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Seasonal Assessment of Resource Adequacy for the ERCOT Region (SARA)
Winter 2021/2022

SUMMARY

ERCOT's new aggressive approach to managing the electric grid is continuing, with significant operational improvements over the summer of 2021 and additional changes planned for the winter o 2021-2022.

Assuming that the ERCOT Region experiences typical winter grid conditions, ERCOT anticipates th there will be sufficient installed generating capacity available to serve the system-wide forecasted peak demand for the upcoming winter season, December 2021 – February 2022. The forecasted peak demand is 62,001 MW and is based on the average weather conditions at the time of the winte peak demand. As part of our aggressive grid management planning, we have also included addition low-probability, high-impact scenarios.

Nearly 85,000 MW of resource capacity is expected to be available for the winter peak. This amount is all operational capacity; there is no planned capacity expected to become operational by the start of the winter season based on the latest developer information. This is largely due to the new practi of classifying projects approved for grid synchronization as operational rather than planned resources. Two thermal generation resources—a coal and a gas-fired unit—are out of service for th winter season. Also noteworthy is that three units (two gas-fired and one biomass-fired) representin 223 MW that previously operated only during the summer season are now planned for year-around operation. However, one of the gas units (61 MW) is the aforementioned unit experiencing an extended outage.

The winter SARA includes a thermal generating unit outage assumption of 8,988 MW during the winter months, which is based on historical winter outage data for the last three winter seasons: 2018/19, 2019/20, and partial 2020/21. (Unplanned outages between 2/15/21 to 2/28/21 are exclude in the base analysis due to the exceptional impact of Winter Storm Uri.)

The winter SARA includes two Risk Scenario tabs: Base & Moderate Risk Scenarios, and Extreme Risk Scenarios. The set of Extreme Risk scenarios has been expanded to include a new "extreme low" renewables output assumption as well as estimates of the thermal and renewable outage improvements due to the Texas Public Utility Commission's October 2021 Electric Weatherization Standard and voluntary weatherization activities conducted by natural gas supply and pipeline operators.

Seasonal Assessmen

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Resources, MW

Operational Resources (thermal and hydro)	
Switchable Capacity Total	
Less Switchable Capacity Unavailable to ERCOT	
Available Mothballed Capacity	
Capacity from Private Use Networks	
Coastal Wind, Peak Average Capacity Contribution	
Panhandle Wind, Peak Average Capacity Contribution	
Other Wind, Peak Average Capacity Contribution	

	Fore Typical Typica
Scenario Adjustments	
Seasonal Load Adjustment	
Typical Planned Outages, Thermal	

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17th Annual Renewable Energy Law Institute session
"Integrating Renewable Energy in ERCOT's Market Redesign"