Standing Rock Sioux Tribe – Lakota/Dakota Nation

Feasibility Study Supporting Wind Development & Establishment of Renewable Energy and Energy Development Office

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OVERVIEW:

- BACKGROUND INFORMATION ON STANDING ROCK RESERVATION
- SITTING BULL COLLEGE WIND TURBINE
- EECBG ENERGY EFFICIENCY & WIND TURBINE INSTALLATION AT SITTING BULL COLLEGE
- WIND ASSESSMENT STUDY
- ESTABLISHMENT OF RENEWABLE ENERGY & ENERGY DEVELOPMENT OFFICE (REEDO)
- WIND FEASIBILITY STUDY
- OCETI SAKOWIN POWER PROJECT
STANDING ROCK

- ONE OF SEVEN RESERVATIONS OF THE GREAT SIOUX NATION
- LOCATED IN SOUTH-CENTRAL NORTH DAKOTA & NORTH-CENTRAL SOUTH DAKOTA
- LOCATED IN SIOUX COUNTY, NORTH DAKOTA; CORSON COUNTY, SOUTH DAKOTA AND SMALL PORTIONS OF ZIEBACH & DEWEY COUNTY, SD
- RESERVATION DIRECTLY TO THE SOUTH IS CHEYENNE RIVER SIOUX TRIBE
LAND

- Terrain
  - Woodlands, rolling hills, river valleys, and lakes
- CHECKERBOARD OWNERSHIP
- ALLOTTED, TRIBAL, AND OTHER (STATE, FEDERAL, NON-INDIAN)
- 2,320,247.67 ACRES
- LOST NEARLY 560,000 ACRES DUE TO THE PICK-SLOAN ACT OF 1944
STANDING ROCK: LAKOTA/DAKOTA NATION

- DAKOTA: HUNKPATINA & CUTHEAD – YANKTONAI
- LAKOTA: MAJORITY HUNKPAPA, BLACKFEET

Cetan Wakinyan – Chief Thunderhawk – Hunkpapa Lakota
STANDING ROCK SIOUX TRIBE

- ORGANIZATION
  - CHAIRMAN, VICE-CHAIRMAN, SECRETARY
  - 8 DISTRICT REPRESENTATIVES
  - 6 AT-LARGE REPRESENTATIVES
  - SEPARATED INTO 3 COMMITTEES (JUDICIAL; HEALTH, EDUCATION, & WELFARE; ECONOMICS)
  - EACH PROGRAM DIRECTOR REPORTS TO A COMMITTEE
WIND TURBINE CURRENTLY PROVIDES ENERGY TO THE SCIENCE CENTER & TRANSIT CENTER (HUD-GRANT)

SITTING BULL COLLEGE NOW HAS A 1 YEAR WIND TURBINE TECHNOLOGY CERTIFICATE PROGRAM

- Introduction to wind turbines
- Wind energy fundamentals
- Electricity & circuits
- Safety & environmental
- Basic hydraulics
- OSHA standards
WIND ASSESSMENT STUDY:

- FUNDED THROUGH THE DEPARTMENT OF INTERIOR
- WORKED WITH CONSULTANT AECOM TO ASCERTAIN THE BEST LOCATION FOR A WIND FARM
Energy Efficiency

- Two possible locations (science center & family support center)
- Family support center was chosen (Lakota/Dakota Immersion Nest, Campus Kids DayCare, and Teaching & Learning)
- Had the highest energy use/unit area from 2007 – 2010
Small Wind Turbine Location
- Sitting Bull Finance Center
- Chosen for the location
Renewable Energy & Energy Development Office

- Begin educational outreach activities
- Gathering of data in the 8 communities of Standing Rock including the tribal government
  - Goals & concerns of the SRST
- To serve as a research center and information clearinghouse
- To ensure that energy development proceeds in a systematic way
Renewable Energy & Energy Development Office

- An advisor to tribal government during “energy” decision making
- Oversee current & future energy grants
- Investigate additional types of renewable energy products
  - Educate SRST on types of renewable energy products
WIND FEASIBILITY STUDY:

- Working with sub-contractors ERM (Environmental Resource Management) and Godfrey & Kahn SC
- By using information from the DOI Wind Assessment Study, we narrowed down our 5 possible site locations to 1 location
- Site 5 (Sherwood Hill) is being currently studied
  - Road accessibility
  - Fiber optic cables located along Hwy 12
  - Large area of trust lands
  - NREL Map score of 3 or more
WIND FEASIBILITY STUDY:

- SITE 5 IS LOCATED WEST OF MOBRIDGE SD AND EAST OF MCLAUGHLIN SD
- CURRENTLY HAVE 2 MET TOWERS AT THE LOCATION THAT HAVE BEEN COLLECTING DATA FOR ONE YEAR
- CURRENTLY WORKING ON:
  - SITE LAYOUT FOR TURBINES
  - ENVIRONMENTAL ASSESSMENT ACTIVITIES
    - ESTHETIC VIEWS
    - EAGLE POPULATION
  - FINANCING POSSIBILITIES
OCETI SAKOWIN POWER PROJECT:

- STANDING ROCK SIOUX TRIBE, CHEYENNE RIVER SIOUX TRIBE, CROW CREEK SIOUX TRIBE, ROSEBUD SIOUX TRIBE, OGLALA SIOUX TRIBE, FLANDREAU SANTEE SIOUX TRIBE, SISSETON WAPEHTON SIOUX TRIBE, YANKTON SIOUX TRIBE

- TRIBES WILL COMBINE THEIR EFFORTS & RESOURCES TO BUILD A UTILITY SCALE 1 GW+ WIND POWER GENERATION & TRANSMISSION SYSTEM THAT WILL SELL POWER TO OUT OF STATE BUYERS
OCETI SAKOWIN POWER PROJECT:

- PROJECT WILL BE BUILT BY $2–$3 BILLION IN FUNDING RAISED BY THE ISSUANCE OF POWER REVENUE BONDS ISSUED BY THE OSPP
  - TRIBES WILL MAINTAIN OWNERSHIP & CONTROL OVER THE PROJECT
  - FINANCING COSTS WILL BE GREATLY REDUCED & THUS NOT DEPENDENT ON THE EXTENSION OF THE WIND PRODUCTION TAX CREDIT
Future Plans

- WRITE for new grants
- Begin research on Renewable energy products and strategic planning
- Begin research on developing an Energy & Mineral Code of Regulation for SRST
- Research on Environmental Effects of Renewable Energy/Energy Development
- Work with our local EPA Office on the development of a Code of Regulation due to the continuing threat of oil & gas exploration
- Standing Rock Minerals
  - Permitting
  - Creating this new entity for SRST
- Creation of a new Tribal Utility
Summary/Lessons Learned

- There’s a lot to do...
- Talk to the community members
- Have an Energy/Mineral Development Office
“Let us put our minds together to see what we can build for our children.” Tatanka Iyotake