



MRO Releases 2022 Regional Summer Assessment

June 8, 2022

Saint Paul, MN. Midwest Reliability Organization (MRO) is pleased to announce the release of its [2022 Regional Summer Assessment](#) (2022 RSA). The 2022 RSA reflects MRO's independent assessment of the upcoming summer season to identify challenges and potential reliability risks to the reliable and secure operations of the bulk power system within MRO's regional footprint. The 2022 RSA provides an evaluation of resources and transmission system adequacy necessary to meet projected summer peak demand, as well as reviews historical data to provide information on regional bulk power system performance and identify trends most impactful to system reliability during the summer months.

MRO's 2022 RSA compliments [NERC's 2022 Summer Reliability Assessment](#), which provides an evaluation of resource and transmission system adequacy necessary to meet projected summer peak demands across all of North America. MRO's 2022 RSA focuses on the bulk power system in MRO's regional footprint, and further evaluates historical performance to identify reliability concerns and trends that might impact resource and transmission system adequacy for the upcoming summer season.

Key findings from MRO's 2022 RSA are:

- Extreme summer peak load, coupled with unplanned generation outages resulting from prolonged hot temperatures, will likely exceed available capacity resources for three of the four Balancing Authorities (BA) in MRO's footprint.
- Capacity shortfalls would likely require these BAs to issue Energy Emergency Alerts (EEAs) and employ operating mitigations such as demand response, non-firm imports from neighboring areas, and short-term load interruption.
 - **MISO North and Central** areas are at **high risk for energy emergencies** due to projected capacity shortfalls during peak summer conditions, which may result in temporary, controlled load shedding. This is primarily the result of a decrease in generation capacity of 3.2 GW compared to the 2021 summer season and an increase of 1.7% in projected peak demand.
 - **SPC (Saskatchewan Power Co.)** is at an **elevated risk for energy emergencies** due to 7.5% increase in peak demand projections related to load growth from economy returning to pre-pandemic levels, increased oil and gas development activities, and a revised forecast methodology for capturing summer peak demands. While sufficient operating reserve margins are projected for normal peak conditions, SPC anticipates needing external assistance during extreme conditions that cause above-normal generator outages or demand.

- **SPP** is at an **elevated risk for energy emergencies** because of drought conditions impacting the Missouri River and other water sources relied upon for generation and once-through cooling processes. These conditions could lead to reduced output from affected resources and require emergency procedures be implemented to meet peak demand during periods of high generator unavailability due to insufficient cooling water.
- **MH (Manitoba Hydro)** anticipates **resources are sufficient** to meet reserve margin requirements under normal and extreme demand scenarios for the 2022 summer season.
- Long-term trends indicate:
 - Increasing generation forced outage rates due to component fatigue and an aging fleet. This is due in part to higher penetrations of intermittent resources that cause conventional generation to cycle more, causing component failures.
 - The report recommends that conventional generation resource performance and availability is key to meeting projected summer demand. Maintaining a robust and reliable fleet of balancing resources needed to serve anticipated demand in needed to balance integrated renewables.
 - The power industry needs to develop new and better methods to evaluate energy availability that will provide reliable operation of the bulk power system during extreme weather events.

Read a summary of the report on the MRO infographic [here](#). MRO will host a webinar on the 2022 RSA key findings on June 30, 2022. You can register for this event [here](#).

###

Midwest Reliability Organization (MRO) is a non-profit organization dedicated to ensuring the reliability and security of the bulk power system in the central region of North America, including parts of both the United States and Canada. MRO is one of six regional entities in North America operating under authority from regulators in the United States through a delegation agreement with the North American Electric Reliability Corporation (NERC) and in Canada under similar arrangements. The primary focus of MRO is developing and ensuring compliance with reliability standards and assessing the grid's ability to meet the demands for electricity.