

Wyoming in for new crop of wind turbines

By **DUSTIN BLEIZEFFER**

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ARLINGTON -- Cloud shadows race over this mesa at 50 mph, where for thousands of years Native Americans came to pray toward Elk Mountain five miles away.

It was believed all the wind in the world came from Elk Mountain. This mesa, now known as Foote Creek Rim, was as close as they dared get to the wind gods on the mountain.

Today, 183 white pinwheels are planted atop Foote Creek Rim, facing the winds of Elk Mountain. On average, the wind turbines generate 134.75 megawatts of electricity. This is a world-class wind resource where the leading cause of turbine down-time is too much wind.

A steady 45 mph to 50 mph is optimal, but turbines are set to shut-down at 60 mph. Last week, there were gusts of more than 105 mph.

Recently, Gene Borrows, general manager of AES Alternative Energy, stood braced against the wind on Foote Creek Rim with a hard hat tightly cranked to his head.

"Sometimes it's too much of a good thing," Borrows screamed over the wind.

Wind developers are set to plant a new crop of turbines in Wyoming, eager to meet growing demand in the West for "green" or renewable sources of energy.

Rob Hurless, energy and telecommunications advisor to Gov. Dave Freudenthal, recently said wind developers are "lined up" at Wyoming's door, prepared to install as much electrical capacity that can fit on interstate transmission lines.

There's a Dec. 31, 2008, expiration date on a federal tax credit for "utility scale" wind development. Within that window of time, utilities must quickly expand the percentage of renewable energy in their electrical portfolios to meet aggressive new standards in several Western states.

Rocky Mountain Power recently announced two new projects: Seven Mile Hill in Carbon County, and the Glenrock Wind Energy Project in Converse County. Both include 66 G.E. turbines generating 99 megawatts of power. Company officials say they expect to continue adding wind turbines at this scale for many years to come.

Also this year, Rocky Mountain Power announced plans to invest some \$4 billion in electrical transmission in the six Western states where it operates. About half of the additional electrical transmission tied to Wyoming will accommodate new wind development, according to the company.

Wind experts say Wyoming is a prime location for wind development, ranking seventh among other states for its wind resource. The Cowboy State also offers a sales tax break on wind turbine equipment.

"This is very valuable power in the sense that it's very desired power," said Gary McCarty, performance engineer at AES Alternative Energy's Foote Creek facility.

Rocky Mountain Power, and many other utilities, offer "green tag" programs in which customers voluntarily pay a higher rate for kilowatts dedicated to renewable energy facilities.

Currently, wind power represents less than 1 percent of the nation's electrical generation. Industry leaders believe wind could fill up to 20 percent of generation portfolio.

But even wind proponents warn against the notion that it can solve the nation's energy and greenhouse gas concerns.

"Wind is a great technology, and it deserves to be in the mix," said Borrows. "But it's not a panacea."

There's fossil fuel consumption in the maintenance of wind farms. Many prime wind resources are located far from areas where renewable energy is in demand.

Even here at the Foote Creek wind facility, where high gusts wreak havoc on turbines, lightning strikes are equally troublesome.

"You've got to look at it for what it is," said Borrows.

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