

WIND POWER ON NATIVE AMERICAN LANDS: OPPORTUNITIES, CHALLENGES, AND STATUS

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Existing and Pending Native American Wind Projects: 50 kW and Larger (May 30, 2007)

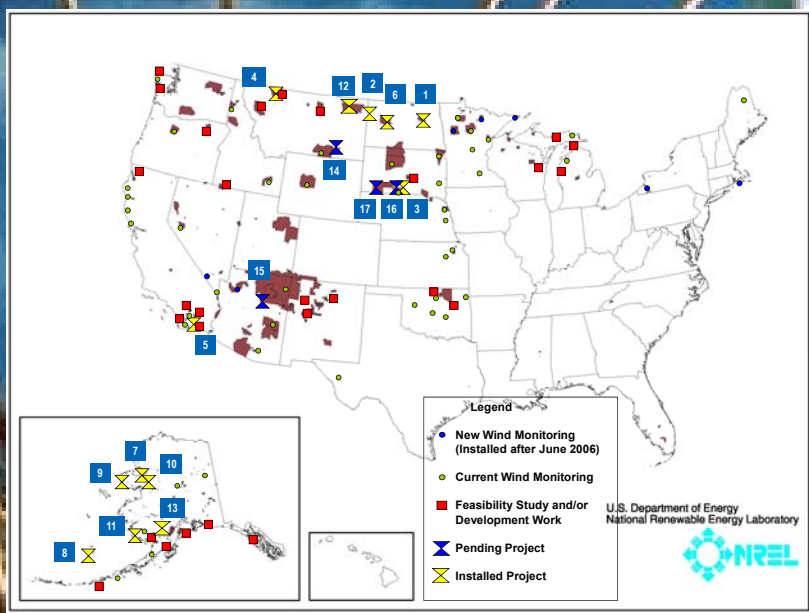
Tribal Wind Opportunities and Issues

In-Place Projects	Near-Term Projects
<p>1 - Spirit Lake Sioux (Fort Totten, ND) 1x 100-kW turbine Meets part of casino load Installed 1996 Financing: TEP grant</p> <p>2 - Fort Belk Mountain Band of Chippewa (Bellevue, ND) 1x 100-kW turbine Meets part of wastewater treatment plant load Installed 1996 Financing: TEP grant</p> <p>3 - Rosebud Sioux (Rosebud Reservation, SD) 1x 750-kW turbine Energy sold to Basin Electric and Ellsworth AFB Green tags sold to Ellsworth AFB and Native Energy Installed: 2003 Financing: TEP grant, RUS loan</p> <p>4 - Spirit Lake (Bismarck, ND) 1x 100-kW turbine Energy sold to local utility Installed 1996 Development supported by TEP Financing: TEP grant</p> <p>5 - Klamath Falls of Kumeyaay (Central Reservation, CA) 50 MW Installed 2005 Privately owned project: leasing land from the Tribe</p> <p>6 - Mescalero (Haskell, Fort Belkard, ND) 1x 66-kW turbine Energy sold to local utility Installed 2005 Financing: TEP grant</p>	<p>7 - Kickapoo (Kickapoo Association) (Mazon, IL) 10 x 66-kW turbines 1x 100-kW turbine Initial installation: 1997, subsequently expanded Low-penetration wind-diesel system</p> <p>8 - TDX Power, Inc. (SU) (Dallas, TX) 1x 225-kW turbine High-penetration wind-diesel system for TDX industrial area Installed 1999 Financing: Commercial financing</p> <p>9 - Alaska Village Electric Cooperative (AVEC) (Witbes, AK) 2x 66-kW turbines High-penetration wind-diesel system Installed 2000</p> <p>10 - Alaska Village Electric Cooperative (AVEC) (Selkirk, AK) 2x 66-kW turbines High-penetration wind-diesel system Installed 2000</p> <p>11 - Alaska Village Electric Cooperative (AVEC) (Tahusook, AK) 4x 100-kW turbines High-penetration wind-diesel system Installed 2006</p> <p>12 - Fort Belkard Sioux (Wibaux, Fort Peck, MT) 2x 50-kW turbine Energy will be used within the reservation Installed July 2006 Financing: TEP grant</p> <p>13 - Alaska Village Electric Cooperative (AVEC) (Kudluk, AK) 3x 100-kW turbines High-penetration wind-diesel system Installed June 2006</p>

- Wind resource
- Transmission access
- Renewable energy for climate change mitigation
- Environmental justice
- Federal outreach programs (DOE TEP, WPA, DOI/BIA MAP, USDA 9006)
- Wind-hydro integration
- Federal green energy preference
- Purchase by Intertribal COUP of Native Energy, a green tag broker (supporting tribal wind projects by purchasing green tags at beginning of project)
- Clean Renewable Energy Bonds (CREBs).

Projects on Tribal Land Are Different

- Inability to monetize Production Tax Credit (PTC) and accelerated depreciation (affects projects with tribal equity interest)
- Tribal tax advantages: Not as valuable as the PTC. Projects with non-tribal partners may lose these tax advantages
- More stringent environmental regulations (NEPA)
- Agreements require multiple levels of review: Tribal, BIA, FWS, EPA, THPO/SHPO
- Land ownership often varies within the reservation (checkerboarding): Trust, Allotted, Fee. Needed permissions and tax status vary depending on ownership status
- Tribal sovereignty/Tribal policies/Native American law: Applicable laws and jurisdictions vary with regard to projects and contracts
- Optimal business structure with tribal equity interest has not emerged.



Business Models

- Tribally Owned: e.g., TDX Power, Blackfeet
- Joint Venture: No current examples. Tribes evaluating lessons from community wind experience.
- Land lease to third-party owner: e.g., Kumeyaay

Tribal Expectations from Partners

- Respect for tribal sovereignty and self-determination
- Native American culture places a high premium on face-to-face interaction
- Extensive outreach to local community
- Respect for tribal cultural artifacts and spiritual sites
- Maximum opportunity for local training and jobs.

Tribal Energy Program: www.eere.energy.gov/tribalenergy/
Wind Powering America: www.windpoweringamerica.gov