

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF DAKOTA RANGE I, LLC AND DAKOTA
RANGE II, LLC FOR AN ENERGY FACILITY PERMIT TO CONSTRUCT
A WIND ENERGY FACILITY

SD PUC DOCKET EL-18-003

PREFILED REBUTTAL TESTIMONY OF BRENNA GUNDERSON
ON BEHALF OF DAKOTA RANGE I, LLC AND DAKOTA RANGE II, LLC

May 21, 2018

1 **I. INTRODUCTION**

2

3 **Q. Please state your name and place of employment.**

4 A. My name is Brenna Gunderson. I am the Director of Project Development for Apex
5 Clean Energy, Inc.

6

7 **Q. Please describe your background and qualifications.**

8 A. I have been a wind energy developer for eleven years, six of which I have worked for
9 Apex Clean Energy. I am currently the Director of Project Development. Prior to
10 working for Apex Clean Energy I was a Project Manager of wind development with
11 EDP Renewables. I have a Master of Arts degree in Counseling and Psychological
12 Services from St. Mary's University, Minneapolis, MN. A copy of my statement of
13 qualifications is included as **Exhibit 1**.

14

15 **Q. Did you provide Direct Testimony in this Docket on January 24, 2018?**

16 A. No.

17

18 **Q. What is the purpose of your Rebuttal Testimony?**

19 A. The purpose of my Rebuttal Testimony is to respond to certain portions of the
20 testimony of Jon Thurber, submitted on behalf of the South Dakota Public Utilities
21 Commission Staff ("Staff").

22

23 **Q. Are there any exhibits attached to your Rebuttal Testimony?**

24 A. The following exhibits are attached to my Rebuttal Testimony:

- 25 • **Exhibit 1**: Statement of Qualifications.
- 26 • **Exhibit 2**: Turbine Flexibility Proposal

27

28 **II. RESPONSE TO TESTIMONY OF JON THURBER**

29

30 **Q. Mr. Thurber discusses the Applicant's request for turbine flexibility. What is**
31 **Dakota Range requesting?**

1 A. Dakota Range is requesting that the permit allow turbines to be shifted within 500
2 feet of their current proposed location, so long as specified noise and shadow flicker
3 thresholds are not exceeded, cultural resource impacts are avoided or minimized per
4 the Cultural Resources Monitoring and Management Plan, environmental setbacks
5 are adhered to as agreed upon with the U.S. Fish and Wildlife Service (“FWS”) and
6 South Dakota Game, Fish and Parks (“GFP”), and wetland impacts are avoided to
7 the extent practicable. If turbine shifts are greater than 500 feet, exceed the noted
8 thresholds, or do not meet the other limitations specified, Dakota Range would either
9 use an alternate turbine location or obtain Commission approval of the proposed
10 turbine shift.

11
12 **Q. Mr. Thurber references Staff Data Request 7-5 and notes that the Applicant**
13 **responded that this information is not readily available. What was requested**
14 **in Staff Data Request 7-5?**

15 A. Staff Data Request 7-5 asked the Applicant to: “
16 • “[P]rovide a list of all wind generation projects completed by Apex Clean
17 Energy Holding, LLC, or an associated subsidiary, where turbines were
18 moved during the final micrositing process.”
19 • “[P]rovide how many turbines were moved, how many feet each turbine was
20 shifted, and the reason for each shift.”
21 • “[P]rovide a list of all wind generation projects completed by Apex Clean
22 Energy Holding, LLC, or an associated subsidiary, where no turbines were
23 shifted during the final micrositing process.”

24
25 **Q. Why did Dakota Range respond that the information sought by Staff in Data**
26 **Request 7-5 is not readily available?**

27 A. Dakota Range responded that the information sought in Data Request 7-5 was not
28 readily available because the request was quite broad and sought detailed and
29 specific information related to multiple projects involving a large number of wind
30 turbines. Apex Clean Energy Holdings, LLC (“Apex”) and its subsidiaries have been
31 involved in the development and construction of more than 2,200 MW of wind

1 energy in the last nine years. Because it is not uncommon for turbine shifts to occur
2 during final micrositing, for the reasons I will discuss in more detail below and as
3 identified in the Application, it simply was not possible to identify each and every
4 turbine shift, and the reasons for that shift, in response to the data request.
5

6 **Q. Why is Dakota Range requesting the flexibility to shift turbines 500 feet?**

7 A. As discussed in Section 9.1 of the Application, “[a]s a result of final micrositing,
8 minor shifts in the turbine locations may be necessary to avoid newly identified
9 cultural resources (cultural resource studies in coordination with the SWO are
10 ongoing), or due to geotechnical evaluations of the wind turbine locations, landowner
11 input, or other factors.” I will discuss each of these factors in more detail below:

- 12 • Tribal Resources: Dakota Range completed tribal resource surveys with
13 Sisseton Wahpeton Oyate (“SWO”) tribe in May 2018. As a result of those
14 surveys, and input from the tribe, Dakota Range has identified certain wind
15 facilities it wants to shift in order to avoid areas of cultural significance to the
16 tribes. There are five turbines Dakota Range would need to shift between
17 100 and 500 feet to address SWO’s concerns.
- 18 • Geotechnical Evaluations: Geotechnical soil borings will be completed at
19 each turbine location prior to the start of construction and are used to design
20 each turbine’s foundation. Should the geotechnical evaluation indicate soil
21 composition at currently proposed locations is not adequate to support a
22 turbine’s foundation design, an engineer will first attempt to shift the turbine’s
23 location to an area with better soil before redesigning the foundation. The
24 requested flexibility will better enable Dakota Range to utilize the geotechnical
25 data in turbine placement and foundation design.
- 26 • Landowner Input: It is common for a landowner to put more thought into the
27 location of the turbine over time. This is particularly true as construction
28 activities get closer or even commence. We do our best to address the
29 concerns of our landowners and try to accommodate their reasonable
30 requests, and having the ability to shift a turbine without further approval will
31 better enable us to do so.

- 1 • Other Factors: There may be unknown obstacles underground that are not
2 discovered until excavation activities begin. Should an obstacle such, as a
3 boulder or a previously unidentified cultural resource, be discovered during
4 construction, shifting the turbine may allow the obstacle to be avoided without
5 delaying construction activities. Additionally, if a new microwave tower was
6 installed prior to commencement of construction, and a turbine location
7 obstructed the tower’s beam path, shifting the turbine may resolve the issue.

8
9 **Q. On pages 7-8 of his testimony, Mr. Thurber sets forth a process for handling**
10 **turbine shifts that occur. Do you have comments on this proposed process?**

11 A. Yes. Rather than the process Mr. Thurber has outlined, Dakota Range proposes the
12 turbine flexibility discussed above, along with a review/approval process for “material
13 changes,” i.e., those turbine adjustments that do not meet the turbine flexibility
14 limitations outlined above. The requested turbine flexibility, and the material change
15 review/approval process, are outlined on the attached **Exhibit 2**.

16
17 Dakota Range’s proposal would allow the flexibility to shift turbines within 500 feet of
18 the currently proposed locations without further approval, subject to the limitations
19 outlined in Exhibit 3. Dakota Range would file an affidavit demonstrating compliance
20 with the applicable requirements prior to implementing the shift.

21
22 For those adjustments that exceed 500 feet or do not otherwise comply with the
23 specified limitations, Dakota Range proposes submitting a filing containing the
24 information outlined in Exhibit 3, and providing Staff with ten calendar days within
25 which to determine if the proposed adjustment should be referred to the Commission
26 for further review. If further review is not requested, Dakota Range could proceed
27 with the turbine adjustment. If further review is requested, the Commission would
28 make a determination on the adjustment at its next regularly scheduled meeting after
29 the Staff’s referral is made.

1 During construction, keeping schedules is crucial not only to meeting the commercial
2 operation date, but also to managing contracts with contractors and subcontractors.
3 Dakota Range believes its proposal will ensure compliance with all applicable
4 setbacks, commitments, and requirements, while also enabling the Project to remain
5 on-schedule and on-budget.
6

7 **Q. Have you reviewed the requests for location deviations referenced by Mr.**
8 **Thurber on page 8 of his testimony?**

9 A. Yes. It is important to note that in past wind project dockets, the project developers
10 had substantial micrositing flexibility, as they did not have to identify final turbine
11 locations until 30 days prior to construction. In this case, Dakota Range is only
12 asking for 500 feet of turbine flexibility, limited by the commitments set forth above.
13 Therefore, when compared to past wind project dockets, the requested turbine siting
14 flexibility is minimal.
15

16 **III. CONCLUSION**

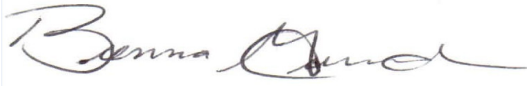
17

18 **Q. Does this conclude your Rebuttal Testimony?**

19 A. Yes.
20

1 Dated this 21st day of May, 2018.

2

A handwritten signature in cursive script, appearing to read "Brenna Gunderson". The signature is written in black ink on a white background.

3

4

5 Brenna Gunderson

6

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 763-267-7195 (land line)
 brenna.gunderson@gmail.com

EXPERIENCE

Senior Development Manager, Apex Clean Energy ***Charlottesville, Virginia****2014 – present*

- Developed and delivered the 100MW Hoopston Wind, LLC project to IKEA Energy US, LLC.
- Managed the local, state, and federal permitting of wind energy projects in the MISO and PJM regions (Minnesota, Wisconsin, Iowa, Michigan, Illinois, and Indiana).
- Identified an Iowa greenfield project, Upland Prairie Wind, LLC, spring 2015, managed the development process, and sold a fully developed site to an off-taker in the fall of 2017. Expected NTP spring 2018.
- Experienced in negotiating Purchase and Sale Agreements for wind energy projects.
- Development activities include: working closely with obtaining site control (i.e. from legal documents to a title policy), environmental studies and surveys, meteorological data collection, public relations (political and social media), transmission and interconnection, engineering & design, GIS map creation, turbine siting (setbacks, sound & shadow flicker obligations), budgets and schedules, and project closing activities.

Development Manager, Apex Clean Energy ***Charlottesville, Virginia****2012 - 2014*

- Worked on the development of wind farms located in Minnesota, Wisconsin, Indiana, and Illinois by securing leases from farm-land owners, applying for permits (federal, state, and local), tracking the MISO interconnection process, facilitated project team meetings, and updated and reviewed project budgets and schedules.
- Prepared bids to utilities in response to their requests to purchase power from wind energy projects.
- Managed consultants that were hired to complete environmental and engineering services during the development process.
- Worked closely with public relations firms to educate and drive support for wind energy projects within the communities.

Project Manager, EDP Renewables North America LLC ***Minneapolis, Minnesota****2008 - 2011*

- Managed the development of the Lost Lakes Wind Farm LLC (IA, '08-09), including but not limited to: site control, permits, environmental studies, and support of the interconnection process. Construction of the wind farm began less than 15 months (certain transmission exceptions excluded) from the initiation of the development process. Lost Lakes Wind Farm was commissioned December 2009.
- Provided development support throughout the construction of the Lost Lakes Wind Farm by establishing relationships with the construction team and their consultants. A firm understanding of the construction process was established.
- Coordinated with local officials, construction, civil engineering, electrical engineering, wind assessment, operations, and various consultants who performed a variety of studies for the project (i.e. sound, shadow flicker, electrical, and environmental).
- Responsible for a \$2 million development budget
- Supervised Project Developers and Land Specialists (i.e. approved expense reports, assisted with goal setting, and completed employee reviews).
- Managed the development of two other wind energy projects during this same period.

Project Coordinator, Horizon Wind Energy, ***Grand Meadow, Minnesota****2006 - 2008*

- Assisted in the development of the Prairie Star Wind Farm (MN, '06- '07) and the Pioneer Prairie Wind Farm (IA, '07- '08)

- Designed and implemented an Access database utilized by developers and operations personnel to organize landowners by parcel, signed agreements, and payments
- Hired and trained administrative support positions and other Project Coordinators
- Assisted with the Legal Department in the preparation of land documents and processed all executed agreements.
- Supervised various office activities: office maintenance, handled difficult situations, formed relationships with other departments within Horizon, and encouraged the understanding and compliance of policies and procedures.

Assistive Technology / MIS Supervisor, Southeastern Minnesota Center for Independent Living (SEMCIL) Rochester, Minnesota
2002 - 2006

- Managed the assistive technology program and the Independent Living Management Information System (DAVIS).
- Supervised, trained, and evaluated job performance of Support Specialist position.
- Established program policies and procedures.
- Designed consumer and facilitator training materials.
- Guided individuals toward identifying and accomplishing independent living goals.
- Facilitated workshops
- Drafted job descriptions and interviewed candidates.

Project Coordinator, Rhythms NetConnections, Inc. Englewood, Colorado
1999 - 2001

- Responsible for logistical aspects of central office operations and customer equipment, such as purchasing, distribution, inventory, and warehousing.
- Created and implemented inventory distribution and tracking processes for the Field Service Department.
- Deployed, managed, and institutionalized the maintenance program for a nationwide fleet of 160 vehicles.
- Supported the Vice President, Director, and Support Manager of the Field Service Department, in addition to 130 nationwide Managers and Technicians.
- Established and implemented departmental policies and procedures by working with Legal, Marketing, and Facilities departments.
- Coordinated quarterly team building events for department heads.

TECHNICAL
SKILLS

- Microsoft Word, Excel, PowerPoint, Project, Access; Land Program Management (LPM); SAP; Nation Builder, Salesforce, Internet based applications: Smartsheet and Box, and ArcView GIS mapping software

EDUCATION

Project Management Institute

*Achieved all requirements and received the approval to take the PMP Certification Exam
2011*

Mini MBA

University of St. Thomas 2010

Minneapolis, Minnesota

Master of Art in Counseling and Psychological Services

St. Mary's University 2002-2005

Minneapolis, Minnesota

Bachelor of Art in Psychology and Family Resources

St. Olaf College 1992-1996

Northfield, Minnesota

Turbine Flexibility Proposal

- **Requested Turbine Flexibility:** Ability to adjust turbines within 500 feet of locations proposed in Application without further approval, subject to the following limitations:
 - Applicable setback requirements are met;
 - Specified noise and shadow flicker thresholds at occupied residences are not exceeded;
 - Cultural resource impacts are avoided or minimized per the Cultural Resources Monitoring and Management Plan;
 - Environmental setbacks are adhered to as agreed upon with the U.S. Fish and Wildlife Service and South Dakota Game, Fish and Parks; and
 - Wetland impacts are avoided to the extent practicable.

Prior to implementing the turbine adjustment, Dakota Range will file in the docket an affidavit demonstrating compliance with the limitations set forth above.

- **Material Changes:** Any turbine adjustments that do not comply with the limitations set forth above would be considered “material changes,” and Dakota Range will file a motion seeking Commission approval prior to making the adjustment pursuant to the following approval process:
 - Dakota Range would file with the Commission and serve on the official Service List a motion for approval of the adjustment that includes:
 - An affidavit describing the proposed turbine adjustment, the reason for the adjustment, the reason the adjustment does not comply with one or more turbine flexibility limitations set forth above, and information regarding compliance with all other applicable requirements; and
 - A map showing both the approved location and the proposed adjustment (in different colors).
 - Once received, the information would be reviewed by Commission Staff, and Commission Staff would have 10 business days within which to request further Commission review.
 - If no further review is requested, then Dakota Range may proceed with the adjustment.
 - If further review is requested, the Commission would then issue a decision regarding Dakota Range’s request at its next regularly scheduled Commission meeting after the request for further review is made by Commission Staff.