

Offer Schedule Selection

MIC

February 8, 2023

IMM



Monitoring Analytics

Issue

- **PJM seeks to shorten the computational time of the market clearing engine (MCE) by selecting offer schedules using a rule based approach rather than optimization.**
- **The IMM seeks to improve the offer schedule selection process to ensure that market power is mitigated.**
 - **This will also shorten MCE computational time.**

PJM Whitepaper

- **PJM published a summary of its perspective on the issue.**
- **PJM's whitepaper outlines six options for a rule based approach to schedule selection.**
- **PJM's issue charge presented to the MIC, as revised in January 2023, would only allow PJM's preferred option to be pursued by stakeholders.**
- **PJM's preferred solution would weaken market power mitigation. The IMM will oppose any FERC filing of the schedule selection possibilities described in section VII of PJM's whitepaper.**

PJM Whitepaper Options

VII. Options defined as In Scope under PJM Issue Charge

- 1. Schedule selection based on predefined formula**
- 2. Schedule selection based on predefined formula using PLS only for emergency and alert days**

VIII. Options Out of Scope under PJM Issue Charge

- 1. One set of parameters for all offers**
- 2. All offers are cost-based and parameter limited.**
- 3. All offers are parameter limited.**
- 4. Create a new schedule from the lowest cost, most flexible offer parameters.**

PJM Whitepaper Options

PJM preferred

~~VII. Options defined as In Scope under PJM Issue Charge~~

1. Schedule selection based on predefined formula
2. Schedule selection based on predefined formula using PLS only for emergency and alert days

VIII. Options Out of Scope under PJM Issue Charge

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IMM preferred

Option VII.1

- **Schedule selection based on predefined formula based on assumed operation at Eco Min or Eco Max and assumed run time.**
- **This option is not acceptable to the IMM.**
- **The approach is oversimplified and will create new opportunities for suppliers to structure their offers in a way that avoids mitigation.**

Option VII.1 Example

- **If the formula evaluates the resource at Eco Min,**
 - **suppliers could include a markup at all offer points above Eco Min.**
- **If the formula evaluates the resource at Eco Max,**
 - **suppliers could block load their resources at Eco Max**
 - **avoid parameter mitigation based on their turn down ratio.**
- **This option weakens market power mitigation. This option creates more issues than the status quo.**

Option VII.2

- **Schedule selection based on predefined formula using PLS only for emergency and alert days.**
- **This option is not acceptable to the IMM.**
- **This option has the same problems as option VII.1.**

Option VIII.1

- **One set of parameters for all offers.**
- **Market power mitigation must be addressed.**
- **This option is only possible if the parameters are always required to be parameter limited.**
- **Not possible under PJM revised issue charge.**



Option VIII.2

- **All offers are cost-based and parameter limited.**
- **This option is acceptable to the IMM because market power mitigation is addressed.**
- **Not possible under PJM revised issue charge.**

Option VIII.3

- **All offers are parameter limited.**
- **Both sets of schedules still need to be passed to the MCE for determination of the lowest offer as is done under the status quo rules.**
- **Crossing curves need to be addressed.**
- **The limitation to one set of parameters should make this computationally feasible.**
- **Not possible under PJM revised issue charge.**

Option VIII.4

- **Create a new schedule from the lowest cost, most flexible offer parameters.**
- **Not possible under PJM revised issue charge.**
- **This is the IMM's recommended approach as explained in the IMM's comments to FERC.**
- **[IMM Comments, Docket EL21-78 \(October 15, 2021\) at 18-19.](#)**

Option VIII.4 (continued)

- **Resources will continue to submit price-based and cost-based offers.**
- **The goal is to mitigate the market power of resources when PJM identifies that they have market power.**
- **Mitigation will be performed by PJM, there will be no need to submit a new schedule.**
- **This solution applies mitigation to offers with markup and inflexible operating parameters when required by the market power test.**

Remove Multischedule Model

- **The section of PJM's whitepaper titled Remove Multischedule Model from Market Rules is unclear.**
- **The IMM disagrees with PJM that other RTOs do not have a multischedule model in their market rules.**
- **All RTOs have market power mitigation,**
 - **Including price-based offers, cost-based offers, parameter limits, and a market power test.**
 - **This is a FERC requirement for market based rates.**
- **The cost-based offers and parameter limits are calculated by the IMM in some cases. In all cases, multiple schedules exist in some form.**

Remove Multischedule Model (continued)

- **The IMM agrees that the other RTOs do not have the MCE selecting which schedule to use.**
- **The market power mitigation rules determine which offers and operating parameters to use in the other RTOs.**
- **The IMM's recommended approach, option VIII.4, also has this feature.**
- **Under the IMM's recommended approach, the market power mitigation rules select the offers and parameters, not the MCE.**

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