UNITED STATES SENATE
COMMITTEE ON INDIAN AFFAIRS

HEARING ON
INDIAN ENERGY LEGISLATION
S. 424 and S. 522
Washington D.C.
March 19, 2003

Testimony of:
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On Behalf of
INTERTRIBAL COUP ~ Council On Utility Policy
and
The Rosebud Sioux Tribe Utility Commission

Introduction:

Hello, my name is Bob Gough, and I am here today on behalf of the Intertribal Council On Utility Policy (COUP) and of the Rosebud Sioux Tribe Utility Commission. Both are headquartered on Rosebud Sioux Indian Reservation in South Dakota. Intertribal COUP represents the majority of the tribes based in the Northern Great Plains and has been one of the leaders in the area of Indian renewable energy policy over the last decade. We have worked closely with the National Congress of American Indians and are one of the founding members of the Inter-Tribal Energy Network (ITEN), a group of regionally- based intertribal organizations concerned with a variety of energy issues.

Thank you Chairman NightHorse Campbell, and Senator Inouye, on behalf of all the American Indians for your leadership in holding this hearing today and for introducing the Indian Energy legislation, S 524,and S 424. I would be remiss in not also thanking Chairman Domenici and Senator Bingaman for their support and their introduction of alternative energy tax legislation. Your collective efforts provide the tools to create a clean sustainable energy future, not only for American Indian Tribes, but for all Americans.

In my time before the committee today, I will share with you an overview of the resources that are available on America's reservations, the experience of Rosebud, and highlight several key provisions in your legislation which the Intertribal COUP believes are essential in making America's Indian energy potential a reality.

Overview of Tribal Renewable Energy Resources:

Let me begin with the Potential: Slide #1 in your packet, is a color slide graphic that shows information available from the Department of Energy regarding on Tribal renewable energy resources of wind, solar, geothermal and biomass across the United States. While I will limit my remarks primarily to wind power, as you can see, Indian lands are blessed in abundance with a variety of renewable energy resources.

Looking at the wind map, you will see the reservations denoted, with the dark areas the highest sustained wind resource as correlates to the reservations. Looking just at the northern Great Plains, this analysis suggests a potential contribution for electric power supply of over 300 gigawatts from wind power alone! To put that in perspective, this is about one-half of the total installed electric capacity for the entire United States, and over 100 times the capacity of all the mainstream dams on the Missouri River.

The second map does the same for solar resources in the United States as it correlates to the reservations. The third shows the same correlation for geothermal, and the last shows biomass potential. The conclusion is clear; there are abundant untapped resources on American Indian Reservations which can be brought to the benefit not only of the American Indian people but also to the society at large.

Over the years, a number of Tribes have installed a variety of small-scale renewable energy technologies utilizing wind, solar and geothermal. Today, several dozen tribes are in the process of measuring their wind resources, in collaboration with the Department of Energy, through the joint Wind Powering America and Western Area Power Administration's Tribal Anemometer Loan Program.

The Rosebud Sioux Wind Turbine Project Experience:

As you can see from my attachment in the testimony, the Rosebud Sioux Tribe Wind Turbine is up and running today. It is expected to produce on average 2.4 million kilowatt hours of clean electricity annually over the next 20 to 30 years. This is a first its kind in America. It is owned by the Tribe and interconnected to the grid (the largest machine in the world).

In all, it has taken eight years from conception to completion from initiating the necessary tribally anemometer studies in January 1995 to commissioning it in February 2003. We believe we have laid the groundwork for what easily could be another 80 to 130 megawatts of tribal power on reservations in the northern Great Plains over the next 18 months. It is my honor to invite the committee members and the staff to celebrate with the Sicangu Lakota of the Rosebud on May 1st at the Rosebud dedication ceremony.

The Rosebud Project is a collaborative partnership between the Tribe and the Department of Energy. It is the first large utility scale (750 kW) commercial wind development in the lower 48 states that is totally owned and operated by Indians for the benefit Indians. The passage of your Indian Energy legislation before the committee today is a minimum requirement for the dream of 80 to 130 megawatts to become a reality.

As we learned with Rosebud, you cannot finance or build a commercial wind project without a sound business plan that includes good wind data, the necessary interconnection and long-term power purchase agreements. If you do not have accurate data for the resource, the documented desire in the market to purchase the power over a number of years, or a way to get your power to that market, you simply cannot get the financing to build the project.

The sale of "green power" to Ellsworth Air Force Base through a Western Area Power Administration "green tags" program has played an essential role in the completion of Rosebud. Federal support for the ongoing purchase of "green power; and a "green tags" program managed by the power marketing administrations are essential if the federal government is to approach the announced goals of 2 ½% of federal electricity consumption by 2005.

Workable mechanisms to assist and encourage the interconnection of Tribal projects into the federal grid system operated by WAPA must be in place to allow Tribes to build sustainable homeland economies based upon renewable energy generation with the sale of clean energy into both federal and private markets. This means that Tribes

need to work with the federal government and particularly with the Western Area Power Administration as full treaty partners.

But let me be clear: This is not a giveaway!

We believe one of the keys to building new power is the valuation assigned to the power itself. If the generation of electric power was viewed in terms of overall output based standards, i.e., if you look at what is the cost of the emissions plus the cost of the feedstock to create the power, tribal renewable projects, especially wind power, are a better economic deal today!

Even under the old system, competing against one of the oldest and dirtiest grandfathered coal plants, we were economically competitive. Plus, wind projects are more quickly deployed (in a matter of months rather than years as with conventional generation) and can be built in incremental stages allowing for expansion as demand grows.

Key Provisions in S 424:

Sec. 103: Sitting of Energy Facilities on Tribal Land. We would recommend that issues and concerns arising in the context of cultural resources and environment justice with regard to any particularly affect community be specifically addressed, as such issues can delay and ultimately derail or reverse such projects unless adequately addressed up front in the review process.

Sec. 105: Renewable Energy Study. In our view, renewable energy studies and bi-annual reporting are necessary as new barriers will arise from the fact that Tribes often lack control of their own rate bases (Tribes are served by outside utilities) and are treated as "new kids on the block" by the existing utilities, especially with the application of newer renewable energy technologies that the existing utilities either have little experience with or consider competition to their established markets.

Sec. 106: Federal Power Marketing Administrations: Overall, the Federal Power Marketing Administrations are critical to the development and expansion of tribal wind power. In the Dakotas and for Tribal renewable energy development in some 15 states across the West, the WAPA federal transmission grid crosses or interconnects to the vast majority of Indian reservations. WAPA, along with the Bonneville Power Administration, provide our "farm to market roadways". They are in strategic positions to facilitate the collection of tribal energy generation and for the delivery of tribal green power to federal facilities throughout the west. Further, under a tribal "green tag" program, the federal power administrations could meet the entire federal governments "green power" requirements under Executive Order 13101and, in particular, the goal of Executive Order 13123 for the use of tribal renewable energy sources to generate the equivalent of 2.5% of federal facility electricity consumption by 2005, in both the most cost efficient and energy efficient manner, while building our reservation economies.

Specifically, I would recommend the insertion of the words " and replacement" following the term "firming" with regards to Western's purchase of renewable energy, especially in light of the diminished hydropower in the region due to the ongoing drought. Western has seen high increases in the cost of replacing hydropower in the Missouri River basin due to the changing climate precipitation patterns in the region. Including only "firming" requirements leaves to door open to denying any purchase of renewables based upon Western's determination that wind and solar are not sources of firm power.

In section (B) (iii), we would suggest the insertion of the words "and transmission" after "use of Federal power".

Also, based upon experience in the Northern Great Plains, I have been asked to request that where the word "may" is used in terms of Western's working with the Tribes, that drafters consider the word "shall" to assure a mutually cooperative working relationship.

Sec. 107: Feasibility Study for Combined Wind and Hydropower Demonstration Project:

Generally, the same comment as above on "firming and replacement". In (a)(4) I would suggest that "a determination of resource" be spelled out to specifically to include "transmission access and capacity" along with wind energy.

In section (c) (4), we would recommend the insertion of the word "cultural resources" after the word "economic" in the phrase "economic and environmental benefits…"

Sec. 201: Renewable Energy Production Incentive.

This is long over due, and is a good first step; but may not go far enough to assist in large scale development. The inability of Tribes to own a project and receive a bankable "Production Tax Credit" that has driven non-Indian renewable energy development is a major economic barrier that disadvantages the financing of large tribal projects. Simply put, the REPI is not bankable, since it can't be included in a business plan. The power of making Tribes eligible for the bankable PTC that is assignable, tradable, or which could be used to offset federal loan financing, would greatly encourage Tribal renewable development.

Key Provisions in S 522:

Section 2602: Definitions. (11) Vertical Integration of Energy Resources.
We would recommend that "(B) electricity transmission" also include "distribution".

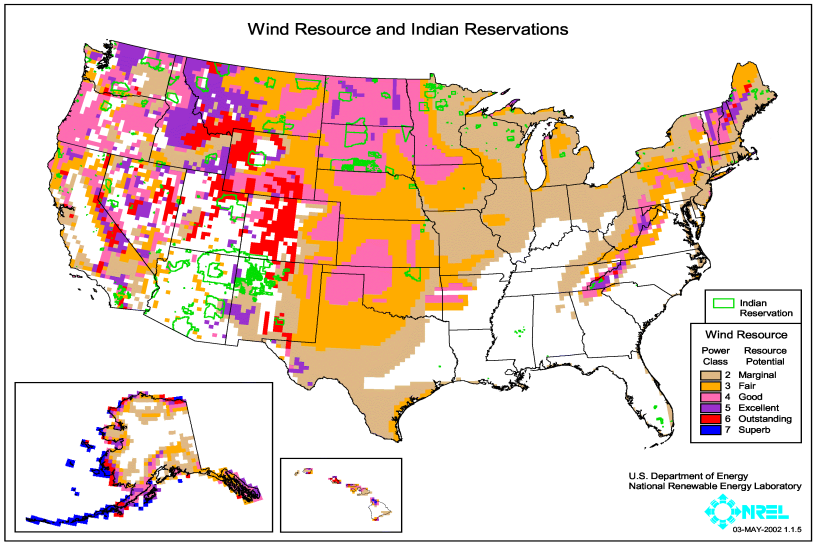
Section 2605: Leases, Business Agreements, and Rights-Of-Way Involving Energy Development or Transmission. (e) Tribal Regulatory Requirements. (C) Environmental Review Process. Same as above in Section 103 of S. 424.

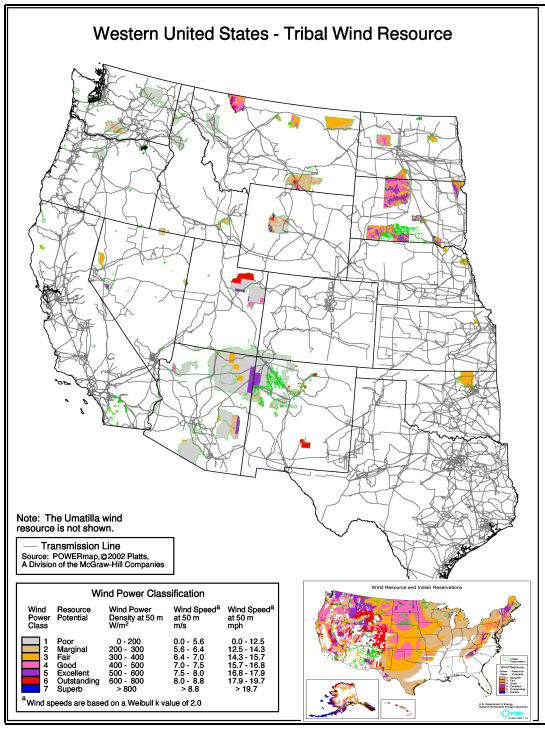
Let me conclude by thanking the Committee and its members for the introduction of stand alone Indian Energy legislation and for the opportunity to appear before you

today. I would respectfully request the opportunity of submitting extended written testimony on some of the points highlighted this afternoon. I stand ready to answer questions you may have and pledge the Intertribal Coup's support in assisting in the passage of the legislation through the Congress this year. .

APPENDIX

Testimony of Intertribal Council On Utility Policy
Senate Indian Affairs and Energy Committees Hearing
March 19, 2003





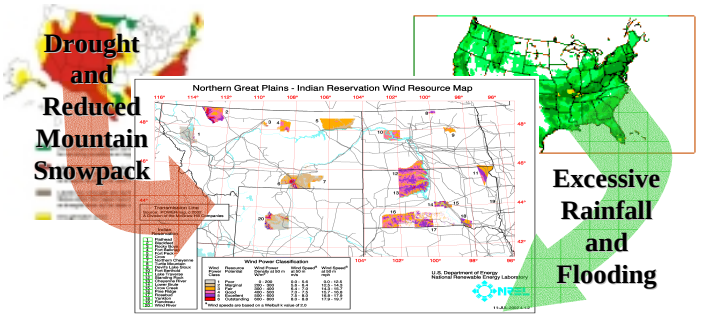
TRIBAL WINDPOWER: CLEAN, UNTAPPED, INEXHAUSTIBLE & COMPETITIVE

- **American Indian Tribes have tremendous untapped renewable energy resource potentials.**
- **On and off-grid applications can be used to meet local Tribal needs.**
- **Tribes are interconnected to federal WAPA/BPA grids for off-reservation sales.**
- **Federal Power Marketing Administrations could efficiently serve "green" markets.**
- **Windpower = Zero emissions.**
- **Distributed Indian owned wind power could cost effectively meet federal, state and tribal renewable portfolio standards (RPS).**

Intertribal Council On Utility Policy

TRIBAL WIND - FEDERAL HYDRO:

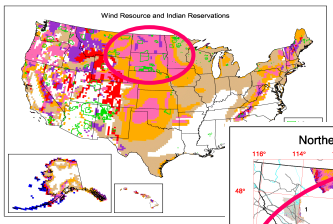
Windpower can break a positive feedback loop in the CO2 Energy Cycle

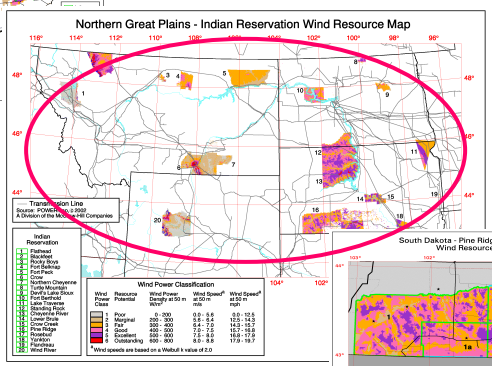


Tribal Wind **can replace diminishing Federal Hydropower on Western Transmission Grid.**

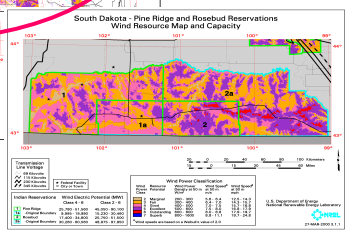
- **... Increased drought and precipitation shifts, which are consistent with changing climate forecasts, are associated with increased levels of CO2 from coal fired power plants -- Reduced snowpack and drought are likely to be the "New Normal" for the West!**
- **Missouri River dam operations managed by the Army Corps of Engineers are based upon the last 100 yrs. of flow -- hydropower production for WAPA is based on the "Old Normal".**
- **Hydropower is only an incidental responsibility of the Corps of Engineers. COE holds back water due to drought and flood conditions, reducing hydroelectric power generation.**
- **Hydropower marketing administration (WAPA) buys coal power to offset hydropower shortfalls, increasing the atmospheric CO2, resulting in greater drought and precipitation shifts, leading to ...**

The TREMENDOUS WIND POWER RESOURCES found on the NORTHERN GREAT PLAINS INDIAN RESERVATIONS:



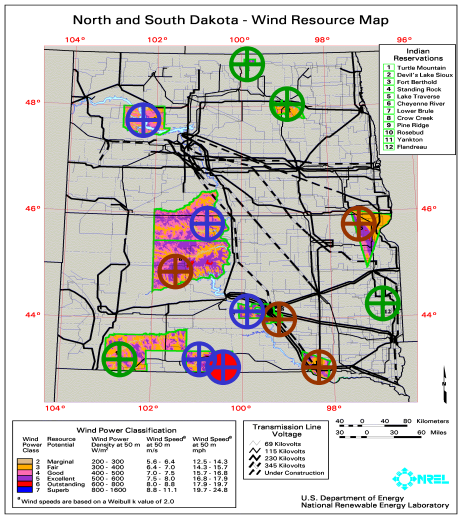


Twenty Northern Plains Indian Reservations hold several hundred gigawatts of wind power potential.



Windpower potential on the Pine Ridge and Rosebud Reservations alone are enough to met the Kyoto targets for all of North America.

INTERTRIBAL Council On Utility Policy
Tribes with Commercial Wind Resource Data



Twelve Reservations with 250 to 300 GW of wind power potential

Four Tribes with at least 40-50 meter tower anemometer wind data in the Dakotas

Federal hydro-power dams: 4 in SD, 1 in ND and 1 in Montana

Intertribal COUP Tribes in North and South Dakota

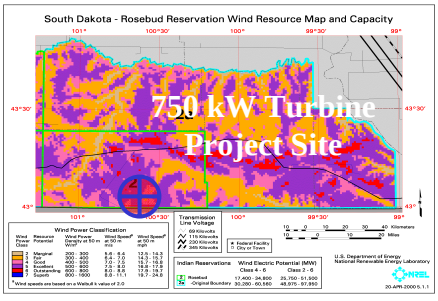
- Without Data
- With Wind Data
- Commercial Data
- .75 MW Turbine

Intertribal COUP
Council On Utility Policy

Rosebud 750 kW Wind Turbine
Installation: Feb. 27 2003 ~ Dedication: May 1st, 2003

The first Tribally owned 750 kW utility scale NEG MICON wind turbine operated by the Rosebud Sioux Tribe in partnership with:

- Department of Energy (DOE)
- Rural Utilities Service (RUS/USDA),
- DisGen, Inc. (Engineering)
- Basin/CherryTodd/ NPPD/ WAPA/ Ellsworth AFB
- Native*Energy*, Inc. (Green Tags)



SIGNIFICANT ACCOMPLISHMENTS:

- 1st DOE Commercial Tribal Project
- 1st Tribally-Owned 750 kW Turbine
- 1st RUS loan for Tribal Wind
- 1st Tribal Green Tag sales
- 1st Tribal-DOD Green Power sales

Rosebud Wind Power Electric Potential (MW)

	Class 4-6	Class 2-6
Todd Co:	17,400 - 34,000	25,750 - 51,500
Original:	30,260 - 60,560	48,975 - 97,950

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