

Pantex: Powering National Security with Wind

Panhandle, TX 79068 | Siemens SWT-2.3-101 | 5 x 2.3 MW on 80m Tower | Installed by Siemens



Photo Credit: Pantex Plant / National Nuclear Security Administration

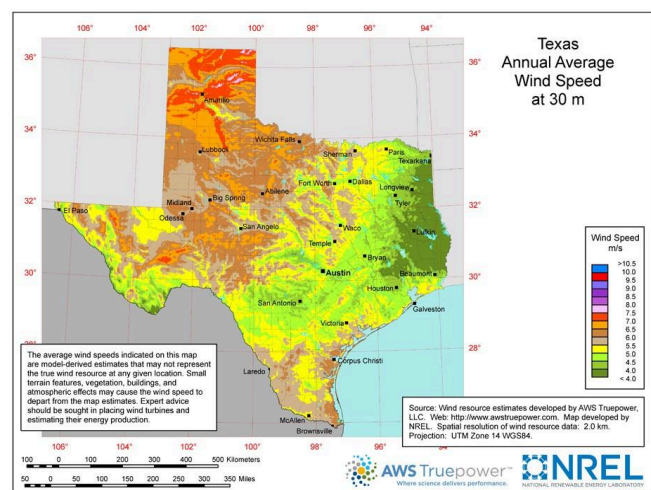
The Pantex Wind project, located near Amarillo, Texas, stands as the largest federally owned wind energy project in the United States. Developed for the Pantex Plant, a critical facility for the U.S. nuclear security enterprise, this project was spearheaded by Siemens Government Technologies under a performance-based contract. The distributed wind farm consists of five 2.3 MW turbines, each 400 feet tall, sited on 1,500 acres of federal land adjacent to the main Plant.

The core objective was to significantly reduce the plant's reliance on traditional energy sources, aligning with federal mandates for renewable energy adoption and sustainability. The innovative financing model, known as an Energy Savings Performance Contract, allowed the project to be constructed without upfront taxpayer costs, with long-term energy savings funding the investment. Within its first year, the wind farm exceeded expectations by generating over 43 million kWh—about 63% of the plant's annual electricity needs—surpassing initial projections and providing a model for future federal renewable energy projects.

“For 70 years, Pantex has played a vital security role by helping to create and maintain the nation’s nuclear deterrent. Now, Pantex is poised to help secure the future of America through utilization of renewable energy, as well.” – Steve Erhart, NNSA, Production Office Manager

Key findings

- Supplies ~60% of the plant's electricity
- \$2.9 million in energy costs saved each year
- Will pay for itself over the 20-year performance contract, covering the investment over its lifespan



More than 635,000 properties have wind resources suitable for distributed wind, with a combined technical potential of 4.2 GW, according to NREL

Want further information? Please contact:

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