



Manual 15

Biennial Review and Fuel Cost Policy

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Special Session of Market Implementation Committee

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- Review Changes in Manual 15:
 1. Biennial review administrative updates
 2. Changes
 3. Fuel Cost Policy Process
 - a) To include recent FERC Hourly Offer ordered suggestions
- Fuel Cost Policy Template will NOT be discussed at this time

Administrative Updates

- Capitalization
- Abbreviations
- Dashes
- References

Changes

- 1.7 Market Seller
- 1.8 Cost Methodology and Approval Process
- 2.3 Fuel Cost Policy
- 7.6 Pumped Hydro
- 8 Demand Side
- 11 Energy Storage

Fuel Cost Policy Process

- New Policy
- PJM / IMM indicates policy requires update
- Market Seller seeks modifications to existing approved policies
- Approval Timeline
- Penalty Structure

Administrative Updates

- Changes to terms that are previously defined in earlier sections of M15 with short name in later sections. e.g. Markets and Reliability Committee to MRC
- Change references of the defined terms in the Tariff and PJM Manuals as capitalized terms in M15
- Changed eMKT references to Markets Gateway
- Changed 'Pumped Hydro' references to Pumped Storage Hydro
- Replaced CODA with 'MIRA, or other applicable tool'

Changes

- 1.7 Market Seller
- 1.8 Cost Methodology and Approval Process
- 2.3 Fuel Cost Policy
- 7.6 Pumped Hydro
- 8 Demand Side
- 11 Energy Storage

- Added language to clarify that a Market Seller is the entity that submits a cost based offer and is responsible for all information necessary to calculate resource's cost-based offer.

1.7 Components of Cost

This Manual is designed to instruct ~~Unit Owner~~Market Sellers on how to develop their cost based offers. A Market Seller who submits a cost-based offer for a resource shall be responsible for the development and accuracy of all information to support the calculation of a resource's cost-based offer and shall provide such information to PJM or the MMU upon request or as required by applicable PJM market rules. These cost based offers are used by PJM to schedule generation in cases in which structural market power is found to exist. PJM uses the information provided from ~~PJM Member~~Market Sellers to determine each unit's production costs.

PJM Operating Agreement Definition Section 1.23

Market Seller

“Market Seller*” shall mean a Member that has met reasonable credit worthiness standards established by the Office of the Interconnection and that is otherwise able to make sales in the PJM Interchange Energy Market.

*A Market Seller can use an agent to submit offers for them.

- Add Market Seller
- Documentation requirement
- Cost Methodology and Approval Process – Market Power vs. Market Rules
- Fuel Cost Policy Process moving to section 2.3.1

1.8 Cost Methodology and Approval Process

A PJM-MemberMarket Seller which seeks to obtain an exemption, exception or change to any time frame, process, methodology, calculation or policy set forth in this Manual other than fuel cost policies, or the approval of any cost that is not specifically permitted by the PJM Tariff, PJM Operating Agreement or this Manual, shall submit a request to PJM and the PJM-Market Monitoring Unit (MMU) for consideration and determination, along with all necessary documentation supporting its request, except as otherwise specified herein.

After receipt of such a request, the PJM MMU shall notify the PJM-memberMarket Seller of its determination as to whether of the request raises market power concerns no later than fifteen (15) calendar days after the submission of the request. If the PJM memberMarket Seller and the PJM MMU agree on the determination of the request, the request shall be deemed to be approved.

If the PJM-memberMarket Seller and the PJM MMU cannot agree on the determination of the request, the PJM-memberMarket Seller may submit its request to PJM in writing for consideration and approval as to whether the request complies with the PJM Market Rules. In its written request to PJM, the PJM-memberMarket Seller must notify PJM of all prior determinations of the PJM-MMU with respect to any such request and must provide a copy of such request to the PJM MMU within one (1) calendar day of submitting the request to PJM.

This process shall be referred to in this Manual as the “Cost and Methodology and Approval Process.”

- Market Sellers must have an approved policy in place
- Fuel Cost Policy must be submitted in MIRA
- Section 2.3.1 will become Submission and/or Modifications to Fuel Cost Policies (to be discussed later)

2.3 Fuel Cost Policies and Guidelines

~~All ny Unit Owner Market Sellers who can submit a cost-based offer must have submit an approved fuel cost policy in accordance with section 2.3.1 in this manual. to the PJM MMU pursuant to the Cost and Methodology Approval Process described in this manual. The fuel cost policy will be submitted in MIRA, or other system(s) made available for submission of such data, from which it will be forwarded to PJM by the MMU upon submission.~~

- Added language regarding the Pumped Storage Hydro units.

7.6 Maintenance

Note: The information in Section 2.6 contains basic Maintenance Cost information relevant for all unit types. The following additional information only pertains to hydro units.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of plant, includible in Account 332, Reservoirs, Dams, and Waterways. (See operating expense instruction 2.) However, the cost of labor materials used and expenses incurred in the maintenance of fish and wildlife, and recreation facilities, the book cost of which is includible in Account 332, Reservoirs, Dams, and Waterways, shall be charged to Account 545, Maintenance of Miscellaneous Hydraulic Plant. Further, Pumped Storage Hydro Units scheduled by the Office of the Interconnection pursuant to the hydro optimization tool in the Day-ahead Energy Market may not include maintenance costs in their offers because such offers may not exceed an energy offer price of \$0.00/MWh.

- Demand Side Resource (DSR) replaced with Demand Resource (DR)

- Batteries and Flywheels replaced with Energy Storage Resources

Fuel Cost Policies and Process

Three scenarios

- New Policies
- Not in accordance with Governing Documents/Manuals (“Bad”)
- Market Seller Requests a change

Issues to address

- Timeline
- Roles and Responsibilities
- Governing documents changes:
 - Tariff, Operating Agreement, Manual Changes

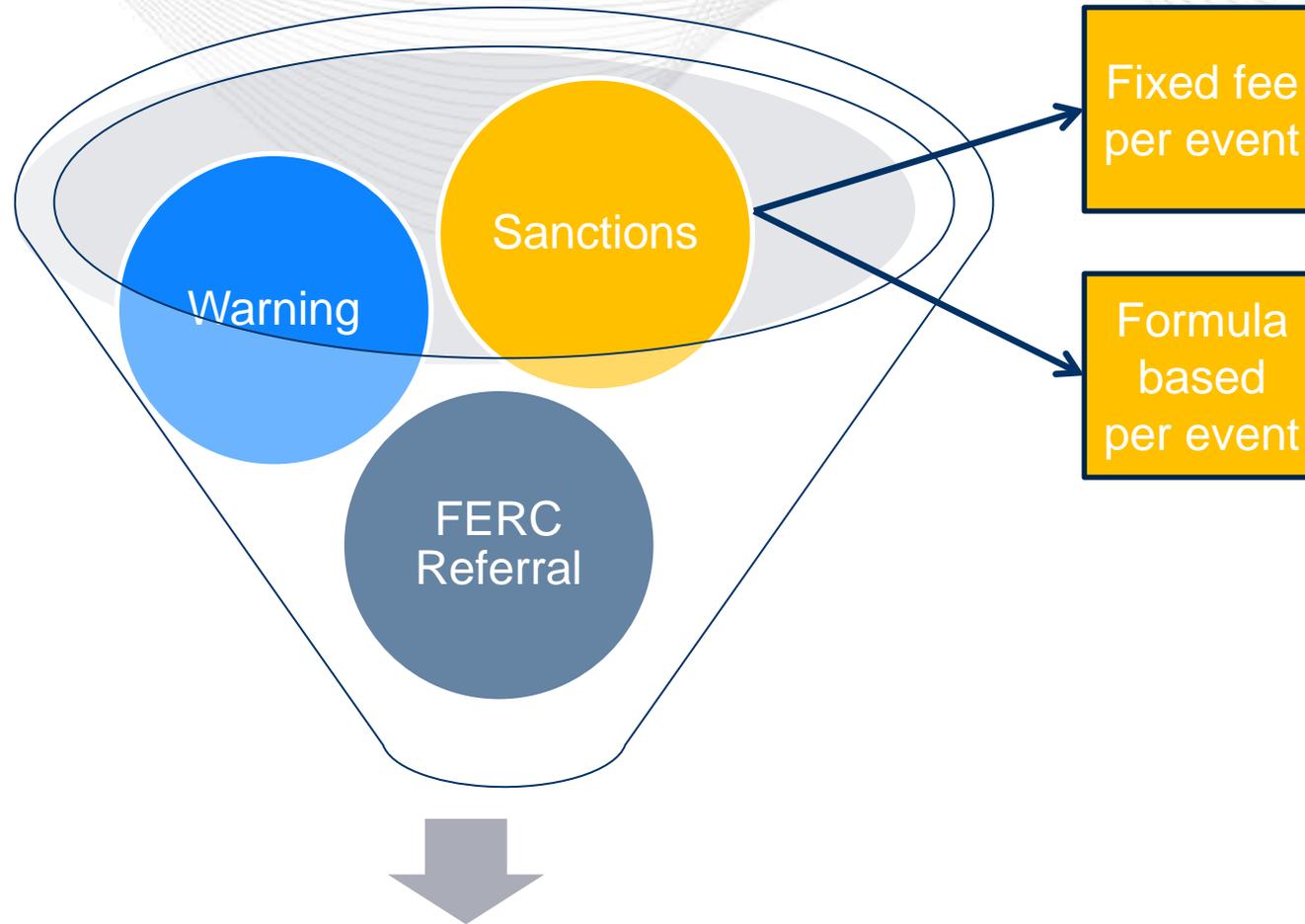
PJM	MMU
<p style="text-align: center;"><u>FERC 719</u></p> <ul style="list-style-type: none"> Prospective Mitigation – Implements prospective mitigation that affects market outcomes on a forward-going basis. PJM uses expertise and software from MMU to avoid duplication. 	<p style="text-align: center;"><u>FERC 719</u></p> <ul style="list-style-type: none"> Prospective Mitigation – May provide inputs required by RTO to conduct prospective mitigation, For example, Fuel cost policy review, cost calculations, cost levels, reference levels, etc.
<p style="text-align: center;"><u>Tariff Section 12A</u></p> <ul style="list-style-type: none"> Determine whether offers comply with Market Rules Accept/Reject Offers Administer Tariff Makes no determination about market power 	<p style="text-align: center;"><u>Tariff Attachment M</u></p> <ul style="list-style-type: none"> Monitor Investigate Evaluate Report Recommend Changes to Market Rules
<p>Operating Agreement Schedule 2 Components of Cost</p>	<ul style="list-style-type: none"> Section E-1 (within Attachment M) <ul style="list-style-type: none"> Review all offers for Market Power Appendix IIA – Inputs for Prospective Mitigation
<p style="text-align: center;">Approval Authority</p>	<p style="text-align: center;">Inputs, Recommendations, and Referrals</p>

- Approved policy in place
- Timeline during submission
- Deadline for negotiations
- Effective date for all FCP's in place
- Approval Process
- Disagreement between PJM/Market Seller/IMM
- Penalty Structure

Potential Options

- PJM & MMU determine Index pricing fuel cost (temporary)
- Default Fuel Cost Policy (provisional)
- Penalties for non-compliance
- 30B-three-15B Timeline
- Effective Date - All Market Sellers must have an approved policy by date 12/01/2016 (example date)

Penalty Structure Potential Solutions Ideas



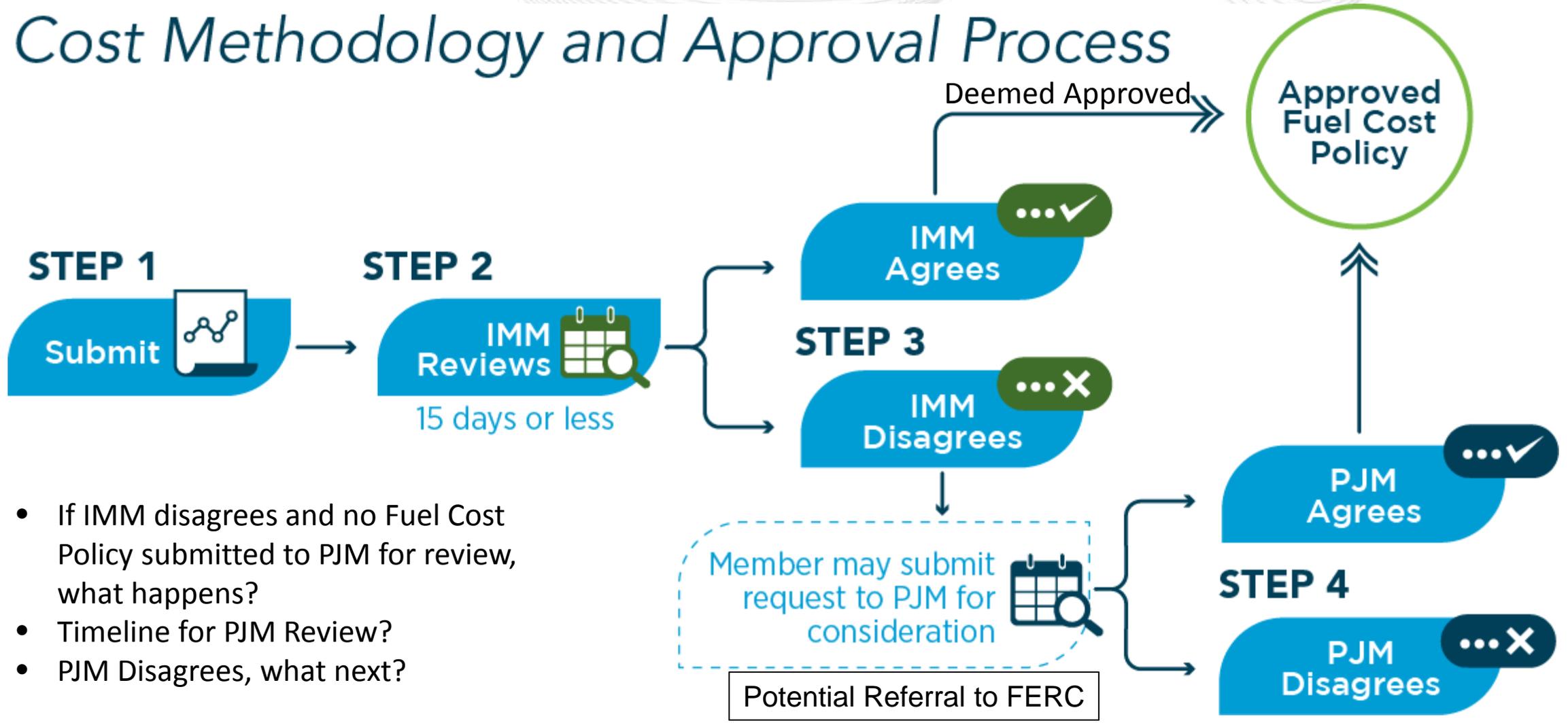
Penalty Structure Components
for Cost-Based Offers

Three scenarios exist for activation of a new Fuel Cost Policy

- New Fuel Cost Policy
- A Fuel Cost Policy has been deemed by PJM to be non-compliant with governing documents.
- A Market Seller needs to update their current Fuel Cost Policy due to some change to a fuel source, unit characteristics etc.

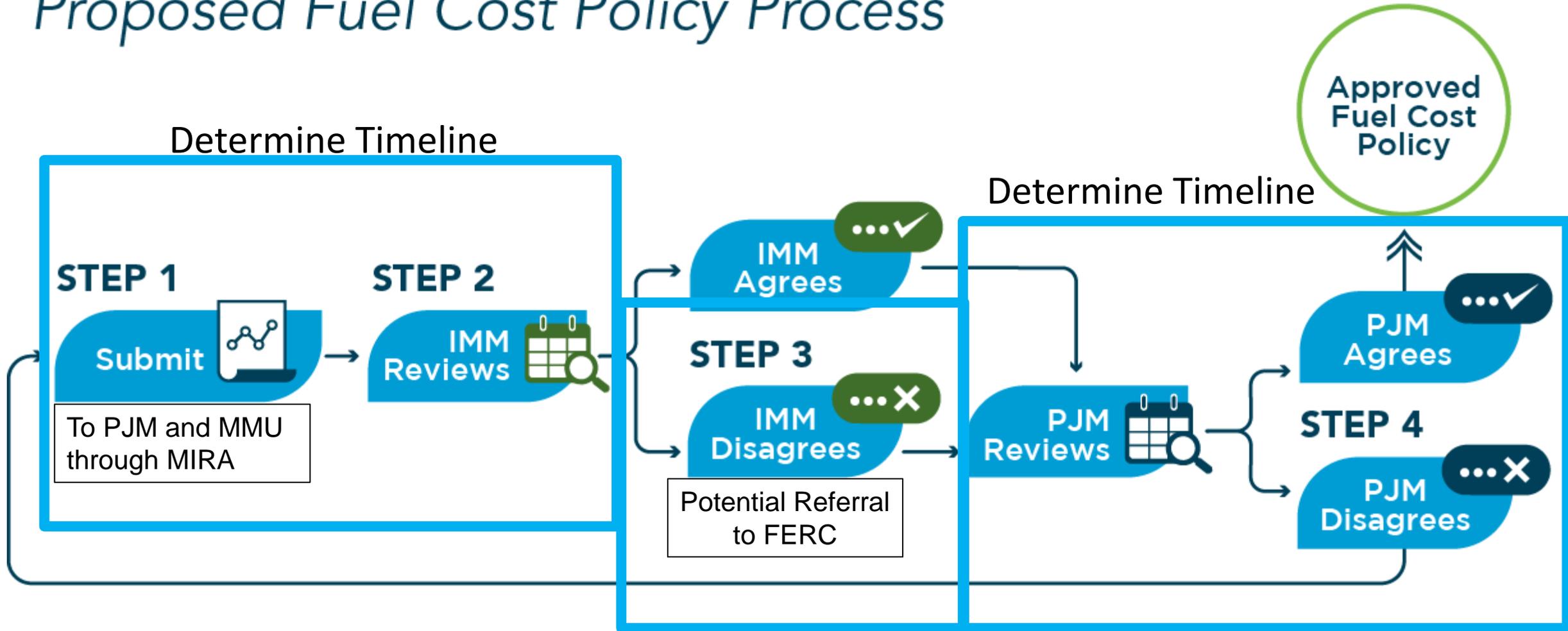
All Market Sellers follow the same process for Fuel Cost Policy **approval, however, differences exist for what Fuel Cost Policy to use in the interim.**

Cost Methodology and Approval Process



- If IMM disagrees and no Fuel Cost Policy submitted to PJM for review, what happens?
- Timeline for PJM Review?
- PJM Disagrees, what next?

Proposed Fuel Cost Policy Process



Therefore, we direct PJM to include in its Tariff and Operating Agreement (1) **a requirement for market participants to submit fuel cost policies that are approved by PJM prior to submission of cost-based offers**, and (2) **a penalty structure that will be applicable in the event that PJM or the IMM determines that a resource has submitted a cost-based offer that does not comply with Schedule 2 of the Operating Agreement or the Cost Development Guidelines in Manual 15**. We direct PJM to submit these revisions, as part of the compliance filing, within 30 days of the date of this order. While we are not requiring PJM to implement identical provisions, we note that both ISO New England Inc. (ISO-NE) and the New York Independent System Operator, Inc. (NYISO) have market power provisions in place to review real-time offer updates after-the-fact and impose penalties on resources that submit inaccurate cost information.” (P 63)