## 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

1		<u>INTRODUCTION</u>		
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.		
3	A.	My name is Jay Haley. My business address is 3100 DeMers Ave., Grand Forks, ND, 58201.		
4				
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?		
6	A.	I am a Partner in EAPC Wind Energy and work as a Wind Engineer.		
7				
8	Q.	WHAT ARE YOUR RESPONSIBILITIES?		
9	A.	My responsibility was to conduct the sound and shadow/flicker studies for Crowned Ridge		
10		Wind, II LLC ("CRW II").		
11				
12	Q.	ARE YOU THE SAME JAY HALEY WHO SUBMITTED DIRECT TESTIMONY		
13		IN THIS PROCEEDING ON JULY 9, 2019 AND SUPPLEMENTAL TESTIMONY		
14		ON SEPTEMBER 20, 2019?		
15	A.	Yes.		
16				
17	Q.	HAS THIS REBUTTAL TESTIMONY BEEN PREPARED BY YOU OR UNDER		
18		YOUR DIRECT SUPERVISION?		
19	A.	Yes.		
<ul><li>20</li><li>21</li></ul>	Q.	PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.		
22 23	_			
	A.	The purpose of my supplemental testimony is to address Staff witness David Hessler.		
24	0	CT A FRANCISCO HEGGI FRANCISCO AND COMPANY CONTRACTOR C		
25	Q.	STAFF WITNESS HESSLER (PAGE 5, LINES 7-11) CLAIMS THAT CRW II MAY		
26		BE ABLE TO FURTHER OPTIMIZE SOUND THROUGH THE USE OF 6		
27		ALTERNATIVE TURBINE LOCATIONS 94, 97, 103, 113, 134, AND ALT6.		

I		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 TURBINI	
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.	
13 14			
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.	
25			

1	Q.	DOES THIS CONCLUDE	E YOUR REBUTTAL TESTIMONY?
2	A.	Yes, it does.	
3			
			) ) ss ) ath, depose and state that I am the witness identified in the am familiar with its contents, and that the facts set forth are aformation and belief.
			Jay Haley  Subscribed and sworn to before me this 8 <sup>th</sup> day of January, 2020.

Carol Englund Notary Public

My Commission Expires April 11, 2023

SEAL

CAROL ENGLUND
Notary Public
State of North Dakota
My Commission Expires April 11, 2023