

CHEROKEE NATION ENTERPRISES

WIND ENERGY

FEASIBILITY STUDY

October 18, 2005



*Oklahoma – 8th in the Nation for wind
13 Month Wind Energy Feasibility Study –
U.S. Dept of Energy grant*

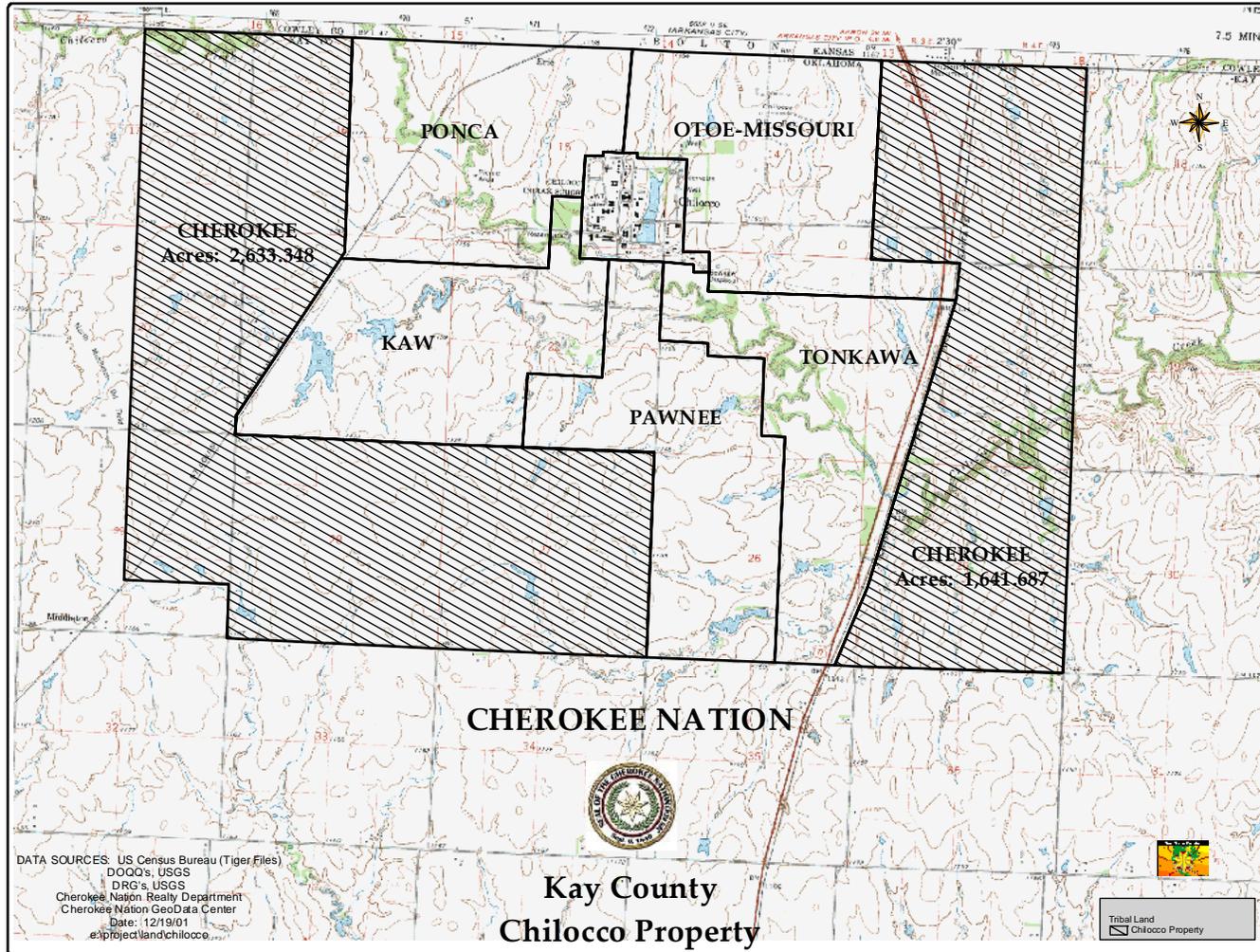


Cherokee Nation, 2nd largest Indian Tribe – 256,938 members
14-County area jurisdiction – 90,000 acres
Employs approx. 6,000 people in Oklahoma



Cherokee Nation Chilocco Property

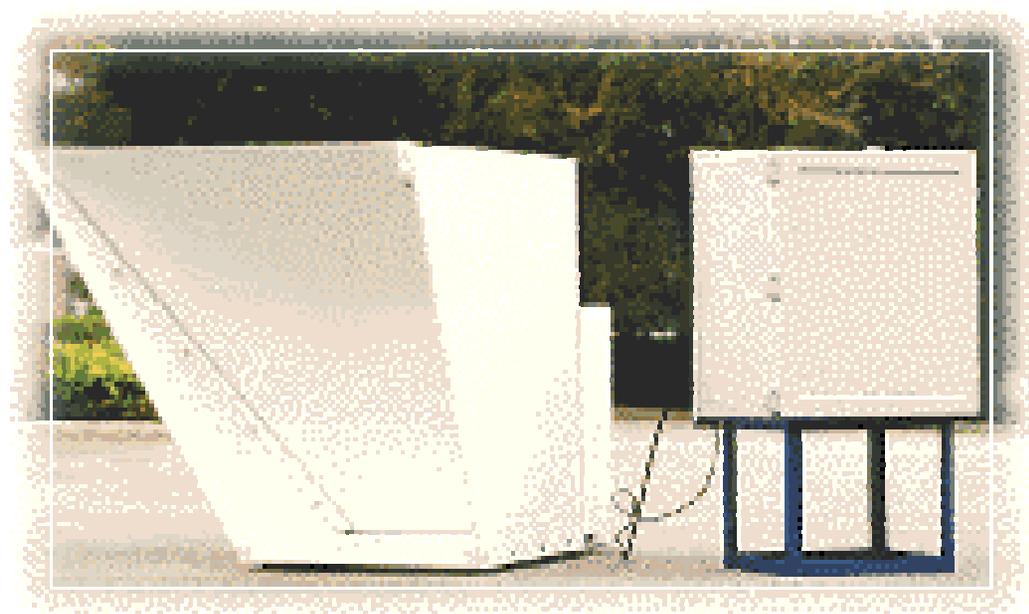
4,275 acres



*Model 4000 MiniSODAR
high-frequency doppler system*

*Wind speed accuracy
2 degrees*

Weight – 255 lbs.



- *Uses patented 32-element phased array antenna to form 3 orthogonal beams needed to measure a complete three-dimensional wind profile.*
- *SODAR acoustic signal processor is engineered for reliable, unattended field operation.*
- *Data is read remotely via modem.*
- *Wind profile measurements – 15 to 200 meters in 5 meter increments*
- *Designed to accurately measure wind shears.*
- *Unit is portable and mounted on a trailer.*



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Project Participants:

- Project Administrator – Lynn Ousley
- Program Coordinator – Bobby Short
- Administrative Assistant – Carol Wyatt
- Technical Consultant – Dr. Ken Underwood

Objectives:

- Determine the feasibility of a Wind Farm on Cherokee Nation property in North Central Okla.
- Compare SoDAR data with anemometer data in the same area.



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Project Status:

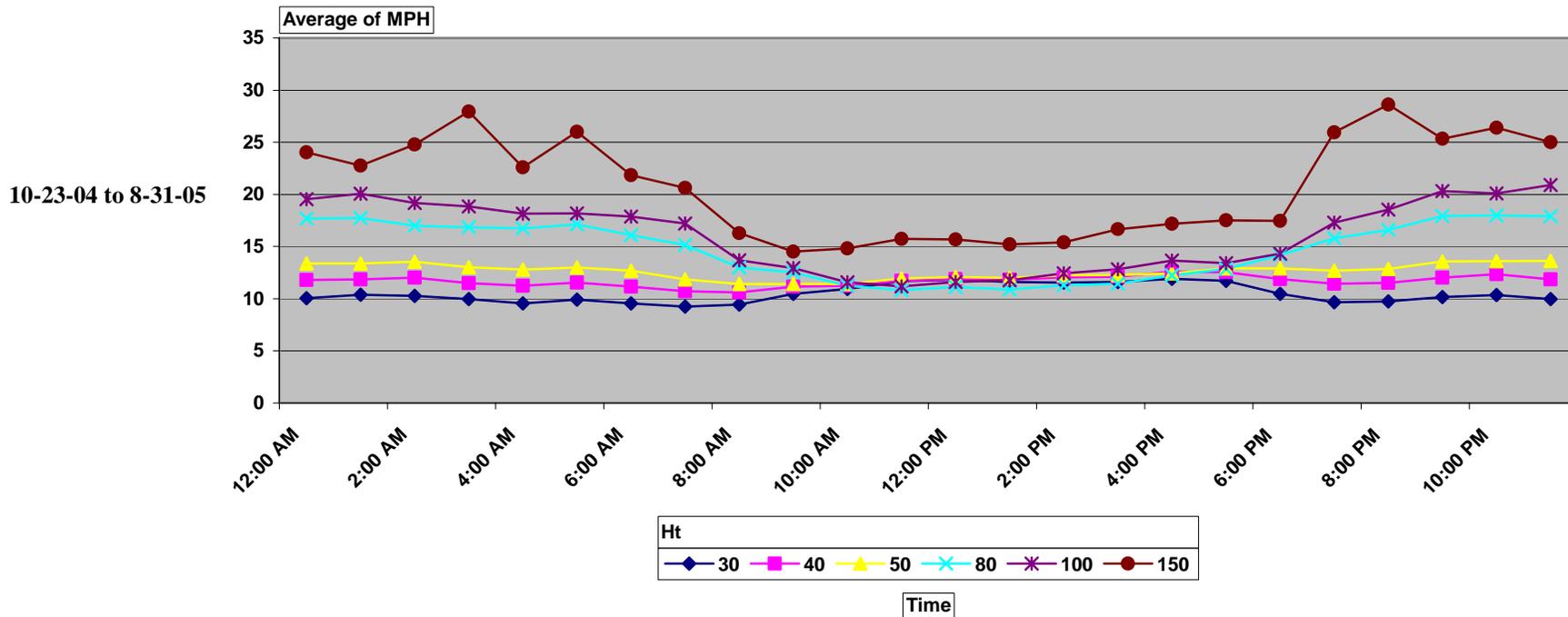
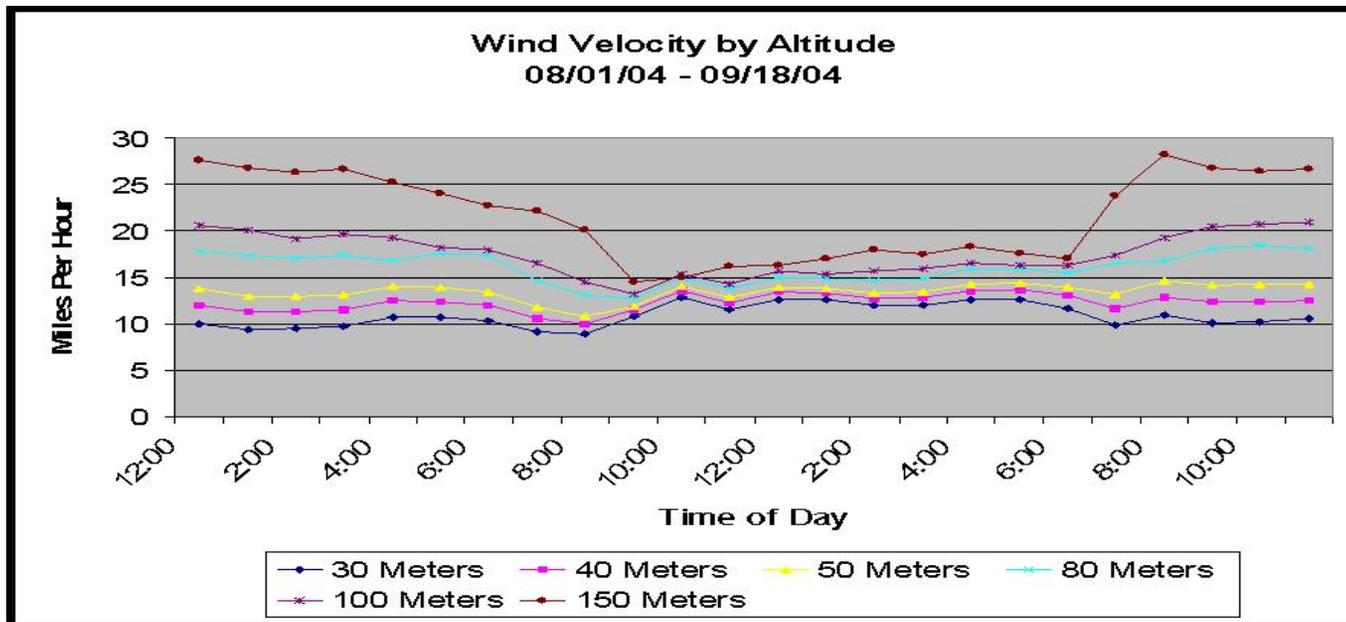
- Gathered data for 14 months with two interruptions for a period of 47 days.
- Preliminary data looks promising.
- Data not edited or interpreted by consultant.
- Study will be completed by Jan. 2006.
- Plan to gather data until May 2006 to allow 12 months of continuous data.



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Future plans on wind farm development:

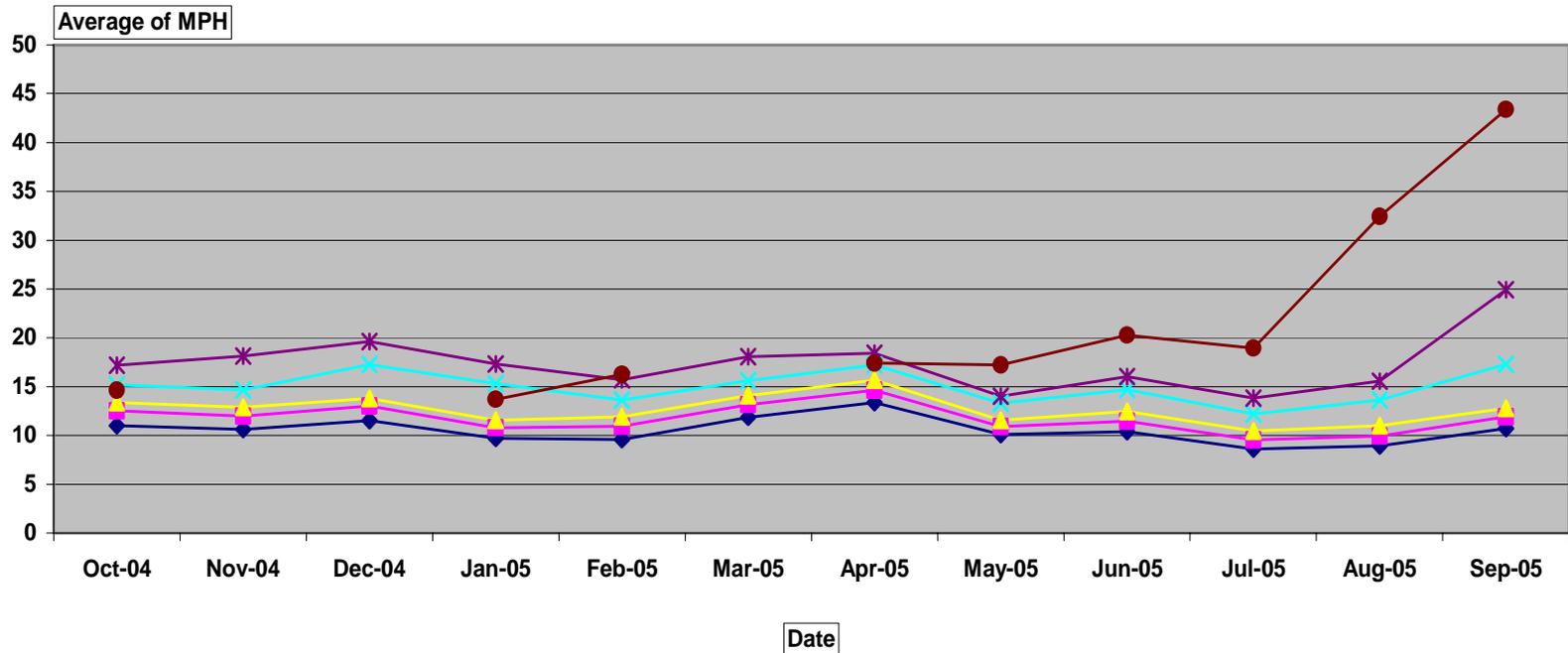
- Move to next phase pending final outcome of study.
- Other variables to consider will be:
 - ✓ Availability of investment capital.
 - ✓ Return on investment.
 - ✓ Federal and State incentives.
 - ✓ Partnering/sharing arrangements with neighboring tribes.





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Seasonal Wind Velocity Avg by Altitude
10-23-04 to 8-31-05





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Total Wind Rose data For Chilocco (Avg 13 Month)
50 Meter Level
For the Period 10-23-2004 to 8-31-2005

