

Performance Assessment Interval - New Trigger Logic

As of November 16, 2023

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Impact Details

Action Required	Deadline	Who May Be Affected
Go-Live	12/12/2023	All Stakeholders
Register for education session	12/11/2023	All Stakeholders
Review training materials	N/A	All Stakeholders









- On July 28, 2023, the Commission issued an order accepting the changes to the definition of Emergency Action, for purposes of determining Performance Assessment Intervals (PAI).
 - Docket No. ER23-1996
 - Filed on May 30, 2023
 - Effective date of July 30, 2023
 - Compliance filing August 28, 2023; Accepted October 2, 2023



New PAI Triggers

Emergency Conditions: All Conditions Must Be for Reserve Zone (RTO) or Sub-Zone*

Under Condition 1, a PAI is triggered when:

COMPONENT A

Voltage Reduction Warning and Reduction of Non-Critical Plant Load

Manual Load Dump Warning

Maximum Generation Emergency Action

Curtailment of Non-Essential Building Load and Voltage Reduction Warning

COMPONENT B

Primary Reserve Shortage



Primary Reserve Shortage is not an emergency procedure. It's determined by the dispatch run from the Security Constrained Economic Dispatch (SCED).

Under Condition 2, a PAI is triggered when:

Deploy All Resources Action

Voltage Reduction Action

Manual Load Dump Action

Load Shed Directive

*Current active sub-zone is MAD.



- PAI signal will be communicated via ICCP to participating units via RTSCED
- PJM.com to provide alert based on new PAI trigger
- PJM Now to provide alert setting for PAI and new screen of all issued PAIs from the last 15 days
- New Data Miner feed to provide status for each Real-Time Interval:
 - No PAI
 - PAI in RTO and Active Subzone
 - PAI in Active Subzone Only



- New Data Miner Feed to provide final set of declared PAI intervals
 - PAI Date
 - PAI Datetime Beginning UTC
 - PAI Datetime Beginning EPT
 - PAI Datetime Ending UTC
 - PAI Datetime Ending EPT
 - Area
- Will be posted within 2 business days following an event

*Only the final set of data provided in the Data Miner Feed constitutes PJM's declaration of Emergency Actions for purposes of Performance Assessment Intervals



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PAI – New Trigger Logic



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Appendix



Performance Assessment Interval (PAI) Trigger Matrix

Condition 1 (Component A + Component B): Emergency Procedures and Primary Reserve Shortage (triggered from the latest approved Dispatch Run case on a 5-minute interval basis)

	Primary Reserve Shortage Issuance (Reserve Area)					
Emergency Procedures		RTO	MAD Only	RTO and MAD	None	
Issuance and Reserve Area		RESOURCES ASSESSED:				
Voltage Reduction Warning and Reduction of Non-Critical Plant Load	RTO	Entire RTO	All MAD resources assessed	Entire RTO	No assessment	
	MAD	No Assessment		All MAD		
Manual Load Dump Warning	RTO	Entire RTO		Entire RTO		
	MAD	No Assessment		All MAD		
Maximum Emergency Generation Action	RTO	Entire RTO		Entire RTO		
	MAD	No Assessment		All MAD		
Voltage Reduction Warning and Curtailment of Non-Essential Building Load	RTO	Entire RTO		Entire RTO		
	MAD	No Assessment		All MAD		



PAI Matrix: Condition 2

Condition 2: Emergency Procedures

Emergency Procedures Issuance and Reserve Area		Resources Assessed	
	Deploy All Resources Action Voltage Reduction Action	MAD resources assessed	
MAD	Manual Load Dump Action		
Lo	Load Shed Directive		
RTO	Deploy All Resources Action	Entire RTO resources assessed	
	Voltage Reduction Action		
	Manual Load Dump Action		
	Load Shed Directive		

Notes:

- Determination of shortage conditions is subject to the Real-Time LMP Verification process following the operating day.
- The list of currently effective MAD resources can be found using the following link: https://www.pjm.com/-/media/markets-ops/ancillary/reserve-price-formation/mid-atlantic-dominion-subzone-bus-and-resource-list-effective-20221207.ashx. NOTE: All RPM capacity committed resources have an obligation to respond and are subject to assessment.
- The above list under Conditions 1 & 2 is inclusive of all potential Emergency Procedures that could trigger a PAI. Any other Emergency Procedures (including, but not exclusive to Primary Reserve Alert, Maximum Generation Emergency/Load Management Alert, etc.) are not PAI triggers.

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Conforming Manual Language

- Manual 11, Section 2.19 Notification of a Performance Assessment Interval (New Section)
 - Describes that the initial notification of a PAI will be based on a Primary Reserve Shortage condition from the dispatch run solution
 - Provides guidance on how the indication of a potential PAI will be communicated
- Manual 13, Section 2.3.2 and 5.2
 - Modified or deleted notes regarding PAI
- Manual 18, Section 8.4A Non-Performance Assessment
 - Provides updated guidance on what would trigger a Performance Assessment Interval (PAI) and which resources would be subject to assessment