

# MIC Balancing Ratio

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# Background

- The default market seller offer cap (MSOC) for a Capacity Performance resource is currently defined in the tariff as Net CONE times the average balancing ratio (B) during performance assessment hours (PAH) that occurred during three years prior to the BRA.
- The average balancing ratio from the three year PAH history was used to estimate the expected balancing ratio during the delivery year.

# Default Offer Cap Assumptions

- The default market seller offer cap level is the competitive offer of a resource whose net going forward cost is less than the energy only bonus revenues it can earn without a capacity commitment (Low ACR resource).
- The competitive offer of Net CONE times B is based on explicit assumptions:
  - The nonperformance charge rate is Net CONE divided by the expected number of performance assessment hours.
  - B is the expected average Balancing Ratio during the performance assessment hours.
  - The bonus payment rate equals the nonperformance charge rate.

# Balancing Ratio Issue

- Since there have been no PAH in the period from 2015 through 2017 (or 2018 YTD), there are no data to estimate the expected balancing ratio.
- Using the logic for CP competitive offers, the competitive offer defaults to a unit specific value: Net ACR plus expected nonperformance charges (or minus expected CP bonus payments).
  - Without PAH, there is no opportunity for an energy only resource to earn bonuses to recover its net going forward costs. Therefore there is no opportunity cost associated with being a capacity resource. The competitive offer of such a resource is its net going forward cost (net ACR).

# Expected PAH

- The nonperformance charge rate is currently defined in the tariff as Net CONE divided by 30. The estimated number of PAH used was 30 hours.
- When the expected number of performance assessment hours (H) is not equal to 30, the default offer cap of  $\text{Net CONE} \times B$  overestimates (or underestimates) the competitive offer.

# Objectives

- To come up with a well defined method to estimate the number of performance assessment hours (H) in a delivery year, to use for the nonperformance charge rate.
- To come up with a well defined method to estimate the expected balancing ratio (B) during PAH in a delivery year.
- The default offer cap should always be based on the competitive offer logic for a Capacity Performance resource.

# Potential Challenges

- Using recent history, the estimate of 30 for (H) the expected number of performance assessment hours that has been used for the last 3 years, is inaccurate.
- The lower the estimate for H, the higher the nonperformance charge rate (Net CONE/H).
- If the nonperformance charge rate is not updated to be consistent with an accurate estimate of H, then the competitive offer is not  $\text{Net CONE} \cdot B$ .

# Competitive Offer

- The competitive offer for a low ACR resource is defined as  $PPR * B * H$ .  
where:
  - PPR is the nonperformance charge rate.
  - B is the expected average balancing ratio during PAH.
  - H is the expected number of PAH.
- A low ACR resource is expected to earn enough CP bonus revenues as an energy only resource to cover its net going forward costs.
- A high ACR resource is expected to need capacity revenue to cover its net going forward costs.



# Example scenario

- The estimate for H is 2.
- The estimate for B during the 2 performance assessment hours is 95 percent.
- The nonperformance charge rate (PPR) =  $\text{Net CONE}/2$
- The default offer cap =  $\text{PPR} * B * H = (\text{Net CONE}/2) * (0.95) * (2)$ .
- If for any reason, the nonperformance charge rate is not defined using the expected number of PAH, then the competitive offer is not  $\text{Net CONE} * B$ .

## Example scenario (continued)

- For example, if the PPR is administratively set at Net CONE/30, even though the estimate for H is 2, then the default offer cap will be  $(\text{Net CONE}/30) * B * 2 = (\text{Net CONE} * B / 15)$ .
- If there are expected to be only 2 performance assessment hours, the opportunity to earn bonuses as an energy only resource is reduced.
- The number of Low ACR resources will be reduced.
- The number of High ACR resources will be increased.
- The offer cap for High ACR resource is Net ACR plus the net expected nonperformance charges as a CP resource.

# Scope Issue

- The general determination of the default Market Seller Offer Cap as  $\text{Net CONE} \times B$  was defined as out of scope in the issue charge.
- In order for the offer cap to be consistent with the CP offer logic, the nonperformance charge rate must be defined as  $\text{Net CONE} / \text{PAH}$ , no matter what the estimate is.
  - Recent history indicates very low expected PAH.
- If the nonperformance charge rate does not equal  $(\text{Net CONE} / H)$ , then the default MSOC must be adjusted from  $\text{Net CONE} \times B$  to be consistent with CP design logic.
- To ensure that the default MSOC is a competitive CP offer, the definition of the default MSOC has to be within the scope of this issue.

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