

# Emissions Review Process

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Compliance

Cost Development Subcommittee  
March 7, 2022

## Operating Agreement, Schedule 2:

### 3. EMISSION ALLOWANCES/ADDERS

#### 3.1 Review of Emissions Allowances/Adders.

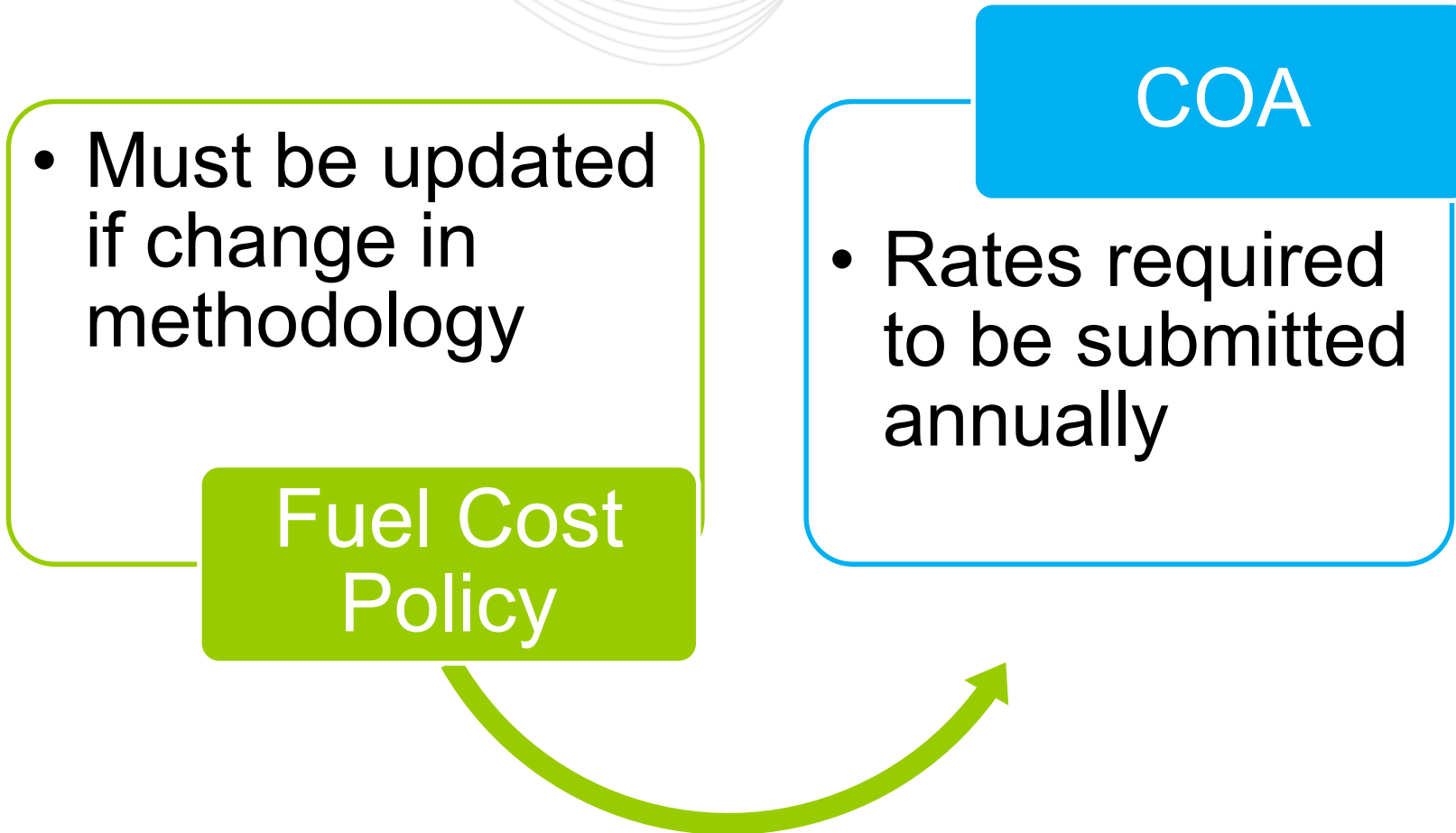
- (a) For emissions costs, Market Sellers <sup>(i)</sup> shall report the emissions rate of each generation resource, the method for determining the emissions allowance cost, and the frequency of updating emission rates. Such adders must be submitted and reviewed at least annually by PJM and be changed if they are no longer accurate.
  
- (b) Market Sellers <sup>(i)</sup> may submit emissions cost information to PJM and the Market Monitoring Unit <sup>(i)</sup> as part of the information it submits during the annual Fuel Cost Policy <sup>(i)</sup> review process, described in Operating Agreement, Schedule 2, [section 2.6](#). The basis for the Market Monitoring Unit's <sup>(i)</sup> review is described in Tariff, Attachment M-Appendix, section II.A.2. PJM shall consult with the Market Monitoring Unit, and consider any input and advice timely received from the Market Monitoring Unit, in its determination of whether to approve emissions costs.

## Emissions Adder

- Emission Allowance Costs
  - SO<sub>2</sub>, CO<sub>2</sub>, NO<sub>x</sub>

## Operating Cost Adder

- Variable Permit Fees (e.g. Title V)



## Fuel Cost Policy must state:

- Which pollutant types will be included in the cost-based offer
- Source of emissions rates and allowance pricing
- Frequency of update to emissions rates and allowance pricing

		Emission Rate Update Frequency	Emission Allowance Source	Emission Cost Update Frequency
Pollutant	Emission Rate Source			
CO <sub>2</sub>	CEMS	Annually	Platts	Daily
NO <sub>x</sub>	CEMS	Annually	Platts	Daily
SO <sub>2</sub>	CEMS	Annually	Platts	Daily

Note: Chart above is an example from the MMU's Fuel Cost Policy template

Upon FCP approval, must submit emissions rates into Cost Offer Assumptions (COA) Review module in MIRA (under Fuel Cost Data Detail)

Emissions Data	
SO2 Allowance Price Index Source	[Select One] ▼
NOx Annual Allowance Price Index Source	[Select One] ▼
NOx Seasonal Allowance Price Index Source	[Select One] ▼
CO2 Allowance Price Index Source	[Select One] ▼
Other Emissions Allowance Cost (\$/ton)	<input type="text"/>
Base SO2 Emissions Rate (lbs/MMBtu)	<input type="text"/>
Base NOx Emissions Rate (lbs/MMBtu)	<input type="text"/>
Base CO2 Emissions Rate (lbs/MMBtu)	<input type="text"/>
Volatile Organic Compounds Emissions Rate (lbs/MMBtu)	<input type="text"/>
Other Emissions Rate (lbs/MMBtu)	<input type="text"/>

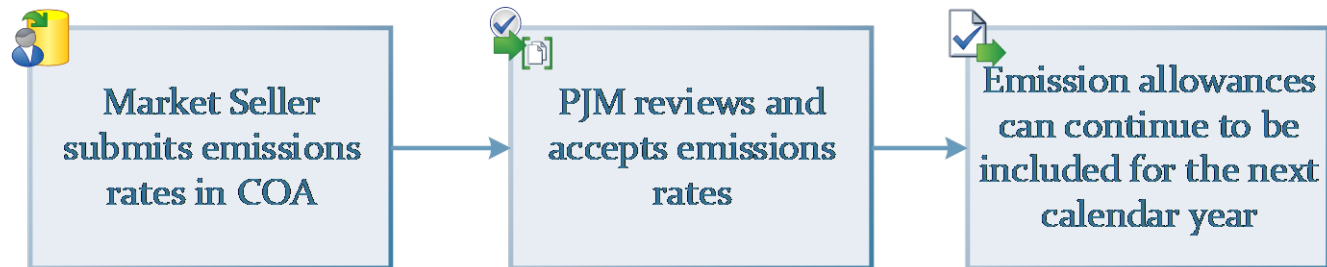
Instructions for COA: [https://www.monitoringanalytics.com/tools/docs/MIRA\\_User\\_Guide\\_2021.pdf](https://www.monitoringanalytics.com/tools/docs/MIRA_User_Guide_2021.pdf)

## Emissions Review Process

Submission Upon  
Change in Methodology



Annual Submission



- Manual 15 clean-up
  - Clarify emissions review process & expectations
  - Update outdated language in Section 2.2.5(see appendix)
    - Reference to “Emissions Policy”
- Determine if process needs to be done annually



# Appendix

## 2.2.5 Emission Allowances

Each unit that requires SO<sub>2</sub> /CO<sub>2</sub> /NO<sub>x</sub> emission allowances (EAs) to operate may include in the unit's TFRC the cost (\$/MMBtu) of the EAs as determined in the Market Seller's Emissions Policy.

Each Market Seller must submit a policy that would state the method of determining the cost of SO<sub>2</sub> /CO<sub>2</sub> /NO<sub>x</sub> EAs for evaluation pursuant to the Cost Methodology and Approval Process. An example of the calculation must be included in the policy. The method of calculation may be changed only after evaluation pursuant to the Cost Methodology and Approval Process and should be updated at least annually

The period used for determining the projected SO<sub>2</sub> /CO<sub>2</sub> /NO<sub>x</sub> discharge and the MMBtu's burned must be included in the Market Seller's policy and may be based on historical or projected data.

For units that have dual fuel firing capability, a Market Seller should use different EA factors based on the SO<sub>2</sub> /CO<sub>2</sub> /NO<sub>x</sub> emitted for each particular fuel or fuel mix.

NO<sub>x</sub> /CO<sub>2</sub> emissions costs will be included in TFRC only during a NO<sub>x</sub> /CO<sub>2</sub> compliance period and only by affected generating units. Details of the cost calculation methodology and example calculations will be contained in each Market Seller's Emissions policy. Compliance requirements and dates may vary by geographic region.

Emissions adder calculations must be submitted to PJM and the MMU for review annually, in accordance with Operating Agreement Schedule 2 Section 3.

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## Emissions Review Process



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