



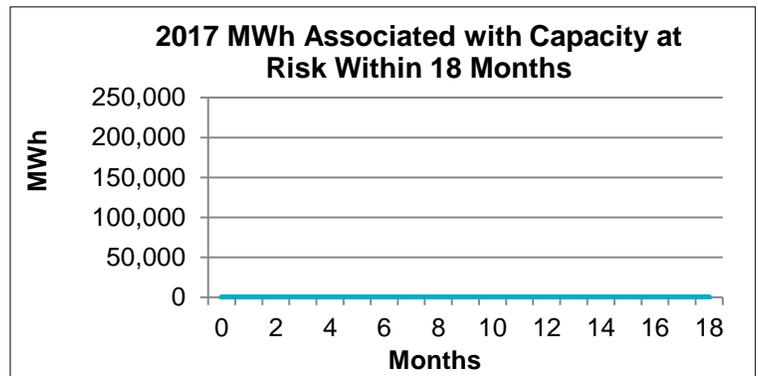
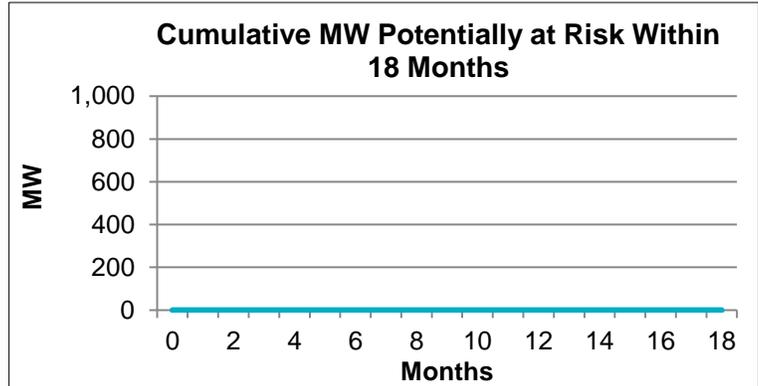
Electric Reliability Council of Texas

ERCOT Drought Risk Analysis: August 2018

This report summarizes the results of ERCOT's drought risk prediction model for August 2018. This analysis identifies potential drought-related impacts to generation availability in the region based on a current snapshot of system conditions, and is not intended to be an exact prediction of future generator outages. ERCOT uses the results of this analysis as a signal to initiate coordination with owners of potentially affected generation capacity. The current predictions indicate that no generation is expected to become at risk within the next six months.

ERCOT estimates the amount of capacity and generation potentially at risk of losing water supplies within the next 18 months based on current reservoir levels and historical withdrawals under drought conditions. Generation or capacity "at risk" refers to generation resources with water supplies that are at or approaching low levels (i.e., level of intake).

When water supply becomes "severely at-risk" (at risk within 6 months), the generator can still withdraw water for cooling water and other purposes. However, this is a trigger point at which the owner of the resource should evaluate mitigation options. In some cases mitigation is not possible due to customer demand, financial, or operational constraints. In these cases a second trigger point would occur when the water supply reaches the intake level and becomes non-operational.



Generation technology type impacts the amount of water a unit uses in the generation process and for cooling. Simple cycle power generation units generally have a much lower water consumption compared to other technologies. These generation units are included in ERCOT's drought risk analysis because there is some risk of drought-related outage. However, this risk is lower for simple cycle units than for other generating technologies. Depending on the unit configuration and operating characteristics, simple cycle units may continue to operate even once reservoirs or groundwater aquifers reach low water levels.

MW Potentially at Risk by Fuel Type

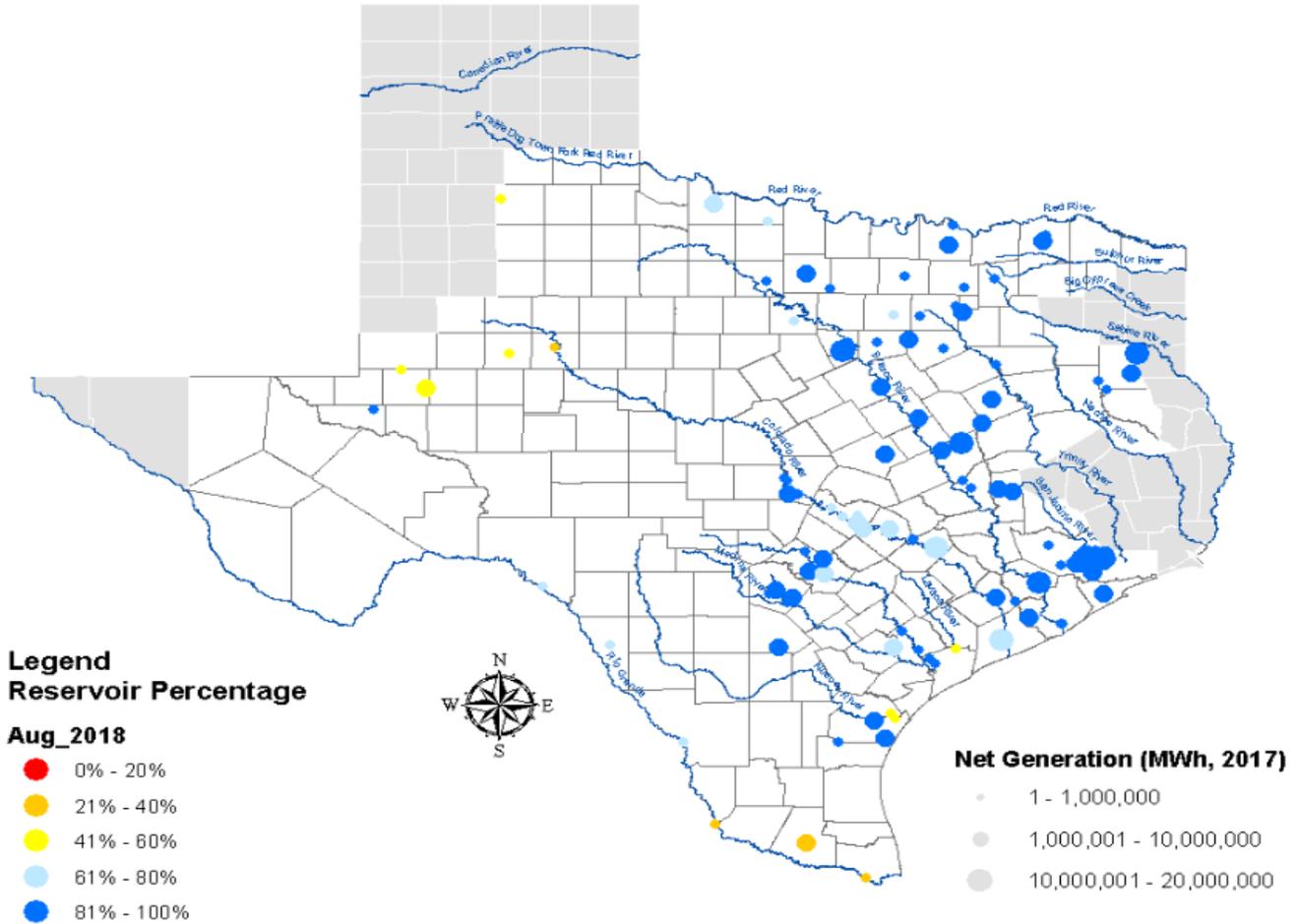
no generation is at risk within the next 18 months

2017 MWh Associated with Capacity at Risk Within 18 Months by Fuel Type

no generation is at risk within the next 18 months

The map below shows the current reservoir storage available in the primary reservoirs from which generating resources in the ERCOT region withdraw water. Each dot on the map corresponds to a generating site, sized according to the amount of power (MWh) provided to the grid annually in 2017, and colored according to the amount of storage currently available in the reservoir. Currently, 9% (6.5 GW) of thermal generation in ERCOT use groundwater aquifers as their water source. These aquifers are not highlighted in the map below but are included in the drought risk prediction model.

Reservoir Storage as of August 1, 2018



*Ocean water sources are assumed to be at 100% of available storage.

Additional information about ERCOT's drought risk analysis methodology and related reports can be found at <http://www.ercot.com/gridinfo/resource>