

Hopi Wind Project

HCAPP (*Hopi Clean Air Project*) staff

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&

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Feasibility Study for a Hopi Utility-Scale Wind Project



MET at Hopi

12.5 miles north east of Hotevilla Village

50 meter MET tower collecting data from
the wind



Wind Energy Can Benefit The Hopi Tribe

◆ New Economic Development

- *Electricity export sales create new revenues for Hopi (lease royalties and equity return on investment).*
- *Potentially fund rural electrification and smaller off-grid renewable applications*
- *Contracting work in development and construction phases*
- *New jobs for Hopi*

◆ Environmental

- *No air pollution or toxic emissions*
- *Virtually no water use*
- *Low land impact, no solid waste*
- *Compatible with existing grazing/other land uses*

◆ Capacity Building

- *New business models*
- *Develop tribal human resources for the Hopi Tribe: jobs, training, experience in high-tech renewable energy industry*



PROJECT HISTORY

- Hopi interest in diversifying economy and promoting economic development with clean, sustainable businesses
 - DOE TEP first steps grant identify energy opportunities including utility-scale wind power project development
- Based on strong working relationship, Hopi and foresight identified new project site Sunset Mountain, entirely on Hopi lands
 - Partnered with DOE support to explore the feasibility of a 100MW wind project on the surrounding lower areas of east and west Sunset Mountain.
 - Project feasibility work delayed due to non-compliance requirements (no contract)
 - Exploring possibilities on surrounding areas around the two mesas, but if project goes forward, would likely be in the areas surrounding the North & South areas of the mesas.



•Sunset Project Site



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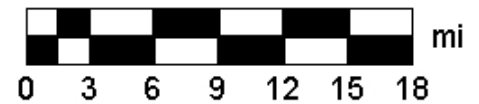


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Prevailing wind
direction



Data Zoom 8-2

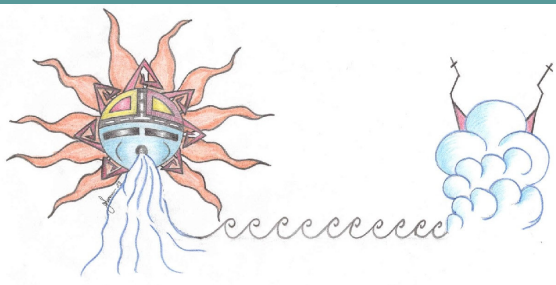
Progress Date

- ◆ **Wind resource assessment**
 - 50m and 60m MET towers will be installed in relocated sites
- ◆ **State renewable energy market assessment**
 - AZ Corp. commission has voted to increase state's renewable energy requirement from 1.1% by 2006 to 15% by 2025
- ◆ **Transmission Studies underway**
 - Project is in APS queue for electrical interconnection
 - APS is now carrying out System impact Study for the Project
(These studies have been done, just waiting for the reports)
- ◆ **Environmental / Land Assessment started**
 - Phase I biological, need to re-establish survey due to relocation on tower site
 - Hopi is managing third party studies, Hopi specialist are carrying out on-site survey work and lending their expertise



ACTIVITIES STILL TO COMPLETE

- ◆ **Wind resource assessment (install ass't 50m and 60m)**
 - County permits secured, installed planned Fall/Winter `05
 - Prove out wind resource and undertake micro-siting
- ◆ **Continue and expand environmental and Land Assessments**
 - On-site Biological and Avian Survey Work (carried out by Hopi Dept. of Nat. Resources)
 - Archeological, Cultural, & Historical Studies (by Hopi Cultural Preservation Office)
 - Aviation and military safety review (3rd party)
 - Preliminary site construction access and geology review (3rd party)
- ◆ **Conduct a environmental, economic and cultural benefits assessment**
 - Continue with professional development and capacity building efforts
 - Conduct community awareness outreach – Hopi
- ◆ **Economic Model and Business Structuring**
 - Develop initial financial model and economic pro-forma for the project
 - Establish a suitable legal and business structure under which the Hopi can effectively pursue development of the project
 - Develop a financing option plan and conduct preliminary meetings industry financiers

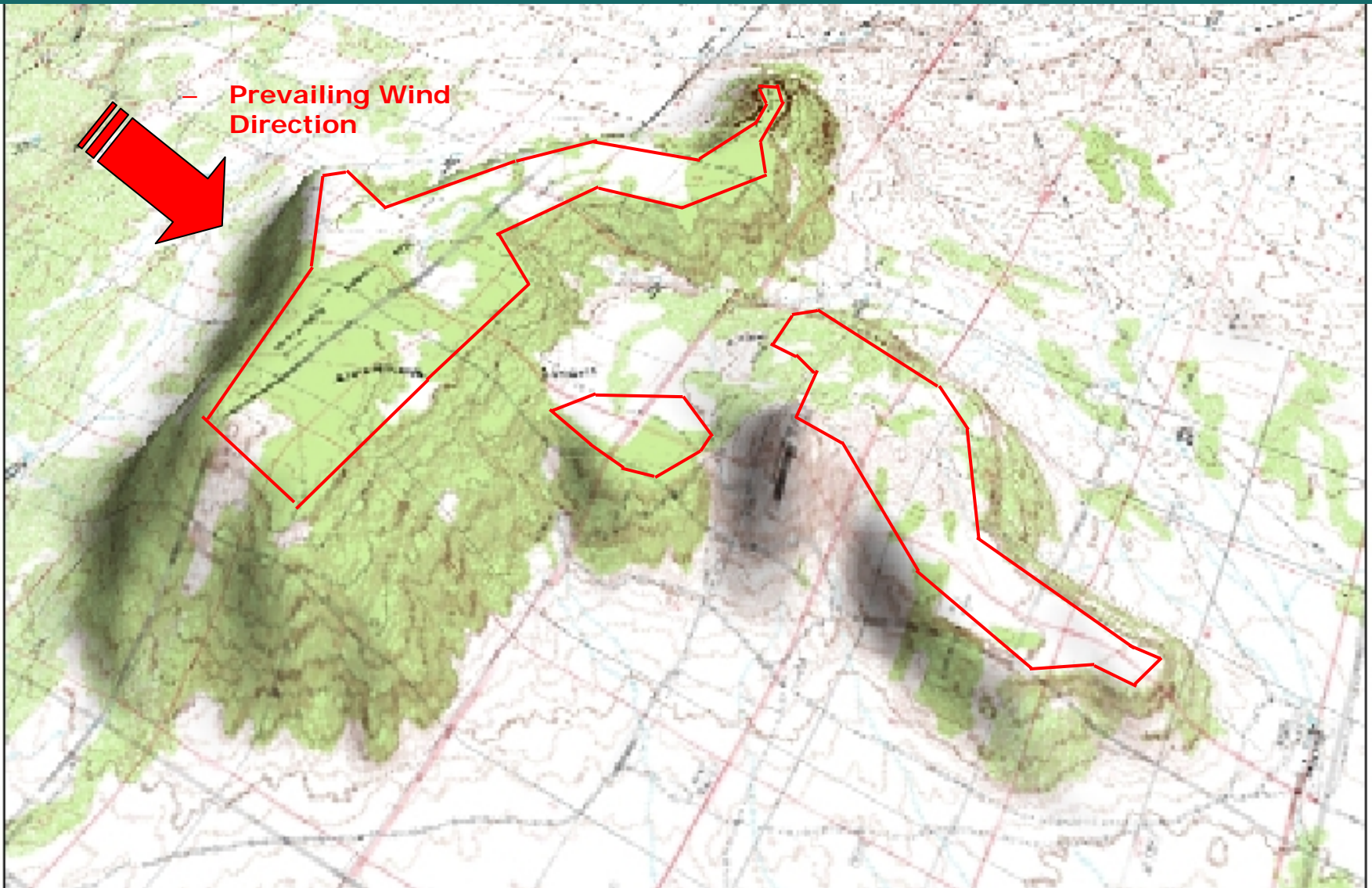


FORESIGHT BACKGROUND

- ◆ **Foresight Energy Company** – experienced renewable energy consulting group founded in 1996, excellent technology, project development, power marketing, analysis and policy skills
- ◆ **Foresight Wind Energy, LLC** formed in 2002 to directly pursue wind project development
 - ◆ **Focus:** top utility industry expertise focused on tribal & private wind opportunities
 - ◆ **Region:** Southwest market
 - ◆ **Relationships:** utilities, state & local governments, landowners, and tribes
 - ◆ **Projects:** Over 1000 MW of wind projects under development
 - ◆ **Financial backing:** in 2005, secured support of \$75 million green energy fund

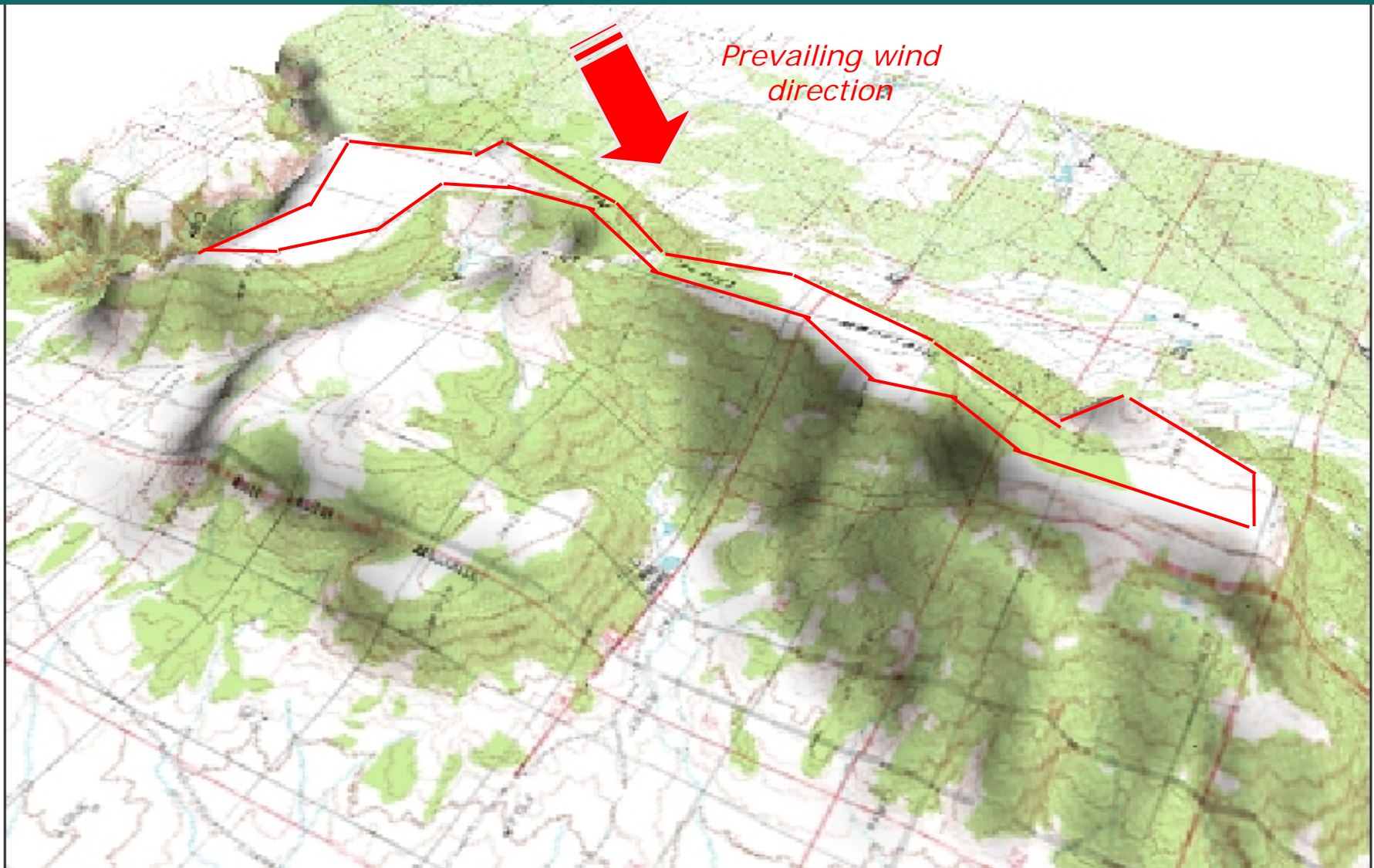


WEST SUNSET MOUNTAIN



Projected MET towers will be erected in areas surrounding the North and South mesas and NOT on the mesas

EAST SUNSET MOUNTAIN



Mesa elevation 600 – 1100 feet prevailing plains

PATH FORWARD

- ◆ Complete DOE funded feasibility work 2006 – include extension (6 months) up to August 2007
- ◆ If economically viable, continue public outreach and education effort to receive feedback from Hopi people
- ◆ Bring project opportunity before tribal Council for vote whether to continue to move forward
- ◆ Potential online date 2008



PROPOSED NEXT STEPS

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