

SCR Baseline Implementation Update

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Topics

- ◆ Overview of Changes Approved by FERC on April 11, 2011
- ◆ Summer 2011 Implementation
- ◆ DRIS Implementation of Changes
- ◆ DRIS Training and Deployment

Overview of Changes Approved by FERC on April 11, 2011

- ◆ Change from APMD baseline method to ACL baseline method
- ◆ Changes to calculation of aggregation performance
- ◆ RIP definition and RIP aggregation deficiency calculation
- ◆ Compliance filing on May 2, 2011 to incorporate ACL and Provisional ACL descriptions/calculations into tariff sections 5.12.11.1.1 and 5.12.11.1.2, respectively

Summer 2011 Implementation

- ◆ Beginning with the May 2011 auction month, new ACL rules were implemented using existing DRIS procedures with some adjustments
- ◆ June 1 semi-annual compliance filing to FERC included analysis on differences between APMD and ACL for re-enrolled resources based upon enrolled MW
- ◆ 2011 Gold Book forecast for SCRs was reduced by 10.9% to account for potential impact to enrollment under ACL baseline
- ◆ 2012 IRM Study uses actual SCR enrollment from July 2011 as basis for forecast
 - *ACL impact already reflected in July 2011 enrollment*
- ◆ Verification of Summer 2011 ACLs will occur after the September DRIS deployment

DRIS Implementation of Rule Changes

- ◆ Top SCR Peak Load Zone Hours
- ◆ Revised import file
- ◆ ACL Calculation
 - *TO Add-back*
 - *Summer 2011 ACL verification*
- ◆ Provisional ACL
 - *In-period verification*
- ◆ Aggregation and RIP Performance Factors
- ◆ Deficiency Calculations
- ◆ To be deployed in September

Top NYCA Hours by Zone

- ◆ NYISO will provide the SCR Load Zone Peak Hours for each Load Zone 90 days prior to the beginning of each like Capability Period.
 - *Data for Winter 2011-2012 will be posted to NYISO's website in the Forms section under "Manuals and Forms" on the ICAP page*
 - Summer 2011 SCR Load Zone Peak Hours were posted on February 11, 2011
 - *After September deployment, data will be stored in DRIS for reference, preparation of export file formats, and validation of import data*

Import File

- ◆ Import file has been redesigned to account for zone-specific values required for calculation of ACL
- ◆ Export feature will generate files that include the SCR Peak Load Zone Hours in the format required for import
 - *Pre-populated version for existing resources*
 - *Blank version for new RIPs*
 - *Custom version for TO add-back*

ACL Calculation

- ◆ Calculation of ACL will occur at the time of import for resources that are not using a Provisional ACL
 - *Details on Provisional ACL begin on slide 13*
- ◆ TO Add-back will be matched to resource by TO account number and included in ACL calculation at time of import
 - *Details on TO Add-back begin on next slide*

TO Add-Back

- ◆ Con Edison and NYPA will import into DRIS the response data for resources in their administered demand response programs for any SCR Peak Load Zone Hours where the TO demand response program was deployed
 - *TOs will provide account numbers for DRIS to match with resources*
 - No access to SCR Resource IDs will be provided to TOs
- ◆ **It is the responsibility of the RIP to resolve any add-back issues with the TO prior to the close of enrollment for each auction month**
 - *The NYISO does not have access to any information related to TO demand response programs*
 - *Adjustments to the ACL for any unresolved issues between a RIP and the TO will not be made after enrollment closes for the auction month*

TO Add-Back - continued

- ◆ Import of TO Add-Back values will occur prior to the beginning of enrollment for the applicable Capability Period
 - *TOs will have the ability to make corrections until the SCR enrollment period ends for each auction month*
 - *Corrections made by the TO will activate recalculation of the ACL for the affected resource(s)*
- ◆ If a resource is enrolled in more than one TO demand response program deployed in the same hour
 - *DRIS will store both response values as reported by the TOs*
 - *DRIS will use the higher of the two TO add-back values for the hour*
- ◆ All ACLs will be recalculated at the close of enrollment to ensure that all adjustments are included prior to Aggregation Management

TO Add-Back - Sample Views

Summary view of TO Add-Back

Resource ID	TO Account Number	TO Add-back
9876543	T111111111111	Y
1234567	T222222222222	Y
4567893	T333333333333	N
32145789	T444444444444	N
5754744	T555555555555	Y
643646456	T666666666666	Y

Summary view includes a status of whether TO add-back values exist for the resource

Detailed Resource-specific view of TO Add-Back

Peak Load Date and HB	TO Reported Add-back kW	TO
mm/dd/yyyy hh	350	TO 1
mm/dd/yyyy hh	234	TO 1
mm/dd/yyyy hh	200	TO 2
mm/dd/yyyy hh	200	TO 1
mm/dd/yyyy hh		
mm/dd/yyyy hh		
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mm/dd/yyyy hh		

Top hours are shown in descending order, along with the name of the TO that provided the add-back value

Summer 2011 Verification of ACL Data

- ◆ Following the September deployment of DRIS, RIPs will be required to report for each resource the top 50 loads used to compute the Summer 2011 ACL
 - *A calendar event will be shown in DRIS*
 - *More details on timing will be provided during upcoming DRIS training sessions*
- ◆ The check will compare the Summer 2011 RIP-reported ACL to the DRIS-calculated ACL of each resource
- ◆ Any resources with a DRIS-calculated ACL that is less than the RIP-calculated ACL will be referred to Market Mitigation and Analysis

Provisional ACL

- ◆ A “Provisional ACL” will be permitted for new resources that never had interval metering data
- ◆ A “Provisional ACL” will be permitted for up to three consecutive Capability Periods, beginning with the Capability Period in which the new resource first enrolls.
 - *Resources attempting to enroll with a Provisional ACL flag after three consecutive Capability Periods are not eligible and will be rejected by DRIS.*
- ◆ The Provisional ACL will be based on the RIP’s forecast of the ACL for the Capability Period in which the resource is enrolled.
 - *The Provisional ACL provided with the initial enrollment for that Capability Period will remain in effect for the entire Capability Period.*
- ◆ Following the Capability Period for which a resource with a Provisional ACL was enrolled, the RIP will be required to provide the data necessary to compute the ACL from metered interval data.
 - *If the RIP fails to provide the data necessary to compute the ACL of the resource enrolled with a Provisional ACL by the deadline, the ACL of the resource will be set to zero for each month in which the resource with a Provisional ACL was enrolled, and the RIP may be subject to deficiency penalties in accordance with the NYISO Services Tariff.*

Provisional ACL Implementation

- ◆ Additional clarifications are necessary for implementation of Provisional ACL; details are provided on subsequent slides
 - *Resources with a Provisional ACL may only enroll with one RIP per Capability Period*
 - *Meter Installation Date will be required for resources enrolling with a Provisional ACL*
 - *In-period data is required beginning with the Meter Installation Date*
 - *Amount of in-period data necessary for calculating an in-period ACL*
 - *Continued use of a Provisional ACL after the first Capability Period*

Resource with a Provisional ACL May Only Enroll with One RIP per Capability Period

- ◆ This implementation requirement is being proposed in a Technical Bulletin to become effective immediately
- ◆ Limiting a resource with a Provisional ACL to a single RIP during a Capability Period reduces the risk of deficiency penalties associated with:
 - *Estimating the Provisional ACL value, and*
 - *Reporting in-period data*

Meter Installation Date will be Required for Resources with a Provisional ACL

- ◆ This implementation requirement will become part of the enrollment process, beginning with the September deployment
- ◆ All resources enrolling with a Provisional ACL will be required to provide the Meter Installation Date of the interval meter used to report participation in the SCR program
- ◆ The meter installation date will be used to verify in-period data

In-Period Data is Required Beginning with the Meter Installation Date

- ◆ This implementation requirement will become part of the in-period verification process, beginning with the September deployment
- ◆ The RIP will be required to report data for all SCR Peak Load Zone Hour dates required for in-period verification beginning with the Meter Installation Date, regardless of whether the RIP continues to enroll the resource for the entire Capability Period
 - *In order to perform in-period verification of the Provisional ACL, the RIP is required to report all SCR Peak Load Zone Hours for which the interval meter was installed*

Continued Use of a Provisional ACL After the First Capability Period

- ◆ This implementation requirement will become part of the in-period verification and enrollment processes, beginning with the September deployment
- ◆ A resource enrolled with a Provisional ACL that reported all 40 hours for in-period verification for a Capability Period will not be eligible to enroll with a Provisional ACL in the next like Capability Period because it has sufficient interval meter data from the Prior Equivalent Capability Period
 - *The resource may still enroll with a Provisional ACL for the immediately succeeding Capability Period if it did not participate in the Prior Equivalent Capability Period or it did not have all 40 hours for in-period verification from the Prior Equivalent Capability Period*

Continued Use of a Provisional ACL After the First Capability Period - continued

- ◆ **Example:** New resource enrolled with a Provisional ACL in Summer 2011 reports all 40 hours for in-period verification after the Summer Capability Period.
 - *It may enroll with a Provisional ACL for the Winter 2011 – 2012 Capability Period*
 - *It may not enroll with a Provisional ACL for the Summer 2012 Capability Period*

Amount of Data Necessary for Calculating an In-Period ACL

- ◆ If, based upon the Meter Installation Date, a RIP with a resource using a Provisional ACL has reported fewer than 40 hours of data for in-period verification in a Capability Period, but 20 or more hours, the in-period ACL will be calculated for the resource using the top 20 of the reported hours and the in-period ACL will be used for performance and deficiency calculations.
- ◆ If fewer than 20 of the 40 required ACL hours are reported due to the Meter Installation Date, the Provisional ACL will be used for performance and deficiency calculations.
- ◆ If a RIP fails to report interval data for any hour in which interval data was expected for in-period verification based on the Meter Installation Date, those hours shall be set to zero and the ACL will be calculated for the resource. The calculated ACL will be used for performance and deficiency calculations.

Overview of Implementation of SCR Aggregation and RIP Performance Factors

- ◆ Performance of SCR Aggregations in events or tests that occur during the Summer 2011 Capability Period will be measured using the SCR Aggregation performance factor calculation that allows over-performance of one SCR in an SCR Aggregation to compensate for under-performance of another SCR in the same SCR Aggregation in the same hour
- ◆ The September 2011 DRIS deployment will include implementation of rule changes for Aggregation performance factors, however, Aggregation performance factors will not be visible in DRIS until Summer 2012
- ◆ Beginning with Summer 2012, Aggregation performance factors will be computed at the end of the enrollment period and will be updated with change made during Aggregation Management
 - *Plan is to shorten the enrollment period by two days so that aggregation performance factors can be available prior to the monthly auction*

Approved RIP Deficiency Calculation

- ◆ Shortfall will be computed for each Load Zone separately, in increments of 0.1 MW:
 - *The total amount of UCAP sold for a month in a Capability Period Auction or Monthly Auction and certified prior to that month's ICAP Spot Market Auction,*
 - *the UCAP sold in that month's ICAP Spot Market Auction, and the UCAP sold as a Bilateral Transaction and certified prior to that month's ICAP Spot Market Auction*
 - *that is greater than the greatest quantity MW reduction achieved in a single hour, as confirmed by data received by the ISO in accordance with ISO Procedures, during any test or event called by the ISO within the Capability Period (or zero if Load reduction data is not received by the ISO in accordance with ISO Procedures)*

RIP Deficiency Calculation for Shortfalls of SCRs with Provisional ACLs

- ◆ After each Special Case Resource with a Provisional ACL has its ACL determined for the Capability Period in which it had a Provisional ACL
 - *The NYISO shall determine the shortfall when the Provisional ACL is higher than the ACL for the Capability Period*
 - *The shortfall shall be equal to the sum of:*
 - The amount of UCAP a RIP sold or certified
 - The actual metered demand for the month
 - Minus the SCR's ACL
 - *A shortfall shall exist when the Provisional ACL deficiency is positive*
 - Provisional ACL deficiency =

$$UCAP_{gm}^S + AMD_{gm} - ACL_{gm}$$

Where: S = sold, g = Resource, m = Month

~ This equation does not show the adjustment to ACL when a Change of Status is in effect for a resource

DRIS Training and Deployment

- ◆ DRIS communication e-mails regarding training and deployment will begin in August
- ◆ Two full-day (10am – 4pm) sessions have been scheduled for DRIS training on the changes that will be deployed in September:
 - *Tuesday, August 30*
 - *Wednesday, September 7*
- ◆ DRIS Deployment is scheduled for Tuesday, September 13

Additional Implementation Steps

- ◆ Implementation procedures described in this presentation will necessitate changes to the ICAP Manual
 - *TO Add-Back: slides 9 & 10*
 - *Provisional ACL: slides 15 - 20*
- ◆ An ICAP WG conference call may be needed to review manual language changes prior to the August 10 BIC
 - *Next BIC is September 14, after DRIS deployment*



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