

BSM Examination of New SCRs

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Agenda

- Background
- SCR Mitigation Process
 - Data Requirements
 - Offer Floor Calculation
 - Numerical Examples
- SCRs subject to an Offer Floor
 - Applicable penalties



Background



Background

- NYISO's buyer-side market power mitigation rules provide that certain new Installed Capacity (ICAP) Resources must enter NYISO's Mitigated Capacity Zones at a price at or above their applicable Offer Floor, unless exempt from mitigation
- On February 20, 2020, FERC granted rehearing on the February 3, 2017 Order and found that all new SCRs should be subject to NYISO's buyer-side market power mitigation rules
 - NYISO's February 17, 2017 compliance filing in Docket No. ER17-996-000 was rejected as moot



NYISO's Implementation of February 20, 2020 FERC Order

- NYISO submitted a Notice of Compliance Plan and Request for Conditional Waiver to the Commission on March 11, 2020 that:
 - Indicated that the NYISO will begin to conduct monthly BSM evaluations of new SCRs that enroll for the May 2020 Capability Month
 - Indicated that the NYISO will conduct monthly BSM evaluations in accordance with the currently effective tariff language until the Commission's findings in the paper hearing require the NYISO to modify the currently effective Services Tariff language in Section 23.4.5.7.5 and the Commission accepts such tariff modifications



Today's Presentation

 The NYISO is presenting material to describe its evaluation of new SCRs in Mitigated Capacity Zones (presently, NYC and the G-J Locality) when they are first enrolled as described in MST Att. H, Section 23.4.5.7.5



SCR Mitigation Process



SCR Mitigation Determination Process

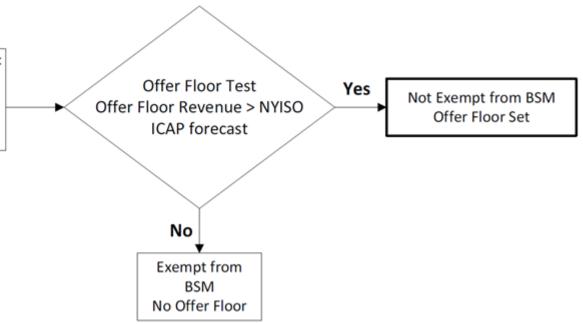
- The NYISO will evaluate new SCRs in Mitigated Capacity Zones (J and G-J Localities) when they are first enrolled
 - DRIS will alert Responsible Interface Parties (RIPs) when they have submitted a new SCR in a Mitigated Capacity Zone
- The NYISO compares a SCR's Offer Floor for the first twelve months it expects to offer to supply UCAP with the projected ICAP Spot Market Auction price during the same time period



Process Flow Chart

 NYISO annual ICAP price forecast: Forecasted ICAP Market Revenue for next 12 months (\$/kW-year)

 Offer Floor Revenue: 12 months of contract payments (\$/kW-year)





Data Requirements

- Responsible Interface Parties (RIPs) are required to submit the following components of the Offer Floor for each new enrollment:
 - Description of programs that the SCR is eligible for and contract terms for each resource for evaluation (e.g., "minimum monthly payment")
 - Description of the capital expenditures & assets
 - Estimates of annualized and levelized costs of such capital expenditures
 - Total amount of subsidy/rebate/incentive payments to be received
 - Value of all other benefits or payments from a third-party for providing Installed Capacity
- The <u>SCR Offer Floor Request</u> form can be found on the Demand Response page of the NYISO website



NYISO Assumptions

- If a RIP fails to provide such information, the annualized values will be calculated based on straight line depreciation
 - 5-years for expenditures associated with
 - Computer equipment and peripherals
 - Batteries and storage upgrades/installation
 - 10-years for expenditures associated with
 - Meters and smart electric grid system
 - Small back up generators
 - A/C system upgrades



NYISO's Review of Submitted Data

- NYISO reviews and verifies all data submitted
- If a RIP does not submit the required data by the deadline, the SCR will not be eligible to offer or sell Installed Capacity
 - The deadline is noted on the ICAP Event Calendar
- RIPs should be prepared to respond quickly to additional requests in order to insure that the NYISO has all the required data to review and evaluate the information for a new SCR to be eligible to participate



SCR BSM Test

- The Offer Floor is compared with the NYISO's ICAP price forecast
 - The Offer Floor and ICAP price forecast are compared over a 12 month period, starting when the SCR reasonably anticipates to offer to supply UCAP
 - If, and only if, the projected ICAP price forecast is greater than a SCR's Offer Floor, then the resource is exempt and will not be subject to its Offer Floor
- The NYISO notifies each RIP of a determination of exempt or not exempt by the deadline noted on the ICAP Event Calendar
 - If an SCR is not exempt, the NYISO states the seasonally shaped Offer Floor



Offer Floor Calculation

- The Offer Floor calculation includes payments and value of benefits the SCR receives from
 - Its RIP for providing Installed Capacity
 - A third party for providing Installed Capacity
- The Offer Floor calculation excludes payments or the value of other benefits provided under programs administered or approved by New York State or a government instrumentality of New York State
 - Incentives towards capital expenditures to help facilitate participation in the demand response program(s) offered by some utilities and state instrumentalities are excluded in the offer floor determination
 - Revenues received from NYS PSC-approved utility demand response programs and NYSERDA programs are excluded in the offer floor determination



Numerical Examples



Numerical Example #1 for a New SCR

RIP Contract terms

• Payment share = 95% of NYISO auction revenue

Offer Floor Calculation

- Payment Share: Contract does not guarantee a minimum and does not project ICAP revenue
 - Share 95 % * \$0.00 = \$0.00

Total Offer Floor Revenue

Offer Floor benefits + payments = \$0.00/kW-year

- 12 month ICAP price forecast is \$130.00/kW-year
- Total Offer Floor Revenue is \$0.00/kW-year
- NYISO Forecast exceeds Revenue: \$130.00/kW-year > \$0.00/kW-year
 - SCR is exempted and not subject to Offer Floor



Numerical Example #2 for a New SCR

RIP Contract terms

Guaranteed payment of \$20.00/kW-month Summer, \$5.00/kW-month Winter

Offer Floor Calculation

- Guaranteed Payment
 - \$20.00/kW-month * 6 Summer months + \$5.00/kW-month * 6 Winter months = \$150.00/kW-year

Total Offer Floor Revenue

Offer Floor benefits + payments = \$150.00/kW-year

- 12 month ICAP price forecast is \$130.00/kW-year
- Total Offer Floor Revenue is \$150.00/kW-year
- NYISO Forecast does not exceed Revenue: \$130.00/kW-year < \$150.00/kW-year
 - SCR is not exempted and is subject to Offer Floor
 - This Offer Floor is seasonally shaped



Numerical Example #3 for a New SCR

RIP Contract terms

- Payment share = 75% of NYISO auction revenue
- NYPSC approved program: 80% share of Reservation Payment rate (\$10/kW-month)
 - Performance Factor (PF) = 85%

Offer Floor Calculation

- Payment Share: Contract does not guarantee a minimum and does not project ICAP revenue
 - Share 75 % * \$0.00 = \$0.00
- NYPSC approved program: Reservation Payment * PF % * Share%
 - \$10.00/kW-month * 85% * 80% = \$6.80/kW-month
 - Offer Floor other benefits = \$0/kW-year
 - Revenue excluded from calculation

Total Offer Floor Revenue

Offer Floor benefits + payments = \$0.00/kW-year

- 12 month ICAP price forecast is \$130.00/kW-year
- Total Offer Floor Revenue is \$0.00/kW-year
- NYISO Forecast exceeds Revenue: \$130.00/kW-year > \$0.00/kW-year
 - SCR is exempted and not subject to Offer Floor



Numerical Example #4 for a New SCR

RIP Contract terms

- Payment share = 75% of NYISO auction revenue
- Guaranteed minimum payment of \$5.00/kW-month Summer, \$1.50/kW-month Winter
- NYPSC approved program: 80% share of Reservation Payment rate (\$10/kW-month)
 - Performance Factor (PF) = 85%

Offer Floor Calculation

- Payment Share: Contract does not guarantee a minimum and does not project ICAP revenue
 - Share 75 % * \$0.00 = \$0.00
- Guaranteed Minimum Payment
 - \$5.00/kW-month * 6 Summer months + \$1.50/kW-month * 6 Winter months = \$39.00/kW-year
- NYPSC approved program: Reservation Payment * PF % * Share%
 - \$10.00/kW-month * 85% * 80% = \$6.80/kW-month
 - Offer Floor other benefits = \$0/kW-year
 - Revenue excluded from calculation

Total Offer Floor Revenue

Offer Floor benefits + payments = \$39.00/kW-year

- 12 month ICAP price forecast is \$130.00/kW-year
- Total Offer Floor Revenue is \$39.00/kW-year
- NYISO Forecast exceeds Revenue: \$130.00/kW-year > \$39.00/kW-year
 - SCR is exempted and not subject to Offer Floor



SCRs Subject to an Offer Floor



SCRs Subject to an Offer Floor

- Capacity subject to an Offer Floor may only be offered into the ICAP Spot Market Auction
 - It is not eligible to be certified for a Strip or Monthly Auction sale or in a bilateral
 - Certification of UCAP subject to an Offer Floor for a Strip or Monthly Auction sale, or bilateral will
 constitute a shortfall
- Offers by a RIP at a PTID shall be not lower than the highest Offer Floor applicable to a Special Case Resource providing Installed Capacity at that PTID
 - Such offers may comprise a set of points for which prices may vary with the quantity offered
 - If this set includes megawatts from a SCR with an Offer Floor, then at least the quantity of megawatts in the offer associated with each SCR must be offered at or above the Special Case Resource's Offer Floor
- The NYISO systems are not capable of automatically enforcing Offer Floors for SCRs
 - It is the responsibility of the RIP to offer the SCR in accordance with the Offer Floor rules
- The NYISO will monitor offers submitted for SCRs subject to an Offer Floor



Duration of Offer Floor

- A Resource subject to an Offer Floor, beginning with the first month its UCAP is offered, is subject until it has offered and cleared its Installed Capacity in the ICAP Spot Market Auction, at a price at or above its Offer Floor for a total of twelve, not necessarily consecutive, months
 - The portion of the UCAP that clears for any 12 months will no longer be subject to an Offer Floor
- If an SCR transfers to a new RIP, it will continue to be subject to its Offer Floor
 - DRIS will track SCRs that are subject to an Offer Floor



Applicable Penalties

- Shortfall Non-Exempt if SCR Capacity was used to certify a Strip, Monthly or Bilateral sale
 - RIP has the opportunity to cover the shortfall in the Spot Auction with Capacity purchases
 - NYISO may place bids on behalf of RIP to cover the shortfall, if the shortfall is identified before the Auction
 - If a shortfall is identified after the Spot Auction, a penalty of 1.5 times the Spot Auction Price multiplied by the number of MW constituting the shortfall will be assessed
- Attachment H Penalty Non-Exempt SCR capacity was sold in a Spot Auction below its Offer Floor
 - If a RIP together with its Affiliated Entities submits one or more offers below the applicable Offer Floor, and such offer or offers cause or contribute to a decrease in UCAP prices in the Mitigated Capacity Zone of 5% or more, provided such decrease is at least \$.50/kilowatt-month, the RIP is subject to a penalty
 - "Affiliated Entities" are defined in Services Tariff Section 23.2.1, and must be updated monthly by the date on the ICAP Event Calendar
 - Penalty is equal to 1.5 times the difference between the Market-Clearing Price for the Mitigated Capacity
 Zone in the ICAP Spot Auction for which the offers below the Offer Floor were submitted with and without
 such offers being set to the Offer Floor, times the total amount of UCAP sold by the Responsible Interface
 Party and its Affiliated Entities in such ICAP Spot Auction



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- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system





Questions?

