

COLUMBUS I CLEVELAND CINCINNATI-DAYTON

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Sally W. Bloomfield 614.227.2368 sbloomfield@bricker.com June 15, 2011

Via Electronic Filing

Ms. Betty McCauly Administration/Docketing Public Utilities Commission of Ohio 180 East Broad Street – 11th Floor Columbus, OH 43215-3793

Re: Blue Creek Wind Farm, LLC Case No. 11-1995-EL-BGA

Dear Ms. McCauly:

Attached please find Blue Creek Wind Farm's clarification to the Response to Staff's Data Request 2 (A) issued on June 7, 2011 in the above-referenced proceeding. The clarification was provided to the Ohio Power Siting Board Staff by electronic mail yesterday, June 14, 2011.

Sincerely,

Sally N Broomjula

Sally W. Bloomfield

Attachment

Case No. 11-1995-EL-BGA Blue Creek Wind Farm

Responses to Staff's Data Requests

Below is the clarification to the response to the Staff's Data Request 2 (A) issued on June 7, 2011; the clarification was e-mailed to the Staff on June 14, 2011.

Original Response (filed June 14, 2011)

2(A) Please model your aforementioned scenario (which would reduce shadow flicker to 30 hours/yr. or less for turbine 127 & residence 224) and provide modeling documentation.

Attached is the Shadow Flicker Calendar demonstrating the reduction of Shadow Flicker at Residence 224 to 29 hours and 41 minutes through the use of curtailment.

Request for clarification:

Please show which parameters were input (which are needed in order to see that the reduction comes from reduced operational hours and a limitation on the operational azimuths – as Scott proposed). Please send the WindPRO parameters and pages showing this.

Attached are the request "calendar" outputs from WindPRO. One file shows the direct output from WindPRO, while the other file (highlighted) has the curtailment hours highlighted.

At the bottom of each page are the "total, real" minutes of shadow flicker expected each month at modeling location 224. These minutes per month can be added up for the entire year to get the annual number of hours/minutes of expected shadow flicker which in this case is 39 hours and 27 minutes. Under the curtailment option wind turbine 126 would not operate between 6:00 - 7:00 EST between July 1 and August 7. Therefore there will be no expected shadow flicker during these times. The total, real minutes of shadow flicker for these months have been highlighted (513 for July and 57 for August) in page 2. These 570 minutes are subtracted from the 39 hours, 27 minutes to generate the new expected amount of shadow flicker of just under 30 hours per year.

Epsil on Associates, Inc 3 Clock Tower Place, Suite 250 US-MAYNARD MA 01754 978 897 7100 03/23/2011 3:20 AM/2 6 1:252 SHADOW - Calendar Calculation: Rev 11 - Receptors Shadow receptor: 224 - 224 Sun shine probabilities (part of time from sun rise to sun set with sun shine) Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 0.40 0.42 0.49 0.59 0.59 0.62 0.59 0.55 0.56 0.46 0.46 0.40 Assumptions for shadow calculations 1,000 m Maximum distance for influence Minimum sun height over horizon for influence Day step for calculation 1 days Operational time ne step for calculation 1 minutes N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum 245 254 350 561 464 333 237 289 587 832 727 929 937 578 491 385 8,199 June **January** February March [April May 05 38 1 08:04 16:10 (115) 07:50 07:14 07:45 (127) | 06:24 05:09 05:57 (126) 28 52 44 19:34 05:37 06:41 (126) 05:58 (126) 2 08.04 16:38 (115) | 17:55 16:10 (115) | 07:49 18:29 17:58 (113) | 19:02 07:44 (127) | 06:22 20:03 29 52 44 117:22 15:39 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56 (126) 45 06:41 (126) Potential sun hours | 298 296 370 396 448 452 Total, worst case 440 271 605 965 1278 0.42 0.94 0.67 0.49 Sun reduction Oper, time red. 0.40 0.59 0.62 Wind dir. red. 0.71 0.70 0.70 Total reduction 0.27 0.26 0.29 0.39 0.41 Total, real 117 72 177 374 521 Table layout: For each day in each month the following matrix apply Sun rise (hh.mm) First time (hh:mm) with flicker (WTG causing flicker first time) Day in month

WindPRO version 2.6.1.252 Jan 2009 06/13/2011 2:25 PM/2

Sun set (hh:mm) Minutes with flicker Last time (hh:mm) with flicker (WTG causing flicker last time)

West FR C is do veloped by EMD International A/S, Nieth Jernaryoj 10, DK-9220 Aartorg 0, TR, 445 99: 35 44 44, Fax 45 99: 35 444 9, 5-mail: winap-ro@e-mail.

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WindPRO version 2.6.1.252 Jan 2009

06/13/2011 2:25 PM / 2

Epsilon Associates, Inc 3 Clock Tower Place, Suite 250 US-MAYNARD MA 01754 978.897 7100

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2842 - Iberdrola Blue Creek

SHADOW - Calendar

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	17:31	25	16:41 (115)				18:41	31	08:13 (127)		19:44	31	06:34 (126)		43	06:43 (126			
12 [0	08:03		16:17 (115)	07:38			06:57		07:42 (127)	06:06	05:25		06:01 (126)	05:06		05:59 (126			
	17:32	23	16:40 (115)				18:42	30	08:12 (127)		19:45	34	06:35 (126)	20.11	43	06:42 (126			
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	17:34	22	16:41 (115)	18.11			18:44	25	08:09 (127)		19:47	36	06:36 (126)	20:11	42	06:42 (126	i		
	38:02	1000	16:20 (115)				06:52		07:45 (127)		05:22		05:59 (126)		1000	96:00 (126			
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	17.36	18	16:40 (115)				18.46	18	08:04 (127)		19:49	39	06:37 (126)	20.12	42	06:00 (126			
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	17:37	15	16:38 (115)				18:47	13	08:02 (127)		19:50	40	06:39 (126)	20:13	41	06:43 (126			
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	17:42			07:26	15	17:55 (113)				19:23	19:54	43	05:36 (126)		47	06:02 (126			
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	17:53						19:00			19:32	20:01	45	05:56 (126) 06:41 (126)		42	05:04 (126			
	07:52						06:27			05:39	05:10		05:57 (126)			06:03 (126			
11	17:53						19:00			19:33	20:02	44	06:41 (126)		43	06:46 (126			
	07.51						06:25			8	05.10	45	05:56 (126)						
tential sun hours	298			298			19:01			395	20:03	40	06:41 (126)	452					
Total, worst case		440			271			605			110	965		104	1278				
Sun reduction		0.40			0.42		Q	0.49		5	1	0.59		12	0.62				
Oper time red.		0.94			0.94			0.94			1	0.94		1 C	0.94				
Wind dir. red. Total reduction		0.71			0.67			0.64				0.70			0.70				
Total reduction		117			0.26			177		3		374			521				
ble layout: For	each		each mon	h the f		ing matrix	apply					100			-				
and rayout. For	Caell	July in	coon nom	al ule l		ang matrix	-66.0												
Day in month	Sun	rise (h	h.mm)			F	irst tim	e (hh)	mm) with flic	ker (WIGo	ausing	flicker first	time)					
				Vinutes	Incides I				mm) with flic				flicker last						

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Case No(s). 11-1995-EL-BGA

Summary: Correspondence Submitting Clarification to the Response to Staff's Data Request electronically filed by Teresa Orahood on behalf of Blue Creek Wind Farm, LLC