

Escalation Factor and Inflation Rate in Buyer-Side Mitigation Rules: Review and Proposals

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Agenda

- Background and Objective
- Overview of Proposals and Stakeholder feedback from 10/7/2016 ICAPWG
- NYISO's Revised Proposal
- Next steps

Background and Objective

 The buyer-side capacity market mitigation tariff provisions ("BSM Rules") specify that the NYISO is to use the escalation factor and inflation rate component of the escalation factor from the effective ICAP Demand Curves*

*See slide 5 for BSM processes that use escalation factor and inflation rate

- The newly-accepted Demand Curve annual update rules provide more up-to-date escalation and inflation factors than those in the current BSM Rules
 - Previously, inflation and escalation were longer term outlooks established at the Demand Curve reset and remained constant between reset periods
 - Now, inflation and escalation will update annually based on prescribed underlying data**

** The newly-accepted Demand Curve annual update tariff provisions will be implemented for the first time in November 2017 (i.e., after the 2017-2021 curves have been accepted by FERC) 2000-2016 New York Independent System Operator, Inc. After the 2017-2021 curves have been accepted by FERC) lights Reserved.

Background and Objective cont'd

- When stakeholders were considering the ICAP Demand Curve tariff revisions at the BIC and MC, there were concerns about how the revisions would affect the BSM process and adjustments to Offer Floors
 - The NYISO reviewed this issue and returned to stakeholders during the 10/7/2016 ICAPWG in order to solicit feedback on proposed solutions
 - The NYISO has considered stakeholder s' feedback and is presenting revised proposals today that are designed to:
 - Apply inflation adjustments consistently to all parts of the BSM tests and Offer Floors
 - Apply inflation adjustments consistent with those used in the determination of the ICAP Demand Curves

BSM Processes That Use the Escalation Factor and Inflation Rate

- Adjusting new entrant Offer Floor to year of entry dollars MST Att. H 23.4.5.7.3.7
 - Non-exempt facilities that enter into service prior to, or after, the first Capability Year of the Mitigation Study Period ("MSP") have Offer Floors adjusted to the year of entry, "inflation rate"
- Annually adjusting existing Offer Floor levels MST Att. H 23.4.5.7
 - Offer Floors shall be inflated annually, "inflation rate"
- Examined Facility Unit Net CONE MST Att. H 23.4.5.7.2 and 23.4.5.7.6
 - As part of the Part B test, Unit Net CONE is inflated from current dollars to the MSP dollars, "inflation rate"
- ICAP Spot Market Auction clearing price forecast MST Att. H 23.4.5.7.2
 - As part of the ICAP forecast, the Demand Curve reference point is escalated to the MSP, "escalation factor"

Overview of Presentation during 10/7/2016 ICAPWG

- During the ICAPWG on 10/7/2016, the NYISO reviewed how escalation and inflation are used in the current BSM rules and proposed several alternatives in order to solicit feedback from Stakeholders. Feedback received included the following:
 - Historical data used in Demand Curve escalation factor calculation may not represent the long-term trend
 - Consistency is important (i.e., we should not use an escalation rate for the ICAP Reference Point and a potentially different inflation rate for adjusting Offer Floors and Examined Facility Unit Net CONE)

NYISO's Proposals

- Modify previous proposal for forecasting ICAP Spot Market Auction clearing prices to specify that solely for purposes of the BSM Rule determinations, the ICAP Demand Curve reference point will be forecasted by:
 - a)Escalating the peaking plant Gross CONE using the most recently published Demand Curve <u>inflation rate</u> as opposed to the escalation factor – revised from previous proposal by replacing escalation factor with inflation rate
 - b)Reasonably estimating the peaking plant net Energy & Ancillary Services revenues by using information available at the time of the BSM determination – same as previous proposal presented at 10/7/2016 ICAPWG
 - c)Updating Winter-to-Summer ratio same as previous proposal presented at 10/7/2016 ICAPWG

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NYISO Proposals cont'd

Previous slide continued

- Removes more volatile and harder to predict cost data (i.e., turbine, materials, labor) used in Demand Curve escalation factor
- Maintains assumed general inflation rate from effective Demand Curve escalation factor
- Provides consistency between BSM tests (i.e., same value used to inflate Unit Net CONE and Demand Curve peaking plant gross CONE)
- While using historic year over year cost data (i.e., turbine, materials, labor) may be appropriate to use in the Demand Curve annual update process, it may not be a good representation of future trends expected during the Mitigation Study Period
- Reasonably estimates these additional factors that could affect the ICAP Demand Curve reference point (i.e., existing BSM provisions are in contrast to the Demand Curve annual update rules in that they do not require the NYISO to update net Energy & Ancillary Services revenue or the Winter-Summer ratio for the purpose of the BSM ICAP projection of the ICAP Demand Curve reference point)

Requires tariff change

NYISO Proposals cont'd

- Maintain previous proposals and existing provisions for adjusting Offer Floors and inflating Examined Facilities Unit Net CONE (*i.e.*, make adjustments using most recently published Demand Curve inflation rate)
 - Maintains assumed general inflation rate from effective Demand Curve escalation factor
 - Provides consistency between BSM tests
 - The inflation rate based on the historic year-over-year change reasonably approximates long run inflation expectations
 - No tariff change required

Using Updated Inputs After the Initial Decision Period and to the Final Determination

- Under the BSM Rules, the NYISO issues an initial exemption or Offer Floor determination prior to the Class Year Initial Decision Period and at each round of the Class Year. It also issues a final determination for Examined Facilities in the Class Year at the time of its completion.
- Because the period from the Initial Decision Period to the completion of the Class Year can span numerous months, the escalation factor and inflation rate values could be different if the November 30 publication of the updates occurs in the middle of that process.
- The NYISO plans to use such updated escalation factor, inflation rate, and reference point. The NYISO does not recommend a change
 - This provides consistency with the other provisions and with the annual Demand Curve updates

Next Steps

- The NYISO will consider input received during today's ICAPWG meeting
- Stakeholders may also provide additional comments in writing to <u>deckels@nyiso.com</u> by February 2, 2017

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.



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Appendix

Composite Escalation Rate Indices and Component Weights, for SGT6-PAC5000F(5) Technology (2017-2018 Capability Year)

Cost Component	Index	Interval	Calculation of Index Value	Growth Rate	Component Weight
Construction Labor Cost	BLS Quarterly Census of Employment and Wages, New York - Statewide, NAICS 2371 Utility System Construction, Private, All Establishment Sizes, Average Annual	Annually	Most recent annual value	5.40%	28%
Materials Cost	BLS Producer Price Index for Commodities, Not Seasonally Adjusted, Intermediate Demand by Commodity Type (ID6), Materials and Components for Construction (12)	Monthly	Average of 3 most recent finalized monthly values	-0.58%	37%
Turbine Cost	BLS Producer Price Index for Commodities, Not Seasonally Adjusted, Machinery and Equipment (11), Turbines	Monthly	Average of 3 most recent finalized monthly values	0.39%	20%
GDP Deflator	Bureau of Economic Analysis: Gross Domestic Product Implicit Price Deflator, Index 2009 = 100, Seasonally Adjusted	Quarterly	Most Recent Quarterly value	1.22%	15%