

Frequency of Stability Limits

MIC

August 5, 2020

IMM



Monitoring Analytics

Identification of Stability Events

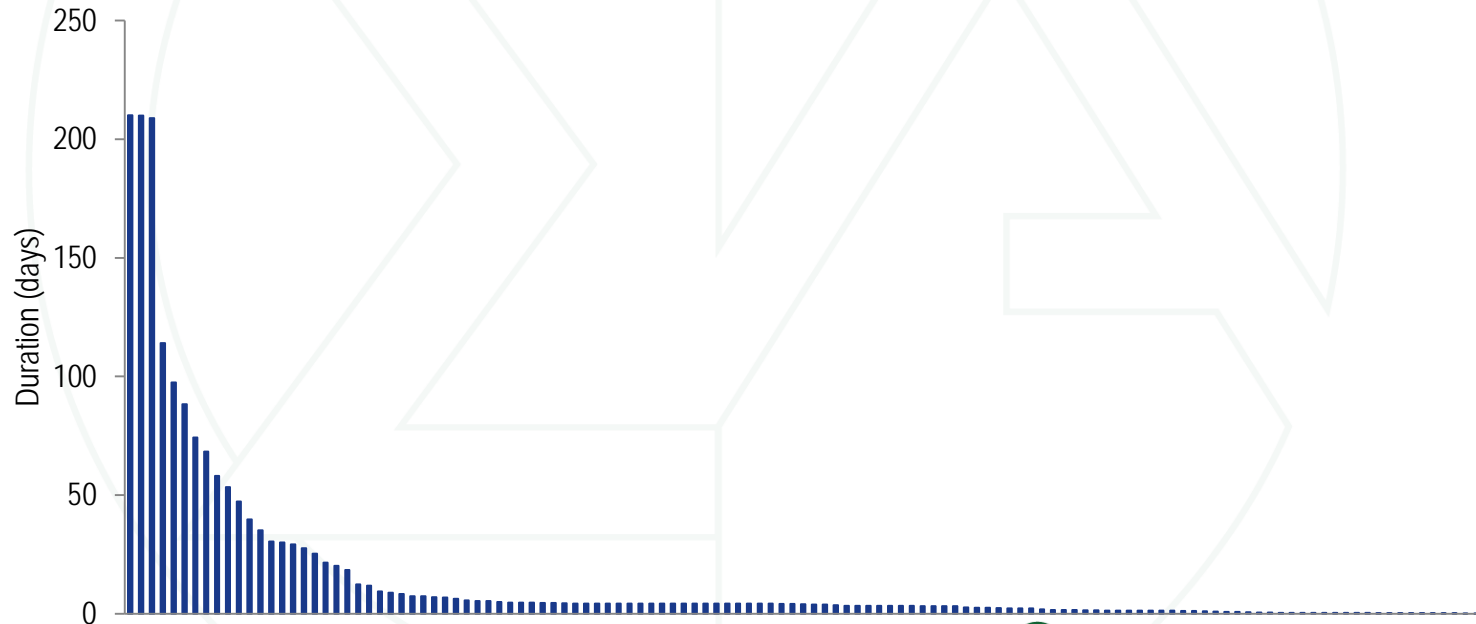
- **Stability limits identified during scheduling of planned transmission outages**
- **Generation owner notified of any MW or MVAR restrictions and may be asked to lower ECOMAX**
- **Short term and real-time stability limits determined using Transient Stability Analysis (TSA) tool**
- **PJM may manually dispatch a unit to lower its MW or raise its MVAR output**
- **MW limit may be priced using a thermal surrogate constraint**

Identification of Stability Events

- **PJM identified 124 outages that resulted in stability limits on generators from January 1, 2019, through July 17, 2020. The frequency increased from 2019 to 2020.**
- **There were 77 units at 38 separate locations having total ICAP of 46,177 MW monitored for stability impact at least once.**
- **Largest number of units in PPL (16) and PN (11) zones.**
- **There were 69 manual dispatch log entries for stability or TSA constraint.**
- **There were at least 29 units limited by surrogate constraints for stability.**

Duration of Outages

Duration in days of transmission outages causing stability limits for generators, January 1, 2019, through July 17, 2020.



Monitoring Analytics, LLC

2621 Van Buren Avenue

Suite 160

Eagleville, PA

19403

(610) 271-8050

MA@monitoringanalytics.com

www.MonitoringAnalytics.com

