STANDING ROCK SIOUX TRIBE

Prairie Knights Community-Scale Single Wind Turbine Project

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A Section 17 Corporation of the
Standing Rock Sioux Tribe

DOE Annual Program Review
November 2024

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Presentation Outline

- Standing Rock Sioux Tribe Background
- SAGE Background
- SAGE Related Experience
- Project Overview and Location
- Project Objectives
- Progress
- Project Participants

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Background
Standing Rock Sioux Tribe

- Land boundary expands across part of the North Dakota and South Dakota Boarder
- Federally recognized in 1889 through an agreement between the U.S. and the Great Sioux Nation
- Tribal leadership includes a Chairman, Vice-Chairman, a Secretary, and 14 council members.
- 2.3 million acres (~3593.75 square miles)
    - ~980,000 acres – Tribally owned, allotted trust, and gov
    - ~1.5 million acres – Fee land
- Enrollment
    - ~15,568 members with over 7,819 residing within the land boundaries

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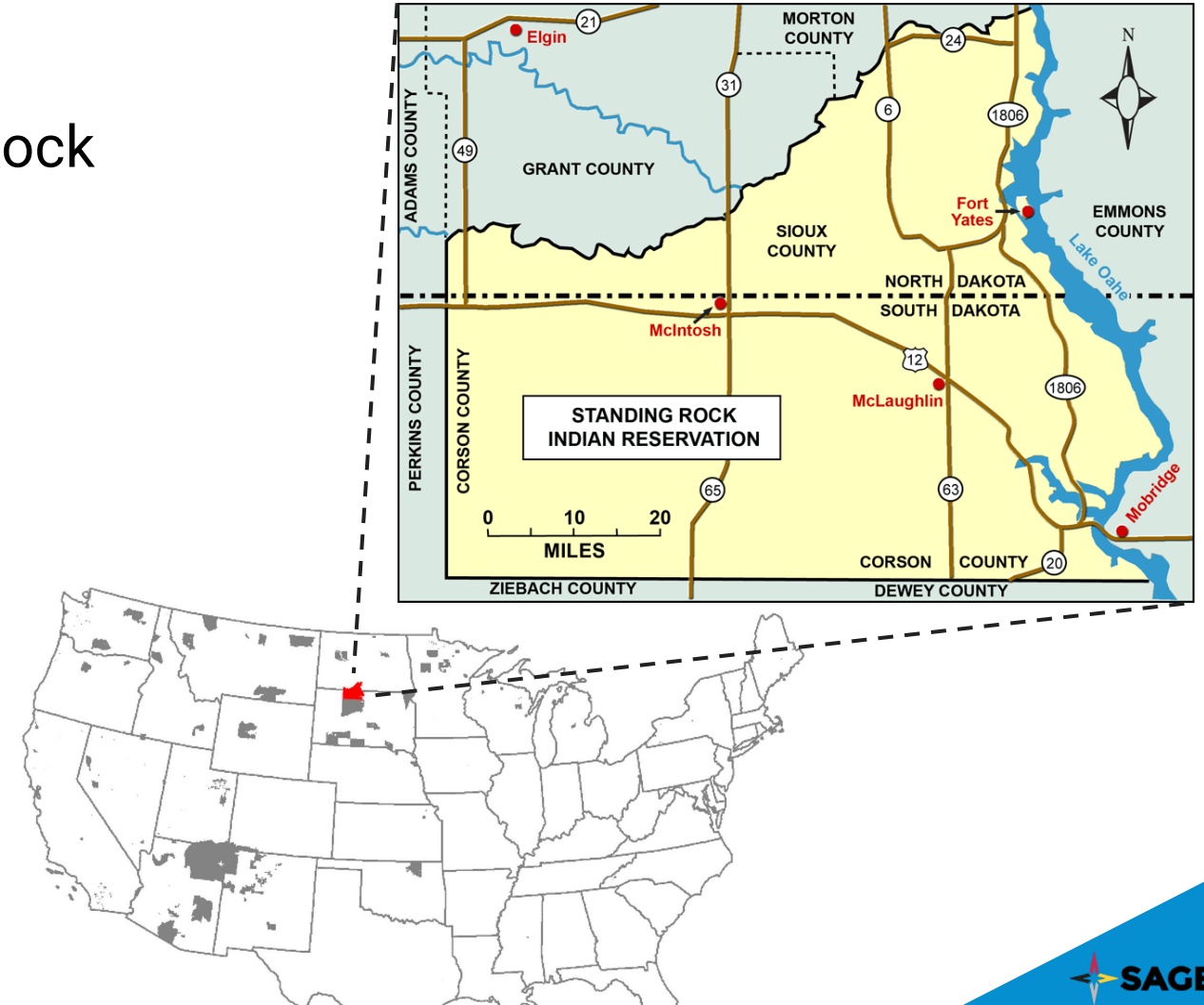
Map of Standing Rock



SAGE Development Authority Background

- Federally chartered Section 17 Corporation
- 100% owned by the Standing Rock Sioux Tribe
- Public power authority
- Primary goals:
  - Development of the Tribe's renewable energy resources
  - Promoting the Tribe's economic development
  - Enabling the Tribe to be self-sufficient and to provide economic support for Tribal members
- SAGE is committed to operating with the Lakota values of wisdom, respect, humility, honesty, fortitude, generosity, and compassion.

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Related Experience

In addition to the single wind turbine project, SAGE has completed or is in process of completing various renewable and clean energy projects across the entire Reservation

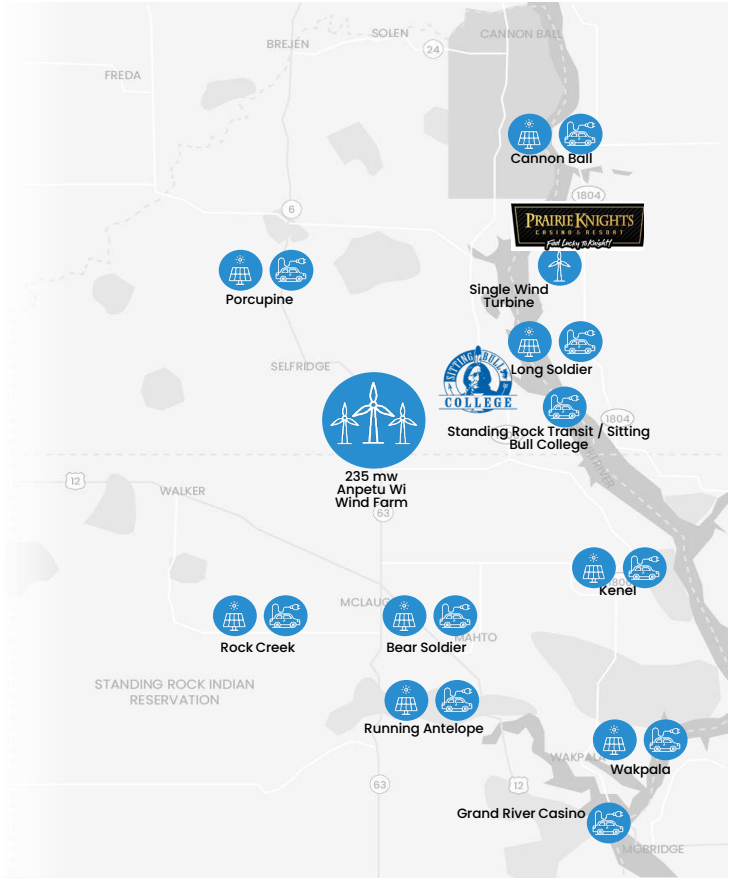
- Public EV charging stations
- Small-scale distributed solar at various Tribal buildings
- Community-scale solar
- Utility-scale wind
- Local renewable energy workforce development

Utility-scale wind

Community-scale solar

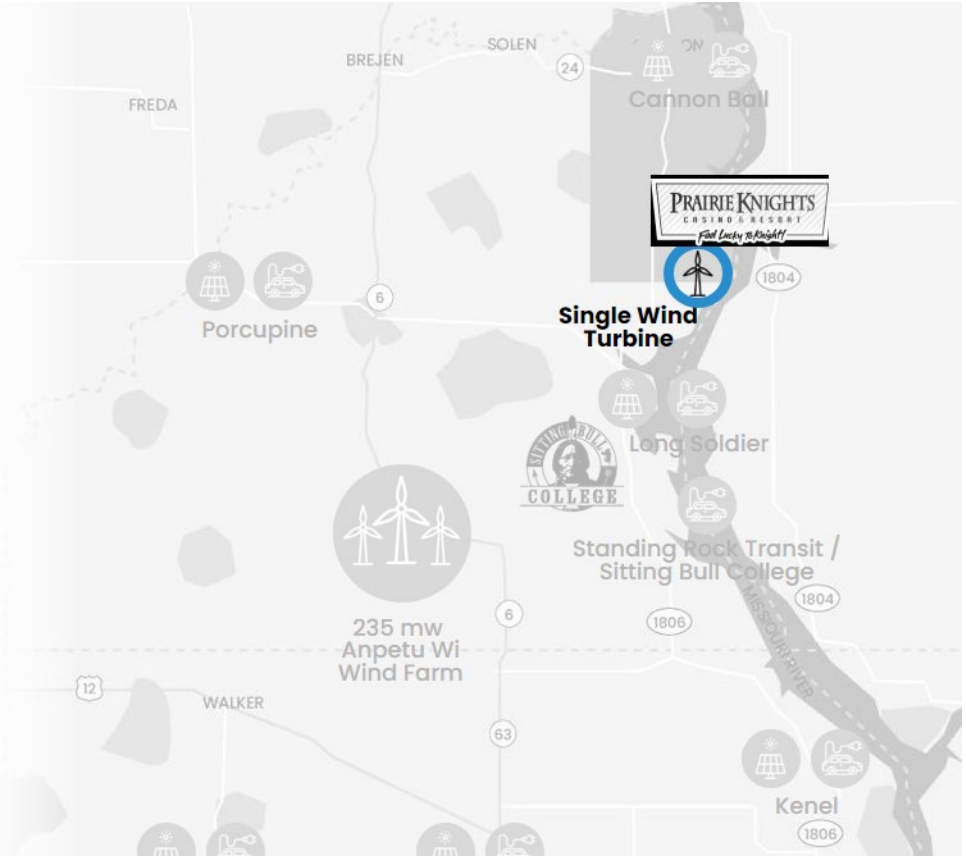
Single Wind Turbine

EV Charging Station



Project Overview

- Design, procurement, and installation of a community-scale 1.7 to 2.4 MW wind Turbine
- Hub height of around 86 meters
- Two potential location sites: both in the vicinity of Prairie Knights Resort north of Fort Yates, North Dakota
- Projected to generate approximately 6 million kWh of electricity per year
- Anticipating an offtake agreement with the local co-op at either a fixed price or real time market pricing
- Total project cost of roughly $5.5 million
- $4.0 million in funding provided by the Department of Energy and the remaining gap to be funded via federal Investment Tax Credit
- Expected COD summer/fall 2026

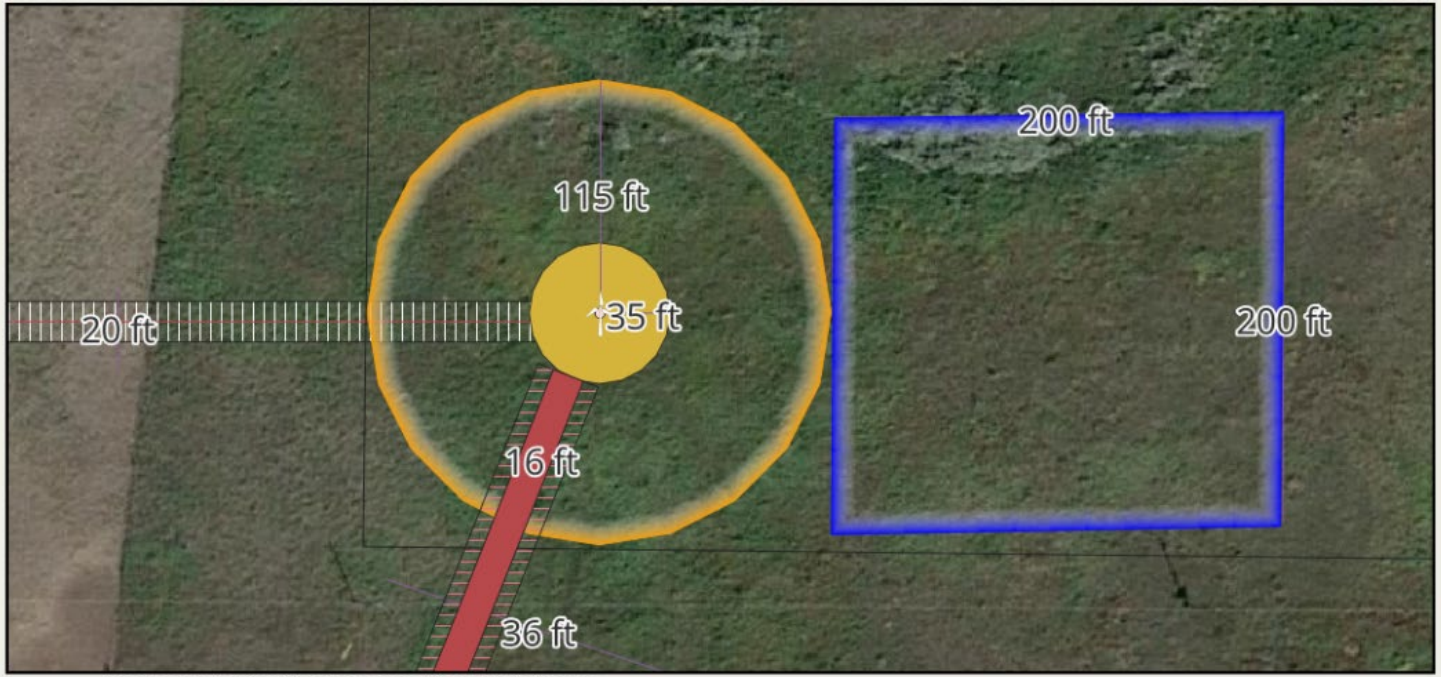


Project Location

The proposed turbine location is on undeveloped trust lands

- Near the Prairie Knights Resort in Fort Yates, North Dakota
- Excluding the Resort, there is minimal development in the immediate area
- Missouri River is about 2.5 miles due east
- Project will tie into local substation

Expected Site Disturbance



Approximate Turbine Construction Disturbance

- Temporary 115 foot radius
- Temporary 200x200 laydown yard & crane pad In the immediate vicinity
- Temporary 20 foot wide trench to lay underground cables
- Temporary 36 foot wide road for heavy machinery

Approximate Turbine Permanent Disturbance

- 35 foot radius for turbine foundation
- 16 foot wide road for O&M

Project Objectives

Three main goals in our energy vision

- Increase renewable energy generation
- Advance sovereignty and independence
- Lower the energy bills of local community members

Environmental benefits

- Over the life of the project, implementation will prevent the release of nearly 6million lbs. Of Co2, which is the equivalent of around 3 million pounds of coal burned or 500 home's electricity use for one year

Economic benefits

- Creation of local jobs in a growing industry
- Lower energy bills for Tribal elders

Other benefits

- Reduce reliance on fossil fuels
- Accelerate just transition locally

SAGE intends to use the profits from this project to credit Tribal elder electric bills under a similar mechanism to the current WAPA credit allocations.

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Project Progress

Department of Energy grant contracting was formally signed in May 2024 and initial project activities are underway.

Notable activities to-date

- Partial NEPA determination was provided by DOE
- Project management and environmental teams are on board
- Micrositing is in progress to determine how close the turbine can be located to the Resort and substation
- SPP injection study has been initiated to determine the maximum turbine capacity that can be interconnected without requiring costly system upgrades
- Offtake options are being analyzed to determine risk/benefit of a fixed price power purchase agreement vs. real time market pricing

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Thank you to our project partners and participants

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Thank you