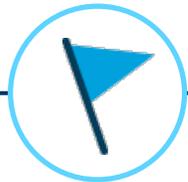




MIC Special Sessions: Fuel Cost Policy

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Market Implementation Committee
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Action Required	Deadline	Who May Be Affected
<p>Communicate proposed changes to the Fuel Cost Policy process and penalty calculations</p> 	<p>2/20/2020</p> 	<p>Market Sellers</p> 

- ❑ KWA#3: Explore potential enhancements to Fuel Cost Policy rules. Initial review suggests the following categories for enhancements to PJM's fuel cost policies:
 - ❑ Requirement for zero marginal cost offer units (e.g., wind and solar) to have Fuel Cost Policies;
 - ❑ Requirement for self-scheduled units to have Fuel Cost Policies;
 - ❑ Need for Market Sellers, on an annual basis, to confirm that their annual Fuel Cost Policy remains compliant;
 - ❑ Lack of a penalty exemption and/or safe harbor for minor violations in a Market Sellers' Fuel Cost Policy, and/or lack of appropriate crediting mechanism for a market-seller's self-report of a potential Fuel Cost Policy violation.



Summary of Packages- Fuel Cost Policy Requirements

Fuel Cost Policy (FCP) Requirements

	IMM	Joint Stakeholder	PJM Primary	PJM Alternate
Remove FCP Annual Review	X	X		
Remove FCP requirement for zero marginal cost offer units	X	X	X	
Remove Market Seller Submission Deadlines	X	X	X	X
Refine PJM/IMM Review Deadlines	X	X	X	X

Removed

Operating Agreement, Schedule 2 Proposed Changes

	IMM	Joint Stakeholder	PJM Primary	PJM Alternate
Modify Revocation Language		X		X
Temporary Fuel Cost Policy		X		
Penalty Calculation Components				
Market Seller Identified Error Factor	X	X	X	X
Market Impact Factor (IF)	X	X		X
Average Hourly LMP	Entire Duration	Entire Duration	Entire Duration	Entire Duration
Average Hourly Available MW	Entire Duration	Entire Duration	Entire Duration	Entire Duration
Market Impact Evaluation Period	Entire Duration	Entire Duration		Entire Duration

Removed

	MIC	MRC	MC
First Read	11.13.2019	1.23.2020	
Endorsement	12.11.2019	2.20.2020	3.26.2020*

* **Note:** Manual 15 – Cost Development requires Members Committee endorsement and Board of Managers approval in accordance with Operating Agreement Schedule 2

Appendix

- Removal of requirement for zero marginal cost offer units (e.g., wind and solar) to have Fuel Cost Policies
- Submission and Review Deadlines
 - Remove FCP submission deadlines for Market Sellers
 - Established PJM/IMM review timeline
 - IMM review first 10 business days; PJM review next 20 business days
- Market Seller Identified Error Factor (MEF)
 - Discount on penalty for Market Sellers who identify an error in their cost based offer prior to inquiry from PJM or the IMM
- MW and LMP inputs into the Penalty calculation will be an average over the entire duration of the incorrect offer

- IMM and Joint Stakeholder packages propose removing the annual review requirement
- PJM Primary package proposes keeping the annual review with the following modification:
 - If a Market Seller reaffirms an approved policy, then the PJM approval and IMM review status would remain in effect for another year

$$\Sigma \text{Penalty}_{dh} = \frac{\min(d, 15)}{20} \times \text{LMP}_h \times \text{MWh}$$

where:

- d (days) = 1, if Market Seller corrects non-compliant offer after notification from PJM or the IMM
- LMP_h = Average hourly LMP on last day of non-compliant offer
- MWh = Average hourly available MW on last day of non-compliant offer

$$\Sigma \text{Penalty}_{dh} = \frac{\min(d, 15)}{20} \times \text{LMP}_h \times \text{MWh} \times \text{MEF}$$

- MEF (Market Seller Identified Error Factor) – discount on penalty if non-compliant offer identified by Market Seller

$$\Sigma \text{ Penalty}_{dh} = \frac{\min(d, 15)}{20} \times \text{LMP}_{hd} \times \text{MW}_{hd} \times \text{MEF} \times \text{IF}_{hd}$$

- LMP_{hd} = Average hourly LMP **over duration of** non-compliant offer
- MW_{hd} = Average hourly available MW **over duration of** non-compliant offer
- IF_{hd} (Market Impact Factor) = **Discount if non-compliant offer did not have market impact at any time during period of non-compliance**
 - Joint Stakeholder IF ranges 0.1-1
 - IMM IF ranges 0.1-2



Penalty Calculation Example

Package	Day1	Day2	Day3	Day4	Day5
Available MW Utilized	Available MW	Available MW	Available MW	Available MW	Available MW
Status Quo/PJM Primary					X
IMM	Average MW across period of invalid offer				
Joint Stakeholder	Average MW across period of invalid offer				
LMP Utilized (Average)	LMP	LMP	LMP	LMP	LMP
Status Quo/PJM Primary					X
IMM	Average LMP across period of invalid offer				
Joint Stakeholder	Average LMP across period of invalid offer				
Evaluation Period	Market Impact	Market Impact	Market Impact	Market Impact	NO Market Impact
Status Quo/PJM Primary	N/A	N/A	N/A	N/A	N/A
IMM	Market Impact evaluated over the length of invalid offer				
Joint Stakeholder	Market Impact evaluated over the length of invalid offer				

Penalties Issued April 2017- August 2019

