

# November 11, 2025 Synchronized Reserve Performance Inquiry Results

Operating Committee  
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# Reserve Performance Inquiry on Shortfall

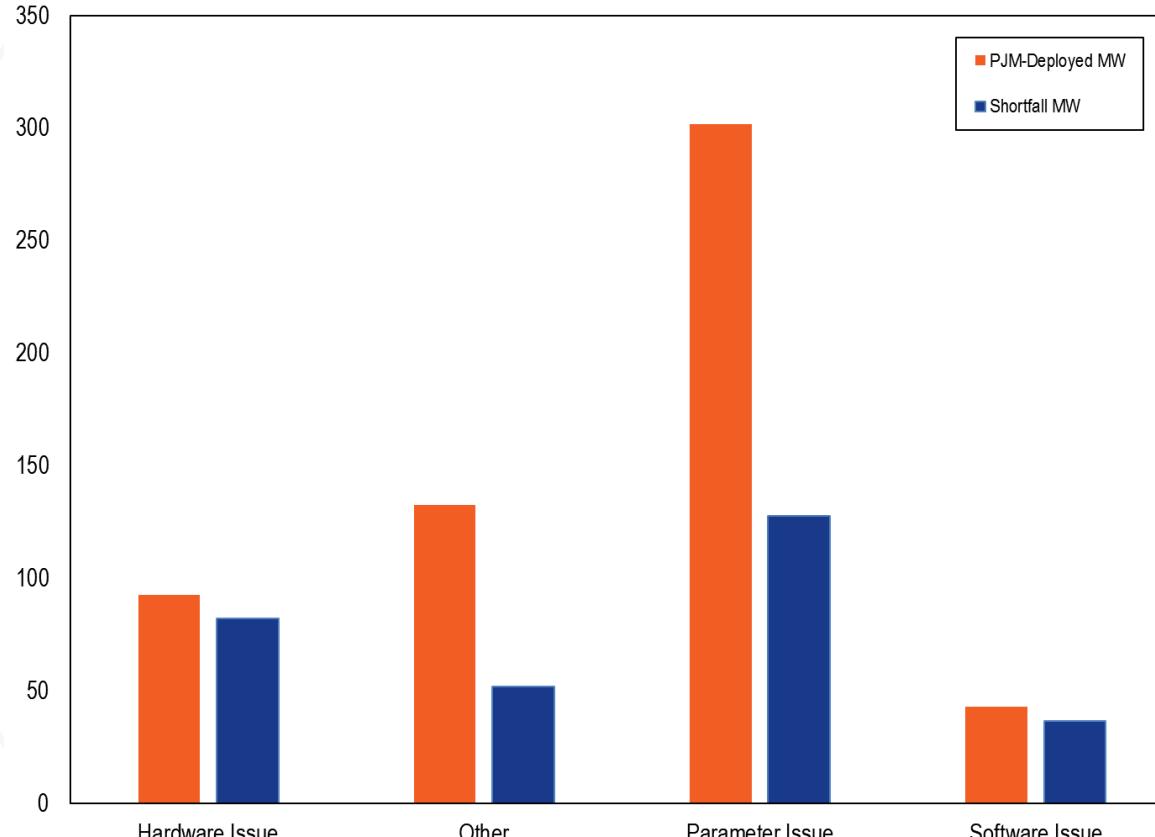
- The IMM contacted resources regarding their underperformance during the November 11, 2025 synchronized reserve event.
- The November 11, 2025 event had a 83% response (2,254 MW responded of 2,720 MW deployed, 466 MW did not perform).
- Performance including over response was 104% (2,829 MW).
- Results:
  - 60 resources of interest contacted (82% of total shortfall).
  - So far, 36 resources categorized by primary cause of shortfall, representing approximately 299 MW (64% of the total 466 MW of shortfall initially of interest).

Note: Values can change as communications continue. Numbers might differ from PJM presentations.

# Category Definitions

Issue Category	Definition
Communication	Delayed action, mistimed action, failure to act, delayed communication, or failure to communicate by MOC operator or plant personnel after contact/notification
Hardware/Software	Mechanical problems that occur during response; misconfiguration or logic errors in software that deploys the response or manages/monitors the unit; or problems with fuel that limit response
Modeling	Transition time to put equipment into or out of service or time needed to change direction of unit
Parameter	Ramp rates, economic maximums, offer amounts, and other parameters overstated resource ability
Personnel	Incorrect action or lack of action taken by MOC operator or plant personnel after contact/notification. Contact/notification was made, but operator did not know what to do when spin event was called

# MW Shortfall by Primary Cause



# Historical Categorization Results

Day	Communication	Hardware/Software	Modeling	Parameter	Personnel	Total
08-Jul-2024	860.6	85.9	78.1	355.9	271.9	1,652.4
18-Aug-2024	56.3	271.5	49.7	183.2	36.2	596.8
10-Nov-2024	28.2	1.6	107.2	207.1	79.4	423.5
05-Feb-2025	0.0	113.6	54.9	83.1	240.5	492.1
01-Jul-2025	0.0	17.2	211.6	82.0	8.0	318.7
22-Jul-2025	35.5	142.1	178.8	136.8	29.8	523.0
25-Sep-2025	0.1	135.8	34.8	102.2	139.2	412.0
17-Oct-2025	13.1	26.8	59.9	105.3	69.4	274.5
28-Oct-2025	2.3	301.1	12.7	265.0	1.9	583.0

# Historical Results

- **Observations:**
  - Communication issues have become less concerning.
  - Personnel issues continue to be persistent. Generation owners / MOC should maintain focus on operator training.
  - Parameter issues should be dealt with existing tools (e.g. spin max exceptions, updating ramp rates, ensuring eco max are updated)

# Event Response Including Full Response from Assigned Resources

Day	Assigned MW	Capped Response	Reported Performance	Full Response		Full Performance
		MW		MW	MW	
08-Jul-2024	3,234	1,479	46%	1,621		50%
21-Jul-2024	2,379	1,766	74%	2,079		87%
18-Aug-2024	1,945	1,342	69%	1,672		86%
10-Nov-2024	1,919	1,483	77%	2,330		121%
05-Feb-2025	1,924	1,252	65%	1,623		84%
01-Jul-2025	2,942	2,337	79%	2,933		100%
22-Jul-2025	3,312	2,610	79%	3,304		100%
25-Sep-2025	3,343	2,566	77%	3,297		99%
17-Oct-2025	2,387	1,893	79%	2,397		100%
28-Oct-2025	2,282	1,389	61%	1,847		81%
11-Nov-2025	2,720	2,254	83%	2,829		104%

# IMM Recommendation

- PJM's calculation metric for synchronized reserve performance artificially understates performance.
- The IMM recommends that PJM calculate the synchronized reserve performance metrics including the performance of all units assigned reserves.
- The IMM recommends that PJM calculate the synchronized reserve performance metrics without capping the performance of over performing units at the assigned reserve amount.

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