

NEW YORK STATE RELIABILITY COUNCIL
MEETING 231: July 13, 2018
Report for Agenda Item #11.2: Michael Forte
NPCC Board of Directors Report

The NPCC Board of Directors (BOD) meeting was held on June 27th. The NERC 2018 State of Reliability Report was discussed.

On June 12th, the NERC Board of Trustees approved the 2018 State of Reliability Report. The report, which is produced annually, measured the performance of the Bulk Power System (BPS) throughout 2017 against a set of established reliability indicators. A summary of the report's key findings includes:

1. The BPS showed improved resilience during the two NERC Category 5 Events: Hurricanes Harvey and Irma
Hurricanes Harvey and Irma resulted in NERC Category 5 Events, the highest severity level within the Event Analysis Process. While wind and water damage were record setting, the restoration efforts and subsequent recovery times were improved compared to historical benchmarks.
2. Inverter disconnects during transmission disturbances present an emerging risk
A number of events have resulted in the wide-spread loss of BPS-connected inverter-based resources for different reasons. NERC initiated the Inverter-Based Resource Performance Task Force, which studied inverter performance under a variety of circumstances. The Task Force informed industry on potential risks and their mitigation in 2017, and will continue to do so as long as the need exists.
3. The BPS experienced no loss-of-load due to cyber or physical security events despite continually evolving threats
In 2017, there were no reported cyber or physical security incidents that resulted in a loss of load. Nonetheless, grid security, particularly cyber security, is an area where NERC and the industry must continually improve defenses as threats continue to rapidly evolve.
4. Transmission outages caused by failed protection system equipment, AC substation equipment, or human error all show a decreasing trend over the last five years
These three areas have historically been major causes of transmission outages. Each has trended downward for the last five years, however, these areas remain major contributors to transmission outage severity and will remain areas of focus.
5. Frequency response performance trends, while remaining acceptable, are showing varied results by Interconnection
Individual Interconnection performance is separated into performance during the arresting period and performance during the stabilizing period. Three of the four Interconnections trended "improving" during the arresting period, and two of the four trended "improving" during the stabilizing period. No Interconnection experienced frequency response performance below its interconnection frequency response obligation.
6. Protection system misoperation rates have declined for the fifth consecutive year
The overall NERC misoperation rate is lower in 2017 than 2016 (7.1% down from 8.3%), continuing a five-year trend of declining rates across North America. The three largest causes of misoperations in 2017 remained the same as in 2016: Incorrect Settings/Logic/Design Errors, Relay Failure/Malfunctions, and Communication Failures.

A FERC Technical Conference is scheduled for July 31st to review and consider the NERC State of Reliability Report, along with other reliability and resilience issues.