

# Reactive Power Compensation Task Force

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- Problem Statement/Issue Charge Summary
- History of the Reactive Power Compensation Task Force
- Reactive Power Compensation Task Force Package Comparison/Summary



# Reactive Power Compensation Problem Statement Status Quo

- Unit specific FERC filed rates based on "AEP methodology" and paid via PJM Tariff Schedule 2
  - Many rate cases result in "black box" settlement
  - Administrative burden for FERC, IMM, PJM, Market Seller
- FERC determines eligibility, capability for compensation
- Compensation not tied to reactive performance

 PJM also pays make whole and opportunity cost payments under Attachment K, Appx. Section 3.2.3B for synchronous generation if they are uneconomically dispatched to provide VAR capabilities



### Reactive Power Compensation Problem Statement

 Seek solutions to address the lack of uniform compensation of VAR capacity reactive rates and avoid the significant time and litigation costs which are otherwise passed on to customers

Review resource eligibility of reactive power lost opportunity costs



## Reactive Power Compensation Issue Charge

- Key Work Activities
  - Provide education
  - Discuss improvements to the Reactive Power cost recovery process and examine alternative Reactive Power Rate recovery mechanisms.
  - Discuss the possibility of expanding resource eligibility for LOC revenue due to provision of reactive power

- Out of Scope
  - Modifications to cost-based energy offers, fuel cost policies, and capacity offers beyond those needed to reflect the cost of reactive service.
  - Any existing FERC-approved or pending reactive service rates.

Deliverable: A recommendation to the MRC on a proposed market rule change that would establish a rate mechanism or market mechanism that would reduce the procedural risks and costs associated with existing methodology, if appropriate.



- Problem Statement/Issue Charge was approved by MIC in October 2021 and the Reactive Power Compensation Task Force (RPCTF) was developed to work this issue, reporting to the MIC
- The RPCTF started in November 2021 and has met monthly with a small hiatus around mid-2022
  - RPCTF completed education, review of procedural matters, and package development
  - Conducted a poll in December 2022
  - Finalized package development in June 2023
- The RPCTF is bringing forward 4 package proposals today for consideration and first read.



### Education and review of procedural matters

- AEP Methodology
- Current Reactive Power Rate Case Process
- ISO/RTO Comparison
- Whitetail Settlement
- FERC Notice of Inquiry (RM22-2-000) on November 18, 2021
- FERC MISO Order

\*\*Not an exhaustive list of education or discussion topics.



# Polling Results

- 589 Total responses
- 280 Member responses
- 65 Unique responses:
  - 17 non-member; 37 member,
     11 for both member and non-member

• General support for changes to the status quo *process* (burdensome)

item-01---2-rpctf-poll-results.ashx (pjm.com)

- CEC Package
  - 63% support among members
- PJM Package
  - 28% support among members
- IMM Package 1
  - 16% support among members
- IMM Package 2
  - 17% support among members
- Change from status quo?
  - 38% support among members

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# Package Comparison

Topic	CEC	РЈМ	IMM 1	IMM 2
Eligibility	Transmission and Distribution connected with a valid ISA or WMPA, Regulates voltage	Transmission connected, Regulates voltage	Capacity Resource	Transmission connected, Regulates voltage
Compensation Rate	Technology-specific stated rates developed by applying the AEP method to a proxy unit of each technology type	Flat Rate Design (\$/MVAR- year) Based on (current Sched 2 \$) / Total generator MVAR capability	Reactive cost already included in capacity; remove from E&AS offset	Flat rate Design (as in PJM package) for 5 years, then \$0
Capability/ Testing Verification	Capability based on name- plate, testing to verify capability	Capability based on testing (Status quo) or historical performance (event based)	Capability as defined in ISA	Capability based on historical performance (event based)
Performance Review & Incentive/ Penalty	FERC Approved Capability Three-strike rule for non- performance similar to MISO's Schedule 2 section IV.A.1	Monthly event assessment, re-rating, and pass/fail look back analysis of generator voltage control performance.		
		Reactive flat rate revenues are withheld for that month and capability is reduced to match delivered	N/A	Reactive flat rate revenues are withheld for that month and capability is reduced to match delivered
Reactive Services Uplift	All resource types eligible for Reactive Services Uplift (Make Whole and Lost Opportunity Cost)			

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### **RPCTF Update**



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