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promoting regional energy awareness



Changes and Challenges Blow in the Wind

Wind energy is playing a major role in the Northwest power system. Utilities have invested in wind projects in all four Northwest states, with the largest concentration in and around the Columbia River Gorge. And we expect that in the near future the amount of wind generation in the region will continue to grow.

There are good reasons to tap into wind. But integrating it into our well-tuned system is a challenge. Unlike our traditional resources of hydropower and natural-gas fired plants, wind is highly variable. There are constant fluctuations in the amount of power wind is feeding into the lines. And that adds complexities for ensuring the reliable delivery of electricity.

What's behind this drive to wind power? Wind is a non-polluting form of energy production. As with hydropower, there are no greenhouse gas emissions and it is a renewable resource. As long as the wind blows, there is "fuel" to spin the blades.

Public policy is spurring wind development too. Tax credits – federal and state – provide financial incentives to build wind farms.

With these changes come challenges. Engineers are working on solutions to meld wind generation into our system. They are at the cutting edge with ideas and technology to support the contribution of wind power. Some remedies are physical, like increasing and decreasing generation at dams to balance with the wind. Other actions are institutional, like shortening the planning cycle to 30 minutes from 60, to better follow wind patterns.

Utilities are working to make sure consumers have the electricity they need when they need it and are stepping up to the challenges of adding wind.

Check out the **Plan Today Power Tomorrow** regional energy project,
www.PlanTodayPowerTomorrow.com