BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

In the Matter of the Application of Flying Cow Wind, LLC for a Facilities Permit for a 345 kV Transmission Line

Docket No. EL18-__

DIRECT TESTIMONY
OF MICHELLE MATTHEWS

September 27, 2018

INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michelle Matthews. My business address is 330 2nd Avenue South, Suite 820, Minneapolis, MN 55401.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Applicant, Flying Cow Wind, LLC (“Applicant" or "FCW”).

Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT POSITION DO YOU HOLD?

A. I am employed by Renewable Energy Systems Americas Inc. ("RES") as Development Manager II. RES, through its affiliates, develops renewable energy projects throughout the United States and Canada. RES is one of the top renewable energy companies in North America. Since 1981, RES has constructed more than 160 renewable energy projects, with a global portfolio that exceeds 16 gigawatts. RES has been active in North America since 1997 and has a renewable energy construction portfolio that exceeds 10,000 megawatts ("MW"). This includes the construction of more than 1,000 miles of overhead transmission lines.

Q. WHAT IS THE ORGANIZATIONAL RELATIONSHIP BETWEEN RES AND FLYING COW WIND, LLC?

A. Flying Cow Wind, LLC is a wholly-owned subsidiary of Roaring Fork Wind, LLC, the joint venture formed by subsidiaries of its affiliate RES and Vestas Wind Systems A/S (Vestas).

Q. PLEASE DESCRIBE YOUR POSITION AND YOUR RESPONSIBILITIES FOR THE PROJECT?

A. As a Development Manager II, I am responsible for managing the development of utility-scale wind and solar projects, including associated transmission lines and substations, across the United States. I oversee site and route identification, land acquisition, permitting, system engineering, commercial contracting, and regulatory compliance. For the Project, I have been responsible for identifying the route and alternatives, working with engineers on preliminary designs for the route, acquiring land, working with landowners to incorporate their preferences and concerns, meeting with regulatory staff, and permitting. For the wind project as a whole, I have been responsible for managing land acquisition, permitting, and engineering, as well as community outreach and engagement and contract negotiation

Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

A. I have four years of experience in renewable energy project development, siting, and permitting. I hold a Bachelors of Arts Degree in Environmental Studies from the University of St. Thomas and a Juris Doctorate Degree from the University of Minnesota.

Q. WAS THIS TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES COMMISSION OF SOUTH DAKOTA?

A. No.

PURPOSE OF THE TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to (1) address the need for the Project; (2) describe the benefits of the Project; and (3) provide an overview of permitting with and outreach to other governmental units.

Q. DO YOU SPONSOR AN EXHIBIT IN SUPPORT OF YOUR TESTIMONY?

A. Yes, I sponsor the following exhibit to my testimony:

Exhibit 1: Resume of Michelle Matthews

Exhibit 2: Detailed Map of Proposed Route and Associated Facilities

NEED FOR THE PROPOSED PROJECT

Q. PLEASE DESCRIBE THE PROPOSED PROJECT AND ROUTE.

A. The Project consists of an underground electric collection cabling system with six circuits of approximately 200 linear feet each, as measured from the Minnesota – South Dakota border ("Collection Lines"); a substation with a 34.5 kilovolt (kV) to 345 kV step-up transformer ("Project Substation"); and approximately 10.42 miles of 345 kV overhead transmission line ("Transmission Line"). As shown in Exhibit 1, the Project is located entirely within Deuel County, South Dakota. The overall proposed route for the Transmission Line is approximately 10.42 miles. The Collection Lines, Project Substation and approximately 0.97 miles of the proposed transmission line are located in Norden Township, and the remaining approximately 9.45 miles of Transmission Line are located Scandinavia Township. There will be an approximately 300-foot wide corridor within which the Transmission line is to be located.

Q. WHAT IS THE PURPOSE OF THE PROPOSED PROJECT?

A. The Project is designed to connect the planned Bitter Root Wind Project, an up to 152 MW to be located in Yellow Medicine County, Minnesota ("Wind Project"), to the point of interconnection ("POI") located at a planned Otter Tail Power Company substation ("Astoria Substation") to be built in Deuel County, South Dakota. The Project will transmit 34.5 kV electricity produced from the Wind Project turbines via underground electrical collection lines to the Project Substation which is anticipated to be located in Deuel County, SD. The Project Substation will step up the electricity from 34.5 kV to 345 kV and then carry electricity via the proposed 345 kV overhead transmission line to the POI at the Astoria Substation. The Project will interconnect at a dedicated breaker position at the Astoria Substation, which will allow the energy output from the Wind Project to be injected onto the recently-constructed and now operational Big Stone South to Brookings County ("BSSBC") 345 kV transmission line.

Q. PLEASE DESCRIBE THE DEMAND FOR THE PROPOSED PROJECT.

A. The Project will provide transmission facilities to deliver to the grid the energy from the Wind Project. The Applicant has executed a PPA for the sale of the renewable energy generated by the Wind Project. Without the construction and operation of the Project, there is not a transmission line or substation to deliver power from the Wind Project to the transmission grid on the MISO system in South Dakota via the BSSBC 345 kV transmission line.

Q. WHAT IS THE ANTICIPATED SCHEDULE FOR THE PROJECT?

A. FCW anticipates beginning construction of the Project in the second quarter of 2020 once all required permits and approvals are in place, all landowner agreements have been

finalized, and final design has been completed. The Project is expected to be in-service in the third quarter 2020, pending related permitting and approvals.

Q. PLEASE DESCRIBE WHY THE PROJECT IS NEEDED TO DELIVER ENERGY FROM THE WIND PROJECT TO THE TRANSMISSION GRID.

A. As I indicated above, the Project is necessary to interconnect the Wind Project to the POI at the Astoria Substation. The Wind Project entered the Midcontinent Independent System Operator, Inc. (MISO) interconnection queue in February 2016 and has a queue number of J493. MISO selected the POI for the Project/ Wind Project, balancing the needs of the interconnection system as a whole and other applicants. The Project is necessary to interconnect the Wind Project to the selected POI, and without the Project, the energy from the Wind Project could not be delivered to the transmission grid and to the offtaker under the PPA.

PROJECT BENEFITS

Q. ARE THERE ADDITIONAL BENEFITS OF THE PROJECT, AND IF SO, WHAT ARE THEY?

A. Yes, construction and operation of the Project will provide direct and indirect economic benefits to the local community and region. The new transmission infrastructure and the Wind Project will increase generation capacity of a clean, affordable, carbon-free renewable energy source (wind) and improve the security and reliability of the regional electric transmission grid and distributed generation of clean power. The primary economic benefit of the Project will result from property taxes paid for right-of-way ("ROW") and improvements in Deuel County and from easement payments for necessary ROW for the Project from the Applicant to affected landowners, and from purchase of the

proposed Project Substation site. The Project will also generate direct economic benefits from jobs. Construction of the Project will require approximately 27-43 temporary construction jobs, and operation and maintenance of the Project will require 4-6 full time employees. Construction of the Project will also provide indirect positive economic benefits to Deuel County businesses and services including food services, lodging, wholesale trade businesses, real estate services, fuel, retail stores, and other businesses.

PERMITTING AND OUTREACH

Q. WHAT OTHER PERMITS ARE REQUIRED FOR THE PROJECT?

A. Section 24.4 of the Application sets forth the other federal, state, and local permits that may be required for the Project. The Applicant continues to work with applicable federal, state, and local agencies and government units, and will acquire all necessary permits and approvals necessary to construct and operate the Project.

Q. PLEASE DESCRIBE FCW'S OUTREACH EFFORTS WITH OTHER GOVERNMENTAL ENTITIES.

A. The Applicant has contacted various federal, state, and local agencies and government units to inform them of the Project, request additional information, and coordinate regarding each agency's jurisdiction and relevant permitting processes. Additionally, the Applicant has been in communication with Deuel County representatives to discuss the Project and necessary local permitting for the Project Substation. The Applicant is in the process of preparing an application for a Special Exception Permit from Deuel County and anticipates filing the application in fourth quarter 2018.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Dated this 27th day of September, 2018.

Michelle Matthews