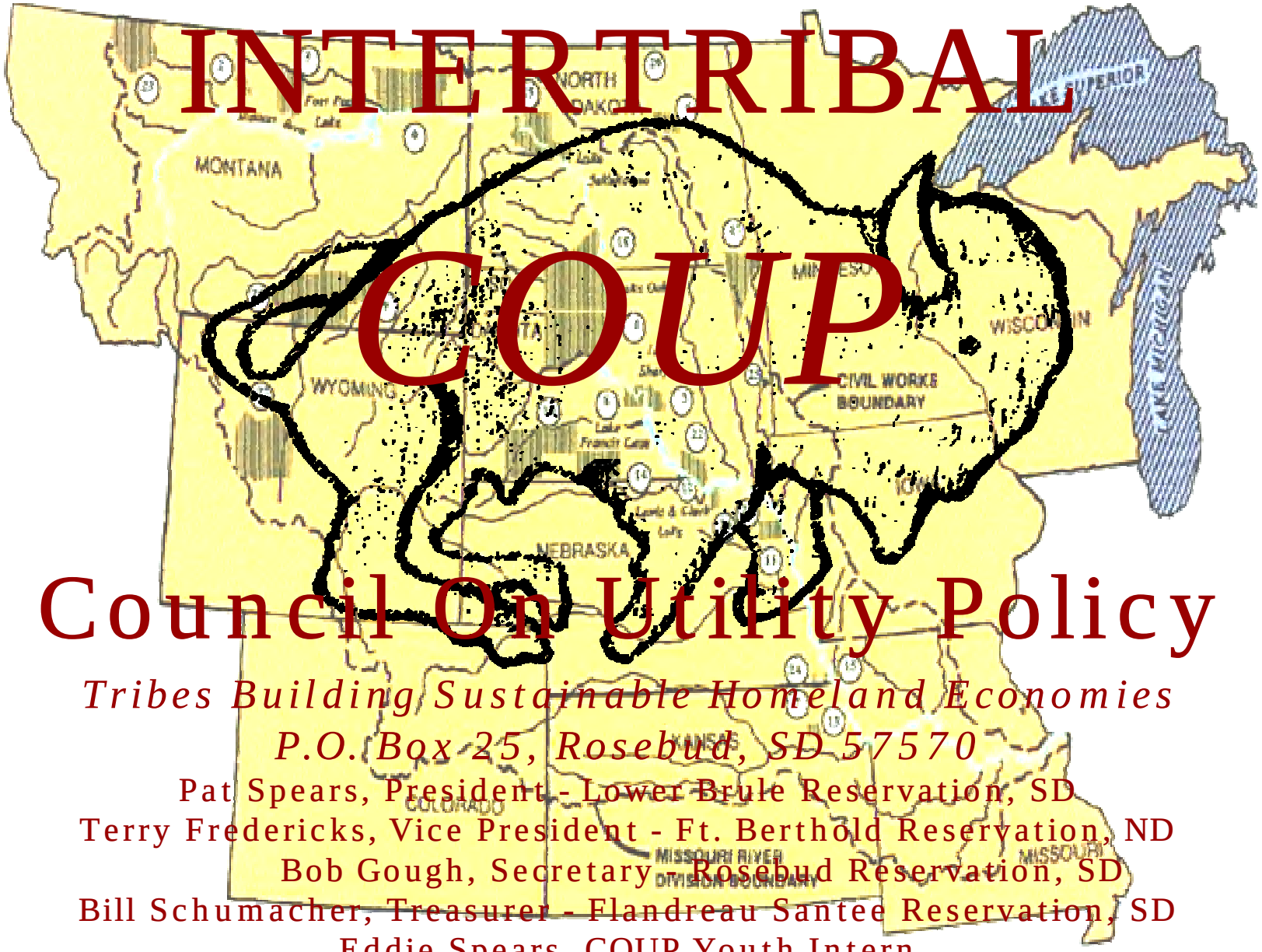


INTERTRIBAL COUP

Council On Utility Policy

Tribes Building Sustainable Homeland Economies

P.O. Box 25, Rosebud, SD 57570

Pat Spears, President - Lower Brule Reservation, SD

Terry Fredericks, Vice President - Ft. Berthold Reservation, ND

Bob Gough, Secretary - Rosebud Reservation, SD

Bill Schumacher, Treasurer - Flandreau Santee Reservation, SD

Eddie Spears, COUP Youth Intern

www.EnergyIndependenceDay.org

INTERTRIBAL COUP

Council On Utility Policy

MT Governor's Energy Symposium

October 19, 2005

"Intertribal Wind Power Development"

www.Intertribalcoup.org

www.EnergyIndependenceDay.org

www.NativeWind.org

Native Wind
Powering America
www.EnergyIndependenceDay.org

Tribal Renewable Energy

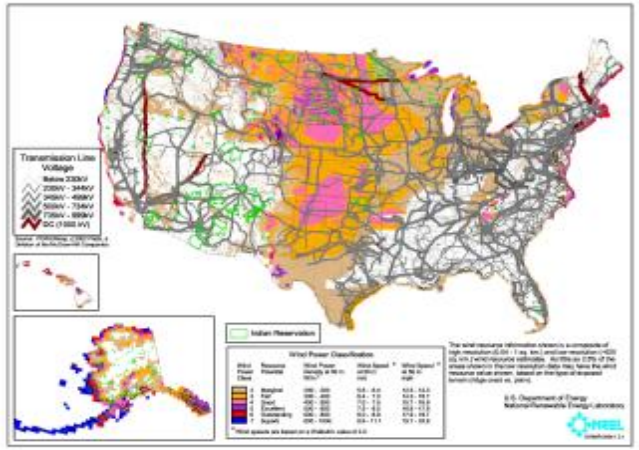
Rosebud Sioux Turbine

- Indian Reservations are the poorest communities in the U.S. and have the highest unemployment rates.
- Indian Tribes are the fastest growing populations in the U.S with half their members under 18 years of age, and all growth is natural, not immigration.
- Reservation homes are 10 times more likely (14.2%) to be without electricity than rest of U.S. (1.4%)
- Tribes have hundreds of gigawatts of renewable energy potential. Tribes could meet most of U.S. electric energy needs with clean green power.
- Federal Trust Responsibility to build Tribal Sustainable Homeland Economies/Federal Markets

http://www.eia.doe.gov/cneaf/solar.renewables/page/pubs.html

www.NativeWind.org

Potential Wind Generation from Tribal Lands



Potential Annual Wind Generation*
(Billion kWh/yr)

- 0.001 - 1
- 1 - 5
- 5 - 10
- 10 - 50
- 50 - 104

Indian Reservations

* Generation estimated for areas of class >= 4 annual average wind resource, assuming 5 MW/km^2 of installed capacity, and capacity factors ranging from 25.1% (class 4) to 41.4% (class 7).

Aggregate technical estimate of 209 GW does not account for sacred sites, transmission access, water bodies, or other factors that will significantly impact development potential.

Total Tribal Wind Generation Potential:
535 Billion kWh/yr

U.S. Total Electric Generation (2004 Est.):
3,853 Billion kWh/yr (EIA)

U.S. Department of Energy
National Renewable Energy Laboratory

NREL

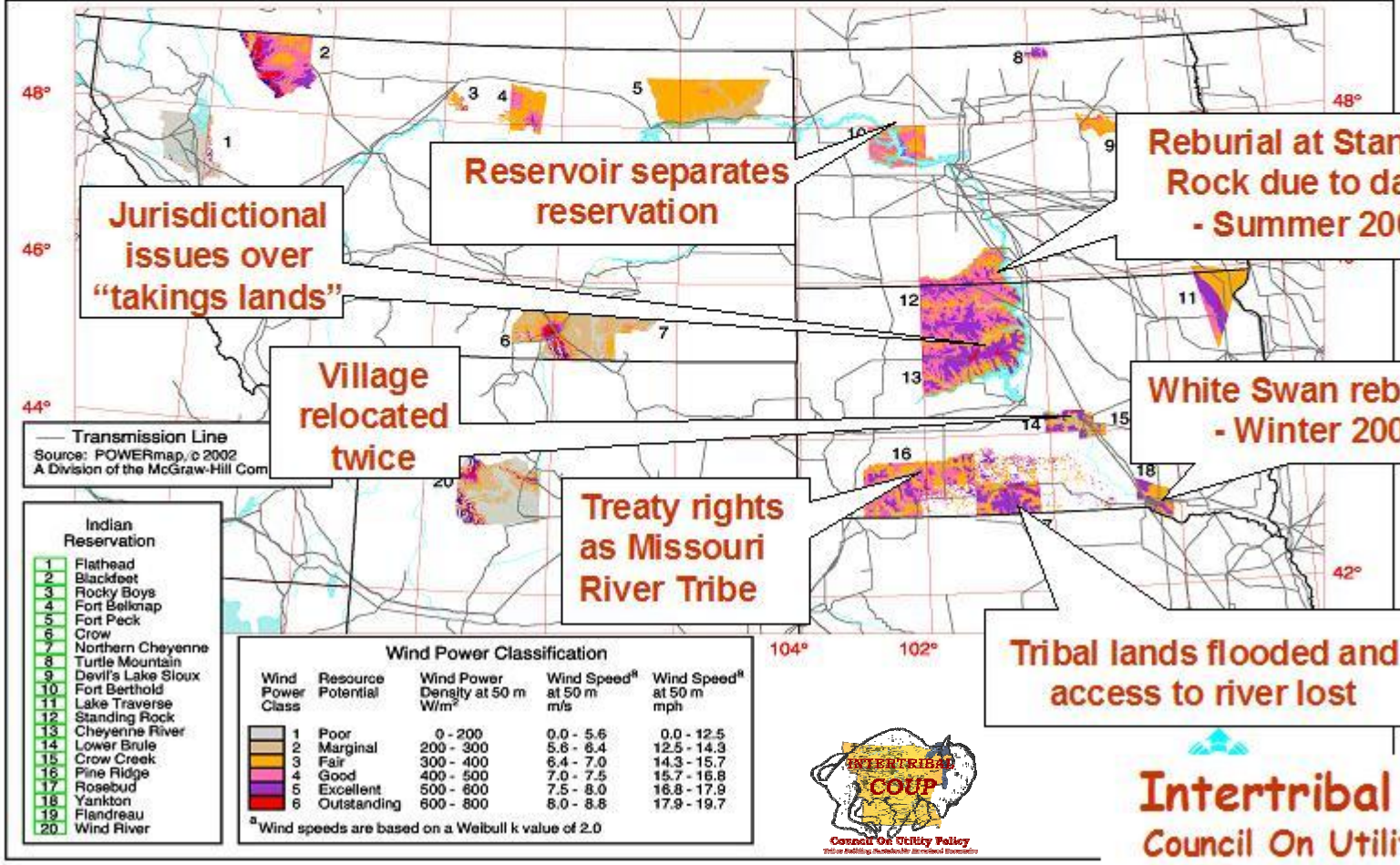
DHJul2004windgen

Intertribal Wind Planning and Policy Project

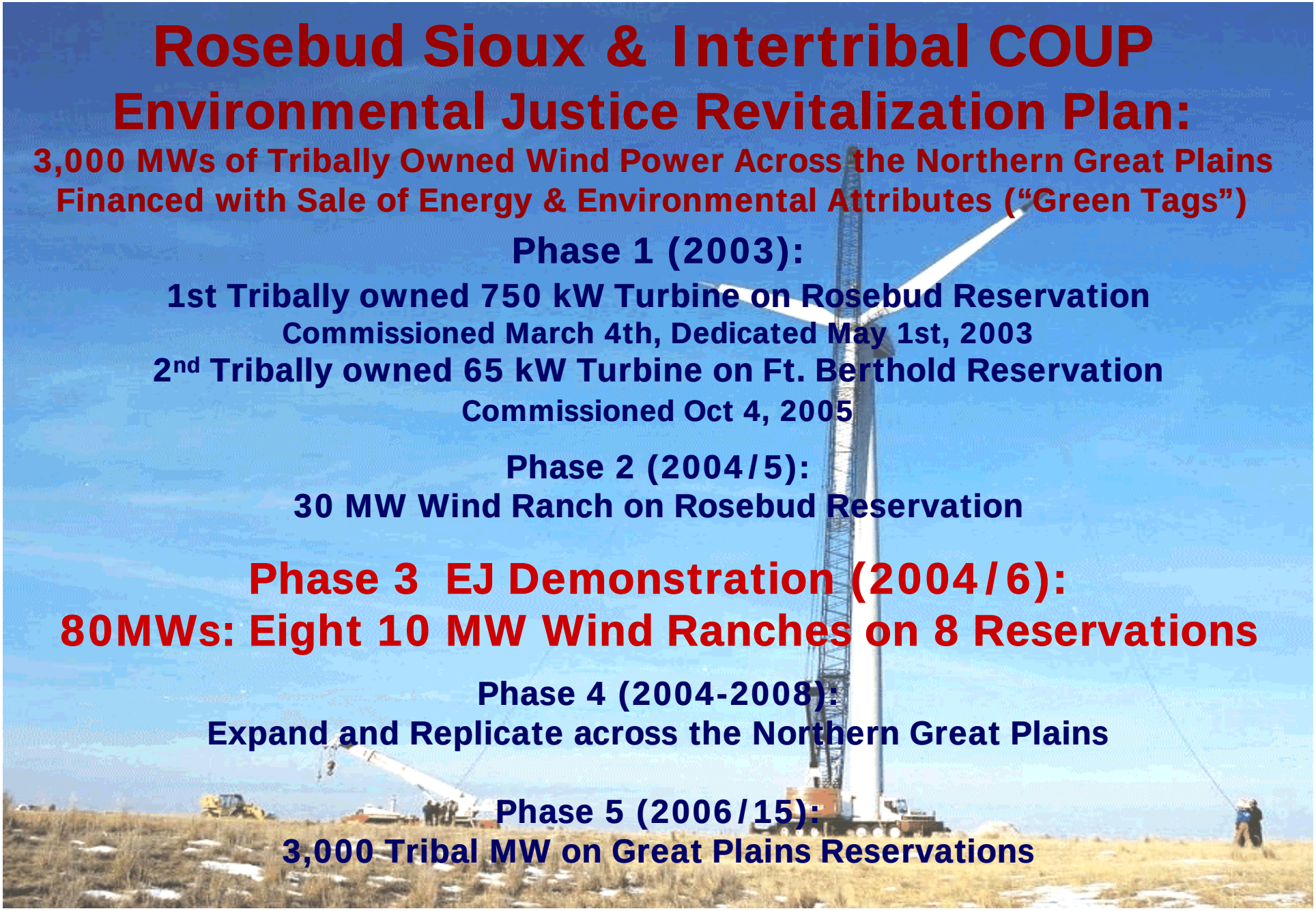
Intertribal Council On Utility Policy (COUP)

Wind Resources on Northern Plains Reservations located in the Eastern Pick-Sloan Region (Upper Missouri River Basin) of the Western Area Power Administration (WAPA) Grid

Past and ongoing Tribal Environmental Justice Issues Resulting from the Construction of Hydropower Dams



Intertribal COUP
Council On Utility Policy



Rosebud Sioux & Intertribal COUP
Environmental Justice Revitalization Plan:
3,000 MWs of Tribally Owned Wind Power Across the Northern Great Plains
Financed with Sale of Energy & Environmental Attributes ("Green Tags")

Phase 1 (2003):

1st Tribally owned 750 kW Turbine on Rosebud Reservation

Commissioned March 4th, Dedicated May 1st, 2003

2nd Tribally owned 65 kW Turbine on Ft. Berthold Reservation

Commissioned Oct 4, 2005

Phase 2 (2004/5):

30 MW Wind Ranch on Rosebud Reservation

Phase 3 EJ Demonstration (2004/6):

80MWs: Eight 10 MW Wind Ranches on 8 Reservations

Phase 4 (2004-2008):

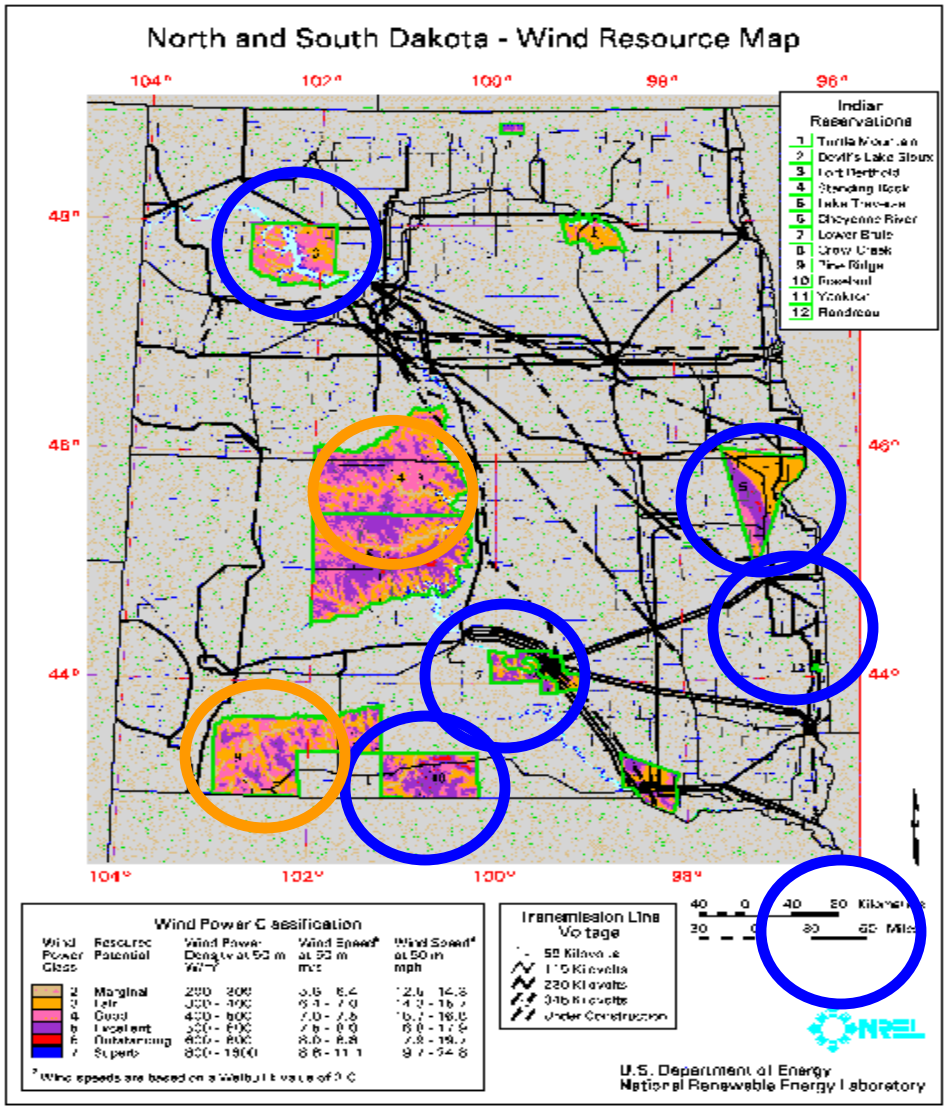
Expand and Replicate across the Northern Great Plains

Phase 5 (2006/15):

3,000 Tribal MW on Great Plains Reservations

Tribal Wind Power for Sustainable Homeland Economic Development

INTERTRIBAL COUP
Initial Distributed Wind Development Plan



COUP Tribes have, by Resolution, signed on to participate in the Federal/ Intertribal 80 MW Inter-Agency Environmental Justice Wind Development Demonstration Project. (Two Tribes pending)

This tribally-owned, distributed generation 80 MW project will be built in 10 MW clusters on each of the participating COUP Reservations.

Each project site capable of expanding to 50-150 MWs.

www.NativeWind.org

80 MW Intertribal Wind EJ Demo Project
Status Report

Feasibility Study complete for majority of Tribes - November, 2005
- Rosebud, Lower Brule, and Ft. Berthold (DOE)
- Flandreau Santee, Sisseton-Wahpeton and Omaha (BIA)
- Pending: Pine Ridge and Standing Rock

Delays in anemometer tower installation due to BIA NEPA requirements of USFWS and State Historic Preservation Office approvals

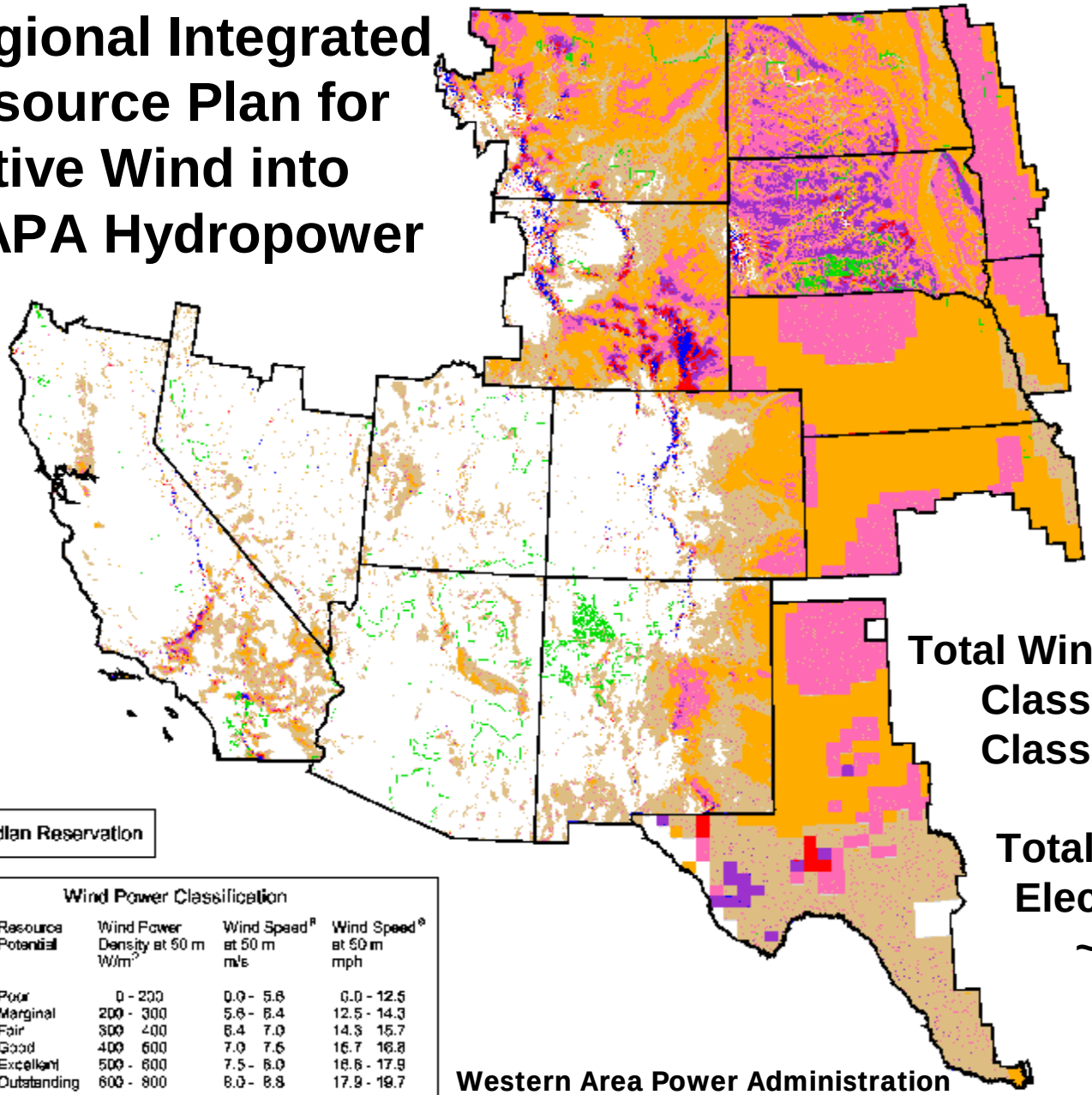
Intertribal COUP will apply for BIA grant for development - Spring 2006

Continuing discussions with WAPA / Dakota Wind Transmission Study
- Interconnection Studies for 10 MW sites
- Supplemental Power Purchase requirements

Discussion with Basin Electric on reservation projects

Discussion with IOUs on PPA potential (Xcel, Otter Tail, MRE Services)

Regional Integrated Resource Plan for Native Wind into WAPA Hydropower



Nine of the Top Ten Wind States in the U.S. are located in the WAPA Service Territory

WAPA's total hydro-power capacity is 17,474 MWs with 2,791 MWs UGPR

Total Wind Power Potential:
Class 3+ 4,500 GWs
Class 4+ 2,000 GWs

Total U.S. Installed Electric Capacity ~ 800 GWs

Indian Reservation

Wind Power Classification

Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m²	Wind Speed[a] at 50 m m/s	Wind Speed[a] at 50 m mph
1	Poor	0 - 200	0.0 - 5.6	0.0 - 12.5
2	Marginal	200 - 300	5.6 - 6.4	12.5 - 14.3
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7

[a] Wind speeds are based on a Weibull k value of 2.0

Western Area Power Administration
Wind Power Potential

U.S. Department of Energy
National Renewable Energy Laboratory

NREL

07-FEB-2005 5.2.1

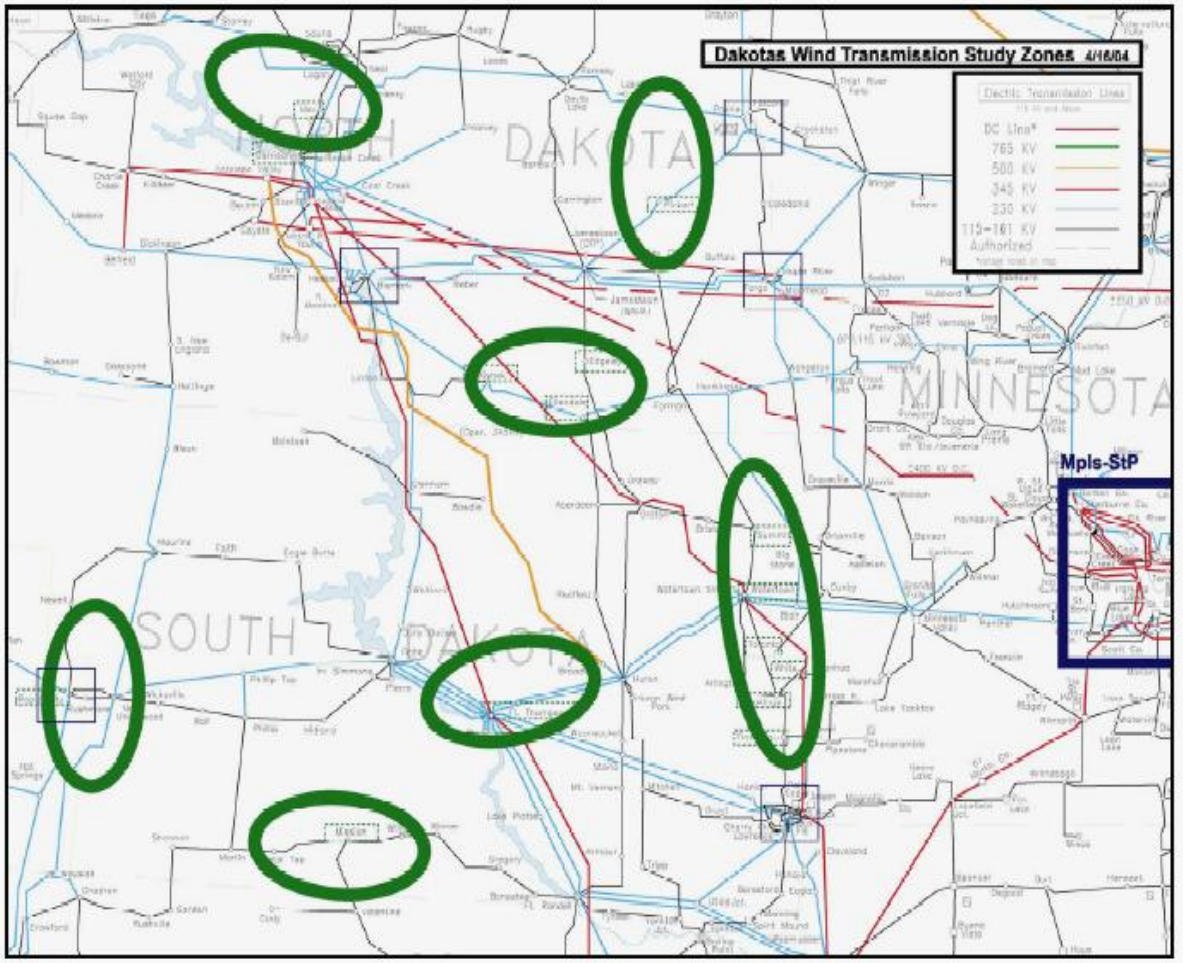
Rosebud's 750 kW Turbine produces 2.4 Mil kWh/yr.

IntertribalCOUP.org

Ft. Berthold's 65 kW Turbine installed Sept 30, 2005

IntertribalCOUP.org

WAPA / WIND INTEGRATION STUDY AREA

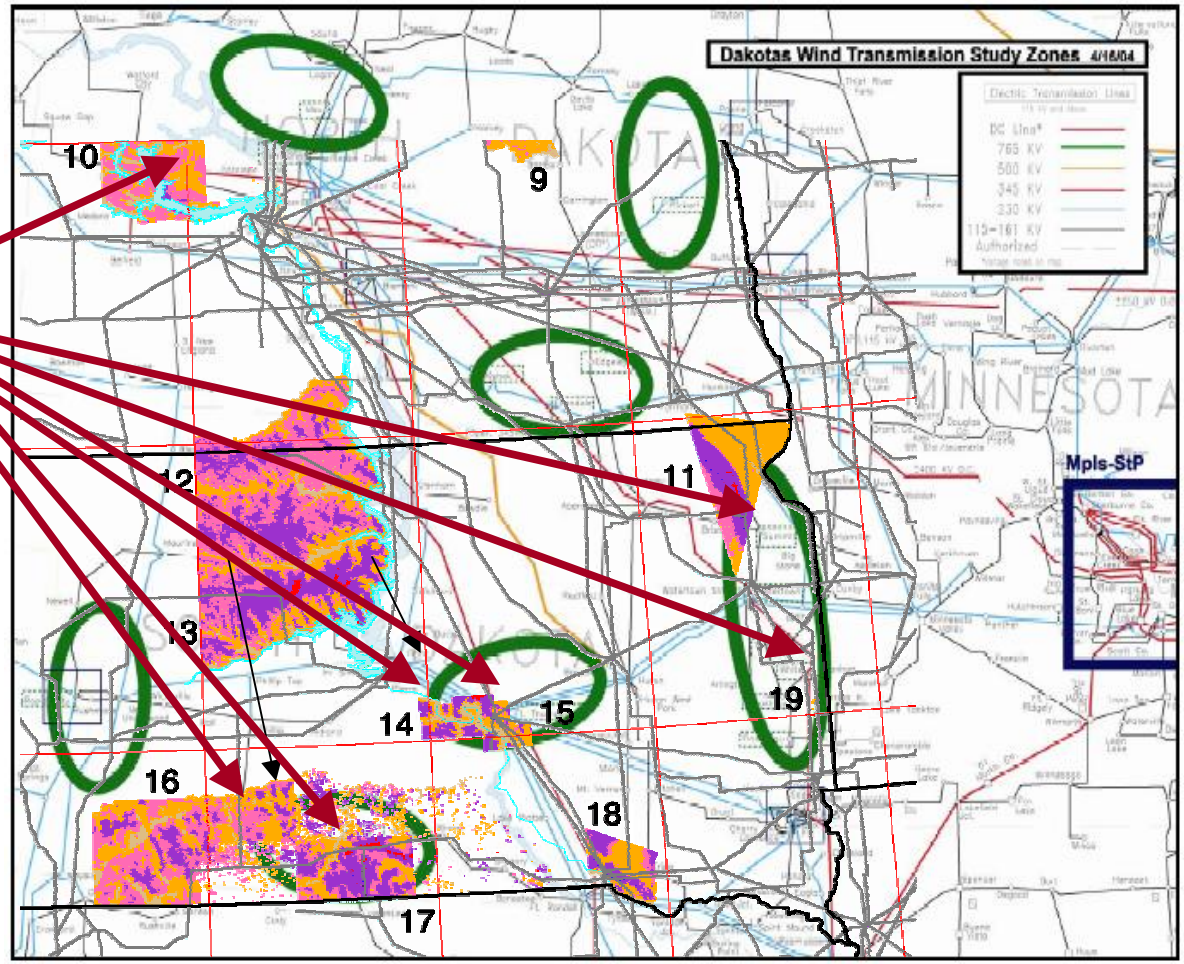


http://www.wapa.gov/ugp/study/DakotasWind/Zone%20Map.pdf

WAPA / WIND INTEGRATION STUDY AREA

Includes Several Reservation Interconnection Sites

Intertribal COUP Proposed WAPA Wind Study Site Areas



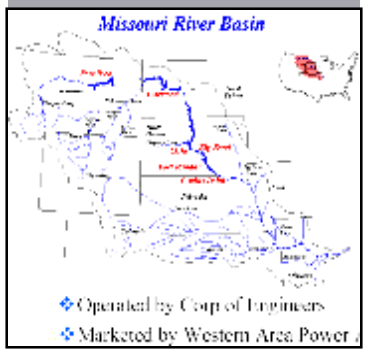
http://www.wapa.gov/ugp/study/DakotasWind/Zone%20Map.pdf

www.NativeWind.org

Restoring and Recharging
"The Federal Renewable Energy Grid"

Western Area Power Administration

Serving the West with Federal Hydropower



… And Tribal Renewable Energy

- Cities & Tribes are on WAPA grid as eligible WAPA *"Preference Customers"*
- Federal trust responsibility to Tribes
- Sustainable Homeland Economies
- Great Wind/Hydro Dynamo Potential
- Diminishing Hydropower Resource
- Clean Air Quality and Attainment
- The grid, once 100% renewable, is now only 20% hydropower and 80% coal
- Federal Renewable Energy Grid 20% hydro & 30% wind / 50% coal-gas

www.NativeWind.org

Implementing the energy bill at WAPA

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

Title V—Indian Energy

Section 502 creates an Office of Indian Energy Policy and Programs within the Department of Energy.

Section 503 amends Title XXVI of the Energy Policy Act of 1992.

Section 2602 of EPAct is amended to allow Federal agencies to give preference to electricity purchased from tribes at prices not greater than prevailing market rates.

Section 2604 of EPAct is amended to provide 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.

Implementing the energy bill at WAPA

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

Title V—Indian Energy

Section 2605 of EPAct requires Federal power marketing administrators to encourage Indian tribal energy development. New amendments under this section include:

• Tribes are allowed to use power allocations from Western to meet firming and reserve needs of Indian-owned energy projects on Indian land.

• Western may purchase non-Federally generated power from tribes to meet its firming and reserve requirements.

• Western may provide technical assistance for tribes wanting to use the high-voltage transmission system to deliver electric power.

Implementing the Energy Act

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

Title V—Indian Energy

Section 2605 The Secretary of Energy must conduct a study describing the use and quantity of power allocations sold to, or for the benefit of, tribes by the PMAs and the barriers that impede tribal access to Federal power. The report must describe how to remove those barriers and improve the ability of the PMAs to deliver Federal power to tribes.

Section 2606 of EPAct is amended to require the Secretary of Energy to conduct a study of the cost and feasibility of developing a demonstration project that uses wind energy generated by tribes and Federal Missouri River hydropower to supply firming power to Western.

Section 504 requires the Energy and Interior secretaries to consult with Indian tribes to the maximum extent practical.

ENERGY POLICY ACT OF 2005

Section 2602 (d) Federal Agencies-Indian Energy Preference-
(1) In purchasing electricity or any other energy product or by-product, a Federal agency or department may give preference to an energy and resource production enterprise, partnership, consortium, corporation, or other type of business organization the majority of the interest in which is owned and controlled by 1 or more Indian tribes.
(2) In carrying out this subsection, a Federal agency or department shall not--
(A) pay more than the prevailing market price for an energy product or by-product; or
(B) obtain less than prevailing market terms and conditions.

ENERGY POLICY ACT OF 2005

SEC. 203. FEDERAL PURCHASE REQUIREMENT.

(a) Requirement- The President, acting through the Secretary, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy:

(1) Not less than 3 percent in fiscal years 2007 through 2009.

(2) Not less than 5 percent in fiscal years 2010 through 2012.

(3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter

(c) Calculation- For purposes of determining compliance with the requirement of this section, **the amount of renewable energy shall be doubled if--**

(1) the renewable energy is produced and used on-site at a Federal facility;

(2) the renewable energy is produced on Federal lands and used at a Federal facility; or

(3) **the renewable energy is produced on Indian land** as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) **and used at a Federal facility.**

ENERGY POLICY ACT OF 2005

SEC. 2604. LEASES, BUSINESS AGREEMENTS, AND RIGHTS-OF-WAY INVOLVING ENERGY DEVELOPMENT OR TRANSMISSION.

Allows Intertribal Wind Company to serve as a `tribal energy resource development organization'

Allows Tribes to develop Tribal energy resource agreements for renewable energy projects

SEC. 1303. ***Clean Renewable Energy Bonds ("CREBs").*** 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.

MILESTONES of ENERGY ACT OF 2005

90 days after enactment (Nov. 7, 2005):

DOI Study on Renewable Energy on Federal Lands: DOI shall contract with NAS for a study on the potential for developing renewable energy on federal lands. No later than 2 years, submit to Congress study results. §1833

DOI Report on Potential Hydropower Facilities: Submit to Congress a report describing the status of potential hydropower facilities included in studies undertaken by the Secretary for projects that have not been completed or authorized for construction. §1840

120 days after enactment (Dec. 6, 2005):

DOE Report on Solar and Wind Technologies: Submit report to Congress containing detailed summaries of the roadmaps prepared under subsections (a)(1) and (b)(1) of Title 8, descriptions of the Secretary's progress in establishing projects and programs required under this section, and recommendations for promoting the availability of advanced solar and wind energy technologies for the production of hydrogen. §812

MILESTONES of ENERGY ACT OF 2005

180 days after enactment (Feb. 6, 2006):

DOE Assessment of Renewable Energy Resources: Review available assessments of U.S. renewable energy sources, undertake new assessments if necessary. (annually thereafter) §201

1 year after enactment (Aug. 8, 2006):

DOE Assessment of Renewable Energy Resources: Report on available renewable energy resources in the U.S. (annually thereafter) §201

DOI Report on Insular Areas: Submit to Congress updated plans for each insular area required by this section. §251

DOE Wind Energy Feasibility Report: The Secretary of Energy with the Secretary of the Army shall submit a report to Congress that describes the results of a study of the cost and feasibility of developing a demonstration project that uses wind energy generated by Indian tribes and hydropower generated by the Army Corps of Engineers on the Missouri River. §503

MILESTONES of ENERGY ACT OF 2005

18 months after enactment (Feb. 8, 2007):

DOE Report on Status of Federal Purchasing Requirement: Not later than April 15, 2007, provide report to Congress on the progress of the federal government in meeting the renewable energy consumption goals of this section. (every 2 years thereafter) §203

DOE Concentrating Solar Power Report: The Secretary submit a report with the 2008 budget request assessing the potential impact of technology used to concentrate solar power for electricity. §933

DOI, DOE and Army Study/Report on Increased Hydroelectric Generation at Existing Federal Facilities: Conduct a study and report to Congress on the potential for increasing electric power production capability at existing federal hydro facilities. §1834

*Native*Energy is now Native-Owned!

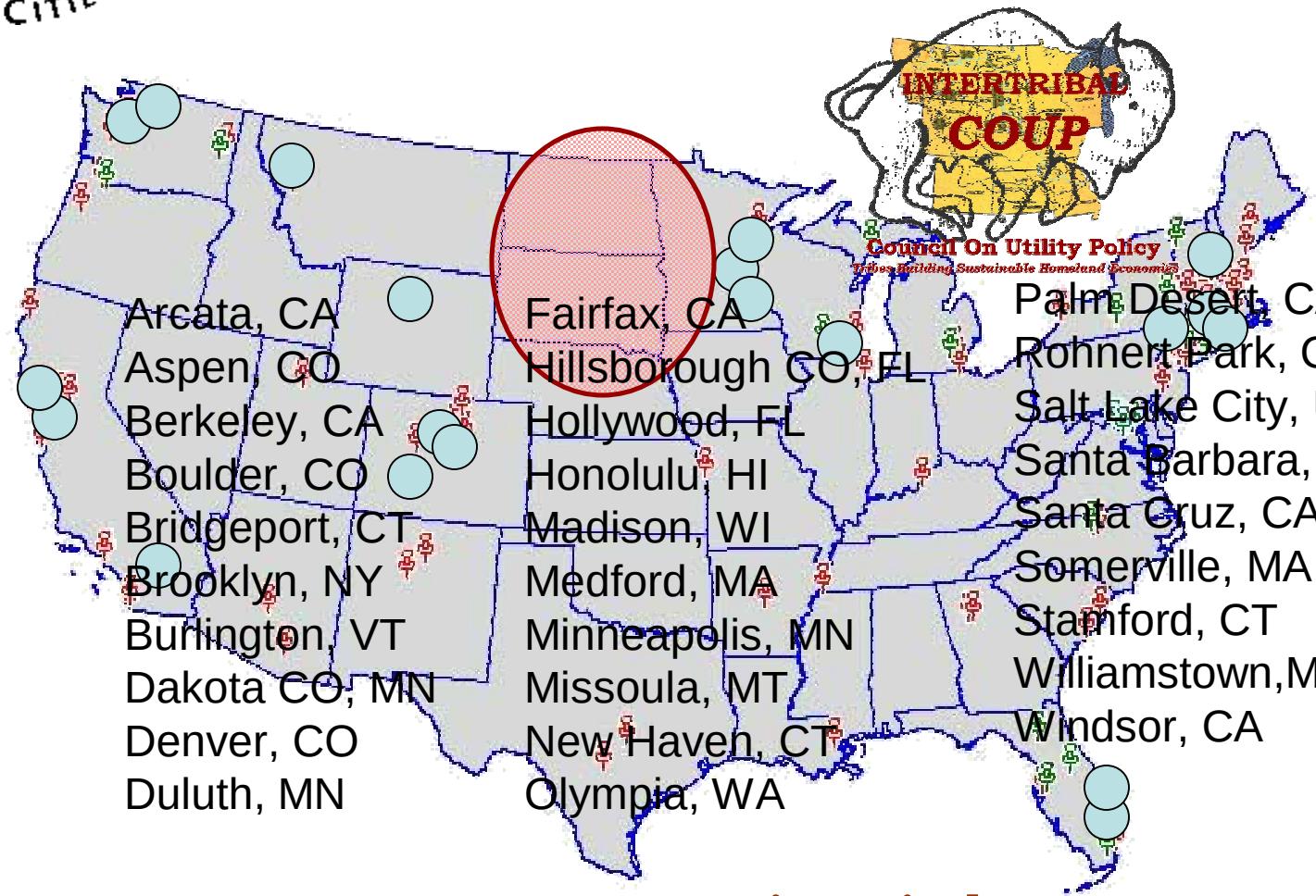
Intertribal COUP Executive Council and the founders of *Native*Energy

Intertribal COUP acquires majority stake in leading renewable energy marketer, on behalf of its member tribes.

Rosebud, SD and Charlotte, VT (August 16, 2005) – ***Native*Energy**, a leading national marketer of Renewable Energy Credits (RECs) and greenhouse gas offsets, and the nonprofit **Intertribal Council On Utility Policy** (COUP), announced today that COUP has acquired a majority interest in ***Native***Energy…

www.NativeWind.org

American Leadership
Energy Independence Day. org
Local Government/Tribal Partnership
Signers to Date



Arcata, CA
Aspen, CO
Berkeley, CA
Boulder, CO
Bridgeport, CT
Brooklyn, NY
Burlington, VT
Dakota CO, MN
Denver, CO
Duluth, MN
Fairfax, CA
Hillsborough CO, FL
Hollywood, FL
Honolulu, HI
Madison, WI
Medford, MA
Minneapolis, MN
Missoula, MT
New Haven, CT
Olympia, WA
Palm Desert, CA
Rohnert Park, CA
Salt Lake City, UT
Santa Barbara, CA
Santa Cruz, CA
Somerville, MA
Stamford, CT
Williamstown,MA
Windsor, CA

www.NativeWind.org

NATIVEWIND

ENERGY INDEPENDENCE

INTERTRIBAL COUP

Conclave of U.S. Mayors and Native Leaders:

Tuesday, Nov. 15

Native Renewables Energy Summit: Solutions for Tribes and Cities

Wed-Thur, Nov. 16-17

Denver, Colorado

www.NativeWind.org

INTERTRIBAL COUP

Council On Utility Policy