2022 ERCOT System Planning

Long-Term Hourly Peak Demand and Energy Forecast

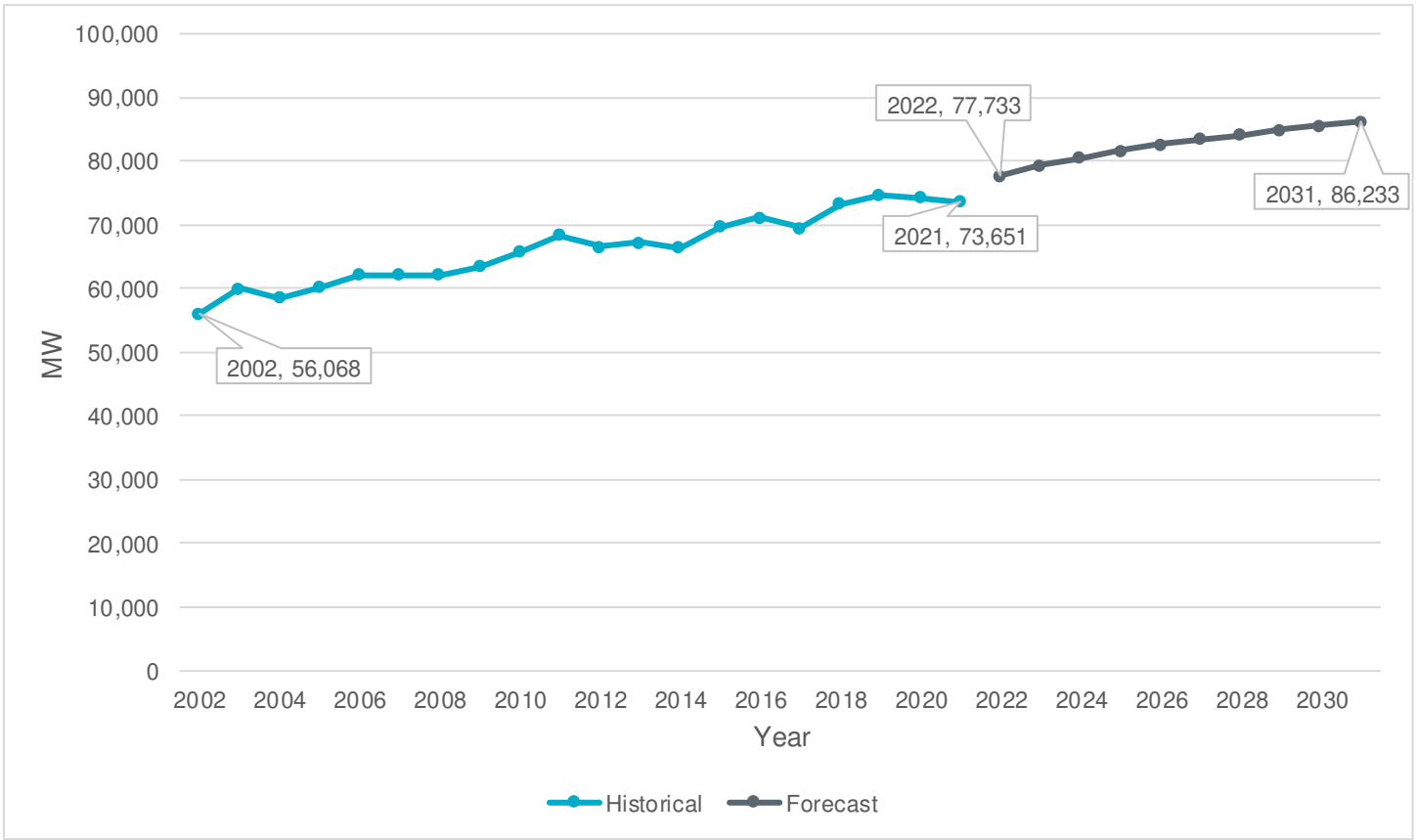
January 18, 2022

Executive Summary

The 2022 Long-Term Demand and Energy Forecast (LTDEF) for the ERCOT region is presented in this report, which includes information about the methodology, assumptions, and data used to create the forecast. This forecast is based on a set of econometric models describing the hourly load in the region as a function of the number of premises in various customer classes (e.g., residential, business, and industrial), weather variables (e.g., various temperature values), and calendar variables (e.g., day of week and holidays). The premise forecasts that drive growth in the LTDEF are created using a set of econometric autoregressive models (AR1) and are based on certain economic (e.g., non-farm payroll employment, housing stock, and population) data. A county-level forecast of economic and demographic data was obtained from Moody's. Fifteen years of historical weather data was provided by Schneider Electric/DTN for 20 weather stations.

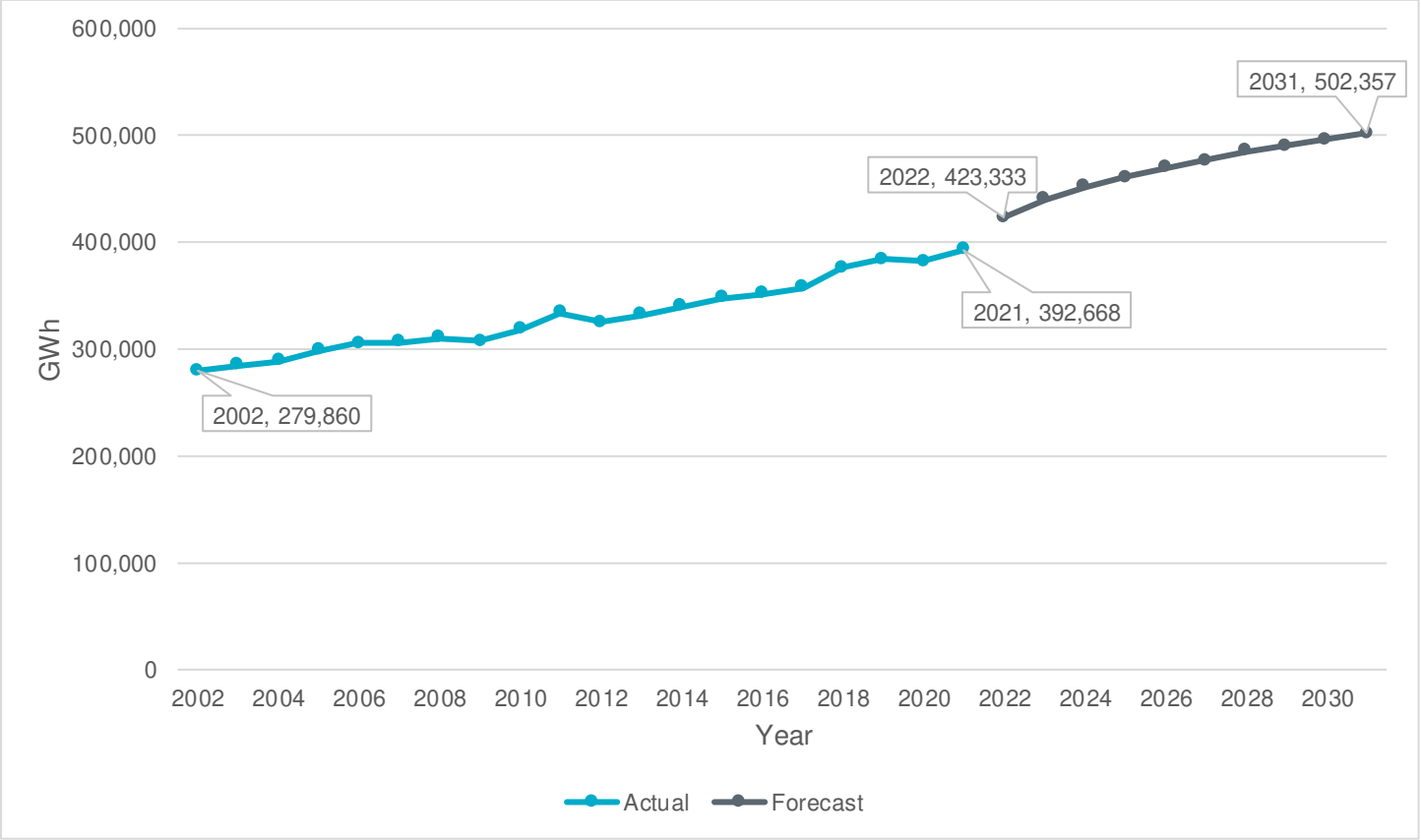
As shown in Figure 1, the 2022 LTDEF depicts system peak demand increasing at an average annual growth rate (AAGR) of approximately 1.2% from 2022-2031. Historically, summer peak demand has grown at an AAGR of 1.1% from 2012-2021.

Figure 1: ERCOT Summer Peak Demand Forecast



As shown in Figure 2, historical annual energy for the calendar years 2012-2021 grew at an AAGR of 2.1%. The forecasted AAGR for energy from 2022-2031 is 1.9%.

Figure 2: ERCOT Annual Energy Forecast



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