

Renewable Energy Credits (RECs)

Wind Power: Local vs. National

May 2007

If you are contemplating purchasing wind Renewable Energy Credits (RECs), you should remember one thing: Not all wind RECs are equal.

What is an REC?

An REC is a trackable measure that represents the environmental benefits of renewable energy generation – a single REC is equal to one megawatt-hour (MWh). They provide consumers and suppliers with a way to support renewable generation technologies, such as wind farms or hydro electric dams, without purchasing the actual electric generation itself. Other common names include green tags, tradable renewable certificates, alternative energy credits and renewable energy certificates.

Local Wind RECs

For customers in Mid-Atlantic states, local wind RECs come from wind turbines located within the Pennsylvania, Jersey and Maryland (PJM) regional transmission organization footprint. This organization coordinates the movement of wholesale electricity throughout the Mid-Atlantic region (covering all or part of Pennsylvania, Maryland, New Jersey, Delaware, Maryland, Virginia, West Virginia, Ohio, Indiana, Michigan, Illinois and the District of Columbia).

Wind farms have been built along the ridges of the Allegheny Mountains from Northern Pennsylvania to Northern Virginia, where wind speeds are strong enough, to support the use of wind power. FirstEnergy Solutions Corp. has signed exclusive 20-year purchase contracts with several of these wind farms.

The benefit of local wind is that the electric output of the wind farms along the Allegheny Ridge goes directly into the PJM grid, mixing with the existing electricity from other sources. You can think of buying local wind RECs as an environmentally conscious decision that supports renewable energy and benefits your region as a whole.

National Wind RECs

National wind RECs are benefits from wind turbines located throughout the United States. One limitation of wind power is that many areas of the country do not have average wind speeds strong enough to support wind power. The most wind-rich areas are in the central United States, from North Dakota to North Texas. The wind in North Dakota alone is theoretically capable of supplying one-fourth of the U.S. electrical demand.

However, because of the lack of transmission capacity, as well as the inefficiencies of transporting electricity over long distances, most of the energy from wind projects in these central states does not leave the area. The environmentally friendly benefits, such as cleaner air, also remain in the area where the power was generated. As such, a purchase of a national wind REC is also an environmentally conscious decision that supports

renewable energy, but most of the benefits remain in the local area where the energy supply was generated.

Why Do Local Wind RECs Cost More?

Local PJM wind RECs typically cost more than national RECs for two main reasons: First, there is less supply in the PJM area than there is nationally, and second, there is more demand for PJM RECs. Renewable energy portfolio standards have been enacted by most Mid-Atlantic States (including Pennsylvania, Maryland and New Jersey) that require all retail energy suppliers (including utilities) to provide anywhere from 1 to 3 percent of the total electricity supplied from Tier I RECs (which include wind power). In addition, the proximity of the Allegheny Ridge wind farms to the major population centers in the Eastern U.S. has made Allegheny Ridge wind RECs highly sought after by environmentally conscious residential, commercial, industrial and institutional customers throughout the region.