

Wind & Hydropower Technologies Program

Harnessing America's abundant natural resources for clean power generation

NAWIG NEWS

THE QUARTERLY NEWSLETTER OF THE
NATIVE AMERICAN WIND INTEREST GROUP

SUMMER 2005

As part of its Native American outreach, DOE's Wind Powering America program has initiated a quarterly NAWIG newsletter to present Native American wind information, including projects, interviews with pioneers, issues, WPA activities, and related events. It is our hope that this newsletter will both inform and elicit comments and input on wind development in Indian Country.

Weather Dancer Harnesses the Power in the Wind

"There was always power in the wind before there was wind power," said William Big Bull, energy manager of the Piikani Utilities Corporation in Alberta, Canada. "Now that we have harnessed this resource, we have to use it wisely and respectfully on our course of co-existence."

Piikani Utilities Corporation harnessed the wind via a joint partnership with EPCOR, a City of Edmonton power company. Their project, named Weather Dancer I in honor of the Okaan (Sundance), a traditional Blackfoot ceremony that renews the relationship with the life forces of nature, is located on the Peigan Indian Reserve in southern Alberta. The 900-kilowatt (kW) wind turbine is the second tallest wind tower erected to date in Canada. Weather Dancer generates 2960 megawatt-hours (MWh) of power each year, and that power is sold to the city of Edmonton. The Weather Dancer I pilot project, which came online in October 2001, has been so successful that a 100-MW wind farm is now planned.



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"Economically, Weather Dancer has brought revenue," said William Big Bull, "but in the bigger picture, it's brought recognition for Tribal resources that have always been here. It's helped us to associate with other First Nations and investors. It's brought good values."

A member of the Piikani and part of the Blackfoot Nation, William Big Bull urges all First Nations to overcome apprehension of new business ventures like Weather Dancer and to adopt a philosophy of "jump feet-first in a project." According to Big Bull, "We took the first step in approaching investors and the government by participating in discussions."

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- William Big Bull

Affirming that his people have benefited over the past 30 years from the resources on their land, he believes the community should take ownership of a project, which requires community support and a different way of doing business.

"First Nations are coming of age," Big Bull said, "and the interest has peaked."

His advice to other Tribal leaders considering a wind energy project is to "wake up and smell the coffee. Don't give up on ideals because in the long run, it will pay off for First Nations."

William Big Bull is the recipient of the 2004 Gold Award for Climate Change from the Government of Canada and Canadian Geographic Enterprises.



U.S. Department of Energy

Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

Energy Policy Act of 2005 Contains Indian Energy Provisions

Title V of The Energy Policy Act of 2005, which was signed into law on August 8, contains a number of potentially important provisions to Native Americans. Title V—Indian Energy, known as the Indian Tribal Energy Development and Self-Determination Act of 2005, recognizes the increasing importance of energy resources on Tribal Lands and the promotion of Indian self-determination over those resources.

Section 502 of Title V authorizes the creation of an Office of Indian Energy Policy and Programs within the U.S. Department of Energy (DOE) to “promote Indian tribal energy development, efficiency, and use; reduce or stabilize energy costs; enhance and strengthen Indian tribal energy and economic infrastructure relating to natural resource development and electrification; and bring electrical power and service to Indian land and homes of tribal members located on Indian lands or acquired, constructed, or improved (in whole or in part) with Federal funds.”

Implementation responsibilities are split between the U.S. Department of the Interior (DOI) and DOE. Section 504 requires the DOI and DOE Secretaries to consult with Indian tribes to the maximum extent practical. Under Title V, DOI responsibilities include establishing an Indian energy resource development program; providing development grants for developing or obtaining managerial and technical capacity to develop energy resources and properly account for energy production and revenues; providing grants to implement projects; providing low-interest loans to promote energy resource development; and providing grants to establish a national resource center to develop Tribal capacity.

Additionally, DOI is authorized to implement a grant-based program for energy resource development, feasibility studies, energy law development, environmental protection, and training; and encouragement of energy leases, business agreements, and rights-of-way.

DOE responsibilities include establishing programs to assist with 1) education, R&D, planning and management needs; 2) competitive grants for energy programs, studies, planning, construction, development, operation, maintenance, and improvement of electrical generation, transmission, and distribution facilities; and 3) grid interconnection. Beginning in 2006, up to \$20 million per year for 10 years is authorized for these activities. Additionally, Title V provides for a 90% Energy Loan Guarantee Program with a \$2 billion ceiling.

Title V also contains provisions regarding the DOE Bonneville and Western Area Power Administrations (PMAs) that encourage the PMAs to support Indian energy development, including the use of Western power allocations for firming and reserve needs of Indian-owned energy projects and the purchase of Indian energy to meet Western’s power needs. Section 2606 authorizes the expenditure of up to \$1 million to conduct a wind/hydro feasibility study to evaluate the opportunities for wind/hydro integration throughout the Missouri River Basin to supply power to Western. Section 2602 allows federal agencies to give preference to electricity purchased from Tribes at prices not greater than prevailing

market rates. Section 2604 provides Tribes with additional authority for entering into leases or business agreements related to energy-resource development or construction and operation of energy and transmission facilities on tribal lands. It limits lease and agreement terms to 30 years.

Title V also reaffirms the Federal commitment to the Four Corners Transmission Line Project (a transmission line from the Four Corners area to southern Nevada) and the Navajo Electrification program. It requires the Secretary of Housing and Urban Development to assist in implementation of energy-efficient technologies (including the procurement of energy-efficient refrigerators and other appliances) and the promotion of shared energy savings contracts on housing located on Indian lands.

Section 1303, Clean Renewable Energy Bonds (CREBs), provides an exciting opportunity for wind energy. A new category of bonds are authorized for facilities qualifying for tax credit under Section 45. Qualified issuers include governmental bodies (including Indian Tribal governments) and mutual or cooperative electric companies.

For more information:

Western Area Power Administration:

www.wapa.gov/newsroom/cct/2005/sept9/27no181a.htm

Honor the Earth:

www.honorearth.org/media/worddocs/initiatives/energy/usenergybill/whatsnew/energypolicy2005/indiantitlesummary.doc

Navajo Wind Project Kicks Off



Wind Powering America participated in the Navajo Department of Energy-Tribal Energy Program wind project kickoff in Window Rock, Arizona on September 9. The project team includes the Navajo Tribal Utility Authority (NTUA, project lead); Dine; Northern Arizona University (NAU); specialty wind consultants (TBD); and advisors from Sandia, the National Wind Technology Center, and Intertribal Council on Utility Policy (COUP). This \$200K project will focus on the evaluation of alternative wind sites, resource assessment, environmental screening, interconnection analysis, project alternative proformas, and consideration of alternative ownership scenarios. The six elements of a potentially successful wind project are in place: an existing tribal utility, an excellent wind resource (best in Arizona), a champion (NTUA's Larry Ahasteen), a good partner/team (NAU), transmission availability, and a ready market (Arizona and New Mexico have Renewable Portfolio Standards). Additionally, Title V of the new Energy Policy Act offers double value to tribal RECs for the 7.5% renewable energy requirement for federal facilities by 2013.

FERC Holds First Tribal Renewable Energy Consultation

On February 23, 2005, the Intertribal Council on Utility Policy (COUP) hosted the first Tribal Consultation with the Federal Energy Regulatory Commission (FERC) in Grand Forks, North Dakota, in conjunction with Senator Dorgan's sixth annual conference on wind energy in the Great Plains.

Tribal leaders from across America's heartland, from Michigan to Nevada, met with Chairman Pat Wood III and Commissioner Suedean Kelly for almost four hours to discuss FERC's recently developed American Indian Policy, along with a variety of utility issues related to renewable energy development. Chairman Wood recognized the tension between "clean energy and cheap energy" in developing regulatory policies, while Tribal renewable energy advocates pointed out the need for full cost accounting of conventional generation, in which many environmental impacts are often externalized by utilities.

Representatives of Western Area Power Administration (WAPA), referred to as "our federal treaty partner" with obligations to assist in Tribal economic development, and Basin Electric Power Cooperative, which lists many Indian reservations among its co-op

members, were also present to respond to Tribal questions about interconnection, integration, and transmission of wind energy generated on Indian reservations.

During the meeting, it was suggested that the federal grid operated by WAPA could be regarded as the "National Renewable Energy Grid" because it was built from Minnesota to California to transmit federal hydropower. Today, this integrated transmission system, which delivers reduced allocations of electricity generated from federal dams throughout the West, could now also be used to collect wind and solar energy as replacement power from Indian reservations, instead of simply relying on additional coal-fired electricity as the default supplemental power supplier.

Tribes, which only recently began receiving hydropower allocations, suggested that WAPA conduct an integrated resource plan to optimize the renewable resources found within its service territory. Expansion of WAPA's legislative authority with regard to renewable energy, the development of Tribal renewable portfolio standards, and renewable energy incentive provisions of the proposed energy bill were also discussed.

Tribal Energy Program Grant Recipients Announced

In 2005, DOE awarded nearly \$2.5 million to 18 Native American tribes to advance the use of renewable energy and energy efficient technologies on Tribal lands. The following Tribes will pursue feasibility or pre-development projects that include wind energy:

Aleutian Pribilof Islands Association (Alaska)—The Association, federally recognized as a Tribal organization of the Aleut people in Alaska, resides in one of the windiest places in the world. Currently, site selection and monitoring is underway in six communities—Sand Point, St. George, Adak, False Pass, King Cove, and Nikol-ski—to evaluate wind energy development. The impact on nearby seabird colonies is also being studied.

Grand Traverse Band (Michigan)—The Tribe will conduct a feasibility study to determine the cost effectiveness and benefits of energy conservation and expanding the diversity of energy sources at the Tribe's facilities. Use of conservation, along with wind, solar and biomass resources, could save the Tribe tens of millions of dollars over the next 20 years.

Navajo Tribal Utility Authority (Arizona)—The Tribe is undertaking a feasibility study to evaluate wind energy potential at six different sites on the Navajo Nation. The Navajo Tribal Utility Authority will complete comprehensive Navajo Nation wind energy and economic feasibility assessments.

Smith River Rancheria (California)—The Tribe is pursuing a feasibility study to determine whether a wind or biomass power project would benefit the Tribe. Activities will include siting, transmission issues, power marketing options, cost, quality of life, operational issues, business, and organizational plan development.

Hopi Tribe (Arizona)—The Tribe will conduct a feasibility study for a 100-MW utility-scale wind project called the Sunset Moun-

tains Project. Activities will include a detailed on-site wind resource assessment; biological, environmental, cultural/historical assessments; interconnection and power marketing activities; and development of financial projections.

In addition, preliminary wind assessments will take place as part of the strategic energy planning activities of the following Tribes:

Hualapai Tribe (Arizona)—The Hualapai plan to establish a Tribal utility to provide service to its 9,000-acre tourism facility called Grand Canyon West, which operates off-grid. The formation of a Tribal utility will reduce the cost of electrical services and facilitate expansion of Grand Canyon West, thus enhancing the economic benefit for the entire Tribe. Additionally, the project will evaluate having the Tribal utility take over the existing grid-connected part of the reservation, including the possible future development of a commercial wind project.

Aroostook Band of Micmacs (Maine)—Through development of a strategic energy plan, the Tribe plans to take advantage of plentiful wind and biomass resources to reduce high energy costs and to move toward energy self-sufficiency and energy security. With the third-highest cost of electricity in the United States in 2002, the Tribe hopes to take advantage of its renewable energy resources as a step toward energy independence.

Winnebago Tribe of Nebraska (Nebraska)—The Winnebago Tribe will conduct an energy options analysis and organizational development project to investigate opportunities for wind generation and energy efficiency improvement, analyze renewable generation investment opportunities including their associated job creation and economic development benefits, and evaluate electric utility formation.

2005–2006 Calendar

- Oct. 18–19 **Montana's Energy Future Symposium** – Bozeman, MT
<http://energyfuture.mt.gov/default.asp>
- Oct. 24–26 **Seventh Annual International Tribal Leadership Conference**
Honolulu, HI
www.dciamerica.com/sessions/conference/leadership.htm
- Oct. 27–28 **Green Power North America** – New York
www.greenpowerconferences.com/events/GreenPowerNorthAmerica.htm
- Oct. 30–Nov. 4 **National Congress of American Indians
62nd Annual Convention** – Tulsa, OK
<http://198.104.130.237/ncai/index.jsp?pg=8>
- Nov. 9–Nov. 10 **Council of Energy Resource Tribes Sustainable Energy
Solutions** – Denver, CO
www.certreearth.com/documents/SESFlyer.pdf
- Nov. 15–16 **Better Governance for Alaskan Tribes and Villages**
Anchorage, AK
www.dciamerica.com/

- Nov. 16–17 **Native Renewables Energy Summit Solutions for
Tribes and Cities** – Denver, CO
www.dciamerica.com/brochure/renewables1105.pdf
- March 24–26, 2006 **Denver March PowWow** – Denver, CO
- June 4–7, 2006 **WINDPOWER 2006** – Pittsburgh, PA
www.awea.org/wp06.html
- Current Native American wind events can also be found on the Wind Powering America Web site at
www.eere.energy.gov/windpoweringamerica/wpa/na_calendar.asp

Useful Links

Wind Powering America • www.windpoweringamerica.gov
 American Wind Energy Association • www.awea.org
 U.S. Department of Energy Tribal Energy Program •
www.eere.energy.gov/tribalenergy
 National Wind Coordinating Committee • www.nationalwind.org
 Windustry • www.windustry.org



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For more information contact:
EERE Information Center
1-877-EERE-INF (1-877-337-3463)
www.eere.energy.gov

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

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