

Total Time 00:19:36

00:00:00-00:02:18 First Segment

00:00:00 Wind Powering America Presents
00:00:03 American Spirit Productions

00:00:07 WIND TURBINE MOVING

00:00:08 WIND POWERING NATIVE AMERICA

00:00:16 INTRODUCTION BY PAT SPEARS: How, my relatives. I'm Pat Spears, President of the Inter-Tribal COOP, the Council on Utility Policy. These are exciting times, with Native Americans on the road to renewable energy. Wind energy is a great way to heal grandmother earth and restore sustainable tribal homeland economies.

00:00:36 CAMERA VIEW: Arial view of moving wind turbine.

NARRATOR: I'd like to tell you about the first Native American owned large utility scale wind turbine in Indian country. This is the home of the Sicangu Oyate – The Burnt Thigh Nation on the Rosebud Sioux Reservation in South Dakota.

00:00:50 CAMERA VIEW: Looking up at the turbine from the base, while the blades are moving.
SOUND: Tribal chanting, drum beating fades in.
Camera View: shoots turbine moving, cuts to tribal ceremony, dancers with turbine moving in the background.

00:01:28 NARRATOR: In the summer of 2003 there was a gathering on the Rosebud reservation. At their 4th of July pow-wow, the Rosebud Sioux Tribe celebrated the achievement of building the first 750 kilowatt tribally-owned, commercial wind turbine to be installed on Native American lands.

This moment has real meaning for native people with a great respect for our land. In the twenty first century, we can lead the way in developing a sustainable way of life.

00:00:00-00:01:33 Second Segment

- 00:00:00 WILLIAM KINDLE, PRESIDENT, ROSEBUD SIOUX TRIBE: We here at Rosebud have always had a great concern and a desire to preserve our environment here, whether it be the air, land, or the water. They're probably the three most important things to us as a tribe. We try to preserve all three of them, and that's why we've begun this program of wind development here.
- 00:00:25 CAMERA VIEW: Grassy field, blue sky, with wind turbine in the background.
- NARRATOR: Indian Country is ideally suited for the generation of clean, inexhaustible wind power.
- 00:00:31 CAMERA VIEW: Wind Map of Rosebud Sioux Indian Reservation highlighting the location of the wind turbine site.
- NARRATOR: The Rosebud Sioux Reservation is in South Dakota, the heart of the Great Plains.
- CAMERA VIEW: plains
- 00:00:38 NARRATOR: The winds that sweep across the prairie are steady and reliable.
- 00:00:42 CAMERA VIEW: Modern wind turbine in the background with old, farm wind mill in the foreground.
- NARRATOR: It's a resource that's been used for ages, yet never on a scale like this.
- A wind energy project can serve both local reservation needs, and sell power to large commercial markets. Either option, large or small, needs to follow a wind project development process.
- 00:01:02 The process begins with
- Site selection and wind assessment, and includes:
 - Environmental Review.
 - Interconnection for Power Distribution.
 - Business Plan and Financing
 - And finally, construction and
 - operation.
- 00:01:19 NARRATOR: Wind development requires specialists in each of these fields. Wind Powering America and the National Renewable Energy Laboratory can help Tribes with technical advice and finding the right team.

00:00:00-00:01:52 Third Segment

00:00:00 CAMERA VIEW: Rosebud Casino with wind turbine turning in the background.

NARRATOR: The Rosebud Tribe was interested learning how to serve both reservation power needs and export the energy to regional markets. The tribally owned Rosebud casino located next to a regional transmission line became a likely site to explore both opportunities. Once the site was identified, the Tribal Utility Commission needed to prove the wind potential of the area.

00:00:32 CAMERA VIEW: Metering tower/anemometer.

NARRATOR: For initial wind prospecting and small projects, NREL has a 20 meter anemometer loan program. Like the one in use on the Pine Ridge Reservation. This partnership includes Honor the Earth and Coop in a plan to install a small wind turbine to power the KILI Radio station.

However, if Tribes are interested in a commercial wind project, a taller tower is needed - 50 meters or higher. That's the hub height of a utility-scale turbine.

00:01:05 NARRATOR: The [Rosebud] Tribe installed a tower instrumented with anemometers and wind vanes to measure the annual average wind speed and direction. The results of that 18-month study documented an 18 miles per hour average daily wind speed.

This data, after being by analyzed by a specialist, provided the basis for the business plan and revenue projections for the project.

This Tribal initiative and a 50% funding match qualified the project for a half-million dollar grant from the Department of Energy.

The Tribe secured a low interest loan from the U.S. Department of Agriculture Rural Utility Service, another first for a Tribal wind project.

This allowed the tribe to retain full ownership of the wind turbine project and the economic benefits it would create.

00:00:00-00:02:10 Fourth Segment

00:00:00 CAMERA VIEW: Foundation/turbine being erected.

00:00:10 NARRATOR: After an earlier groundbreaking, construction began in January of 2003. With temperatures sometime dropping below minus 20 degrees and varying windchill, the expert crew installed the first piece of the foundation.

To anchor the turbine, 144 30-foot steel rods were embedded in a massive concrete foundation.

The next step was to erect the 190 foot tower.

It was the culmination of years of planning and effort by many dedicated people --tribal leaders, consultants, private companies, government officials--individuals who saw the potential and never gave up and helped it become a reality.

00:01:03 CAMERA VIEW: Crane lifting second section of tower.

NARRATOR: After the first section of the tower was attached to the foundation, and perfectly leveled, a second section was lifted on top.

Along with selling electricity, there's one more element that's part of the project's economic success - the sale of green tags.

Green tags recognize the value of clean energy. These Green tags represent emission offsets, including the amount of carbon dioxide that won't enter the atmosphere as a result of the wind energy generated here.

00:01:36 CAMERA VIEW: Transition from turbine installation to Tom Boucher.

00:01:42 TOM BOUCHER, NATIVE ENERGY, LLC: We have had the fortunate opportunity to work with the Rosebud tribe to bring a new source of revenue to this project. That is associated with the purchase up front of the long term green tag rights associated with that project. This allowed us to bring a significant up-front payment to the tribe, which they could use to help cover the cost of this project, and to start the development of the expansion from the very first turbine.

00:00:00-00:01:48 Fifth Segment

00:00:00 CAMERA VIEW: Turbine blade installation

NARRATOR: Native Energy is the company set up to handle green tag transactions. It buys carbon offsets from the tribes, and sells them to concerned individuals and businesses like Ben and Jerry's, Stonyfield Farm, and Timberland. These businesses donate the green tags to Clean Air, Cool Planet, which holds them forever so they can never again be sold.

Over it's 25-year lifetime, the Rosebud turbine will save 25,000 tons of coal from being burned. That's equal to a row of ten-ton coal trucks ten miles long.

After the tower was completed, the Nacelle, which contains the turbine generator, was lifted and attached.

The rotor, with its 78 foot blades, was hoisted into place.

The last bolts fixed the rotor to blade assembly to the Nacelle in February, 2003.

00:01:12 PAT SPEARS: "This is a great day for Rosebud and the Lakota Oyate and for future generations."

00:01:48 CAMERA VIEW: Moving wind turbine.

NARRATOR: The giant turbine started spinning on March 4th, another day of victory for the Rosebud Sioux tribe.

Electricity generated from the wind turbine is expected to bring in more than \$100,000 every year. To realize these benefits, there was one more factor that had to be addressed - how to deliver the power to end users.

00:00:00-00:01:57 Sixth Segment

00:00:00 JACK DAVEY, ROSEBUD SIOUX TRIBAL UTILITY COMMISSIONER. Some of the lessons one must look at - first is, as I've mentioned before, the wind velocity. You've got to pick a good place. But that is not the sole consideration. The other is, how do you get that power out of here? And part of what we looked at, and have to continue looking at for future developments, is where are the transmission lines that we can tie to? For us here, one of them is just south of us, and that was one of the driving considerations for it being here. When you look at wind farm development, you either have to locate where you have easy access to transmission capability that can handle the added input, or you have to put up your own transmission lines.

00:00:52 CAMERA VIEW: Transmission lines

00:00:54 NARRATOR: The Rosebud project was able to take advantage of existing infrastructure. The electricity enters the power grid through the local utility, Cherry Todd Electric and interconnects to Nebraska Public Power District. The energy is then delivered on the vast grid operated by the Western Area Power Administration; or WAPA. The Federal Government, trying to help reduce U.S. carbon emissions, agreed to buy the wind power for the Ellsworth Air Force Base in Rapid City, South Dakota.

It took the Rosebud Tribe and its Utility Commission eight years and a host of partners - the Rosebud Casino, the Intertribal Council On Utility Policy, Disgen, and Wind Powering America, to develop the project plan. The Western Area Power Administration, Ellsworth Air Force Base, Nebraska Public Power District, Basin Electric, and Cherry Todd Electric Cooperative, all cooperated in interconnection and power purchase contracts to make this project a resounding success.

00:00:00-00:02:08 Seventh Segment

00:00:00 NARRATOR: Wind Power, whose source is the sun itself, is in perfect harmony with tribal values and traditions.

The Lakota Sioux know the wind power as Tate Atopa the four winds

00:00:14 LEOLA ONE FEATHER - Stone Boy story

STORYTELLER: And then upon the earth there were powers that were sent that are sacred beings and out of that one of them was the wind. The wind had a wife named Ité and they had five sons. The wind is even in our hand.

00:00:30 CAMERA VIEW: woman telling the story, illustrating with fingers, first the pinky, ring finger, middle finger, pointer finger, then the thumb.

In this story, this is the south wind (pinky finger), and he is weak and he cannot do too many things alone, he's very gentle.

And then the third finger (ring finger) is the east wind. And he can't stand alone so he has to have help with the south wind (pinky finger).

And then the center wind is very strong and aggressive. He's the north wind. The center finger. And, what he's able to do is he can stand alone and he can change the whole difference in how the world's seasons change and when see that every year in our part of the country we have winter.

(pointing to pointer finger) This is the west wind. And this one too, he cannot act alone, but he is very powerful.

These two the north (middle finger) and the west wind (pointer finger) bring the most powerful wind and they both bring snow and rain.

And then this is the last wind (thumb) which is the world wind.

00:01:20 CAMERA VIEW: Connie Fox, Tribal Elder and Chairman Tex Hall, president of the National Congress of American Indians dedicate the site of their wind turbine. Connie is holding tobacco, says some words, and spreads the tobacco on the ground. She does this in the north, east, south, and west directions.

CONNIE FOX, TRIBAL ELDER: I acknowledge all our spirit guides in the wind from the east to come forth and to help our people with this project.

And to the south, I acknowledge the wind too and all our spirit guides.

00:01:35 NARRATOR: The Rosebud Sioux are not the only tribe to start making and selling clean energy. Another project is up and running on the Mandan, Hidatsa, and Arikara Reservation in North Dakota. The three affiliated tribes. In the summer of 2003, tribal elder Connie Fox and Chairman Tex Hall, president of the National Congress of American Indians, dedicated the site of their wind turbine..

00:02:07 CAMERA VIEW: Back ho takes first dig of dirt.

00:00:00-00:02:37 Eighth Segment

- 00:00:00 TEX HALL, PRESIDENT, NATIONAL CONGRESS OF AMERICAN INDIANS : All of the reservations in North Dakota, and throughout the United States, are sitting in tremendous wind potential areas. The particular map I was looking at is in North Dakota, and we have so much wind potential here. We have 17,000 times what we need here on our reservation. That's a tremendous asset. That's a great economic potential for our people. We can harness Mother Nature's spirit of the wind for us, using the wind energy to develop our economies and the cash potential. So I just want to encourage, after we've demonstrated today with our tribe, and the Rosebud Tribe, who is the only tribe today that has a huge wind farm in place, for all tribes to do the same. Because if you can see the results of the studies of wind potential on your reservations, I think you too will join us and be a part of helping [to answer] America's questions about developing this renewable resource for us.
- 00:01:06 CAMERA VIEW: looking up at the wind turbine from the base.
- SOUND: Indian music.
- 00:01:30 NARRATOR: Wind energy generation is now cost-competitive. Its time has come. Nationwide there are over 4600 megawatts of installed wind capacity, enough to power almost 1.5 million homes. Several tribal projects are in the feasibility and development stages on the reservation. The Rosebud Sioux tribe is moving forward with wind development plans for a 30 megawatt wind ranch near St. Francis, South Dakota.
- SOUND: Wind song chorus

00:00:00-00:03:05 Ninth Segment

00:00:00 NARRATOR: Indian Country is interested in wind powering America, for all the right reasons. It will bring long-term benefits to future generations, Grandmother Earth, and create jobs for Native Americans. The future of our children's children depends on the wise decisions we make today.

SOUND: Wind song chorus

00:01:27 CREDITS
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Western Area Power Administration

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Ellsworth Air Force Base

Dedicated in the Memory of

Alex "Little Soldier" Lunderman
Akicita Cikala

"Whose great Vision has become reality"

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