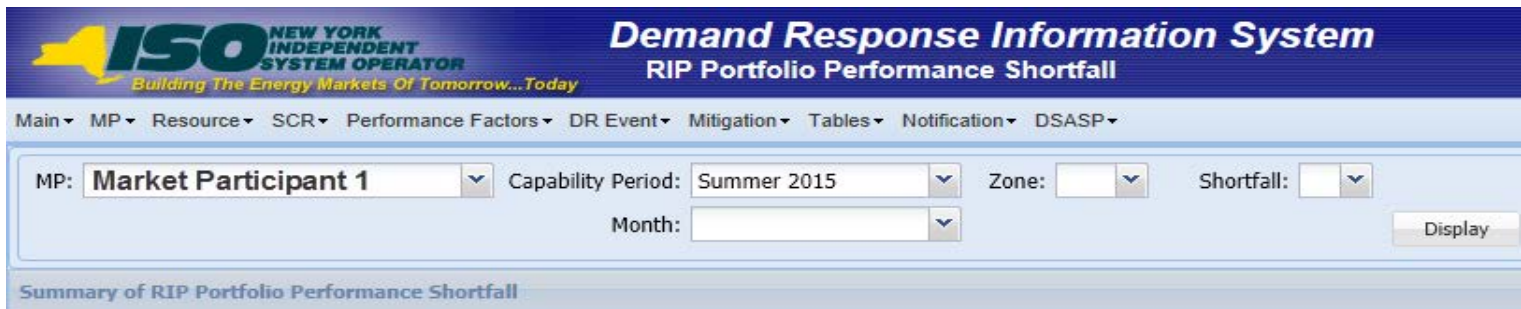
RIP Portfolio Performance Shortfall

- ◆ A shortfall will occur, if the total of the amount of UCAP sold by the RIP for a month in that Capability Period, by Load Zone, is greater than the UCAP equivalent of the greatest quantity MW reduction achieved in a single hour in a test or event called by the NYISO in that Capability Period
- ◆ SCR performance in all tests and events will be considered when determining the Greatest Hour of Reduction for each month
- ◆ RIPs are subject to a shortfall evaluation, by Load Zone, for each month in the Capability period
- ◆ Previously referred to as MP Deficiency

Summary of RIP Portfolio Performance Shortfall



- ◆ From the main menu select “Performance Factors”
- ◆ Choose “RIP Portfolio Performance Shortfall”
- ◆ System displays RIP Portfolio Performance Shortfall screen



Viewing RIP Portfolio Performance Shortfall

- ◆ MPs may view shortfalls including the values used to determine the shortfall, by Capability Period
- ◆ MPs may view shortfalls by Capability Period, month and zone
- ◆ MPs may also select a shortfall filter to display only those months in which a shortfall was determined

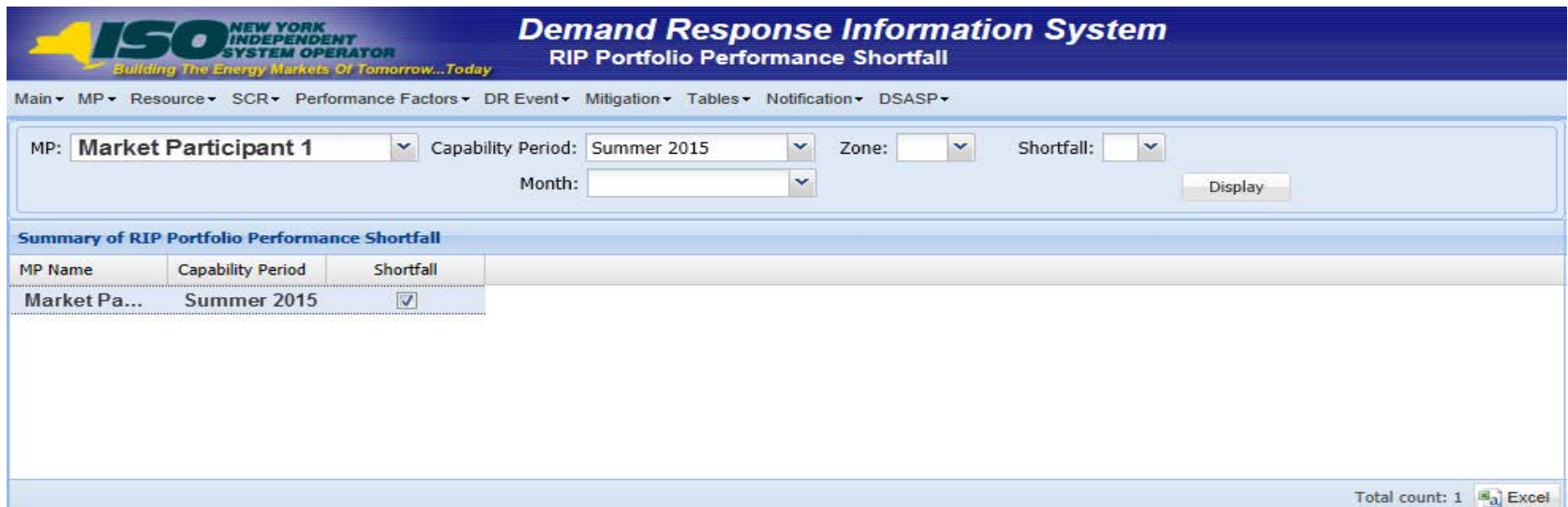
Shortfall Filter

- ◆ The MP may further narrow the search by optionally choosing the specific month or zone
- ◆ MPs may also select a shortfall filter to display only those months in which a shortfall was determined
- ◆ The MP then clicks the “Display” button

The screenshot shows the "Demand Response Information System" (DRIS) interface. At the top, the ISO logo and the text "NEW YORK INDEPENDENT SYSTEM OPERATOR Building The Energy Markets Of Tomorrow...Today" are visible. Below this is the title "Demand Response Information System" and "RIP Portfolio Performance Shortfall". A navigation menu includes "Main", "MP", "Resource", "SCR", "Performance Factors", "DR Event", "Mitigation", "Tables", "Notification", and "DSASP". The main form area contains several dropdown menus: "MP" (set to "Market Participant 1"), "Capability Period" (set to "Summer 2015"), "Zone" (empty), "Shortfall" (empty), and "Month" (empty). A "Display" button is highlighted with a red circle. Below the form is a section titled "Summary of RIP Portfolio Performance Shortfall".

RIP Portfolio Performance Shortfall Summary Screen

- ◆ The system displays the RIP Portfolio Performance Shortfall Summary Screen
- ◆ To view details of the shortfall for a specific Capability Period, click on the corresponding row in the Summary grid
- ◆ The system expands a frame at the bottom of the screen, displaying the details of the RIP Portfolio Performance Shortfall for Capability Period selected



Demand Response Information System
RIP Portfolio Performance Shortfall

Main ▾ MP ▾ Resource ▾ SCR ▾ Performance Factors ▾ DR Event ▾ Mitigation ▾ Tables ▾ Notification ▾ DSASP ▾

MP: Capability Period: Zone: Shortfall:
 Month:

Summary of RIP Portfolio Performance Shortfall

MP Name	Capability Period	Shortfall
Market Pa...	Summer 2015	<input checked="" type="checkbox"/>

Total count: 1

RIP Portfolio Performance Shortfall Details Screen

- MP can view the data used in the calculation of a specific shortfall, broken down by zone and month for the selected Capability Period

Demand Response Information System
RIP Portfolio Performance Shortfall

Main ▾ MP ▾ Resource ▾ SCR ▾ Performance Factors ▾ DR Event ▾ Mitigation ▾ Tables ▾ Notification ▾ DSASP ▾

MP: Capability Period: Zone: Shortfall:
 Month:

Summary of RIP Portfolio Performance Shortfall

MP Name	Capability Period	Shortfall
Market P...	Summer 2015	<input checked="" type="checkbox"/>

Total count: 1

RIP Portfolio Performance Shortfall Details

Zone	Auction Month	Greatest UCAP Equivalent of Capacity Reduction MW Date/HB	Final UCAP MW Sold	Greatest UCAP Equivalent of Capacity Reduction MW in Event or Test	Additional UCAP Equivalent of Capacity Reduction MW from Tests	Final Greatest UCAP Equivalent of Capacity Reduction MW	Monthly Shortfall MW
A	October 2015	08/08/2015 14	65	95		95	0
A	September 2015	08/08/2015 14	65	95		95	0
A	August 2015	08/08/2015 14	105	95		95	10
A	July 2015	08/08/2015 14	105	95		95	10
A	June 2015	08/08/2015 14	85	95		95	0
A	May 2015	08/08/2015 14	65	95		95	0

Total count: 66

Details Screen

- ◆ **Zone**
- ◆ **Month**
- ◆ **Greatest UCAP Equivalent of Capacity Reduction MW**
Date/HB – the date and hour beginning of when the UCAP equivalent of the MW value of the zonal greatest quantity MW reduction was achieved
- ◆ **Final UCAP MW Sold** - UCAP MW sold, net of any exclusions
- ◆ **Greatest UCAP Equivalent of Capacity Reduction MW in Event or Test** - The UCAP equivalent of the zonal greatest quantity MW reduction achieved within the zone

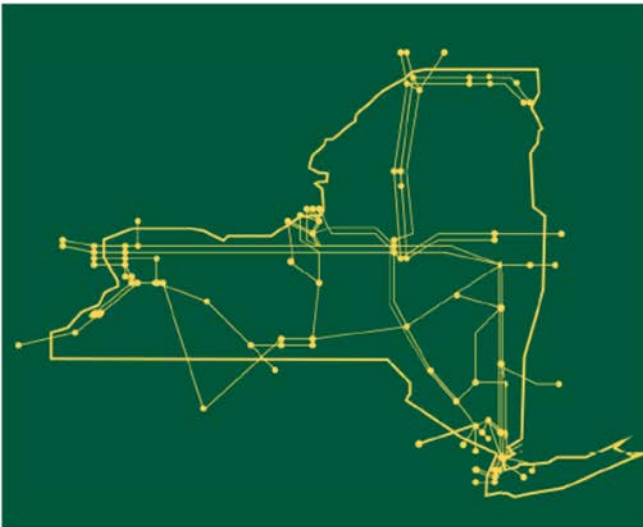
Details Screen con't

- ◆ **Additional UCAP Equivalent of Capacity Reduction MW from Tests** – The UCAP equivalent of the MW value of the additional greatest quantity MW reduction achieved within the zone, when an additional hour is necessary to determine the Total Greatest MW Reduction
- ◆ **Final Greatest UCAP Equivalent of Capacity Reduction MW** – Sum of UCAP Equivalent of Greatest MW Reduction in Event or Test and the Additional UCAP Equivalent of Capacity Reduction MW from tests, net of any exclusions
- ◆ **Monthly Shortfall MW** – Final UCAP MW Sales less the Final Greatest UCAP Equivalent of Capacity Reduction MW

Summary

- ◆ DRIS allows the MP to view RIP Performance Portfolio Shortfalls for a specific Capability Period including the details used to determine the shortfall
- ◆ The Details screen provides the data used in the calculation of a specific shortfall, broken down by zone and month for a selected Capability Period
- ◆ Previously referred to as MP Deficiency

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



www.nyiso.com