

Concepts for Changes to ACL for SCRs

Donna Pratt

*Manager, Demand Response Products
New York Independent System Operator*

**Joint Price Responsive Load and Installed Capacity Working
Groups**

February 14, 2013

Rensselaer, NY

Topics

- ◆ **Summary of ACL issues**
- ◆ **Proposed SCR rule changes which incorporate:**
 - **Provisional ACL: summary of concepts presented at the PRL/ICAPWG August 20, 2012**
 - **Incremental ACL: summary of concepts presented at the PRL/ICAPWG September 11, 2012**
 - **Change of Load and Change of Status: proposed revisions to existing rules**
 - **SCR Load Zone Peak Hours: initial presentation of proposed changes**

Summary of Provisional ACL Issues

- ◆ **Based on stakeholder presentations and comments, the NYISO proposes SCR rule changes for the following topics:**
 - *Address use of Provisional ACL for SCRs that change RIPs*
 - *Review limitation on Provisional ACL for three consecutive Capability Periods*
 - *Review SCR Load Zone Peak Hours for Winter ACL*
 - *Address increased baseline with reporting process to increase ACL values within Capability Period*

CONCEPTS FOR PROVISIONAL ACL

NYISO Concepts for Provisional ACL

- ◆ **Allow a resource to enroll with a Provisional ACL when enrolling with a new RIP**
- ◆ **DRIS will provide "pre-screening" for the enrolling RIP to determine if the resource is eligible to enroll with a Provisional ACL**
- ◆ **A resource enrolled with a Provisional ACL cannot change RIPs in the same Capability Period**
- ◆ **A resource that does not have Provisional ACL verification data reported may have future enrollments in the SCR program limited**

Allow a Resource to Enroll with a Provisional ACL when Enrolling with a New RIP

- ◆ **Dependent on meter data available in DRIS**
 - *If 20 of the Top 40 Hours for the Capability Period in which the resource is being enrolled are available in DRIS:*
 - **The SCR may not be enrolled using a Provisional ACL**
 - RIPs will have the ability to check on the eligibility of Provisional ACL for a resource based on TO Account Number
 - **The new RIP will be provided with the Top 40 Hours through DRIS at the close of enrollment**
 - Enrollment request will be held in a “Provisional Pending” state until the close of enrollment
 - If a duplicate enrollment request is not made by another RIP, the enrollment will be accepted and DRIS will add the ACL values to the resource’s enrollment at the close of enrollment
 - If a duplicate enrollment situation arises, the two RIPs will be notified prior to the close of enrollment and follow the normal duplicate enrollment resolution process
 - *If none or fewer than 20 of the Top 40 Hours for the Capability Period in which the resource is being enrolled are available in DRIS, the resource may enroll using a Provisional ACL*

Clarification on an SCR Enrolled with an ACL that Requires Verification Data

- ◆ **Once a resource is enrolled with a status that requires verification data after the end of the Capability Period, the SCR will not be able to switch RIPs until the next Capability Period**
- ◆ **Applies to Provisional ACL and Incremental ACL**

Limitation on Enrollment with a Provisional ACL

- ◆ **The NYISO cannot continue to allow the resource to be enrolled with a Provisional ACL if the resource does not comply with the enrollment requirements that include reporting of verification data after the Capability Period**
 - *Any resource with no verification data reported for the Prior Equivalent Capability Period in which it was enrolled with a Provisional ACL will not be permitted to enroll in the SCR program with the same RIP until it has the necessary Top 40 Hours to enroll using an ACL*
 - *Any resource with no verification data reported for two consecutive like Capability Periods in which it was enrolled with a Provisional ACL will not be permitted to enroll in the SCR program with a new RIP for the third consecutive like Capability Period, until it has accumulated the necessary Top 40 Hours to enroll using an ACL*

Example of Limitation on Enrollment with a Provisional ACL

		Capability Periods			
		Summer 1	Winter 1-2	Summer 2	Winter 2-3
RIP 1	Enrollment	(1) RIP 1 enrolls resource with a Provisional ACL	(2) RIP 1 enrolls resource with a Provisional ACL	(3) RIP 1 cannot enroll resource in the SCR program until Top 40 Hours are available	(5) RIP 1 cannot enroll resource in the SCR program until Top 40 Hours are available
	Data Reporting Period		No Provisional ACL Verification data reported by RIP 1 for Summer 1	No Provisional ACL Verification data reported by RIP 1 for Winter 1-2	
RIP 2	Enrollment			(4) RIP 2 can enroll resource with a Provisional ACL	(6) RIP 2 can enroll resource with a Provisional ACL
	Data Reporting Period				No Provisional ACL Verification data reported by RIP 2 for Summer 2 (7) Resource cannot be enrolled in the third consecutive like Capability Period with <u>any</u> RIP until Top 40 Hours are available

Existing Provisional ACL Verification

- ◆ **For resources with 20 or more ACL kW hours, based on the resource Meter Installation Date, DRIS will calculate a resource ACL upon import of the Provisional ACL Verification file**
- ◆ **For resources with fewer than 20 ACL kW hours, based on the resource Meter Installation Date, DRIS will take the Provisional ACL kW value from the resource enrollment**
- ◆ **Provisional ACL Deficiency kW for a resource will be calculated when the enrolled Provisional ACL kW value is greater than the calculated ACL kW value reported in the Provisional ACL Verification data of the resource**

Existing Provisional ACL Deficiency Calculation

- ◆ **The Provisional ACL Deficiency kW for a resource is calculated on a monthly basis for the months in which the resource was enrolled in the Capability Period with the MP**
- ◆ **The Provisional ACL Deficiency kW is equal to the sum of the amount of UCAP the resource sold for the month and the resource Actual Metered Demand for the month minus the resource Calculated ACL**

$$\text{UCAP}_{rm}^S + \text{AMD}_{rm} - \text{Net ACL}_{rm}$$

Where S = sold, r = Resource, m = Month

AMD for Response Type C or B = lowest metered load in an event or test in the Capability Period, AMD for Response Type G = highest metered load in an event or test in the Capability Period

Proposed Change to Provisional ACL Deficiency Calculation

- ◆ **The Provisional ACL Deficiency kW is equal to the ICAP equivalent of UCAP sold of the resource for the month minus the resource Calculated ACL**

ICAP equivalent of UCAP^S_{rm} – Net ACL_{rm}

Where S = sold, r = Resource, m = Month

Failure to Report Provisional ACL Verification Data

- ◆ **If a resource is enrolled with a status that requires verification data and verification data is not reported, the RIP will be subject to the following penalties:**
 - *The RIP will be responsible for payback of all Energy Payments received during the Capability Period by the RIP for the resource*
 - *The RIP will be assessed a deficiency penalty for each month that the resource was enrolled with the Provisional ACL, equal to the Provisional ACL kW value * 1.5 Capacity Spot Market Clearing price for the month*

CONCEPTS FOR INCREMENTAL ACL

NYISO Concepts for Incremental ACL

- ◆ **Allow a resource to increase its ACL above the calculated ACL based on the Top 40 SCR Load Zone Peak Hours for the Capability Period**
- ◆ **Resource will be required to perform in the Capability Performance Test based on the increased ACL value**
- ◆ **Resource will be required to submit Incremental ACL Verification data after the close of the Capability Period**

Threshold Requirement for an Increase to ACL

- ◆ **Threshold for an increase to ACL is the same as the existing rules for Change of Load and Change of Status**
 - *Resource must have a calculated ACL of 500 kW or greater*
 - *Increase must be greater than or equal to the lesser of*
 - **Thirty percent of the calculated ACL and**
 - **10 MW if in Rest of State or Long Island or 5 MW in the NYC Locality**

Maximum Increase to ACL

- ◆ **The amount of increase to the resource ACL cannot be greater than 100% of the Base ACL**
 - *“Base ACL” is the ACL produced by the calculation of the average of the highest Top 20 of the Top 40 SCR Load Zone Peak Hours for the resource*

Eligibility Requirement for an Increase to ACL

◆ Eligibility

- *The proposed Eligibility Requirement originally presented at the September 11, 2012 PRL/ICAPWG has been eliminated*
- *Software will evaluate threshold requirements at enrollment and verification data will be used to confirm the Incremental ACL*

Performance Testing Requirement for an Increase to ACL

- ◆ **When the Resource ACL is increased *prior* to the first Performance Test in the Capability Period**
 - *Resource will be required to demonstrate its maximum enrolled capability for the Capability Period based on the new ACL in the first Performance Test*

- ◆ **When the Resource ACL and Declared Value are increased *after* the first Performance Test in the Capability Period**
 - *Resource will be required to demonstrate its maximum enrolled capability based on the new ACL, for the portion of the Capability Period in which the Incremental ACL is in effect, in the second Performance Test in the Capability Period*
 - *Response to the first Performance Test will be used to measure the maximum enrolled capability prior to enrollment with the Incremental ACL*
 - *Performance in both tests will be used in the calculation of the resource, MP, and Aggregation Performance Factors, and the calculation of RIP Deficiency*

Failure to Report Resource Performance in a Test for Resources Reporting an Increase to ACL

- ◆ **If a resource with an Incremental ACL fails to report performance data for a test**
 - *The resource will be assigned a performance of zero for the test hour*
 - *The RIP will be assessed a deficiency penalty for each month that the resource was enrolled with the Incremental ACL, equal to the Incremental ACL kW value * 1.5 Capacity Spot Market Clearing price for the month*

Verification Requirement for an Increase to ACL

- ◆ **Report Incremental ACL Verification data after the close of the Capability Period**
 - *NYISO will establish monthly Top 40 Hours for each month in the Capability Period*
 - *Report verification data for each month of the resource enrollment in the Capability Period for which the resource was enrolled with the Incremental ACL*
 - *A monthly ACL will be calculated for each month that required verification data*
 - *An “Average ACL” will be calculated using the two highest calculated ACLs from all months of verification data reported*
 - *The “Average ACL” will be used in performance, deficiency, and penalty calculations for months with an Incremental ACL*

When all required months of verification data are not reported:

- ◆ **For each month for which verification data was required for the Incremental ACL and not reported, the Calculated ACL will be zero**
- ◆ **The “Average ACL” will be calculated using the two highest calculated ACLs *plus* all months that were assigned a zero as the calculated ACL**
- ◆ **Example on following slide**

Example of calculating an "Average ACL" based on required data reported

All Required Months Reported		
Required Month of Reporting	Calculated ACL	Used in "Average ACL"
June	340	Yes
July	330	No
August	336	Yes
September	325	No
October	335	No
"Average ACL" = (340 + 336)/2 = 338		

All Required Months NOT Reported			
Required Month of Reporting	Data Reported?	Calculated ACL	Used in "Average ACL"
June	Yes	340	Yes
July	Yes	330	No
August	Yes	336	Yes
September	No	0	Yes
October	Yes	335	No
"Average ACL" = (340 + 336 + 0)/3 = 225			

Failure to Report Verification Data for an Increase to ACL

- ◆ **If a resource is enrolled with a status that requires verification data and verification data is not reported, the RIP will be subject to the following penalties**
 - *The RIP will be responsible for payback of all Energy Payments received during the Capability Period for the months in which Incremental ACL Verification data is not reported by the RIP for the resource*
 - *The RIP will be assessed a deficiency penalty for each month in which Incremental ACL Verification data is not reported for the resource, equal to the Incremental ACL kW value * 1.5 Capacity Spot Market Clearing price for the month*

Additional Concepts for an Increase to ACL

- ◆ **An Incremental ACL is expected to be the result of an increase that will be in effect for the Capability Period, not normal load fluctuations from month to month such as weather adjustment or seasonal load variations, therefore:**
 - *A resource ACL may be increased only once per Capability Period*

- ◆ **A resource enrolled using an Incremental ACL may not enroll with another RIP until the next Capability Period**

- ◆ **A resource enrolled with a Provisional ACL may not use the Incremental ACL to increase its ACL in a Capability Period**
 - *Provisional ACL is established by the RIP at the time of enrollment*
 - *Any changes in load from the prior Equivalent Capability Period should be considered when the Provisional ACL is developed*

PROPOSED CHANGES TO PROCEDURES FOR CHANGE OF LOAD AND CHANGE OF STATUS FOR SCRs

Proposed Changes to Change of Load and Change of Status for SCRs Include:

- ◆ **Definition and Qualified Conditions**
- ◆ **Reporting Rules and Procedures**
- ◆ **Penalties for non-reporting**

Obligation to Report a Change of Load and Change of Status

- ◆ **Although Special Case Resources are not subject to maintenance scheduling requirements, each Special Case Resource must be capable of being interrupted on demand, at the direction of the NYISO, as specified in this ICAP Manual. The Responsible Interface Party (RIP) for a Special Case Resource that is not capable of being interrupted on demand shall report such an occurrence to the NYISO in accordance with this ICAP Manual.**
 - ***(ICAP Manual Section 4.3.3)***

Proposed Change to Definition for Change of Load

- ◆ **When an SCR is enrolled with an ACL greater than 500 kW**
- ◆ **A total load reduction for a period of seven (7) continuous days and fewer than thirty (30) days**
- ◆ **In an amount equal to or greater than the lesser of (i) thirty (30) percent of the Average Coincident Load for any month within the then-current Capability Period and (ii) ten (10) MW if in Rest of State or Long Island Locality or five (5) MW in the NYC Locality**

Definition of Qualified Conditions and Reporting of Change of Load

- ♦ **RIPs are obligated to monitor the loads of SCRs for this reporting requirement**

Qualified Change of Load Condition	Reporting Requirement
1) An SCR that is expected to have a Change of Load condition	Submit Change of Load form no later than 5:00:00 P.M. two (2) business days prior to the onset of the Change of Load. Include anticipated Start and End Dates of the Change of Load.
2) An SCR that is experiencing a Change of Load condition for at least three (3) consecutive days and expects it to continue for a period greater than seven (7) continuous days	Submit Change of Load form no later than 5:00:00 P.M. of the fourth consecutive day of the onset of the Change of Load. Include date when the Change of Load began and the anticipated End Date.
3) An SCR that experienced an unanticipated Change of Load condition for a period greater than seven (7) continuous days within any month in which the SCR sold capacity or adjoining months in which the SCR sold capacity in either month	Submit Change of Load form no later than 5:00:00 P.M. of the eighth consecutive day of the onset of the Change of Load or by 5:00:00 P.M. on the day following the day the RIP became aware of the Change of Load condition, whichever is earlier. Include Start and End Dates of the Change of Load.

Procedures for Reporting Change of Load

- ◆ In writing using the Change of Load form submit to: SCR_Registration@nyiso.com
- ◆ When any of the three conditions are met (from table on previous slide)
- ◆ End Date changes
 - *Conditions 1 and 2 from previous slide*
 - *Submit updated Change of Load form with confirmed End Date*
- ◆ Return from a Change of Load
 - *No later than 5:00:00 PM within two business days following the return from a Change of Load*

Failure to Report Change of Load or Return from Change of Load

- ◆ **When a Failure to Report a Change of Load or a Return from Change of Load is identified by the NYISO the RIP will be penalized at the resource level as a proration of the MW value oversold in the ICAP market for the number of days in the month * 1.5 Capacity Spot Market Clearing price for the month**
- ◆ **When a Return from Change of Load is not reported, the NYISO will treat the resource as if it is experiencing a Change of Status**

Proposed Change to Definition for Change of Status

- ◆ **When the SCR is enrolled with an ACL greater than 500 kW**
- ◆ **A total load reduction for a period of greater than thirty (30) days**
- ◆ **In an amount equal to or greater than the lesser of (i) thirty (30) percent of the Average Coincident Load for any month within the then-current Capability Period and (ii) ten (10) MW if in Rest of State or Long Island Locality or five (5) MW in the NYC Locality**

Definition of Qualified Conditions and Reporting of Change of Status

- ◆ **RIPs are obligated to monitor the loads of SCRs for this reporting requirement**

Qualified Change of Status Condition	Reporting Requirement
<p>1) An SCR that is expected to have a qualified Change of Load condition extended for a period of greater than thirty (30) continuous days</p>	<ul style="list-style-type: none"> • Submit Change of Status form during enrollment for the first month in which the Change of Status is expected and upload into DRIS. • If enrollment for a month has already closed: <ul style="list-style-type: none"> • Report partial auction sales through DRIS when DV of the resource is greater than Net ACL • Submit Change of Status form with Start Date • Upload into DRIS during next SCR enrollment
<p>2) An SCR that is experiencing a qualified Change of Load condition that is expected to continue for a period greater than thirty (30) continuous days</p>	<ul style="list-style-type: none"> • Submit Change of Status form during enrollment for the first month in which the Change of Status is expected and upload into DRIS. • If enrollment for a month has already closed: <ul style="list-style-type: none"> • Report partial auction sales through DRIS when DV of the resource is greater than Net ACL • Submit Change of Status form with Start Date • Upload into DRIS during next SCR enrollment

Definition of Qualified Conditions and Reporting of Change of Status

- ◆ **RIPs are obligated to monitor the loads of SCRs for this reporting requirement**

Qualified Change of Status Condition	Reporting Requirement
<p>3) An SCR that experienced an unanticipated Change of Load condition for a period greater than thirty (30) continuous days within any month in which the SCR sold capacity or adjoining months in which the SCR sold capacity in either month</p>	<ul style="list-style-type: none"> • Submit Change of Status form during enrollment for the first month in which the Change of Status is still in effect and upload into DRIS. • If enrollment for a month has already closed: <ul style="list-style-type: none"> • Report partial auction sales through DRIS when DV of the resource is greater than Net ACL • Submit Change of Status form with Start Date • Upload into DRIS during next SCR enrollment. • If the Change of Status is in the past: <ul style="list-style-type: none"> • Submit Change of Status form with Start and End Dates within thirty (30) days of the onset of the Change of Status

Reporting Procedures for Change of Status

- ◆ In writing using the Change of Status form submit to: SCR_Registration@nyiso.com
- ◆ As part of the SCR enrollment upload into DRIS
 - *Report the kW value of the Change of Status in the Shutdown field on the SCR enrollment import file*
 - *Report any corresponding change to Declared Value*
 - *Continue to report for each month that the resource is experiencing a Change of Status*
 - *Net ACL kW = ACL kW – Shutdown kW*

Reporting Procedures for Change of Status - continued

- ◆ **If SCR enrollment for the month has already closed:**
 - *Report in writing using the Change of Status form*
 - *During the 5-day Partial Sales Reporting period in DRIS, when DV of the resource is greater than Net ACL, report a partial sale for the resource decreasing the resource UCAP sales by the kW value of the Change of Status*
 - *During the next SCR enrollment period report the kW value of the Change of Status in the Shutdown field on the SCR enrollment import file*

Reporting Procedures for Change of Status - continued

- ◆ **If the Change of Status occurred in the past:**
 - *Report in writing using the Change of Status form*
 - *Include Start and End Dates of the Change of Status*
 - *Report within thirty (30) days of the onset of the Change of Status*

Reporting Procedures for Return from a Change of Status

- ◆ In writing using the Change of Status form submit to: SCR_Registration@nyiso.com
- ◆ As part of the SCR enrollment upload into DRIS
 - *Report the kW value of the Change of Status as zero (0) in the Shutdown field on the SCR enrollment import file*
 - *Report any corresponding change to Declared Value*

Failure to Report Change of Status or Return from Change of Status

- ◆ **Failure to report a Change of Status through the SCR enrollment import file into DRIS after written reporting to the NYISO using the Change of Status form:**
 - *May result in a referral to NYISO Market Mitigation*
- ◆ **When a Failure to Report a Change in Status for a resource is identified by the NYISO**
 - *If the Change of Status is not reported within 30 days, the MP is subject to a penalty of the value of the kW of the Change of Status * 1.5 Capacity Spot Market Clearing price for the month for the number of months in which the Change of Status was should have been reported*

Performance Obligation for a Change of Load or Change of Status

- ◆ **A resource experiencing a Change of Load or Change of Status, which continues to sell capacity, is not exempt from penalties or other performance obligations in any month in which an event or test occurs**

Performance Testing Requirement for Resources Reporting a Shutdown

- ◆ **Resources that report or change a reported Shutdown value *after* the first Performance Test in the Capability Period will be required to demonstrate performance against the new ACL in the second Performance Test in the Capability Period**
 - *Response to the first Performance Test will be used to measure the maximum enrolled capability prior to the reported Shutdown or change to the reported Shutdown value*
 - *Performance in both tests will be used in the calculation of the resource, MP, and Aggregation Performance Factors, and the calculation of RIP Deficiency*

Performance Testing Requirement for Resources Reporting a Shutdown - continued

- ◆ **Resources that report a Shutdown value *after* the resource has been enrolled in the Capability Period for at least one month and *prior* to the first Performance Test in the Capability Period are required to demonstrate the maximum enrolled capability of the resource in the Capability Period**

Failure to Report Resource Performance in Second Test for Resources Reporting a Shutdown

- ◆ **If a resource with a Shutdown is required to perform in the second test and fails to report performance data for the second test**
 - *The resource will be assigned a performance of zero for the test hour*
 - *The RIP will be assessed a deficiency penalty for each month that the resource was enrolled with the Shutdown decrease to the Base ACL, equal to the Shutdown ACL kW value * 1.5 Capacity Spot Market Clearing price for the month*

CONCEPTS FOR SCR LOAD ZONE PEAK HOURS

NYISO Concepts for SCR Load Zone Peak Hours

- ◆ **Proposed based on stakeholder comments to Winter ACL Peak Hours**

- ◆ **Expand hours used for SCR Load Zone Peak Hours to include all NYCA peak hours and maintain exclusions for events and tests**
 - *Remove 1pm-7pm limit on SCR Load Zone Peak Hours for determination of both Summer and Winter SCR Load Zone Peak Hours*

NYISO Concepts for SCR Load Zone Peak Hours - continued

- ◆ **For Summer or Winter NYCA Peak Hours that occur on an Event day, exclude the hour before the Start Time of the event and the hour after the End Time of the event**
 - *Up to 8 hours in descending rank*

- ◆ **Summer and Winter Performance Tests shall be conducted during the period which includes 1 hour before the earliest hour and 1 hour after the latest hour of the SCR Load Zone Peak Hours**

Next Steps

- ◆ **Review draft tariff and manual changes with stakeholders**
- ◆ **Continue through governance process for manual approval and tariff filing**
- ◆ **Provided project remains on schedule, including regulatory approval, implementation is expected to be ready for Q4 2013**

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