

## Powering Texas:

### Wind Power Creates a More Reliable Electric Grid in Texas

#### Wind Power Makes Important Contributions To Texas' Electricity Mix

- Wind supplied nearly 15% of all Texas electricity in 2017, and Texas has enough installed wind capacity to power the equivalent of over 6.2 million American homes.
- At certain points in time, the main Texas power system has obtained more than 50 percent of its electricity from wind energy.

#### In Times Of Need, Wind Turbines Have Kept Reliably Supplying Electricity To Texas Families And Businesses When Conventional Forms Of Generation Failed

- During a 2011 cold snap, dozens of fossil fuel plants closed while “wind power reliably generated 3.5 GW during the morning peak.”
- Then-CEO Of ERCOT Tripp Doggett: “I would highlight that we put out a special word of thanks to the wind community because they did contribute significantly through this time frame. Wind was blowing, and we had often 3,500 megawatts of wind generation during that morning peak, which certainly helped us in this situation.”
- During Hurricane Harvey wet coal and low gas pressure resulted in reduced power generation at conventional plants, but as soon as hurricane force winds subsided, Texas's wind fleet resumed generating electricity, helping bring power back quickly for many Texans.

#### Summer 2018 Showed That Texas' Diverse Energy Portfolio Can Withstand Extreme Demands

- Leading up to the summer some cautioned the grid could not support the state's electricity needs. High temperatures and the closure of three coal-fired power plants contributed to this concern.
- As predicted, power use broke multiple records in July, but ERCOT did not have to call for conservation; the lights stayed on.
- Bill Magness CEO of ERCOT: “There were also a lot of days when the wind production was high when we needed it. So the various types of generation came through.”

#### Experts Agree Renewable Energy Has Helped Grid Reliability

- ERCOT: “It has not negatively impacted system reliability.”
- Texas Reliability Entity: “Growth in renewable generation continues to be managed well.”
- Joshua Rhodes, a Research Fellow at The Energy Institute at UT Austin: “The grid just isn't as stressed, because there's just so much wind.”