Bonneville Power Administration
Portland, Oregon   March 25, 2005

With support of: Department of Energy
**   National Renewable Energy Laboratory**

BPA Wind Forecasting Network – A wind/hydro optimization RD&D project in the Pacific Northwest

Summary: Due to experience with managing 208 MW of wind in the BPA control area along with the potential to manage an additional 450 MW of new wind with BPA's Wind Storage and Shaping & Wind Integration products, BPA must now actively manage its wind energy portfolio.

Selected Wind Forecasting Vendor – 3Tier Environmental Forecasting group, Seattle, Washington.

Key Points

- **A Two-Year Wind/Hydro Optimization RD&D project to forecast wind each hour from real time to seven days into the future (168 hours)**

- **Improve the quality of wind generation forecasts for BPA's Hydro Optimization models – Columbia Vista, NRTO**

- **Improve the quality of wind generation forecasts to inform near-term marketing decisions (increasing revenue)**

- **Establish operating impacts of Wind Storage and Shaping & Wind Integration Products (reducing costs)**

- **Determine if wind has a capacity value (increasing revenue) and the capacity needed to support its uncertainty (reducing costs), given an accurate wind forecast**

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