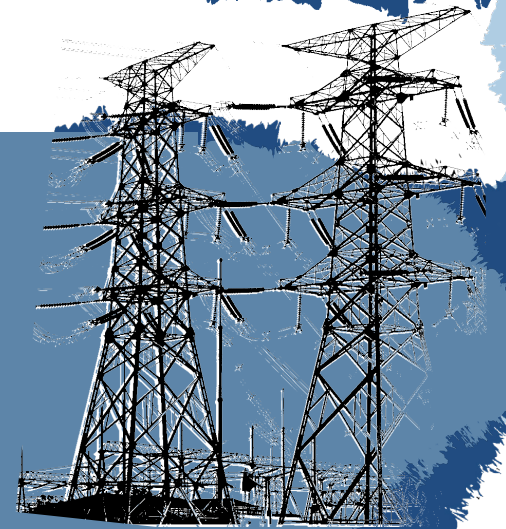


2023 STATE OF RELIABILITY

The State of Reliability provides analysis of past bulk power system (BPS) performance. Leading indicators show that the BPS remains highly reliable and resilient; however, extreme weather continues to pose a significant risk to its reliability and stability.

[SOR 2023 Technical Assessment](#) | [SOR 2023 Overview](#) | [SOR 2023 Video](#)

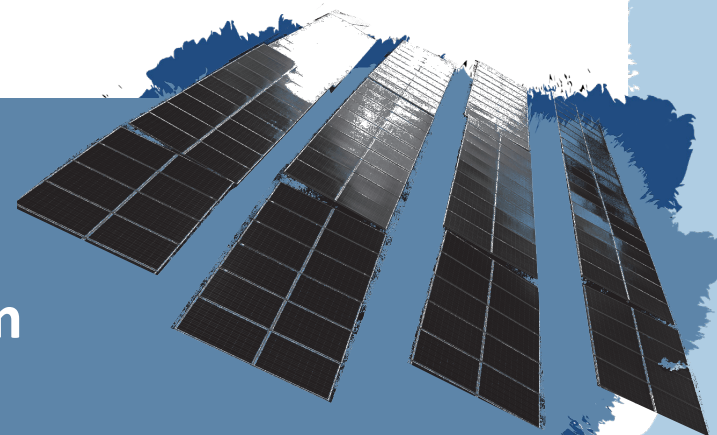
The transmission system demonstrates significantly improved reliability for the fifth year in a row as measured by an overall reduction in transmission outage severity.



The reliability of conventional generation is significantly challenged by more frequent extreme weather, high-demand conditions, and a changing resource mix, resulting in higher overall outage rates.



To continue benefiting from the rapid expansion of inverter-based resources, their dynamic performance during system events must be improved.



Physical and cyber security attacks are increasing, reinforcing the need for further development and adaptation of standards and guidelines.



Protection system misoperations continue to improve with a downward trend in counts, rates, and impact metrics.

