

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION OF
CROWNED RIDGE WIND II, LLC FOR A FACILITIES PERMIT TO
CONSTRUCTION 300.6 MEGAWATT WIND FACILITY**

Docket No. EL19-027

**REBUTTAL TESTIMONY AND EXHIBITS
OF JAY HALEY**

January 8, 2020

INTRODUCTION

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jay Haley. My business address is 3100 DeMers Ave., Grand Forks, ND, 58201.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a Partner in EAPC Wind Energy and work as a Wind Engineer.

Q. WHAT ARE YOUR RESPONSIBILITIES?

A. My responsibility was to conduct the sound and shadow/flicker studies for Crowned Ridge Wind, II LLC (“CRW II”).

Q. ARE YOU THE SAME JAY HALEY WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING ON JULY 9, 2019 AND SUPPLEMENTAL TESTIMONY ON SEPTEMBER 20, 2019?

A. Yes.

Q. HAS THIS REBUTTAL TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?

A. Yes.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The purpose of my supplemental testimony is to address Staff witness David Hessler.

Q. STAFF WITNESS HESSLER (PAGE 5, LINES 7-11) CLAIMS THAT CRW II MAY BE ABLE TO FURTHER OPTIMIZE SOUND THROUGH THE USE OF 6 ALTERNATIVE TURBINE LOCATIONS 94, 97, 103, 113, 134, AND ALT6.

1 **WHAT, IF ANY, REDUCTIONS IN SOUND OCCUR WITH THE USE OF ALL OF**
2 **THESE ALTERNATIVE TURBINE LOCATIONS?**

3 A. I have run my model using Mr. Hessler's recommendations and the reductions in sound
4 pressure levels are shown in Exhibit JH-R-1 in Table C-1 (attached).

5
6 **Q. WHAT ARE THE SOUND REDUCTIONS, IF ANY, ALTERNATIVE TURBINE**
7 **LOCATIONS CR2-94, 97, 134, AND ALT6 ARE USED AS RECOMMENDED BY**
8 **WITNESS WILHELM?**

9 A. I ran my model using CR2-94, 97, 134, and ALT6 and relegating turbines CR2-13, 72, 77
10 and ALT5 to alternative status as I found this combination best optimized the sound
11 impact from CRW II on non-participants. The results are also set forth in Exhibit JH-R-1
12 so they can be compared to Mr. Hessler's proposal.

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15 **Q. WHAT, IF ANY, REDUCTIONS IN SHADOW FLICKER OCCUR WITH THE**
16 **HESSLER PROPOSAL COMPARED TO CRW II'S PROPOSAL TO USE**
17 **ALTERNATIVE TURBINE LOCATIONS CR2-94, 97, 134, AND ALT6 INSTEAD**
18 **OF CR2-13, 72, 77, AND ALT5?**

19 A. The changes in shadow flicker are shown in Exhibit JH-R-2.

20
21 **Q. WHAT IS THE SOUND AND SHADOW FLICKER IMPACT ON INTERVENERS**
22 **WITH THE CRW II PROPOSAL?**

23 A. The table of sound and shadow flicker impacts on Intervenors are shown in
24 Exhibit JH-R-3.

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1 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2 A. Yes, it does.

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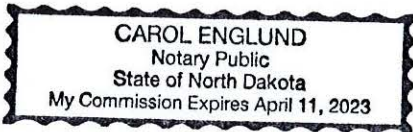
STATE OF NORTH DAKOTA)
) ss
COUNTY OF GRAND FORKS)

I, Jay Haley, being duly sworn on oath, depose and state that I am the witness identified in the foregoing prepared testimony and I am familiar with its contents, and that the facts set forth are true to the best of my knowledge, information and belief.

Jay Haley
Jay Haley

Subscribed and sworn to before me this 8th day of
January, 2020.

SEAL



Carol Englund
Notary Public

My Commission Expires April 11, 2023