

# Performance Assessment Interval Triggers – Conforming Manual Changes

Melissa Pilong, Lead Analyst

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- 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





### 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.



#### **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)

| Emergency Procedures Issuance and Reserve Area                                 |     | Primary Reserve Shortage Issuance (Reserve Area) |                                  |             |                  |
|--|-----|--|----------------------------------|-------------|------------------|
|  |     | RTO  | MAD Only                         | RTO and MAD | None             |
| issuance and Neserve Area  |     | RESOURCES ASSESSED:                              |                                  |             |                  |
| Voltage Reduction Warning<br>and Reduction of Non-Critical<br>Plant Load       | RTO | Entire RTO                                       | All MAD<br>resources<br>assessed | Entire RTO  | No<br>assessment |
|  | MAD | No Assessment                                    |                                  | All MAD     |                  |
| Manual Load Dump<br>Warning  | RTO | Entire RTO                                       |                                  | Entire RTO  |                  |
|  | MAD | No Assessment                                    |                                  | All MAD     |                  |
| Maximum Emergency<br>Generation Action   | RTO | Entire RTO                                       |                                  | Entire RTO  |                  |
|  | MAD | No Assessment                                    |                                  | All MAD     |                  |
| Voltage Reduction Warning<br>and Curtailment of Non-Essential<br>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                           |  |
| MAD  | Manual Load Dump Action                               | resources<br>assessed         |  |
| RTO  | Load Shed Directive  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: <a href="https://www.pjm.com/-/media/markets-ops/ancillary/reserve-price-formation/mid-atlantic-dominion-subzone-bus-and-resource-list-effective-20221207.ashx">https://www.pjm.com/-/media/markets-ops/ancillary/reserve-price-formation/mid-atlantic-dominion-subzone-bus-and-resource-list-effective-20221207.ashx</a>. **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.

# 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

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Presenter: Melissa Pilong

For Questions: <a href="mailto:custsvc@pjm.com">custsvc@pjm.com</a>

**PAI Triggers Manual Language** 



#### Member Hotline

(610) 666 - 8980

(866) 400 - 8980

custsvc@pjm.com

