United States Wind Energy: U.S. Energy Information Administration Report Addresses Regional Patterns by Season

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The United States Energy Information Administration ("EIA") issued a November 30th report titled:

U.S. Wind Generation Falls into Regional Patterns by Season ("Report")

The *Report* addresses the difference in wind resource potential/generation across different geographic regions of the United States.

The *Report* initially notes by way of background three key aspects of wind energy:

- Wind plant performance depends almost entirely on the availability of wind resources which vary depending on the time of the year and geographic region
- The performance of a power plant is often characterized as a percentage of the maximum possible generation in a given time period (i.e., a metric known as a capacity factor)
- Wind plant performance is also (besides speed) affected by wind direction, wind constancy and turbine height

In terms of seasonal factors, the *Report* notes that nationally wind plant capacity factors peaked in March and were at their lowest in July and August between January 2016 and August 2022.

As to geographical patterns, the Lower Plains region of Texas, Oklahoma, Kansas, and New Mexico was deemed to have the largest share of U.S. wind capacity. The share is 44 percent.

The Upper Plains region was identified as having the second-largest share of U.S. wind capacity at 29 percent.

The Interior East region was found to have 13 percent of U.S. wind capacity.

The West Coast region was found to have 10 percent and the Southwest, East Coast, and New England had a combined 4 percent of the United States wind capacity.

A copy of the *Report* can be downloaded here.