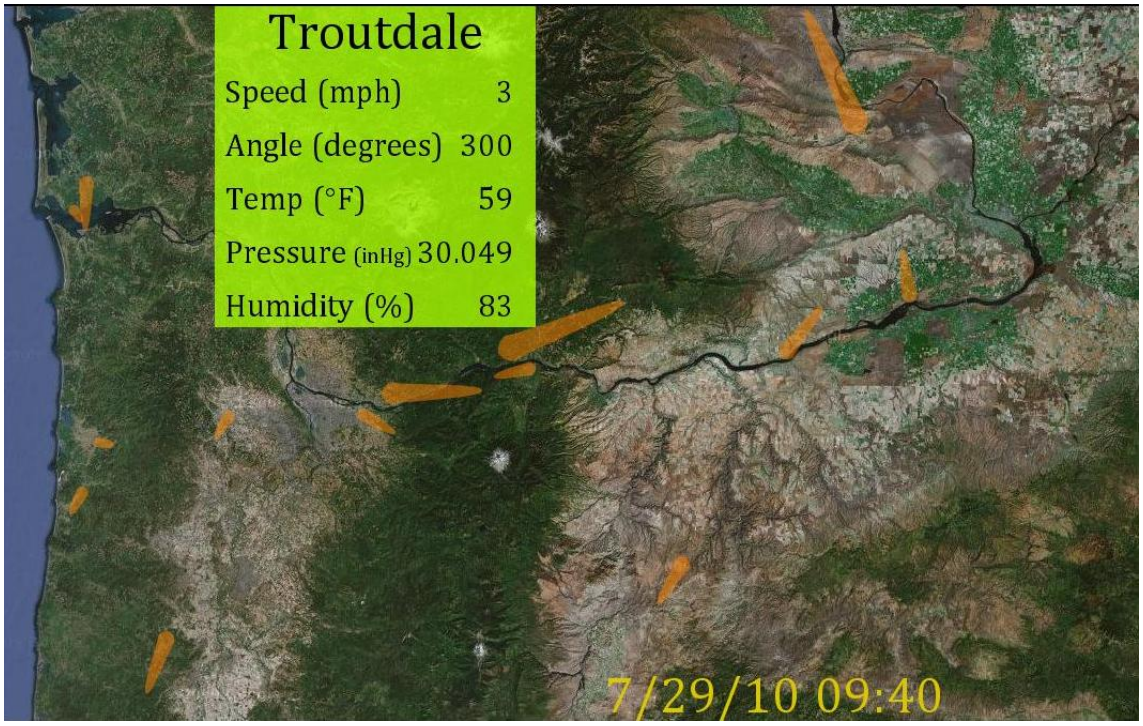
Bonneville Power Administration Shares New Wind, Weather Display

Local News

Posted by: David Haviland

Posted on : August 9, 2010 at 5:10 am



Portland, Ore. - Reporters and the public can now view a new online display of wind and other data the Bonneville Power Administration uses to monitor weather conditions that drive the growing amount of wind energy generated in the Northwest.

BPA has applied for a patent on the unusual display, which illustrates the last three hours of data from 14 new BPA weather stations as animated “windsocks” moving and changing shape to reflect wind conditions. The display is designed to give power managers an instant picture of regional wind and weather conditions at a glance.

The display is available at bpa.gov/go/windsocks and requires Java Runtime 5.0.

BPA installed the 14 weather stations last year to help improve forecasts of wind and the energy it generates so BPA and wind energy producers better anticipate power flows through the Northwest electric grid. The weather stations stretch from the Coast to eastern Oregon and Washington and include Astoria’s Megler Bridge; Mary’s Peak, the highest point in Oregon’s Coast Range; and Sunnyside, west of Richland, Wash.

The online display animates the windsocks in five-minute increments over the preceding three hours. The windsocks often swing around and grow as storm fronts sweep into the region, driving higher winds that generate more energy. The new display combined with BPA’s real-time chart of energy generation provides a look at the relationship between Northwest weather and wind energy. The weather stations also provide temperature, barometric pressure and humidity data, which are visible by hovering your mouse over each station on the animated map.

BPA is a not-for-profit federal electric utility that operates a high-voltage transmission grid comprising more than 15,000 miles of lines and associated substations in Washington, Oregon, Idaho and Montana. It also markets more than a third of the electricity consumed in the Pacific Northwest. The power is produced at 31 federal dams operated by the Army Corps of Engineers and Bureau of Reclamation and one nuclear plant in the Northwest and is sold to more than 140 Northwest utilities. BPA purchases power from seven wind projects and has more than 2,800 megawatts of wind interconnected to its transmission system.