Native Americans “Breaking Trail” for Green Power

“AN OVERNIGHT SUCCESS that took eight years” is a description often applied to the first Native American owned utility-scale wind turbine by people involved in the project. Officially dedicated in May, the 170 ft 750 kW NEG Micon turbine now stands on a hill above the Rosebud Hotel and Casino in south central South Dakota on the Rosebud Sioux reservation.

Wind energy has long been an attractive possibility for tribal communities partly due to simple geography – tribal lands in North Dakota, South Dakota and other Great Plains states happen to include some of the best wind resource areas in the world. However, motivations for pursuing a wind project were much more complex for the Rosebud Sioux Tribe. Concerns about how electricity generation affects the health of the air, land, water and people, the growing threat of global climate change, and a deep-seated interest in expanding economic opportunities for community members played major roles. And this project is only the beginning. The Rosebud tribe purposefully experimented with models and the planning process for this project with the intention of gaining enough knowledge and experience to make future wind projects, bigger, more efficient and more profitable.

The suggestion that this project was almost deliberately made into a long, challenging process is not hard to believe considering that the original groundwork was laid as far back as 1994, the year the Rosebud Sioux established a Tribal Utility Commission (TUC) to expand their capacity to manage energy issues. At that time the most pressing issue was obtaining an allocation for hydropower electricity from the Western Area Power Administration (WAPA). Part of the TUC’s job was to develop an integrated resource plan, which required studying all possible energy sources, both renewable and traditional.

By the late 1990s, it was clear that the Rosebud Sioux had an excellent wind resource, and an interest in using a clean, renewable, natural resource to generate power. However, the question of how to finance a large wind energy venture remained. Part of that question was answered in 1999, when Rosebud was the only tribe to receive funding ($508,000, half the cost of the turbine) for a utility scale wind turbine in the Department of Energy’s first round of Tribal Renewable Energy Grants. Soon after receiving the DOE award, the tribe began negotiations with the Rural Utilities Service to borrow money for the rest of the project, which, at the time, had never worked with either tribes or renewable energy. The effort paid off in 2002 when the Rosebud tribe secured a loan for the second half of the turbine installation costs and a little extra to set up some new wind monitoring stations.

While working on the financing, the TUC also began to tackle other hurdles such as obtaining permission to interconnect the turbine to the power grid and finding a market for the electricity. They used this process explore many markets that could also be viable for future, larger wind projects. Among the considerations: working with the owners of the transmission and distribution lines, plugging into the federal market for renewable energy, and the possibility of selling wind energy as premium green electricity.

The result of the extensive negotiations was a common forum for utility policy discussions. Over the next few years, Intertribal COUP focused on WAPA allocations, but also started exploring ways to integrate their own energy resources. Intertribal COUP and the Rosebud TUC began to grow their knowledge base by organizing and hosting a series of meetings and conferences to explore the feasibility of wind power and building connections with groups from other states with more wind experience. During the process of learning about wind energy possibilities, the Rosebud TUC became a champion of bringing these opportunities home to the Rosebud reservation. Many members of the commission became tireless advocates for both the economic and environmental benefits of wind power. Particularly remembered are the contributions of the late Alex “Little Soldier” Lunderman, the first president of the utility commission for whom the turbine was named at the May dedication. Ronald Neiss, another former utility commission president, told Wind Powering America last year about Lunderman’s vision that continues to guide the commission today: “He believed we could use modern technology as well as our resources in a way that is compatible with our history, our philosophy, and our cultural and spiritual values. With the Rosebud Wind Project, we are trying to make his vision a reality by using the tremendous wind resource on the reservation in a good way.”

The current TUC President, Rod Bordeaux, sees the growing potential for tribal wind power as a positive direction for Great Plains Tribes. “Energy has a steep learning curve, but people are beginning to understand where this is going,” he said.

As many Missouri River basin tribes were facing similar energy at that time, a coalition of northern Great Plains tribes chartered the Intertribal Council on Utility Policy (Intertribal COUP) to create a common forum for utility policy discussions. This first wind turbine is a demonstration project that's breaking trail for future, bigger projects. Such as hosting a series of meetings and conferences to explore the feasibility of wind power and building connections with groups from other states with more wind experience.
USDA Grants Announced

The first round of grant awards for the U.S. Department of Agriculture Renewable Energy Systems and Energy Efficiency Improvements Program was announced August 25, 2003. Over $21 million was awarded for 131 projects in 24 states. Minnesota leads all states with $4,678,632, followed by New York, Illinois, and Ohio. Many grants will support wind projects, including small residential-scale turbines, farmer-owned utility-scale turbines, and rural electric cooperative wind projects. In Minnesota alone, 14 farmer-owned utility-scale wind projects were awarded grants. For more information: www.windustry.org/resources/farmbill.htm.

Large Farmer Project Wins Bid

In August, Great River Energy announced that it will begin contract negotiations for 100 MW of wind power with Trimont Area Wind Farm, LLC. Trimont Wind is a coalition of local citizens from the project area (south central Minnesota) that answered Great River Energy’s request for proposals to develop a renewable energy supply resource to be ready by 2005. It will be the largest locally owned wind project in the nation. According to GBE, the project was chosen for its competitive price, its access to transmission line interconnections, its location within the coop’s service territory, and its appeal as a locally owned project.

Green Power Markets: Sale of Electricity and Green Tags from Rosebud Wind Turbine

Wind is an opportunity for tribes to control their own energy resources and the impact of their energy use. Reservations are seen as permanent homelands for tribal communities, and the residents realize that depleting the natural resources is incompatible with that idea.

The incentive for Great Plains tribes to pursue wind power goes beyond the great promise of economic development.