

Wind Powered Drones at Utah Valley University

Orem, Utah, 84058 | Ryse Energy | 5 kW E-5 + 160 W AIR Breeze | Installed by Ryse Energy



Photo Credit: Ryse Energy

Utah Valley University (UVU) partnered with Ryse Energy to implement a mobile hybrid energy system to power its drone program's operations. UVU needed a mobile power solution able to support both campus-based activities and remote field operations. The innovative solution combines an E-5 wind turbine (5 kW), an AIR Breeze wind turbine (160 W), four 340 W solar panels, battery storage, and an inverter mounted on a portable trailer.



This mobile system enables UVU to charge drones and power field equipment entirely through independent energy, whether stationed on campus or deployed to remote locations while involving students in utilizing and

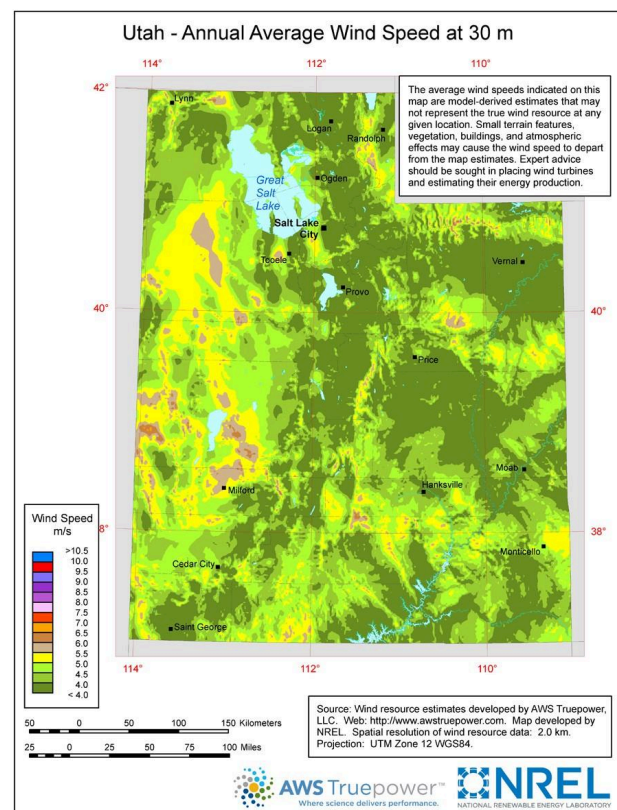
demonstrating energy independence principles.

Key Findings

- Generates ~ 6.52 kW combined capacity
- Provides continuous power supply through battery storage for field missions

Impact

- Demonstrates power of wind+solar hybrid systems
- Showcases innovative energy independent solutions



More than 77,000 Utah properties have wind resources suitable for distributed wind with a combined technical potential of 732 MW, per NREL

Want further information? Please see: www.AgWindEnergy.org or www.DistributedWind.org