

# Weather data from nation's largest wind farms could improve US models, forecasts

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Two of the nation's largest producers of wind-generated electric power will share privately-collected weather data with NOAA, providing agency scientists with additional observations from wind farms across the nation for research and operations.

NOAA now has data sharing agreements with Iberdrola Renewables of Portland, Ore., and NextEra Energy Resources of Juno Beach, Fla.—the country's two largest generators of wind-generated electric power, according to the [American Wind Energy Association](#).

The companies will provide valuable [weather observations](#) from instrumented towers in their wind farms and wind speed data from instruments atop [wind turbines](#). Since 2011, Xcel Energy of Minneapolis, Minn. has provided similar observations to NOAA.

"We appreciate this opportunity to work with industry and are eager to start similar data sharing agreements with other industry partners," said Kathryn D. Sullivan, Ph.D., assistant secretary of commerce for environmental observation and prediction and NOAA deputy administrator. "Everyone who uses weather information will benefit from these additional data. These observations are made at altitudes that are not routinely observed. The more information we are able to collect leads to more accurate predictions."

NOAA will use these weather observations in operational model forecasts produced by NOAA's [National Weather Service](#). Wind data at these heights are not routinely observed and are of great interest to many industries and researchers involved in renewable energy, aviation, and air quality.

While the observations are business-sensitive and will not be redistributed outside of NOAA, the agency's scientists will use the data to validate and improve [weather models](#) at NOAA's [Earth System Research Laboratory](#) and at NOAA's National Centers for Environmental Prediction.

"NextEra Energy recognizes that a better NOAA weather forecast will ultimately improve our operational decisions and our bottom line," said

Mark Ahlstrom, CEO for WindLogics, a NextEra Energy Resources subsidiary that also contributed data to NOAA. "Sharing data with NOAA makes sense because it helps NOAA deliver better forecasts for use by our company and the general public."

Jerry Crescenti, Director of Meteorology for Iberdrola Renewables, added, "When it comes to observations, you can never have enough. Hopefully, other wind energy companies will consider securely providing their weather observations to NOAA to improve the foundational forecasts for all in the industry."

Provided by NOAA Headquarters

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