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Dakota Range III
Roberts and Grant Counties, South Dakota

Dakota Range III Project Basics

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Project Overview

Capacity:

- Up to 151.2 MW.

Land:

- Voluntary wind energy leases and associated facilities easements. Good neighbor agreements offered to everyone within the project boundary and ½ mile from a turbine.

Proposed Project Footprint To Include:

- Up to 42 turbines in both Grant and Roberts Counties.
- Access roads, underground 34.5 kV collector lines, underground fiber-optic cables for turbine communications, etc.
- An operations and maintenance (“O&M”) facility.
- Up to 3 permanent meteorological (“MET”) towers.

Proposed Project Substation:

- A 34.5- to 345-kV collection substation.

Proposed Project Transmission Line:

- ~8-mile 345 kV feeder line, connecting the project to the Otter Tail switching station in Mazeppa Township (for access to the new Big Stone South-to-Ellendale 345 kV line).

Schedule:

- Start of construction: fall 2019
- Commercial Operation Date (“COD”): Fall 2020

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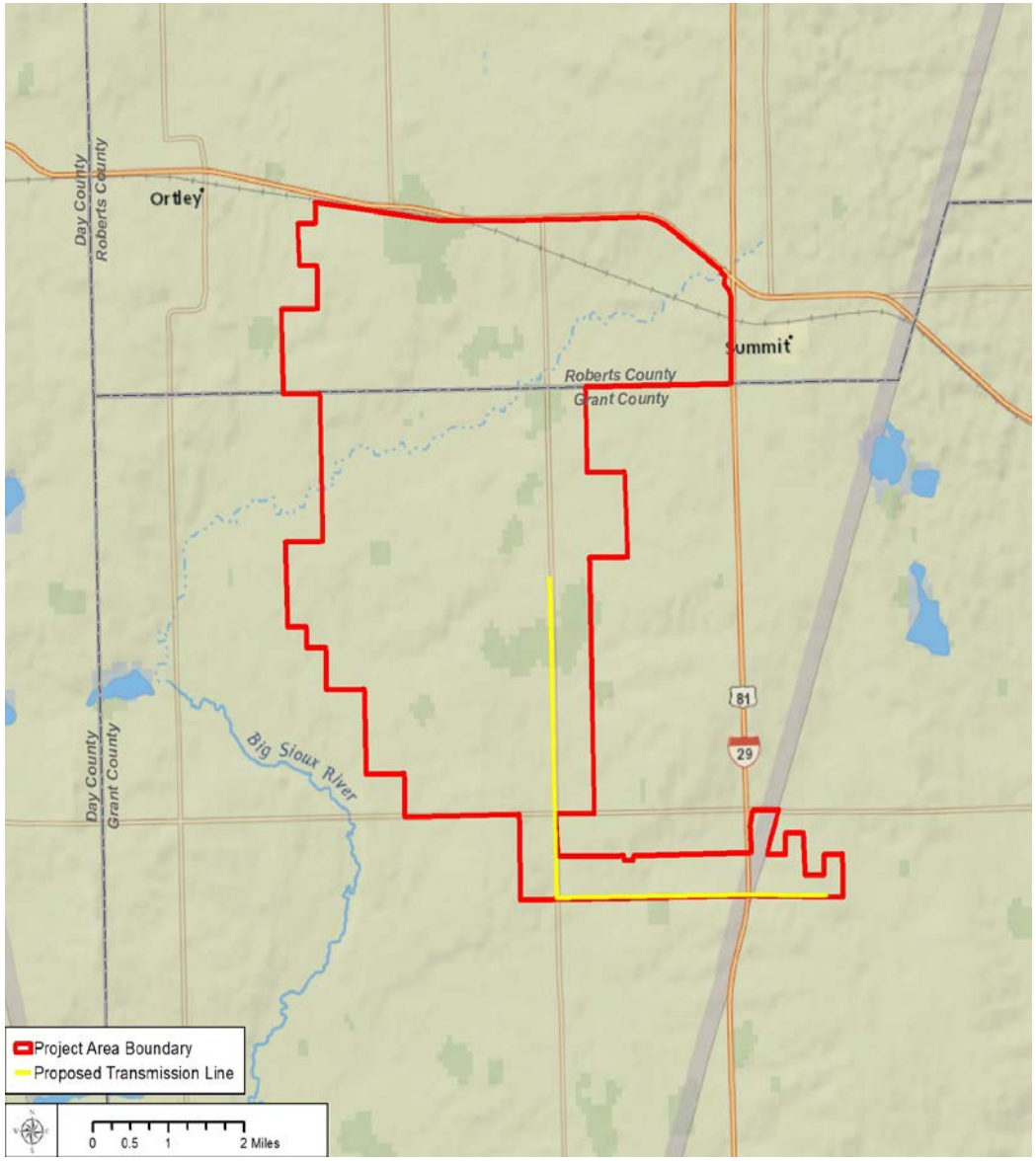
Project Area



- The project area is located west of Interstate 29 and abuts Hwy 12 to the north.
- The ~8mile 345kV transmission line would be entirely in Grant County; half located in the Dakota Range III project boundary and the other half within the Dakota Range I & II project boundary.
- The area is 18,717 acres

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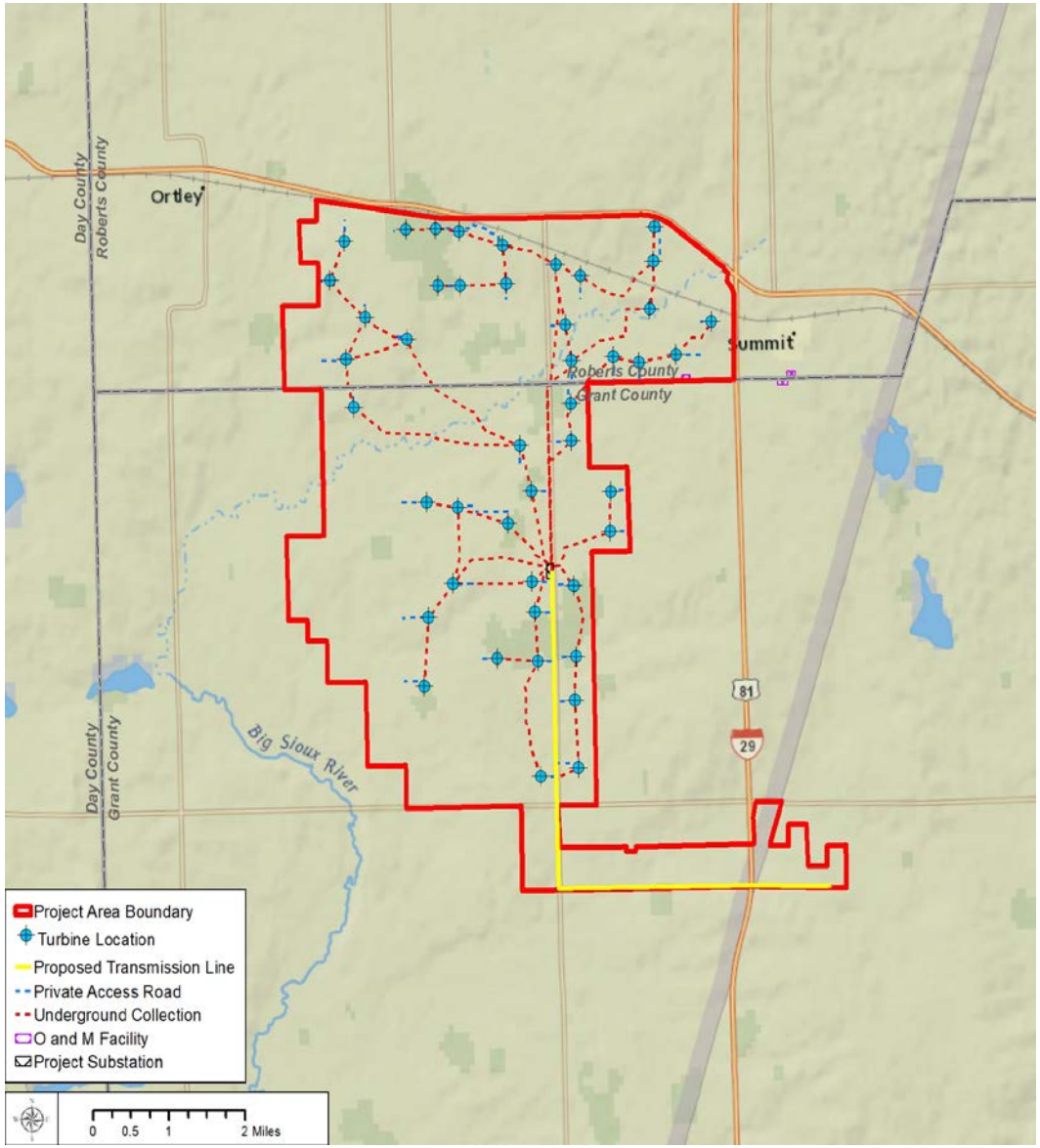
Project Site Plan (16,429 acres signed)



- ~45 landowners signed a wind energy lease.
- 8 landowners signed a feeder line easement.
- 5 landowners signed Good Neighbor Agreements; outreach continues.
- 45 turbine locations being permitted, no more than 42 would be built.
- Permanent facilities will be located on ~132 acres, less than 1% of the project area.

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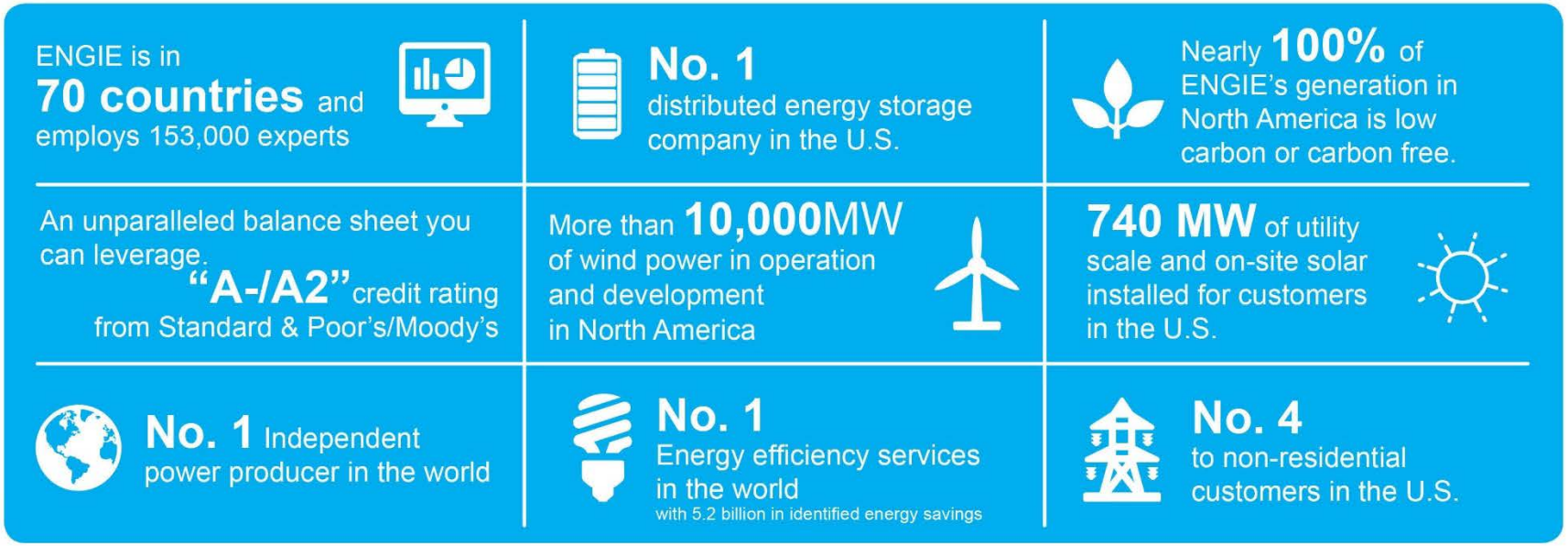
Project Owner

Engie North America: Owner of Dakota Range III

ENGIE is a global energy and services group, with wide expertise and strong international positions in the fields of electricity, natural gas and energy services.



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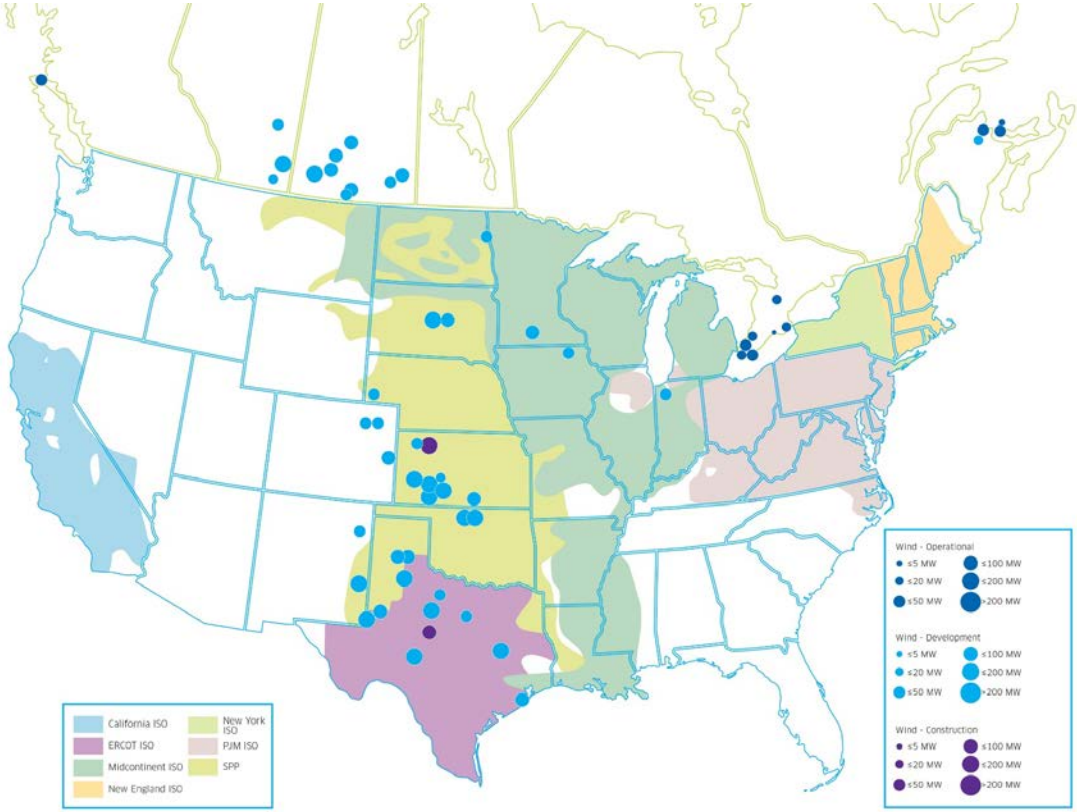
Broadening Our Reach in Wind Energy



- Engie North America Headquarters located in Houston, TX with offices in CA, CO, IL, and MN.
- 702MW Under Construction
- Over 5GW in Active Development

Project Partners

Dakota Range III Partners

Apex Clean Energy will develop Dakota Range III (complete the activities required prior to construction)

Xcel Energy has entered into a Power Purchase Agreement to purchase the power generated from Dakota Range III

Project Due Diligence and Commitments

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Due Diligence

Apex coordinates with many agencies and stakeholders during the project's development.

USFWS	SDDENR	FAA
SD GFP	SHPO	SD DOT
SWO THPO	US ACOE	

Apex conducted numerous studies to greatly minimize impacts to the environment and its residents, including:

a. Habitat Surveys
b. Raptor Nest Surveys
c. Avian Use Survey
d. Bat Acoustic Survey
e. Grouse Lek Surveys
f. Tribal Consultation
g. Level I Cultural Resources Review
h. Architectural Surveys
i. Level III Cultural Resources Surveys
j. Sound Level Modeling Report
k. Shadow Flicker Modeling Report
l. Property Value Effects Studies
m. Decommissioning Plan
n. Electromagnetic Interference

Avoidance Measures

- To avoid potential impacts to Northern Long-eared Bats (“NLEB”), wind turbines are located more than 1,000 feet from four shelterbelts and woodlots greater than 15 acres in size, will feather blades to manufacturer’s cut-in speed from sunset to sunrise during the bat active period (April 15 – October 15), and will avoid tree removal from June 1 through July 31 to minimize risk of impact to potential maternal roosts and other tree roosting habitat for NLEBs and other bat species;
- Minimize ground disturbance/clearing of potentially undisturbed land;
- Avoid and/or minimize impacts to potentially suitable habitat for the Dakota skipper and Poweshiek skipperling;
- Avoid siting turbines in wetlands and waterbodies;
- Design transmission facilities using APLIC guidance to minimize the risk of electrocution and collisions of birds by power lines (APLIC, 2006; 2012);
- Train staff to recognize eagles, and if observed, evaluate risk and respond appropriately;
- Conduct post construction bird and bat monitoring in coordination with FWS and SD GFP.

Project Commitments

Dakota Range III will comply with the PUC's siting requirements, local CUP wind ordinance requirements and all other applicable laws and rules.

- All turbine locations are currently planned to be 1,500 feet or greater from an existing residence, business, church, or other public building.
- Sound levels will not exceed 45 dBA at non-participating and participating occupied residences
- Shadow flicker will be less than 30 hours/year at non-participating and participating occupied residences, unless a waiver is signed.
- The project plans to use Aircraft Detection Lighting System (ADLS), if approved by FAA.
- Dakota Range III will have Road Use Agreements in place with the counties and townships. Generally a road use agreement establishes how the Facility will improve and repair roads before, during, and after construction.
- The Facility's design includes safety and control mechanisms which are monitored using a Supervisory Control and Data Acquisition ("SCADA") system. Each turbine is connected to the SCADA system via fiber-optic cable, which allows the turbines to be monitored in real time by the O&M staff.

Post-Construction and Safety Commitments

The anticipated life of the project is approximately 25-30 years, but could be extended through replacing, retrofitting, and repowering.

- Before and during operations, Dakota Range III will coordinate with local and county emergency management to protect the public and project facilities in the event of natural, manmade, or other incidents.
- Dakota Range III will register each turbine location and the O&M facility with the rural identification/addressing (fire number) and 911 systems.
- At the end of the project's life, decommissioning will be the responsibility of Dakota Range III. Financial assurances, as a protection, will be put in place as required by state and county authorities. Decommissioning will end after the project area is restored.

Dakota Range III Project Benefits

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Community Economic Benefits

Recipient	Annual Tax Revenue[1] (approximate)	Total Tax Revenue (approximate)
Roberts County	$105,800	$3,174,000
Ortley Township	$23,700	$711,000
Summit Township	$21,600	$648,000
Grant County	$92,500	$2,775,000
Blooming Valley Township	$19,900	$597,000
Farmington Township	$17,700	$531,000
Mazeppa Township	$2,600	$78,000
Summit School District	$279,000	$8,370,000
South Dakota	$562,800	$16,884,000

[1] After the fifth year of receiving the total annual tax revenue as well as South Dakota State-aid funds for the school districts, the amount of the wind energy tax revenue that is considered local effort funding would increase by 20 percent each year until year 10, after which all wind energy tax revenue would be considered local effort funding in the South Dakota School Funding Formula, which may decrease the State-aid funds the school districts receive. However, as shown in the table, 100 percent of the wind tax revenue allocated to the school districts would still be received by the school districts.

Benefiting South Dakota Communities

Landowner Lease Payments

- Over its 30-year life, Dakota Range III will generate **$26 million** in lease payments to participating landowners.
    - Prior to construction, landowners will have received well over $500,000 in development payments.

Local Spending During Construction

- During construction, about 250 construction workers will be living and shopping in the area, creating a boost for the local economy.
- Several key construction materials will be sourced locally, supporting local suppliers.

Long-term Jobs

- Throughout operation, Dakota Range III will employ about 10 full-time operations and maintenance employees, creating approximately **$18 million** in wages paid to community members.
- The technicians will work out of an Operations & Maintenance (O&M) facility, built specifically for the project. The footprint of the O&M will be approximately 5 acres.

Community Outreach and Support

Dakota Range III is dedicated to being a strong community partner.

Dakota Range III Wind has been in contact with stakeholders:

- Roberts and Grant counties: Commissioners and Highway Superintendents, both Chambers of Commerce in Sisseton and Milbank, Tri State Extension, Sisseton Economic Development Board, Aliive in Sisseton, Sisseton Wahpeton College, 4H, Grow South Dakota, and other local organizations.
- Townships: Ortley, Summit, Blooming Valley, Farmington, and Mazeppa
- The Towns of Sisseton and Summit

Dakota Range III has an office in Summit to provide information about the project and answer questions from the community.

Additional community support has included:

- Donation to the addition to the high school in Summit
- Donation to fundraising efforts for Summit's Volunteer Fire Department
- Support for Summit High School History Club's trip to Washington, DC
- Contributions to the local Boys & Girls Club
- Contributions and participation in Aliive's trunk or treat in Sisseton giving out candy to 1500 kids
- Contributing to the rodeo at Sisseton Wahpeton College
- Contribution and participation to Farm Lunches and Chili cook off by the Sisseton Chamber of Commerce
- Contribution to Milbank Chamber of Commerce for Kite and Fly event

Dakota Range III Project Components

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Turbines and Permanent Met Towers

Vestas V150 Turbine Dimensions

The tallest turbine being considered for the project is the Vestas V150. It has a hub height of 105 meters (~354 feet), each blade is 73.7 meters (~248 feet), for a total height of 175 meters (591 feet)

Permanent Meteorological Tower

Up to three towers will be located within the project area. The purpose of the tower is to monitor the productivity of the turbines. They will be the same height as the turbine's hub height.

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Feeder Line Dimensions

- The poles are installed to a depth of 14 to 15.5 feet.
- 80 to 105 feet tall.
- The poles of each structure are ~30 feet apart.
- Spacing intervals between structures would be approximately 600 feet apart.

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Access Roads and Underground Collection

16 foot wide Access Road to Turbine

34.5 kV Underground Collection Trench and Cable

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Turbine Foundations and Assembly

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Substation and O&M

Collection Substation

Example Operations & Maintenance Facility

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Conclusion