## 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 CONSTRUCT A 300.6 MEGAWATT WIND FACILITY

Docket No. EL19-027

## SUPPLEMENTAL TESTIMONY AND EXHIBITS OF DARYL HART

**September 20, 2019** 

1		INTRODUCTION AND QUALIFICATIONS
2	Q.	PLEASE STATE YOUR NAMES AND BUSINESS ADDRESS.
3	A.	Daryl Hart. My business address is 700 Universe Blvd., Juno Beach, Florida, 33408.
4		
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed by NextEra Energy Resources, LLC ("NEER"), as a Director of
7		Renewable Business Development. I am responsible for commercial aspects of the up to
8		300.6 megawatt ("MW") Crowned Ridge II wind generation project ("Project"). I also
9		support Tyler Wilhelm on development and permitting.
10		
11	Q.	ARE YOU THE SAME DARYL HART WHO SUBMITTED DIRECT
12		TESTIMONY IN THIS PROCEEDING ON JULY 9, 2019?
13	A.	Yes.
14		
15	Q.	HAS THIS TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR
16		DIRECT SUPERVISION?
17	A.	Yes.
18		
19		PURPOSE OF TESTIMONY
20	Q.	PLEASE DESCRIBE THE PURPOSE OF THE TESTIMONY.
21	A.	The purpose of my testimony is to explain the current MISO interconnection process and
22		its potential impact on the Project as well as an update on the wind array.
23		

1		MISO INTERCONNECTION PROCESS
2	Q.	PROVIDE AN OVERVIEW OF WHERE CRW II IS IN THE MISO
3		INTERCONNECTION PROCESS.
4	A.	CRW II has executed a Generation Interconnection Agreement for 200 MWs.
5		Therefore, CRW II has the ability under the MISO processes to inject 200 MWs into the
6		Big Stone South substation.
7		The remaining 100 MWs of CRW II was initially studied by MISO and SPP in
8		MISO interconnection queue position J721. Based on the final results of the J721
9		studies showing high interconnection costs, on August 9, 2019, CRW II withdrew the
10		J721 interconnection queue position.
11		CRW II, however, has an additional MISO interconnection queue position J722.
12		MISO is currently studying J722 for upgrades needed on the MISO system, and SPP for
13		upgrades based on an affected system. The preliminary results of these studies are
14		anticipated to be released in the first quarter of 2020.
15		
16	Q.	GIVEN THAT THE INTERCONNECTION COSTS FOR J721 WERE HIGH, IS
17		IT POSSIBLE THAT THE RESULTS OF THE J722 STUDIES WILL ALSO
18		SHOW HIGH INTERCONNECTION COSTS?
19	A.	Yes, however, a number of generation projects withdrew from the MISO interconnection
20		queue on August 9, 2019. Therefore, the J722 MISO and SPP studies could show
21		different interconnection costs due to fewer generators requesting to interconnect into the
22		MISO-West transmission network, which includes J722.

1		That said, given the high interconnection costs associated with the withdrawn
2		J721 queue position, if the same results occur for J722, CRW II would defer the
3		construction of 100 MWs until such time that MISO and SPP processes provide a cost-
4		effective solution to the congestion causing the high interconnection costs.
5	Q.	WHEN WILL CRW II DEFINITIVELY DECIDE TO DEFER CONSTRUCTION
6		OF THE 100 MWS?
7	A.	A definitive decision to defer construction of the 100 MWs will be made once the
8		preliminary MISO and SPP studies and costs associated with J722 queue position are
9		released in the first quarter of 2020.
10	Q.	IF CRW II DECIDES TO DEFER CONSTRUCTION OF THE 100 MWS, HOW
11		LONG WOULD YOU DEFER IT?
12	A.	CRW II would defer the construction of the 100 MWs up to four years from the issuance
13		of the Facility Permit. In the event CRW II does not start construction of the last 100
14		MWs within four years, CRW II understands it must request certification from the
15		Commission that the 100 MW array continues to meet the conditions of the Facility
16		Permit.
17	Q.	PLEASE PROVIDE AN UNDERSTANDING OF "THE 200 MW WIND TURBINE
18		ARRAY THAT IS NOT DEPENDENT ON MISO STUDIES, BECAUSE IT IS
19		ALREADY COVERED BY THE GENERATION INTERCONNECTION STUDY."
20	A.	The 200 MW wind turbine array that has all the MISO studies, approvals, including a
21		Generator Interconnection Agreement, is shown in Exhibit DH-S-1. This 200 MW wind
22		turbine array would be constructed no matter the results of the MISO process and study
23		for queue position J722.

1		I have also provided Exhibit DH-S-2, which shows the 300.6 MW wind turbine
2		array with different colors showing the 200 MW wind turbine array and the 100 MW
3		wind turbine array.
4		<u>UPDATES</u>
5	Q.	OTHER THAN THE IDENTIFICATION OF WHICH TURBINES ARE IN THE
6		200 MW ARRAY VERSUS 100 MW ARRAY, WERE THERE ANY OTHER
7		UPDATES WITH THE WIND ARRAY.
8	A.	Yes, CRW II will: (1) now use LNTE blades on all of the turbines, instead only the 34
9		turbines indicated in the application; (2) add five of the eight alternative locations that
10		were identified as under consideration in the application at page 20; (3) move CRII-133
11		fifty feet to ensure compliance with sound on CRW I; and (4) add back in CRII-126, due
12		to the landowner signing an easement option for that turbine. Given the additional
13		turbine locations, CRW II has relegated certain original primary locations to alternates to
14		facilitate the constructability of the wind array. These changes and the five additional
15		alternates are explained in Exhibit DH-S-3.
16	Q.	ARE YOU FAMILIAR WITH THE SUPPLEMENTAL TESTIMONY OF
17		WITNESS HALEY AND THE RESULTS PROVIDED IN HIS EXHIBITS?
18	A.	Yes.
19	Q.	WITNESS HALEY IN HIS SUPPLEMENTAL TESTIMONY REPRESENTS
20		THAT CRW II WILL CURTAIL CERTAIN TURBINES TO ENSURE
21		RECEPTORS CR2-C98-NP AND CR1-C10-P DO NOT EXPERIENCE MORE
22		THAN 30 HOURS OF SHADOW FLICKER ANNUALLY. DO YOU AGREE?

- 1 A. Yes, CRW II will curtail the turbines identified by witness Haley to ensure receptors
  2 CR2-C98-NP and CR1-C10-P do not experience more that 30-hours of shadow flicker
- 3 annually.
- 4 Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?
- 5 A. Yes, it does.

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STATE OF FLORIDA	)
	) ss
COUNTY OF PALM BEACH	)

I, Daryl Hart, 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.

Daryl Hart

Subscribed and sworn to before me this 19<sup>th</sup> day of September 2019.

**SEAL** 



Notary Public

My Commission Expires \_\_\_\_\_