

# DR Nonperformance Penalties

MIC

January 20, 2026

IMM



Monitoring Analytics

## Non-PAI Event DR Dispatch

- **Given that calling demand resources no longer triggers a Performance Assessment Interval (PAI), the MMU recommended in 2023 that PJM revise the performance requirements for demand resources to include an event specific measurement for dispatch occurring outside of PAIs and associated penalties for nonperformance.**
- **Load management resources have an obligation to perform when called, regardless of whether the dispatch event occurs as part of a PAI.**

# PJM's Proposed Nonperformance Penalties

- **PJM proposes to retain the existing nonperformance penalty framework for Performance Assessment Events.**
- **PJM proposes to apply 50 percent of the existing PAI penalty rate to Demand Resources that fail to perform when called outside of a PAI.**



# PAI Penalty Calculation

- The interval Non-Performance Charge is calculated as the Performance Shortfall multiplied by the Non-Performance Charge Rate.
- The Non-Performance Charge Rate for Capacity Performance commitments is equal to  $\{[\text{RTO Net CONE (\$/MW-day ICAP)} \times \text{the number of days in the Delivery Year}] \div 30\}$  divided by the number of Real-Time Settlement Intervals in an hour.
  - This is Net CONE, assuming 30 PAI events per year, on a five minute interval basis.
  - The RTO Net CONE is provided in the Delivery Year BRA Planning Parameters.

# PAI Stop Loss

- **The maximum yearly Non-Performance Charge is 1.5 times the BRA clearing price for the relevant LDA times the number of days in the Delivery Year times the maximum daily unforced capacity committed by the resource.**

# Penalties as a percent of RPM Revenue

- **PJM's proposed penalty structure for nonperformance when called is not an effective performance incentive.**
- **Scenario:**
  - **100 MW ICAP DR Resource in RTO**
  - **ELCC Rating: 92 percent**
  - **2027/2028 BRA Clearing Price of \$333.34 /MW-Day**
  - **PAI Penalty Rate \$2,278.23 per MWh using 2027/2028 RTO Net CONE**
  - **Dispatch Event Duration: 12 hours**
  - **Stop Loss limit: \$16.8M**

# Calculations

- **RPM Revenues**  
$$= (\text{Cleared MW ICAP} \times \text{ELCC Rating}) \times \text{RPM Clearing Price} \times \text{Number of Days in Delivery Year}$$
- **PAI Penalty Rate (\$/MWh)**  
$$= (\text{RTO Net CONE (ICAP)} / 30) \times \text{Number of Days in Delivery Year}$$
- **PAI Stop Loss Limit**  
$$= 1.5 \times \{[(\text{Cleared MW ICAP} \times \text{ELCC Rating}) \times \text{RPM Clearing Price}]\}$$

# Calculations

- ***RPM Revenues***

$$\begin{aligned} &= (100 \text{ MW} \times 0.92) \times \$333.34 \times 366 \\ &= \$11,224,224.48 \end{aligned}$$

- ***PAI Penalty Rate (\$/MWh)***

$$\begin{aligned} &= (\$186.74/30) \times 366 \\ &= \$2,278.23 \text{ per MWh} \end{aligned}$$

- ***PAI Stop Loss Limit***

$$\begin{aligned} &= 1.5 \times \{[(100 \times 0.92) \times 333.34] \times 366\} \\ &= \$16,836,336.72 \end{aligned}$$

- ***Test Failure Penalty (Ex. 50 MW ICAP shortfall)***

$$\begin{aligned} &= (50 \text{ MW ICAP} \times 0.92) \times (1.2 \times \$333.34) \times 366 \\ &= \$6,734,534.69 \end{aligned}$$



# Non-PAI DR Penalties: zero performance

|                                        | Status Quo | PJM Proposal<br>(PAI penalty *0.5) | PAI Penalty    | Test Penalty<br>Structure |
|----------------------------------------|------------|------------------------------------|----------------|---------------------------|
| <b>Penalty</b>                         | \$0        | \$1,366,938.63                     | \$2,733,877.26 | \$13,469,069.38           |
| <b>Penalty Percent of RPM Revenues</b> | 0.0%       | 12.2%                              | 24.4%          | 120.0%                    |

# Non-PAI DR Penalties: 50 percent performance

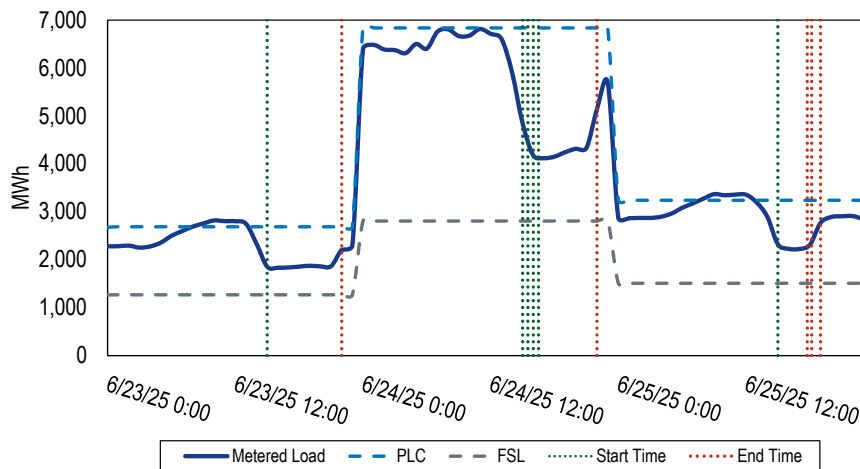
|                                        | Status Quo | PJM Proposal<br>(PAI penalty *0.5) | PAI Penalty    | Test Penalty<br>Structure |
|----------------------------------------|------------|------------------------------------|----------------|---------------------------|
| <b>Penalty</b>                         | \$0        | \$683,469.32                       | \$1,366,938.63 | \$6,734,534.69            |
| <b>Penalty Percent of RPM Revenues</b> | 0.0%       | 6.1%                               | 12.2%          | 60.0%                     |

# Non-PAI DR Penalties: 75 percent performance

|                                        | Status Quo | PJM Proposal<br>(PAI penalty *0.5) | PAI Penalty  | Test Penalty<br>Structure |
|----------------------------------------|------------|------------------------------------|--------------|---------------------------|
| <b>Penalty</b>                         | \$0        | \$341,734.66                       | \$683,469.32 | \$3,367,267.34            |
| <b>Penalty Percent of RPM Revenues</b> | 0.0%       | 3.0%                               | 6.1%         | 30.0%                     |

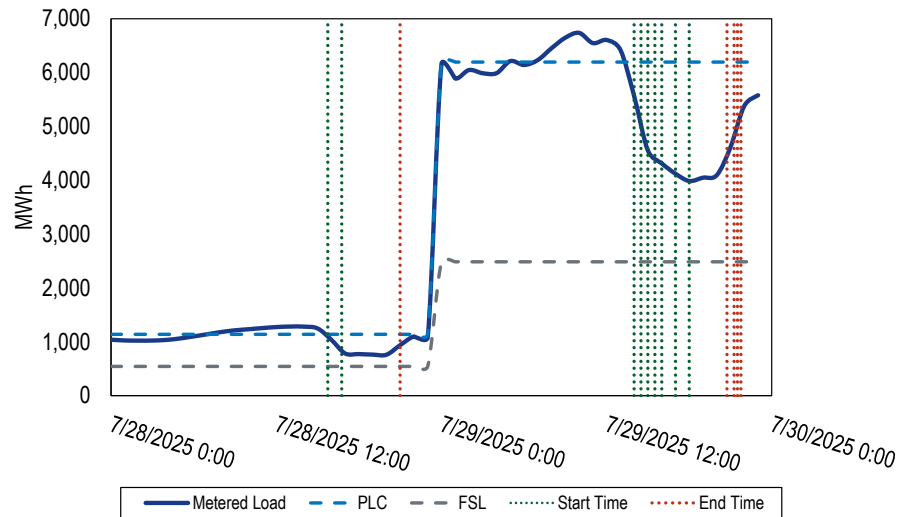
# Event Performance: June 23-25, 2025

| Date      | Actual Reduction (MWh) | Expected Reduction (MWh) | Percent Performance |
|-----------|------------------------|--------------------------|---------------------|
| 23-Jun-25 | 6,614                  | 9,540                    | 69.3%               |
| 24-Jun-25 | 15,506                 | 21,963                   | 70.6%               |
| 25-Jun-25 | 3,675                  | 5,339                    | 68.8%               |
| Total     | 25,796                 | 36,842                   | 70.0%               |



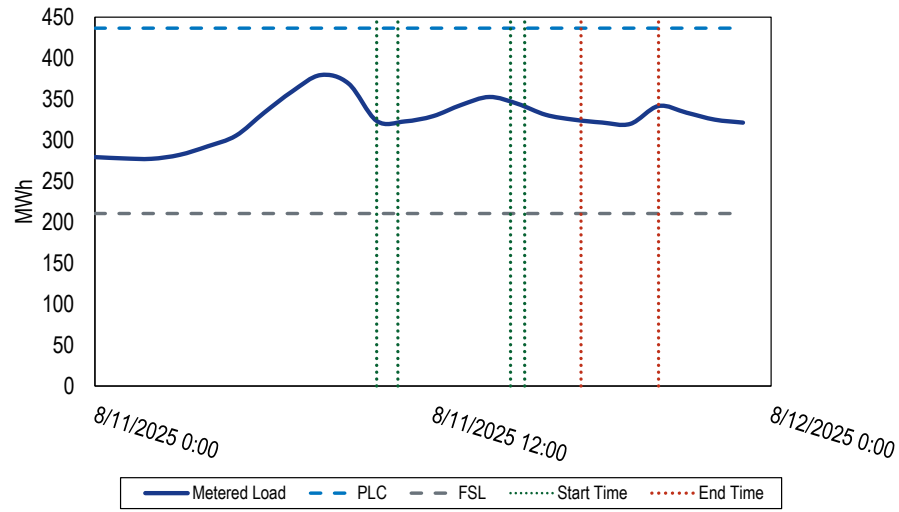
# Event Performance: July 28-29, 2025

| Date      | Actual Reduction (MWh) | Expected Reduction (MWh) | Percent Performance |
|-----------|------------------------|--------------------------|---------------------|
| 28-Jul-25 | 1,866                  | 2,590                    | 72.0%               |
| 29-Jul-25 | 13,128                 | 18,868                   | 69.6%               |
| Total     | 14,994                 | 21,458                   | 69.9%               |



# Event Performance: August 11, 2025

| Date      | Actual Reduction (MWh) | Expected Reduction (MWh) | Percent Performance |
|-----------|------------------------|--------------------------|---------------------|
| 11-Aug-25 | 744                    | 1,510                    | 49.3%               |
| Total     | 744                    | 1,510                    | 49.3%               |



# Conclusions

- **Load management resources have the same obligation to perform when called upon, regardless of whether the dispatch event occurs as part of a PAI.**
- **There is no reason to apply a discounted penalty rate to nonperformance during non-PAI events.**
- **The proposed penalty structure will not provide effective performance incentive.**
- **Even with zero performance when called, it is profitable to sell load management.**
- **PJM's proposed penalty is weaker than PJM's current test based penalty.**
- **If there is zero performance, there should be zero payment.**

# IMM Penalty Recommendations

- **Demand resources that fail to perform when called by PJM, or fail a PJM test, will not receive daily capacity payments in the amount of the shortfall, from the time of the last successful performance, or test, to the next successful performance.**
- **Under existing rules, PAI penalties are allocated to over performing resources in the form of bonus credits.**
- **The IMM recommends that nonperformance penalties collected during non-PAI events be allocated to LSEs based on load ratio share.**



# IMM Proposal

- **Demand Response Accredited UCAP**: Similar to generation, incorporate a Resource Performance Adjustment Factor reflecting each resource's average historically observed performance in the resource specific ELCC.
- **PRD Accredited UCAP**: Annual value based on lesser of summer and winter nominated ICAP. Incorporate a Resource Performance Adjustment Factor reflecting each resources' average historically observed performance in the resource specific ELCC.
- **PRD Non-PAI Event Compliance**: PRD is required to respond during a PAI event regardless of strike price.

# IMM Proposal

- **DR Non-PAI Penalty Rate**: Demand resources that fail to perform when called by PJM, or fail a PJM test, will not receive daily capacity payments in the amount of the shortfall, from the time of the last successful performance, or test, to the next successful performance, or test.
- **DR Non-PAI Penalty Allocation**: No bonus payments for non-PAI events. Penalties allocated to LSEs using load ratio share.
- **DR and PRD Testing**: Required to test and subject to existing test penalty if there are no dispatch events (PAI or non-PAI).
- **Transition**: Effective with 28/29 DY

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