

CCPPSTF IMM Proposal

CCPPSTF

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Joe Bowring



Monitoring Analytics

Proposal Overview

- **Out of market payments to uneconomic generators that enable the generator to avoid retirement are not consistent with the goals of the PJM RPM**
- **Accommodating these subsidies in a way that impacts RPM clearing will undermine PJM markets and reliability**
- **MOPR-Ex addresses this issue by extending the MOPR concept to existing resources**

Proposal Overview

- **MOPR-Ex addresses the state subsidy issue with clearly defined rules on MOPR-Ex exemptions and subsidy exclusions**
- **MOPR-Ex applies to all resource types**
- **MOPR-Ex incorporates the exceptions that apply under the current MOPR design**
- **Self-Supply Exemption not impacted**
- **Competitive Entry Exemptions generalized for application to existing resources and all resource types**

Current MOPR



MOPR Screened Generation Resource

- **New generation resource or uprate based on combustion turbine, combined cycle, or integrated gasification combined cycle technology including Repowering**
- **≥ 20 MW at a single POI**
- **Duration – ICAP equivalent of any MOPR Screened Generation Resource MW that clear an RPM Auction not subject to a MOPR Floor Offer Price for subsequent DYs**

MOPR Screened Generation Resource

- **Exclusions**
 - **ICAP equivalent cleared prior to February 1, 2013**
 - **An uprate to a resource for which a MOPR exception was approved prior to the 2016/2017 BRA under the prior rules and cleared the auction**
 - **Landfill gas units**
 - **Cogeneration units that are certified or self-certified as a Qualifying Facility**

MOPR Floor Offer Price

- **Net Asset Class Cost of New Entry based on technology (CT, CC, and IGCC) and CONE area**
- **Gross CONE values are defined in the PJM OATT through 2017/2018 and then escalated for subsequent DYs**
- **Net E&AS for the CONE area uses the highest three year annual average of the zones within the CONE area, along with other assumptions defined in the PJM OATT**

Competitive Entry Exemption

- **Competitive entry exemption**
 - **All risk/costs borne by generation owner**
 - **All revenues derived from PJM markets**

Self-Supply Exemption

- **The Self-Supply Exemption enables LSEs to reflect revenues associated with regulated retail rates in offers of a MOPR Screened Generation Resource**
- **The Self-Supply Exemption enables LSEs to reflect revenues and costs of Public Power Entities in offers of a MOPR Screened Generation Resource**
- **The exemption is restricted to be within demand/supply bandwidth**

Unit-Specific Exception

- **Unit-Specific Exceptions may be requested in lieu of a Self-Supply or Competitive Entry Exemption**
- **Capacity market seller must submit documentation to support an offer based on a competitive, cost-based, fixed, net cost of new entry**

MOPR Statistics: 2017/2018 through 2020/2021 RPM Base Residual Auctions

Base Residual Auction	Request Type	Requested ICAP (MW)	Granted ICAP (MW)	Offered ICAP (MW)	Offered UCAP (MW)	Cleared UCAP (MW)
2017/2018	Competitive Entry Exemption	12,405.1	12,405.1	5,786.3	5,573.1	4,737.5
2017/2018	Self-Supply Exemption	940.0	940.0	940.0	906.1	906.1
2017/2018	Unit-Specific Exception	0.0	0.0	0.0	0.0	0.0
2017/2018	Total	13,345.1	13,345.1	6,726.3	6,479.2	5,643.6
2018/2019	Competitive Entry Exemption	13,462.5	13,462.5	3,723.3	3,563.6	3,563.6
2018/2019	Self-Supply Exemption	0.0	0.0	0.0	0.0	0.0
2018/2019	Unit-Specific Exception	0.0	0.0	0.0	0.0	0.0
2018/2019	Total	13,462.5	13,462.5	3,723.3	3,563.6	3,563.6
2019/2020	Competitive Entry Exemption	12,270.0	12,270.0	4,671.0	4,515.1	3,561.7
2019/2020	Self-Supply Exemption	1,827.2	1,827.2	1,779.5	1,697.8	1,697.8
2019/2020	Unit-Specific Exception	0.0	0.0	0.0	0.0	0.0
2019/2020	Total	14,097.2	14,097.2	6,450.5	6,212.9	5,259.5
2020/2021	Competitive Entry Exemption	12,171.0	12,171.0	3,212.5	3,161.1	2,646.7
2020/2021	Self-Supply Exemption	0.0	0.0	0.0	0.0	0.0
2020/2021	Unit-Specific Exception	0.0	0.0	0.0	0.0	0.0
2020/2021	Total	12,171.0	12,171.0	3,212.5	3,161.1	2,646.7

MOPR-Ex Proposal



Market Revenue & Subsidies

- **Market Revenue is defined as revenue that is received under a tariff administered by PJM or other RTO or ISO and regulated by the Commission.**
- **Subsidies include any payments, concessions, rebates, or incentives other than Market Revenue.**
- **Subsidies that are consistent with exclusions included in the Competitive Entry Exemption in OATT Attachment DD, Section 5.14h(7) do not trigger the MOPR-Ex.**

Subsidy Exclusions

- **MOPR-Ex subsidies do not include**
 - **Programs that incent general industrial development in an area**
 - **Programs designed to incent siting facilities in a particular county or locality**
 - **Federal subsidies that are available to generators without regard to geographic location**
 - **Revenue or costs that are supported through contracts obtained in competitive and non-discriminatory procurement processes**
 - **Revenue obtained through the sale of a byproduct of power generation in a competitive market**

Competitive Offer for Capacity Performance

- **The competitive offer is based on the expectations of a number of variables, both resource specific variables and system level variables**
- **See Attachment B in the IMM's Analysis of 2019/2020 RPM Base Residual Auction for derivation of a competitive offer,**
www.monitoringanalytics.com/reports/reports/2016.shtml, 8/31/2016

MOPR-Ex Floor Offer Price Level

- In PJM OATT, CP Penalty Rate = Net CONE/30
- Simplifying assumptions
 - CP Bonus Rate = CP Penalty Rate
 - The expected number of Performance Assessment Hours (PAH) is 30
 - Expected Energy Only Bonus Revenue is greater than tariff ACR – CPQR

MOPR-Ex Floor Offer Price Level

- **Under the tariff specified non-performance penalty payment rate and the simplifying assumptions, the CP competitive offer reduces to Net CONE x B**
- **Net CONE x B is the default MOPR-Ex Floor Offer Price Level**

MOPR-Ex Screen – Resource with No Subsidies

- **New and existing generation resources that do not receive subsidies will confirm their compliance with auction specific MOPR-Ex submittals to the Market Monitor.**

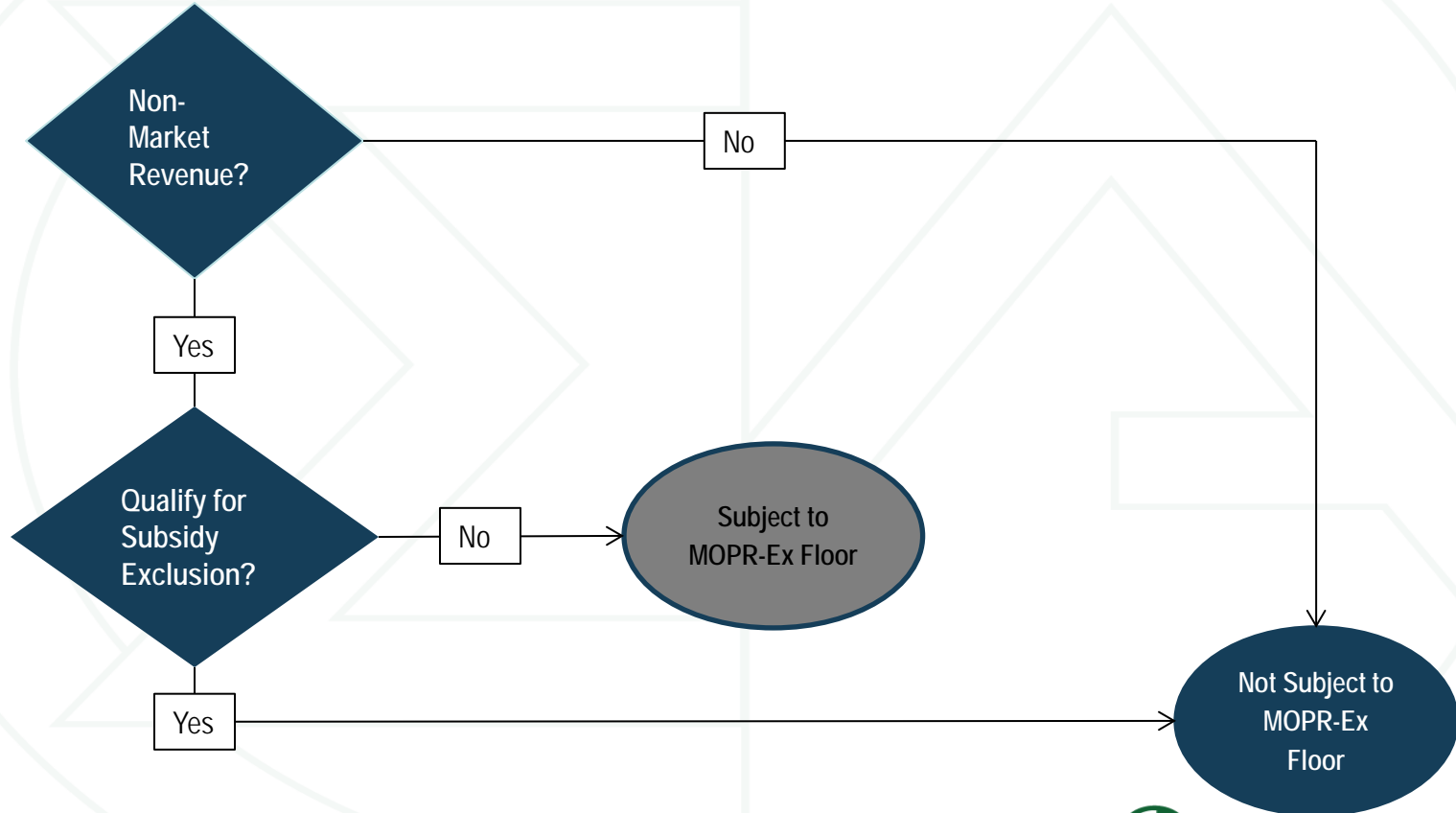
MOPR-Ex Screen – Resource with Subsidies

- **New or existing generation resources that receive subsidies and do not obtain or are not eligible for an exemption are subject to the default MOPR-Ex Floor Offer Price level or may request a Unit-Specific Exception.**

Unit-Specific Exception

- **A Capacity Market Seller can make a request to the Market Monitor for a Unit-Specific Exception to the default MOPR-Ex Floor Offer Price**
- **Justification for a Unit-Specific Exception must be based on the competitive offer derivation but may include alternative assumptions than those used in the derivation of Net Cone x B**
- **The capacity marker seller will be required to justify the difference in assumptions based on supporting data and analysis.**

MOPR-Ex Flowchart



Response to CCPPSTF Questions

- **How do you define the problem that you are trying to solve with your proposal?**
 - **How to maintain a competitive capacity market with market based incentives for entry and exit.**
- **Does your proposal accommodate resources with state government preferences on a non-discriminatory basis?**
 - **Yes. All resources are treated identically. All resources are required to make competitive offers. MOPR-Ex includes competitive and non-discriminatory procurement processes and currently approved subsidy exclusion language.**

Response to CCPPSTF Questions

- **Will your proposal encourage or frustrate state policy objectives or other subsidies?**
 - **MOPR-Ex will encourage competitive markets and discourage subsidies that have a negative impact on competition .**
- **What is your definition of actionable subsidy?**
 - **MOPR-Ex includes the definition of actionable subsidies in the current MOPR .**

Response to CAPPSTF Questions

- **What impact does your proposal have on energy markets?**
 - **The MOPR-Ex will maintain the current relationship between the PJM capacity market and PJM energy market. The MOPR-Ex will contribute to competitive energy markets.**
- **Will your proposal result in or mitigate long term price suppression in the capacity market and/or the energy market?**
 - **MOPR-Ex will mitigate long term price suppression by ensuring that subsidized resources offer into the capacity market at competitive levels.**

Response to CAPPSTF Questions

- **How do you think your proposal will impact bidding behavior?**
 - **MOPR-Ex will incent competitive offers.**
 - **Other proposals incent noncompetitive offers from potentially marginal resources in order to avoid being affected by subsidized resources.**
 - **Other proposals incent more subsidies**
- **Please address the effects of your proposal on potential market manipulation?**
 - **MOPR-Ex is consistent with competitive outcomes and will discourage potential market manipulation.**

Response to CAPPSTF Questions

- **Please address the potential for “leakage” (the effects of one jurisdiction’s actions on other jurisdictions).**
 - **By requiring subsidized resources to offer at competitive levels, MOPR-Ex prevents leakage.**
- **What is the preferred implementation timing?**
 - **MOPR-Ex should be implemented for all auctions beginning in May 2018.**

Response to CAPPSTF Questions

- **How would your proposal address RPS, RECs, RGGI, and ZECs?**
 - **MOPR-Ex will not directly impact Renewable Portfolio Standards (RPS) programs.**
 - **Renewable energy credits (RECs) are subsidies under MOPR-Ex. RECs are not eligible for MOPR-Ex subsidy exclusion because they are technology specific.**

Response to CAPPSTF Questions

- **MOPR-Ex does not affect competitive carbon markets, including RGGI . The impact of RGGI on PJM markets is consistent with competitive outcomes.**
- **Zero emission credits (ZECs) are subsidies under the MOPR-Ex and ZECs not eligible for MOPR-Ex subsidy exclusions because ZECs are unit specific and technology specific.**

Monitoring Analytics, LLC
2621 Van Buren Avenue
Suite 160
Eagleville, PA
19403
(610) 271-8050
MA@monitoringanalytics.com
www.MonitoringAnalytics.com

