

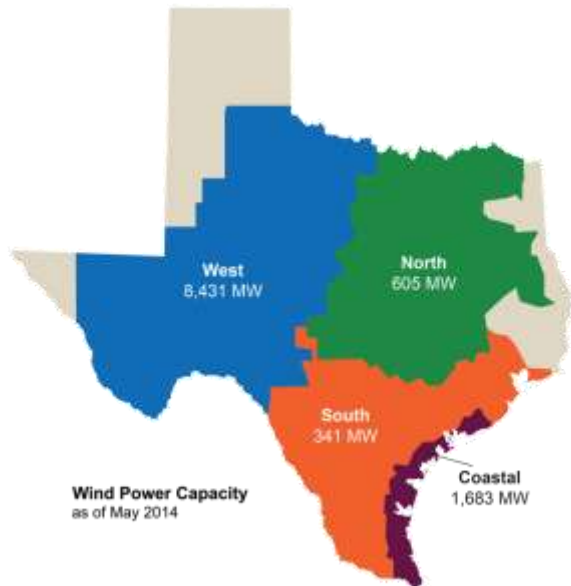
# Forecasting wind power capacity

Improving the method used to predict peak performance



ERCOT has updated the formula used to forecast the expected availability of wind power capacity during peak demand periods.

A methodology approved by the ERCOT board in October uses historical performance of wind generation facilities in different parts of the state to predict the percentage of installed capacity ERCOT can expect during summer and winter peak conditions.



Previous forecasts used probabilistic methods to determine the 8.7 percent overall effective load carrying capability of wind power facilities throughout the region. The new method uses historical data from the top 20 peak hours for each of the past six years to project summer and winter wind availability on peak.

Because turbines along the Gulf Coast and in West Texas operate differently, the new methodology applies different percentages for Coastal vs. non-Coastal facilities to reflect their respective operational characteristics during periods of peak demand. ERCOT used historical seasonal peak data from 2009 through summer 2014 for non-Coastal projections and 2010 through 2014 for Coastal projections. There were no commercial wind generation facilities on the Texas Gulf Coast that were fully operational throughout the 2009 study period.

Under the new formula, ERCOT plans to apply the resulting Peak Average Wind Capacity Percentages to estimate the Peak Average Wind Capacity Contribution in its seasonal and long-term resource adequacy assessments. The percentages will be updated over time based on actual performance and the approved formula.

2014 Peak Average Wind Capacity Percentages		
Report	Coastal	Non-Coastal
Summer and Fall Seasonal Assessments	56%	12%
Winter and Spring Seasonal Assessments	36%	19%
Capacity, Demand and Reserves (10-year outlook)	56%	12%

The new formula is defined in [Nodal Protocol Revision Request 611](#) and has been incorporated into [Section 3.2.6.2.2 of ERCOT Nodal Protocols](#).

For more information about the data used to determine these percentages, [see the CDR Peak Average Wind Capacity Percentages](#) on the [Resource Adequacy page](#) of [ERCOT's website](#).