FCP Joint Stakeholder Proposal

December 11, 2019

FCP Joint Stakeholder Proposal Overview

- Primarily the status quo or the same as the IMM package
- ► Eliminates the need for FCP for zero cost offers
- Eliminates the annual review
 - Allows for PJM or the IMM to seek new FCP due to change in circumstances
- A change in Market Seller requires a need to reaffirm a FCP
 - ▶ Other changes, such as agents, don't need any FCP adjustment
- Self-identified errors reduce penalty to 25% of the calculated penalty
- Safe-harbor for unusual situations not contemplated by FCP
- ► Temporary FCPs based on heat rate and gas pricing point

FCP Joint Stakeholder Proposal Overview

- Penalty based on IMM's proposal, full penalty (impact factor of 1) if:
 - ▶ Unit clears DA or runs RT on cost-based offers AND is either
 - ▶ Paid DA/Balancing operating reserves or
 - ► Cost offer is above \$1,000/MWh
 - Or, unit fails TPS test for constraints
 - ▶ Or, cost offer is above \$1,000/MWh
- ▶ 10% of full penalty if the above don't apply to reflect lack of impact

FCP Expiration Date Approach

The use of expiration dates replaces both the annual FCP review process and the revocation language in the tariff

- An expiration date can be included in a FCP at the time it is approved to ensure that the policy is reviewed at that future time
 - ► Full negotiation is not required at the expiration date Market Seller and PJM can agree to extend the FCP if circumstances haven't changed
- PJM or the IMM can assign an immediate expiration date due to a change in circumstances
 - Written justification plus documentation supporting the decision would be provided for any immediate expiration notices
 - Expiration dates set at the time of initial FCP approval wouldn't require such supporting documentation
- The temporary FCP would be in place for Market Sellers as new FCPs are negotiated (more on next slide)

Expiration Details

- Temporary FCP goes into effect immediately upon expiration of an FCP if a new FCP has not yet been approved
 - The temporary FCP cost offer development methodology will be documented in the tariff
 - ► The pricing points for temporary FCPs will be unit specific
- No penalty is incurred for lack of an approved FCP or use of a temporary FCP
- FCP penalties still apply if an offer is submitted above that which is allowed by the temporary FCP
- Temporary FCPs cannot be used in perpetuity it is only intended to be used while a new FCP is being negotiated
 - Used by new units, units transferring to new ownership, or units with FCPs that have expired

Penalty Calculation & Impact Factor

- The penalty calculation matches the IMM penalty methodology
- For cases in which the Market Seller is notified by PJM or the IMM prior to the violation end, it is the capacity available of the resource and RT LMP at the applicable pricing location for the hour
- For cases in which the Market Seller is notified by PJM or the IMM after the violation has ended, it is the average capacity available of the resource and average RT LMP at the applicable pricing location for all h hours in which the Market Seller submitted a non-compliant cost-based offer
- ► The impact factor is evaluated over the duration of the incorrect offer
 - ▶ If an incorrect offer was submitted on days 1 10 and market impact occurs on day 1 but not on days 2 - 10, then the impact factor is still 1

Safe Harbor Provision

The Safe Harbor provision is intended to cover force majeure scenarios and not those that could have been contemplated at the time of FCP development

Penalty Math

Penalty Condition	IMM/PJM Identified	Self-Identified
Market Impact	100%	25%
No Market Impact	10%	2.5%

Unit Average Output = 500 MW

Unit Average RT LMP = \$40

500 X 40 X 24/20 = 24,000

Current Penalty = \$24,000

Penalty Condition	IMM/PJM Identified	Self-Identified
Market Impact	\$24,000	\$6,000
No Market Impact	\$2,400	\$600

Please send questions for the joint stakeholders to Adrien Ford at aford@odec.com or 215-251-2427