

## Fact Sheet

# WHITE CREEK WIND PROJECT

Four Washington consumer-owned utilities — **Cowlitz PUD, Klickitat PUD, Lakeview Light & Power and Tanner Electric Co-op** developed the White Creek Wind Project in Klickitat County, WA. It is the largest public power initiated wind project in the U.S.



### Location

White Creek is located in the Columbia River Gorge on 9,500 acres of ranchland, 21 miles east of Goldendale, WA. It is just northwest of Roosevelt, WA, which is across the Columbia River from Arlington, OR. The photo below was taken from I-84 in Oregon, just west of Arlington, OR.



### Construction Highlights

- Construction began in July 2006 on roads, electric transmission lines, two substations and other infrastructure.
- Wind towers, blades and other related equipment were delivered from June to September 2007.
- Wind turbine assembly began in June 2007 and was completed in October.
- All 89 units were commissioned and producing electricity in November.

## **Equipment**

Siemens Power Generation supplied, installed and commissioned the 89, 2.3-MW wind turbines and associated towers and other equipment at the project.

## **Shipping and Delivery**

Siemens shipped towers, blades and other components to the Port of Longview (WA) from May to September 2007. The cargo was trucked to the project site.

## **Power production capability**

- Installed capacity of 205 megawatts (MW)
- Based on a one-third capacity factor the projected annual output is 68 average MW
- Will power an estimated 38,000 residences or about 427 residences per wind turbine.



## **Power output shares**

- **46% — Cowlitz PUD**
- 26% — Klickitat PUD (Goldendale, WA)
- 26% — Lakeview Light & Power (Lakewood, WA)
- 2% — Tanner Electric Cooperative (North Bend, WA)

## **I-937 (Renewable Portfolio Standards passed by WA voters in November '06)**

- Cowlitz PUD is the only one of the White Creek utilities with I-937 requirements in the foreseeable future.
- The new law calls for utilities to use non-hydro renewable energy sources for at least three percent of power resources in 2012, nine percent in 2016 and 15 percent by 2020.
- Based on future load forecasts, Cowlitz PUD's White Creek share will help it meet the 2012 requirement and most of the 2016 level.

## **BPA Allocation**

- BPA will not be able to meet the load growth of the region post-2011.
- BPA customers have developed a regional plan to "allocate" the output of the Columbia River system.
- Each customer will get a share of BPA power based on its electric demand and BPA's generation capability.
- All four White Creek partners will count on White Creek power to meet load growth needs post-2011.

## **Cost comparison: Cowlitz PUD wholesale power options post-2011**

- White Creek: \$50 per MWh.
- Power market: \$60+ per MWh.
- BPA and other hydro sources now utilized by Cowlitz PUD cost \$29-\$35 per MWh, but unfortunately no additional cheap hydro is available.
- White Creek is the lowest cost alternative

### **Project cost and financing**

- In December 2006 the White Creek Wind Project was sold to White Creek Wind I – an investment group comprised of affiliates of Prudential Capital Group, Lehman Brothers and Summit Power.
- White Creek Wind I is providing equity capital and utilizing the Federal Production Tax Credits (PTCs) that are available to renewable wind projects.
- Utilizing the PTCs is a major benefit to our customers, because it results in lower wholesale production costs compared to those costs if conventional tax-free bonds had been used for financing. That adds up to lower electric rates.
- Total project cost was about \$360 million (in the end it came in 1% less than projected) – which includes the acquisition and installation of the wind turbine generators, and all other construction and development costs.
- The four utilities have entered into 20-year power purchase agreements with White Creek Wind I. At closing, the utilities paid for the power assured to be delivered during the contract term.
- Cowlitz PUD's investment in White Creek is \$120 million for the amount of power it is assured – plus smaller charges for any additional power that can be generated and annual operating and maintenance expenses.
- The four utilities have the option to repurchase the project after 10 years.

### **Possibility of expansion**

- Wind studies have shown that as much as another 100 MW project is feasible.
- Next phase is being discussed.

*March 2008*