



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

**Jonathan Newton**  
**Analyst, ICAP MMA**  
*New York Independent System Operator*

**ICAPWG**  
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# Agenda

- **Background**
- **Options**
- **Solicit stakeholder input**
- **Next steps**

# Background and Objective

- The buyer-side mitigation tariff provisions specify that the NYISO is to use the escalation factor and inflation rate component of the escalation factor from the relevant ICAP Demand Curves
  - *For example: Offer Floor adjustment from the year of the BSM determination to the year of entry, and to escalation of the Demand Curves used for the ICAP forecast*
- The newly-accepted Demand Curve annual update rules provide more up-to-date escalation and inflation factors than the 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*
- When stakeholders were considering the ICAP Demand Curve tariff revisions at the BIC and MC, some raised concerns about how the revisions would affect the BSM rule inputs and adjustments to Offer Floors
- For example, some stakeholders were concerned with the potential volatility of the new annual factors if they were applied in the BSM processes
- The NYISO agreed to review this issue and return to stakeholders in order to solicit feedback on the possible solutions described in this presentation

# Escalation and Inflation Factor Calculations in the ICAP Demand Curve Reset

## Provisions effective prior the Demand Curve Annual Update Rules

## First Annual Update November 2017

Based on:

- Cost of materials, turbines, and labor
- Measures of general inflation

Set during the Demand Curve Reset and fixed for the entire reset period

Based on longer-term expectations

Based on:

- Cost of materials, turbines, labor
- Measures of general inflation

Recalculated during annual updates

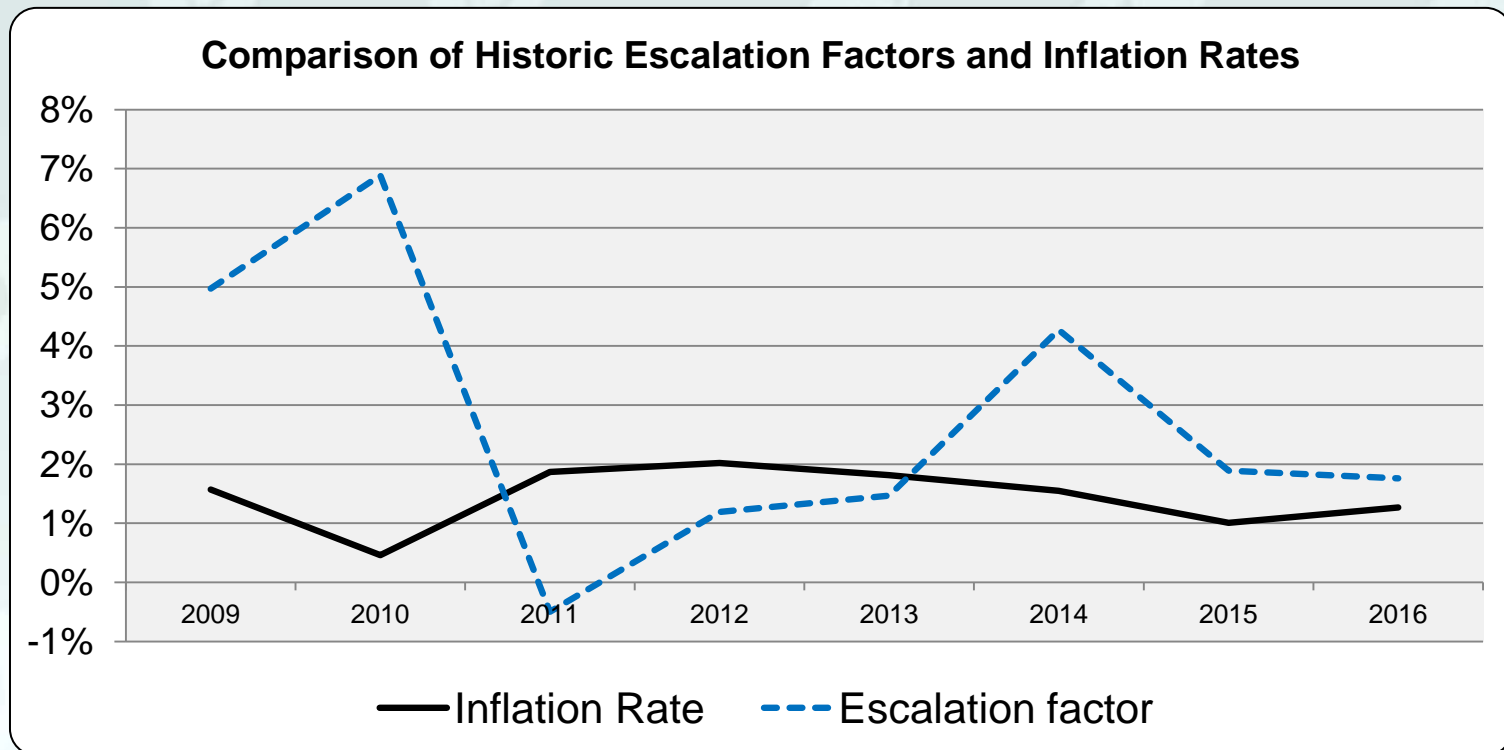
Based on year-over-year change in historical underlying data

# Escalation Factor and Inflation Rate Calculations cont'd

- **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 (January 2017))**
  - *BSM processes will use the escalation factor and inflation rate as prescribed in BSM tariff provisions*
    - *Prior to annual update they will be values accepted by FERC's Order on the Demand Curve reset*
    - *For each subsequent three Capability Years it will be the values from the most recently published annual update (by each November 30)*

# Comparison of Historic Escalation and Inflation

- Stakeholders had expressed concerns about the effect of potential volatility in the annual updates in the BSM determination and Offer Floor adjustments.
- The NYISO performed an analysis to depict the variation between the escalation factor since 2009
  - *The data in the chart below is from the Analysis Group's 2017-2021 Demand Curve model*



# 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”*

# Options for:

- **Adjusting Offer Floors**
- **Examined Facility and NCZ Examined Project Unit Net CONE**
- **ICAP Spot Market Auction clearing prices forecast**



# Adjusting Offer Floors

- ***Offer Floors will be adjusted at the start of each Capability Year using an inflation rate that is updated annually based on the year-over-year fluctuations in underlying inflation data***

# Adjusting Offer Floors cont'd

- **The NYISO does not recommend changing the Offer Floor provisions (see MST Att. H Sections 23.4.5.7.3.7 and 23.4.5.7)**
- **NYISO will adjust Offer Floors using the Demand Curve inflation rate as updated annually**
  - *This method is consistent with the Demand Curve annual update rules*
  - *The inflation rate based on the historic year-over-year change reasonably approximates long run inflation expectations*

# Examined Facility Unit Net CONE

- ***In the “Part B” Unit Net CONE determination for Examined Facilities’ and NCZ Examined Projects’ Unit Net CONE will be inflated to the MSP using the Demand Curve inflation rate from the most recently published annual update; i.e., updated annually based on the year-over-year fluctuations in underlying inflation data***

# Examined Facility Unit Net CONE cont'd

## Options:

- 1) Use a forward looking estimate of long term inflation (e.g., 30 year T-bonds)
  - *Requires Tariff change*
  - *Consistent with power plant financing expectations*
  - *Differs from Offer Floor inflation method*
  
- 2) Maintain existing provision (i.e., inflate Examined Facilities' and NCZ Examined Projects' Unit Net CONE to the MSP using the most recently published Demand Curve inflation rate - *Current NYISO Preference*)
  - *No tariff change*
  - *Aligns with the Offer Floor inflation method*
  - *Consistent with annual Demand Curve update process*

# Forecasting the ICAP Reference Point for the MSP

- *The Demand Curve reference point will be escalated using the Demand Curve escalation factor that is to be adjusted annually based on the year-over-year fluctuations in underlying data (i.e., cost of turbine, materials, labor, and general inflation)*
  - *Demand Curve annual update rules 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*

# Forecasting the ICAP Reference Point for the MSP cont'd

- **BSM provisions are in contrast to the Demand Curve annual update rules that prescribe the actual ICAP Demand Curve reference point is to be updated by:**
  - *Escalating Gross CONE using the prescribed escalation factor*
  - *Updating peaking plant Net Energy & Ancillary Services revenues*
  - *Updating the Winter-Summer ratio*

# Forecasting the ICAP Reference Point for the MSP cont'd

## Options:

- 1) **Maintain existing provision, (i.e., escalate the ICAP Demand Curve reference point using the most recently published Demand Curve escalation factor**
  - *No tariff change*
  - *Potential volatility, as seen in historic escalation factors*
  
- 2) **Update the existing tariff to allow the ICAP Reference Point to be updated by currently approved Demand Curve inflation rate**
  - *Lower volatility*
  - *Does not account for other factors that could affect the actual ICAP Reference Point*

*\*BSM ICAP Forecast Option continued on next page*

# Forecasting the ICAP Reference Point for the MSP cont'd

## Options :

**3) Revise the BSM Rules to specify that solely for purposes of the BSM Rule determinations, the ICAP Demand Curve reference point to be predicted based on:**

- a) Escalating the peaking plant Gross CONE using the most recently published Demand Curve escalation factor**
- b) Reasonably estimate the peaking plant net Energy & Ancillary Services revenues by using information available at the time of the BSM determination**
- c) Update Winter-Summer ratio**

**- *Current NYISO Preference***

- *This option is aligned with the annual Demand Curve update process***
- *Reasonably estimates additional factors that could affect ICAP Demand Curve reference point***
- *Potential volatility***



# Using Updated Inputs After the Initial Decision Period and through 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.**

# Using Updated Inputs After the Initial Decision Period and through the Final Determination cont'd

## Options:

- 1) The NYISO plans to use the 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*
- 2) An alternative is to use throughout the process the escalation factor and inflation rate used at the time of the Initial Decision Period (i.e., and ignore the annual updates)**
  - *The NYISO does not recommend this approach. It would be inconsistent with the annual Demand Curve updates and would not use known and published data*

# Next Steps

- The NYISO will consider input received during today's ICAPWG meeting
- Stakeholders may also provide additional comments in writing to [deckels@nyiso.com](mailto:deckels@nyiso.com) or to [jnewton@nyiso.com](mailto:jnewton@nyiso.com) by October 28, 2016

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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