

Wind Energy Project Pre-Development Phase

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Renewable Energy
Development on Tribal
Lands

FY 2003-06 Project

Dept. of Energy NREL

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Kaw Nation Wind Energy Project Pre-Development Phase Briefing Outline

- Project Overview
- Goals & Objectives
- Types of Development
- Project Location

- Project Participants
- Ongoing Activities & Future Plans
- Questions



Project Overview Gift to the Wind People

- In considering Energy Resources it is relevant that the Kaw, or Kanza, utilize the gift of wind power.
- The Nation's name derived from three subdivisions:
 - Tajé Zhínga: "Little Wind" or Mannáhije: "Makes-a-breeze-near-the-ground"
 - Ák'a Oníkashinga: "South Wind People"
 - Tajé Oníkashinga: "Wind People"
- The Kanza have revered the South Wind in all ceremonial activities. (Kaánze, second syllable scarcely audible)

Project Goals & Objectives

- Identify optimal low-cost, renewable energy to serve tribal members and enterprises.... while providing opportunities for sustainable economic expansion on all trust lands.
- Preserve Native American Cultural Significance
- Initiate & Facilitate Community Energy Development for Adjacent NA Governments

Goals & Objectives (continued)

Subsequent Wind Development

Maximize Tribal Economic Benefits

- Explore ways to employ Wind power to lower electric rates &/or offset production costs
- Determine tribal energy requirements for services, enterprises & proposed Chilocco development
- Determine cost/benefit potential: selling local power vs exporting to regional markets to create revenues

Create NA Employment opportunities

- Proposed wind development enabler will address:
 - # jobs & skills to operate & maintain proposed facilities
 - Staff current & future needs of present NA ops in Service area
 - Staff activities for future Chilocco development
- Supporting-development jobs

Goals & Objectives (continued) Subsequent Wind Development

- Develop Renewable Energy Sources on NA Lands while maximizing NA Cultural significance for community development
 - Preserve individual identity
 - Celebrate and renew collective identity
- Technology Transfer to tribal members, resource & enterprise management
 - Provide Kaw Nation w/training materials to assess & develop wind facilities
 - Establish skill set within tribal and intertribal memberships
 - Project success will enable enterprise expansion & realization of Tribal energy self-sufficiency to offset current energy costs (Facilities Energy Audits/Conservation)

Chilocco Indian School, OK

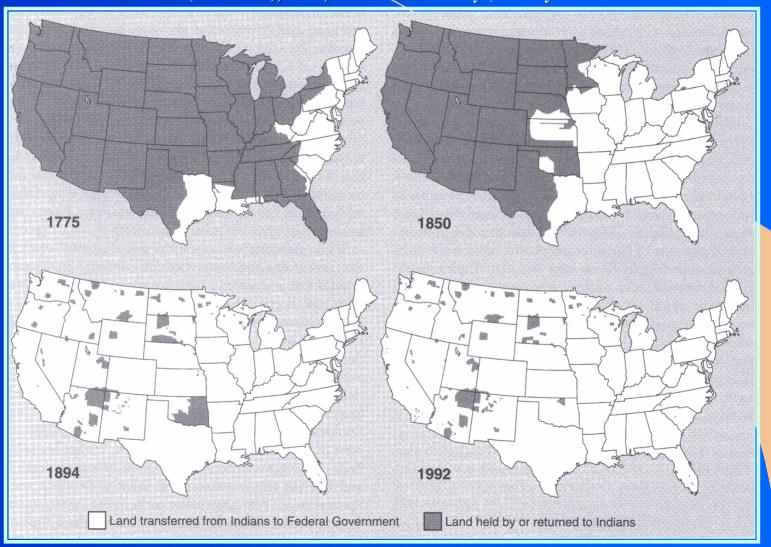
School History

- Est. 1884 by US Gov't ed. W. OK tribes through 8th grade
- Original school built on 8,320 acres purchased from Cherokees
- School based on Industrial Plan
 - Half-day academic subjects
 - Half-day vocational subjects
 - Boys studied Ag pursuits
 - Girls learned domestic arts
 - School produced own food
 & other items needed
- 1907: Expanded to include all Indian children except Five Civ. Tribes (1-bldg to 35-bldgs)
- After 1910 admits children from Five Civ Tribes
- 1916: Education thru 10th grade
- Late 1930's: lower Elem. Grades elim.; Jr-Sr high cont.

- After WWII: only high school
 - Between 1930-1959 annual enrolled between 800-1200 students
- Closed June 1980 amid opposition from Indian parents
- Rather than transform nomadic Indians into"civilized" American farmers & citizens, actually reinforced Indian & tribal identity among students
- Trained leaders of western OK tribes for half century, creating bonds of friendship of different tribes
- Chilocco help create pan-Indian identity among Indian people in OK
- After 1980, property in transition without defined use
- 1993 to early-2002: Church of Scientology used portion of school for substance abuse & rehab center
- Initiated Natl. Hist. Site process (2004)

Native American Land Losses 1775 – 1992

Source: R. David Edmunds (Cherokee), 1996, Indiana University (in Encyl. of North American Indians)



Types of Development

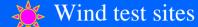
- Kay County, Oklahoma
 - Chilocco Area development of trust lands
 - Integrated development (Inter-tribal coop)
- Guide for Major Developments
 - NA Education & Training Center
 - Wind Center of Excellence
 - Higher Ed courses
 - Other Vo-tech jobs training for region
 - Inter-Tribal Governance Projects
 - Associated inter-tribal government activities; NA School of Government (NCIC)
 - Operate Wind DEG system to power other Chilocco developments (e.g.)
 - Language & Cultural Preservation Ctr
 - Native American Diabetes Ctr (5+ yrs)
 - Native American Community College at Chilocco renewed campus (5+ yrs)
 - Museums and Archive Facilities
 - Elder Care Facilities
 - Ceremonial Circle for community events





Project Location North Central Oklahoma

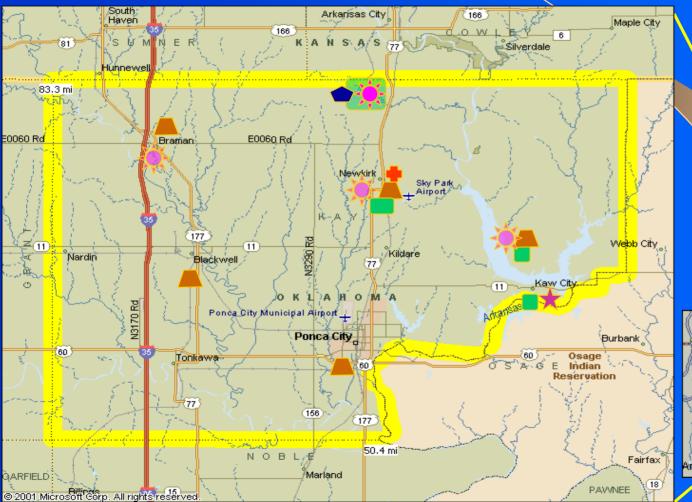






Housing or Enterprise

Med Clinic &
Social Services
Trust Lands





Project Location (continued)

Kay County, OK

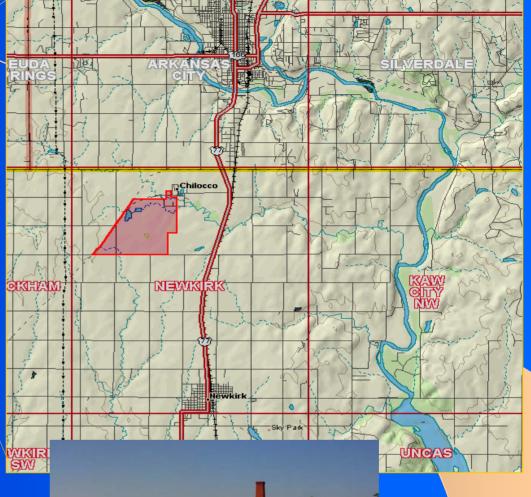


Intertribal Ownership

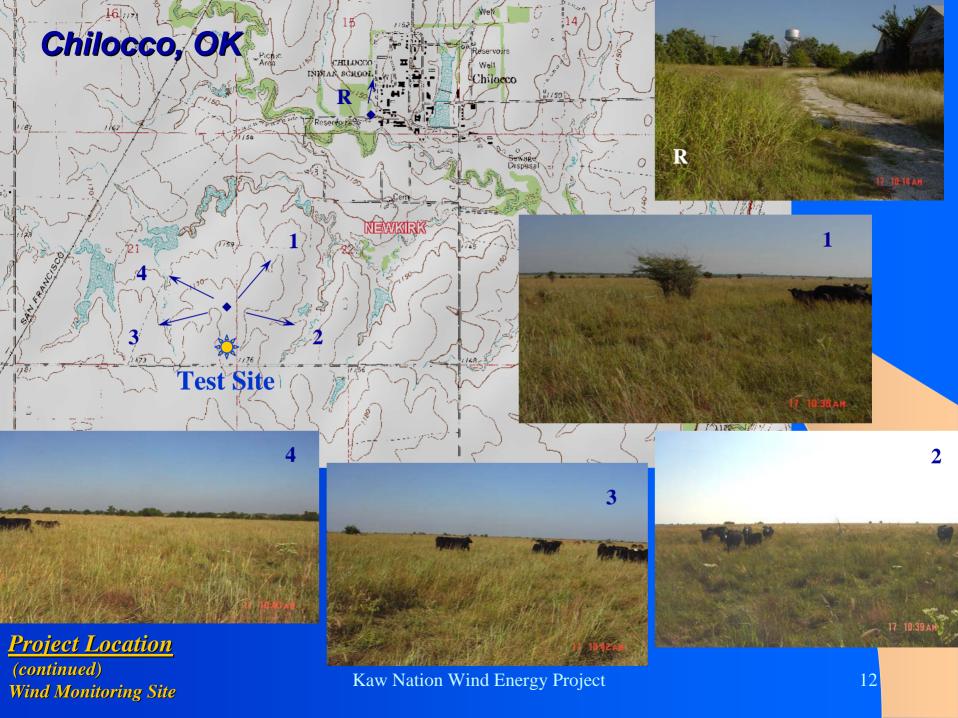
Kaw... Ponca... Pawnee
Otoe-Missouria... Tonkawa

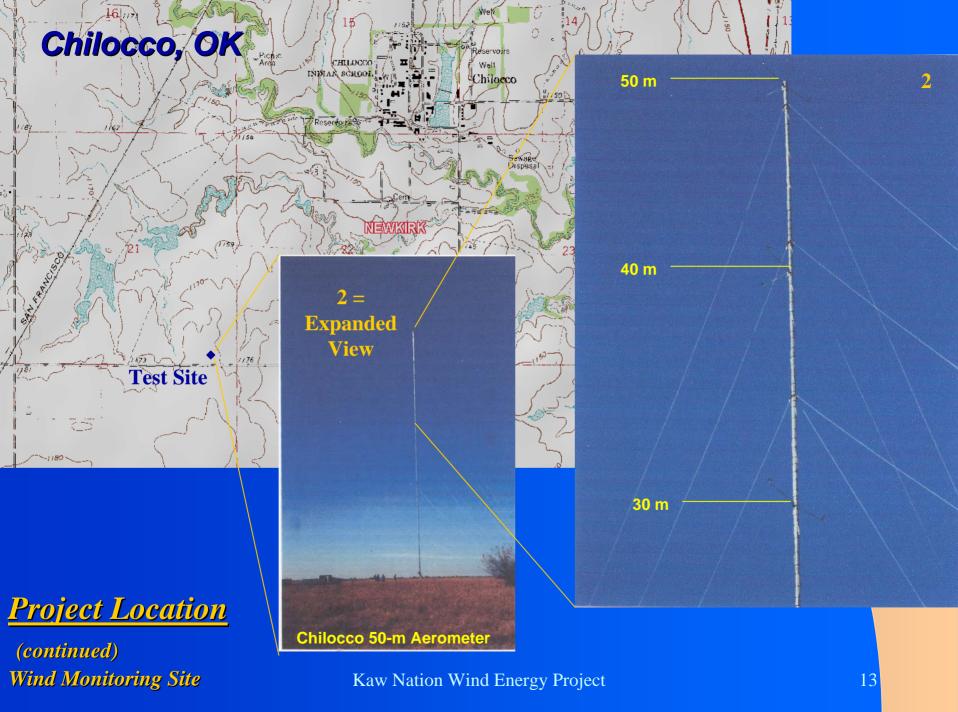
Adjacent Ownership

Cherokees









Project Participants

- Kaw Nation
 - General & Executive Councils
 - Utilities Commission (KNUC)
 - Environmental Dept (KNED)
 - Cultural Cmte (Cultural Studies)
- Native American Interests
 - Chilocco Inter-Tribal Council
 - Ponca... Otoe Missouria...
 - Pawnee... Tonkawa...
 - Cherokees
 - Cultural Grps (CAA, etc.)
- Power & Transm. Interests
 - Western Farmers Electric
 - OG&E Power Distributor
 - OK Municipal Power Authority (OMPA)
 - SW Power Pool (SPP)

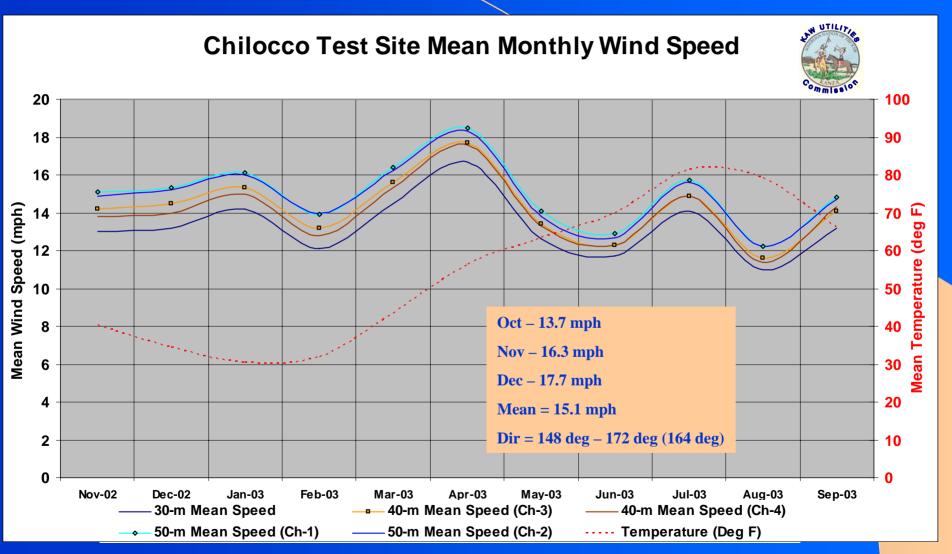
- Contractors
 - **Distributed Gen. Systems (Disgen)**
 - Ed McCarthy (Met Studies)
 - Western EcoSystems Tech., Inc. & Northern OK College (Avian Assessment)
- State Interests
 - Kay County communities
 - Oklahoma Wind Power Initiative (OWPI)
- Federal Interests
 - DOE NREL
 - BIA Energy & Minerals
- Moral & Advisory Support
 - ICOUP (Pat Spears & Bob Gough)
 - CERT



Feasibility Phase Results

- Sufficient wind resource to obtain financing (19-months assessment as of Oct 2003 & counting 43 months as of Oct 2005):
 - Small variations month to month, steady power
 - Class 3-4 Wind Resource at 50m
 - Grid and farm production feasible
- A preliminary Phase I Avian resource assessment showing manageable impacts,
- Cultural issue needs to preserve historically important former Indian school artifacts or facilities,
- Existing local transmission utilities and capacity sufficient to enter the development phase of project evaluation,
- Willing Utilities (OG&E and OMPA) ready to discuss wind development,
- Southwest Power Pool support in developing the project, and
- Potential green tag federal interests in the transmission area.

Feasibility Results (cont)



Ongoing Activities & Future Plans

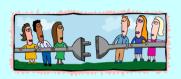
- Initiating Intertribal Council Meetings to gain interests in Cultural Initiatives & Community Energy Development
- Developing coordination plan with Intertribal Council members for cultural and ethnographic studies
- Cooperating with Cherokees on correlation of tower data with SoDAR data.
- Continuing Chilocco Wind Monitoring and tower maintenance activities
- Initiated Environmental Assessment studies (Avian & Cultural)
- Finalizing Kaw Nation IRMP to be used to guide Wind' Energy development options.
- Completing Pre-development Phase Grant to BIA.



? Questions?

Your Turn



















Oklahoma Indian Lands & Counties

Source: Muriel H. Wright, 1986, A Guide to the Indian Tribes of Oklahoma, Univ. of Oklahoma Press, p. 24

