

## Fuel Cost Policy FAQs

Note: Given FERC's recent approval of PJM's hourly offers filing in Docket No. ER16-372-002, PJM is requesting that all Market Sellers review and update their start-up and energy fuel information. Each unit that participates in PJM's day-ahead and real-time markets should provide information on the specific fuel, or fuels, used to provide energy during operation. This information is specified on a schedule basis within Markets Gateway on the Generator > Schedules > Detail window. If you are unable to locate an appropriate fuel choice to match your resource's operation, please [contact PJM](#) so that we can add additional options.

### 1. Who is required to have an approved Fuel Cost Policy

Market Sellers that offer a generation resource, including external capacity and energy-only resources, **and** submit a cost-based offer in the PJM Interchange Energy Market must have a PJM-approved Fuel Cost Policy consistent with fuel type in accordance with Manual 15, and the Operating Agreement, Schedule 2.

### 2. Do I have to submit a new Fuel Cost Policy on an annual basis?

PJM Market Sellers are required by June 15 of each year to submit either;

- a. a confirmation the existing Fuel Cost Policy is still in accordance with PJM governing documents and Manual 15; or
- b. an updated Fuel Cost Policy with requested changes.

### 3. Can I submit a new Fuel Cost Policy outside of the annual review period?

Yes, Market Sellers may submit a Fuel Cost Policy outside of the annual review period if;

- a. they have an approved Fuel Cost Policy currently in place and need to alter it in order to conform it to the provisions of Manual 15 or any applicable provisions of PJM's governing documents;
- b. any action by a governmental or regulatory agency external to the Market Seller results in a need for the Market Seller to change its method of fuel cost calculation;
- c. there are material changes to the Fuel Cost Policy;
- d. PJM requests the Market Seller to submit an updated Fuel Cost Policy, or;
- e. they will be offering a newly interconnected resource into PJM's Interchange Energy Market and do not have an existing Fuel Cost Policy for that resource.

Additional details on submission outside the annual review period can be found in Manual 15, Section 2.3.1.2

### 4. How do I submit a Fuel Cost Policy to PJM and the MMU?

Market Sellers are required to submit their Fuel Cost Policy in the Monitoring Analytics Member Information Reporting Application (MIRA)<sup>1</sup>, or any other system(s) made available. Submission to MIRA, or other system(s) made available, is considered submission to PJM and the MMU.

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<sup>1</sup> MIRA Log-in: <https://mira.monitoringanalytics.com/mira/pages/secure/dashboard.jsf>

**5. How will I know if my Fuel Cost Policy is approved, and when it becomes effective?**

- For Fuel Cost Policies that are submitted in the annual review process, PJM shall notify the Market Seller in writing, with a copy to the MMU, whether the Fuel Cost Policy is approved or rejected by no later than November 1, and will include the effective date of the Fuel Cost Policy in the notification.
- For Fuel Cost Policies submitted outside the annual review process, PJM will have thirty (30) Business Days for the initial review of a policy. For policies that are approved, PJM will include the effective date of the new fuel cost policy in the notification.

Once a Fuel Cost Policy has been approved by PJM, the policy will be in effect until superseded or revoked.

**6. What if my updated Fuel Cost Policy is not approved?**

- If a Market Seller has a previously approved Fuel Cost Policy, the Market Seller will continue to use the existing Fuel Cost Policy until such time that PJM notifies the Market Seller that the policy has been superseded or revoked.
- If a Market Seller does not have a previously approved Fuel Cost Policy, or the previously approved Fuel Cost Policy has been revoked, Market Sellers are not permitted to submit non-zero cost based offers into the PJM energy markets and will be assessed a penalty as described in PJM's Operating Agreement, Schedule 2.

**7. What is the difference between rejection and revocation of a Fuel Cost Policy?**

PJM may reject a new or updated Fuel Cost Policy submitted for approval. A Market Seller will continue to use its currently effective Fuel Cost Policy if PJM rejects the new policy or requests a revised policy. Under these conditions, if there is no previously approved Fuel Cost Policy for a particular fuel, the Market Seller is not permitted to submit a non-zero cost-based offer consistent with that fuel type, and a penalty will be assessed as described in PJM Operating Agreement, Schedule 2.

A Fuel Cost Policy may be revoked by PJM if the Market Seller does not notify PJM and the MMU of a material change to their policy. Reasons for revocation may include, but are not limited to, fraud or gross misrepresentation. For example, PJM would revoke a Fuel Cost Policy if a Market Seller installs a new lateral to a pipeline that makes lower-priced gas available, utilizes this lower-priced gas to run the unit, but does not reflect that price in the calculation of the cost-based offer for the unit.

**8. Are external resources required to have an approved Fuel Cost Policy?**

Yes, all Market Sellers who participate in the PJM Interchange Energy Market and submit a cost-based offer must have a PJM-approved Fuel Cost Policy.

**9. How do I formulate a Fuel Cost Policy for a new unit?**

An initial preliminary Fuel Cost Policy must be submitted no later than 45 days prior to the Market Seller submitting a cost-based offer in the PJM Interchange Energy Market. Within ninety (90) days of the commercial operation date, the Market Seller must submit an updated Fuel Cost Policy for review and approval reflecting actual commercial operation data.

For additional details, see the PJM Operating Agreement, Schedule 2, Section 2.2.a.

**10. How do I formulate a Fuel Cost Policy for a unit that has recently transferred ownership (excluding sub-account transfers within the same company)?**

Market Sellers must submit a Fuel Cost Policy forty-five (45) days prior to the date the unit transfers ownership. If the Market Seller cannot submit a policy 45 days prior to the sale date, the Market Seller shall submit a Fuel Cost Policy as soon as practicable. Please note, PJM may not have sufficient time to approve the Fuel Cost Policy prior to the transfer date. A PJM-approved Fuel Cost Policy is required for Market Sellers to submit a non-zero cost-based offer.

**11. How do I formulate maintenance costs for a new or immature unit that does not have historical operating data?**

When unit information is not available to the Market Seller, estimates may be developed based on a methodology consistent with the provisions of Manual 15 related to VOM, such as, but not limited to:

- Regional industry average
- Industry average in PJM
- Forecasted value based on Long Term Business Plan
- Information from Original Equipment Manufacturer (OEM)

For more information on new or immature units, please refer to Manual 15, Section 2.6.5. Note that for combined cycle and combustion turbine units, major inspections and overhaul costs cannot be included with maintenance costs as of June 1, 2015.

**12. What if a Market Seller requires more than five (5) days to provide additional information requested during a Fuel Cost Policy review?**

Market Sellers shall have five (5) Business Days to provide additional documentation or information for any request from PJM or the MMU. If the Market Seller does not believe it can provide the information within five (5) Business Days, they can request from PJM an alternative deadline for submission of the data no later than one (1) Business Days prior to the due date for the additional data. PJM must approve all requests to extend the deadline.

**13. What if a Market Seller submits an inaccurate cost-based offer?**

If PJM determines a Market Seller submitted a cost-based offer not in accordance with an approved Fuel Cost Policy, the Market Seller will not be permitted to submit a non-zero cost-based offer and will be subject to the penalty described in the PJM Operating Agreement, Schedule 2.

Market Sellers that are assessed a penalty for non-compliance with an approved Fuel Cost Policy, or the cost-based offer is not in compliance with the Market Seller's PJM-approved Fuel Cost Policy or Schedule 2, shall be assessed penalties until the day after PJM determines that the Market Seller's cost-based offers are in compliance with the Market Seller's approved Fuel Cost Policy or in compliance with Schedule 2. Such penalties will be assessed for no less than one (1) Operating Day.

**14. Is using replacement costs for pricing fuel acceptable as a standard methodology?**

Yes, PJM considers this acceptable under the proposed PJM Operating Agreement, Schedule 2.

**15. Will PJM notify a Market Seller it has received a notification from the Market Seller stating that nothing in the previously approved Fuel Cost Policy has changed during the annual review?**

PJM will notify the Market Seller acknowledging receipt of the Market Seller's request to keep the currently approved Fuel Cost Policy in place and will provide notification that the current Fuel Cost Policy is approved and effective until the next annual review period.

**16. For dual-fuel units, are Market Sellers required to submit separate Fuel Cost Policies?**

Yes, Market Sellers are required to have a Fuel Cost Policy for each fuel type for which offers are submitted into Markets Gateway.

**17. What are the requirements for dual-fuel units in PJM?**

Dual-fuel units are required to have a PJM-approved Fuel Cost Policy for each fuel type on which the unit can be operated. If a Market Seller does not have a PJM-approved Fuel Cost Policy for all fuel types, the Market Seller will be in violation of PJM Operating Agreement, Schedule 2 and shall be assessed a penalty.

Manual 11, Revision 86, Effective Date: 2/01/17

- Each Generation Capacity Resource must make available at least one cost-based schedule and for price-based units, if it falls within the types of generators in the PJM Unit Parameter matrix, it must also submit a Price Based Parameter Limited Schedule.
- For price-based units, a price-based parameter limited schedule must be offered into the Day-ahead and Balancing Market. All price-based units have the option of submitting a second price schedule that is not parameter limited. In addition to the price-based schedules, one cost-based schedule shall be made available for PJM's use in the event that the resource is used to control a transmission constraint. The cost-based schedule shall be parameter-limited.
- If a generator is brought on for constraint control and its supplier fails a TPS test, then the unit is dispatched at the lower of the cost or price offer.

A recommended best practice for Market Sellers is to submit cost-based offers into Market Gateway for both fuel types. In the event the unit was required to run, PJM would contact the Market Seller to notify them the unit is needed. At that point, the Market Seller would inform PJM what schedule they are available to run.

PJM would make a reliability and economic evaluation to determine if the unit was still needed. If PJM decides that unit is needed, the generator would be permitted to run on the available schedule.

However, if a unit is committed on their gas schedule in the day-ahead market, they are expected to run in real-time on natural gas during that commitment period. If the unit must switch to backup fuel [oil] during that commitment period in order to continue to operate, the Market Seller will only be paid on the committed schedule.

**18. Can gas pipeline penalties be included with a Market Seller's cost-based offer?**

Gas pipeline penalties are not permitted to be included with a Market Seller's cost-based offer. Gas pipeline penalties, as referenced herein, are charges that are incurred for taking unauthorized gas in violation of an interstate pipeline and/or LDC tariff or contract. The penalty dollars are unknown at the time of the cost-based offer and therefore cannot be included. Higher commodity pricing as a result of market conditions is not the same as gas penalties. Additionally, allowing Market Sellers to include gas penalty charges in their cost-based offer, thus relying on unauthorized gas, puts the interstate pipeline and/or LDC distribution system at risk for failure.

**19. Can gas pipeline balancing charges be included with a Market Seller's cost-based offer?**

Gas pipeline balancing charges, which PJM defines as the cost of unburned gas, is not permitted to be included with a Market Seller's cost-based offer.

For example, if a Market Seller does not have a day-ahead commitment and purchased natural gas to run, but does not get picked up in real time, the cost of the unburned gas cannot be included in a cost-based offer, nor will the market participant be made whole using the current make whole settlement rules. Moreover, if the Market Seller has a day-ahead commitment and is dispatched off due to a constraint, the Market Seller will be made whole for the lost opportunity costs of their day-ahead commitment, but will not be made whole for the unburned gas.

Additionally, gas pipeline storage, park and loan, or other similar tariff-based rate for gas balancing can be included if the cost can be calculated prior to creating a cost-based offer. Gas balancing due to a change in ownership cannot be included.

**20. Can the cost of ratable take gas be included with a Market Seller's cost-based offer?**

Although gas balancing charges from ratable take gas cannot be included in a Market Seller's cost-based offer, PJM will attempt to honor any enforced and verifiable ratable gas flow pipeline restriction submitted as part of PJM's dispatch instructions through either;

- a. a temporary exception to the unit's operating parameters (e.g. minimum run time) on its Parameter Limited Schedules in the Day-Ahead Energy Market; or

b. a change to real-time values<sup>2</sup> in Markets Gateway after the close of the Day-Ahead Energy Market. Units dispatched with ratable gas restrictions will be eligible for make-whole payments for energy in accordance with PJM's current settlement rules. Any gas pipeline penalties or gas balancing charges incurred by the unit during this period cannot be included in the Market Seller's cost-based offer.

**21. Are Market Sellers responsible for providing ex-post documentation to support cost-based offers?**

Yes, Market Sellers are required to maintain daily records, including screen shots, instant messages, text messages, emails or recorded phone calls to allow PJM or the MMU to verify or recreate the cost-based offer at the time it was offered.

**22. Can a unit recover costs incurred from operating when actual costs exceed \$1,000 MWh?**

If a Market Seller's cost-based offer exceeds \$1,000 MWh, the Market Seller is required to maintain and submit to PJM after-the-fact documentation that is clearly described in its Fuel Cost Policy to verify and support the request to recover such fuel costs, such as screen shots, instant messages, text messages, emails and/or recorded phone calls.

**23. Can a unit recover actual costs incurred from operating beyond their day-ahead commitment at PJM's direction?**

If a generation resource is requested to operate by PJM System Operations outside of a day-ahead commitment and cannot accurately estimate intraday costs as described in the Market Seller's Fuel Cost Policy, the Market Seller may be able to recover actual costs as referenced in Manual 11, Attachment C.

**24. How should Emissions and VOM (Variable Operations & Maintenance) costs be documented as part of a Fuel Cost Policy?**

Market Sellers should indicate in their Fuel Cost Policy whether or not they include Emissions and VOM in their cost-based offer. Emissions and VOM costs should be calculated in accordance with Manual 15. Starting with the June 2017 Annual Review, Market Sellers must document in separate policies how (1) Emissions and (2) VOM costs are calculated. These policies should be submitted in MIRA concurrently with the Fuel Cost Policy. A review of Emissions and VOM policies will be handled during the annual review period.

1. Emissions costs, including CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub>, are to be documented in a separate Emissions Policy that includes a sample calculation.
2. VOM costs are to be documented in a separate VOM Policy. VOM costs that are included in a Market Seller's capacity (ACR) offer may not be included in the energy offer. If VOM costs are not included in a Market Seller's RPM Sell Offer, they may be included in the energy offer. How VOM costs are calculated and included in a Market Seller's capacity (ACR) or Energy offer must be clearly documented in the VOM Policy.

<sup>2</sup> For more information on real-time values see slides 26-36: <http://www.pjm.com/~media/committees-groups/committees/elc/postings/20160505-performance-assessment-hour-education-presentation.ashx>

**25. What template should be used to submit Fuel Cost Policies?**

Market Sellers should use the Fuel Cost Policy template that is provided on the [Monitoring Analytics website](#), along with the MIRA login and user guide.

**26. Who do I contact with questions or to schedule a conference call with PJM?**

Please contact [FuelCostPolicyAnalysis@pjm.com](mailto:FuelCostPolicyAnalysis@pjm.com) with any Fuel Cost Policy related questions, or if you would like to schedule a conference call to discuss your Fuel Cost Policy in greater detail.

**27. Does PJM wait to review the Fuel Cost Policy until after the MMU has reviewed the policy?**

No, PJM begins to review Fuel Cost Policies as soon as they are submitted. PJM will use any timely input and advice received by the MMU regarding the policy as part of the review process.

**28. Settlement example of how a unit would be made-whole during a revocation of a fuel-cost policy**

Market Sellers who have a Fuel Cost Policy revoked by PJM will be provided a three (3) Business Day rebuttal period, starting from the date of revocation, to submit supporting documentation to PJM demonstrating that the revoked Fuel Cost Policy accurately reflects the fuel source, transportation cost, procurement process used, applicable adders, or commodity cost for such generation resource such that the Fuel Cost Policy accurately reflects the Market Seller's fuel procurement practices and methodology for pricing fuel. During the rebuttal period, if the Market Seller does not have a PJM-approved Fuel Cost Policy, it may not submit a non-zero cost-based offer. The penalty will still apply during the rebuttal period. However, if, upon review of the Market Seller's supporting documentation, PJM determines that the revoked policy accurately reflects the Market Seller's actual methodology used to develop the cost-based offer that was submitted at the time of revocation, and that the Market Seller has not violated its Fuel Cost Policy, then PJM will refund to the Market Seller the penalty payments and make-whole the Market Seller via uplift payments for the time period for which the applicable Fuel Cost Policy had been revoked and the generation resource was mitigated to its cost-based offer.

If during the revocation period the unit continues to offer into PJM on its price-based schedule, and the unit was offer capped during the rebuttal period, the unit would be made-whole to the cost-based offer that would have applied during the cost capping. Otherwise, the unit would be paid according to the schedule they offered and were committed on during that period. In this case, no make-whole payments would apply and the penalty would be refunded.