

The quest to harness the wind



Tut Camblin works with a horse he is retraining at his ranch 30 miles east of Gillette. Camblin signed a developmental contract with Third Planet Energy to lease a portion of his land for wind turbines to be built. - News-Record photo by Sarah Voegelé

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With massive coal reserves, humming gas production, steady oil activity and burgeoning prospects for uranium, Gillette and Campbell County are used to being on top of the region's energy heap.

Not so for wind.

"Campbell County, for the first time, is not going to be a leader on this one," said Ed Werner, a consultant who has worked with the Wyoming Business Council to promote wind energy across the state.

But while Werner and many others believe Campbell County may be years away from being a major player in the wind energy field, the area has not been bereft of developments in recent months:

- A Michigan firm with major Wall Street backing has locked up nearly 13,000 acres of leased land for a proposed \$300 million wind project
- The local manager of a major mine shovel manufacturer is in the midst of evaluating a program to repair wind turbines
- The owner of one of the Campbell County's largest ranches says a recent study completed there bodes well for wind development north of Wright
- And what seems to be the first modern residential wind generator was just erected by a homeowner along Echeta Road

Much of Campbell County doesn't have the type of wind profiles that has led developers and speculators to scoop up land along the Interstate 25 corridor south of Douglas, in the Medicine Bow National Forest and along the state's southern border.

Werner said the county's position between the Big Horn Mountains and Black Hills seems to hurt the county's wind profile, a measure of, among other things, wind speed, direction, height and constancy.

It's not a total wash, though. Werner and other industry observers see real potential for the southern and western portions of Campbell County, albeit down the road.

Here's a look at what is under way:

WIND NEAR THE BUTTES

Uranium companies aren't the only ones prospecting for big energy projects in the Pumpkin Buttes area.

Third Planet Windpower, a Bad Axe, Mich., start-up is banking on wind coming off the steep slopes of the buttes to power what could be a 12,800-acre development 40 miles south of Gillette and in view of Highway 50.

The company already has two meteorological towers set up on the site that combines land leased from five ranchers. Project Developer Monica Jensen said the company plans to install two more soon and has already started environmental studies.

Depending on the results, the company could install up to 167 1.5-megawatt General Electric turbines at an estimated cost of \$300 million. If fully built, the project would be 250 megawatts.

"(It depends on) how much we can get on the (power) line, and there's an awful lot of oil and gas activity — and uranium — that we have to work with," Jensen said.

The company was attracted by what Jensen describes as good wind resource combined with proximity to a nearby substation being built by Black Hill Power. But their entry into the sparsely populated area on the Johnson County line has not sat well with everyone.

Jo Ann Shober rejected Third Planet's attempt to lease a 640-acre section she owns near the buttes. Chief among her concerns were losing control of her land and what she saw as an under-valued contract.

She also thinks that wind energy, which the Shobers believe once powered a kitchen outlet in their red and white ranch home east of Savageton, is a technology of the past and an unreliable one at that. Nuclear and coal plants sit better with her.

"I just think wind energy is in the past. Like I say, this house used wind energy. My grandparents used wind energy."

By contrast, Shober's brother, Tut Camblin, thinks wind energy is a thing of the future. He recently signed a lease agreement with Third Planet on land that neighbors his sister's.

A longtime cowboy and horse trainer, the 58-year-old Camblin sees the deal as a way to supplement his income as he gets older. If Jensen is right and the project is built by late 2009, Camblin and five other landowners could begin receiving thousands of dollars per turbine in less than two years.

But Camblin said his main motivation is not money but a belief that wind energy needs a kick-start to get going here and other parts of the state. He sees himself as a leader of sorts.

"The reason I went for the deal is it's clean energy — we're not blowing smoke into the air," Camblin said. "I realize Campbell County produces a lot of coal but there are better ways there and that's why I went with it."

FROM SHOVELS TO TURBINES?

On the other side of the county from Camblin's Highway 50 ranch, clusters of oversized tractor trailers will turn off Interstate 90 every few weeks and join the heavy industrial traffic heading down Highway 59.

But instead of turning off at the coal mines, Bill rail yards or gas plants north of Douglas, they'll roll onto Interstate 25, headed for wind farms being built throughout the West and as close as Cheyenne and Converse County.

"I think what you're seeing is a real thirst for the turbines in America," said Alan Redding, sales and marketing director for the wind energy arm of Anderson Trucking, one of the companies hauling wind equipment through Gillette.

For the past seven years, the St. Cloud, Minn., trucking giant has invested heavily in equipment designed specifically for hauling wind turbines, with about 130 custom-made trailers projected to be in its fleet this year. Since opening the division, Redding says the company has shipped 30,000 components to every corner of the United States.

"We went with kind of an all-in mentality in about 2004, 2005," Redding said without giving specific figures. "We've got a lot of skin in the game."

Those trailers and their cargo have caught the eye of David Jones, general manager at P&H MinePro's South Douglas Highway office. Already one of the major players in the clubby mine shovel business, Milwaukee-based P&H Mining Equipment is relying on Jones to investigate entry into the wind energy business.

Jones believes P&H, which already maintains large rotary equipment found on mining shovels and draglines, can translate that experience into repairing generator boxes that conduct the electricity produced by wind turbines. Depending on his findings, the company could have a pilot program running by the fall with eyes toward a regional

maintenance business in the future.

Such a program likely would have a Gillette presence.

"We're still in the early investigation stages," Jones said earlier this month. "We look at the financial side of the business, the location of the wind farms; we look at the age of the wind farms, whether it's in warranty (or) out of warranty.

"There's a lot of these turbines going up and there is basically not enough maintenance for the generation boxes and generators," he said. "(But) we'll only look at it if it could be a growth business."

With reports like one issued this week by the Global Wind Energy Council that projects U.S. wind energy production tripling to 61 gigawatts by 2012, other businesses soon may be following Jones' lead as tractor trailers keep hauling wind turbines down the road.

A RANCHER'S DREAMS

Some 30 miles down the road from where Jones is considering the next move for P&H, John Flocchini also has seen Anderson Trucking's tractor trailers headed south on Highway 59.

The difference between Flocchini and Jones is that the rancher hopes the trucks will one day be turning off the road just north of Wright onto the Durham Ranch. With a recently completed wind study in hand, Flocchini sees a day in the future when wind turbines will whirl on the nearly 60,000 acres of land now grazed by buffalo.

"We've got the space, we've got the ridge lines, we've got the acres," he said.

Most importantly, it appears the ranch has the necessary wind.

Flocchini, who refused to release the study as he tries to attract wind developers, said three-month wind speeds were above-average. Speeds clocked during the year-long study ranged from 14.8 mph to 19.3 mph, with the strongest winds in the winter.

He is using the data, collected on an anemometer loaned by the Wyoming Business Council and funded through an Agriculture Department grant, to woo companies to the area. He estimates talking to a half-dozen companies ranging from start-ups like Third Planet to established utilities like PacifiCorp.

He envisions hundreds of turbines on ridges around his land.

"I really think people would accept it easily ... they're used to seeing the landscape scattered with oil wells and mine silos," he said. "I can't speak for the public perception, but I think there's a beauty in them."

ONE, NOT A HUNDRED

Just one turbine suits Paul Anderson fine for now.

But the three blades of the tiny tower have gotten him plenty of attention as they spin behind his house sandwiched west of Gillette between Echeta Road and Interstate 90.

"I get a ton of comments, particularly being along the interstate," he said. "People are always calling."

Perhaps, because it's a rarity in these parts.

Anderson learned about the wind mills from his brother, the co-owner of GenPro, a Rapid City, S.D., vendor of renewable energy products. When he installed the wind mill in January with the hope of saving money on power bills, he may well have become the county's first to install a power-generating windmill.

Gillette Utility Director Mike Muirhead said the city does not have any net metering agreements, which allow customers to sell power back onto the grid. Powder River Energy spokeswoman Doreen Schaar said that only one of its more than 6,000 Campbell County customers has that type of deal.

That agreement is for solar panels.

"We have very few inquiries regarding residential wind generation," she wrote in an e-mail. "Some development's covenants would actually restrict a wind turbine due to the height of it."

Muirhead pointed out the cost per kilowatt hour is higher for self-generated wind power along with a high upfront cost. A model like Anderson's would cost \$15,000 to install, according to Mark Holstein, a salesman with the company.

That hasn't discouraged Anderson. He estimates his turbine, which soon will be outfitted with new 5-kilowatt blades, an upgrade from the current 1.8-kilowatt version, will cut his electricity bill by \$100 a month.

"We're in Wyoming," he said. "If we can benefit from the wind, we should."