

COLUMBUS I CLEVELAND CINCINNATI-DAYTON

BRICKER & ECKLER LLP 100 South Third Street Columbus, Ohio 43215-4291 MAIN: 614.227.2300 FAX: 614.227.2390

www.bricker.com info@bricker.com

Sally W. Bloomfield 614.227.2368 sbloomfield@bricker.com June 2, 2011

Via Electronic Filing

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

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

Dear Ms. McCauly:

Attached please find the responses to Staff Data Requests by Blue Creek Wind Farm, LLC in the above-referenced matter. These were provided to the Ohio Power Siting Board Staff by electronic mail yesterday, June 1, 2011.

N Brompula

If you have any questions, please give me a call.

Sincerely,

Sally W. Bloomfield

Attachment

## Responses to Staff's Data Requests

Below are the responses to the Staff's Data Requests issued on May 25, 2011 which were e-mailed to the Staff on June 1, 2011.

1. Page 8.7, Shadow Flicker "....and transportation corridor near these new turbines." Please numerically quantify "near" as it appears here.

The statement above was inaccurately provided in our amendment text. The impacts are presented with respect to the 30hrs/year limit at a residential structure, this presentation of shadow flicker has been consistent with the previously accepted April 7, 2010 analysis.

2. **Page 8.7, Shadow Flicker, Table A8-6** Please expound upon the proposed curtailment periods for residences 224 and 96. Please specifically explain how thirty hours can be met operationally.

<u>Turbine 127</u>: Shadow flicker modeling by an independent consultant reports that turbine 127 causes a cumulative annual shadow flicker effect of 39 hours, 27 minutes on house #224 (owner McDowell). This estimate includes reductions taken for overcast/cloudy conditions, cut-in/cut-out wind speeds, and wind direction. We need a reduction of 9 hrs, 27 min to meet the state limit of 30 hours per year. Based on the modeling results Project Meteorologist Scott McDonald estimates that we can achieve this reduction by programming the turbine not to run between 0600-0700 hours (1 hr duration, LST), Jul 1-Aug 7, for all winds except for approximately 15 degree and 195 deg winds (sun azimuth parallel with blade plane).

Residence 96 has signed a Good Neighbor Agreement so no mitigation would be required.

3. Page 8.7, Shadow Flicker, Table A8-6 Please provide a single point / "realistic mode" shadow flicker analysis (incorporating window orientation, obstructions, line-of-sight etc.) for residences 224 and 96.

The results submitted in our amendment application on April 12, 2011 assessed the entire residence as a receptor, therefore our results provided for the requested analysis.

4. Have "Good Neighbor Agreements" been offered to residences 224 and 96?

Yes, residence 96 has signed a Good Neighbor Agreement and residence 224 has decided not.

5. Page 8-25/26 Have the eight new turbine sites been submitted to the NTIA for review? If so, please provide the outcome and supporting documentation. If not, when does the Applicant plan to submit these for review?

An NTIA is not required for individual turbines, it is requested for an entire project area which was provided as part of the original project submittal in 2010. FAA determinations for individual turbines (discussed below) provide for individual turbine radar clearance.

6. Please provide the FAA hazard analysis determination letter for turbine 904 to Staff for review.

Attached.

7. Has the Applicant modeled the turbines' (8 in the amendment) shadow flicker and acoustics for cumulative impacts with other developer's projects etc.? If so, please provide the results to Staff for review. If not please do so. If no cumulative effects are expected, please provide as much to Staff.

The following turbine proximities have been obtained from public databases for the Horizon Wind Project adjacent to the Blue Creek Wind Farm. Based on the approximate distances separating the Horizon turbines from the Blue Creek Wind Farm we do not anticipate any cumulative impacts from Sound or Shadow Flicker for Turbines 901, 902, 903, 904, 906, 907 and 925.

Turbine 908 is within approximately 167 meters of a proposed Horizon proposed turbine. Can OPSB please confirm whether this turbine is approved for construction within the Timber Road Wind Farm.

Blue Creek Amendment Turbine		Closest Horizon Turbines (Based on FAA data)			Distance (m)
STRUCT_TYP	STRUCT_NUM	STUDY_ASN_	LATITUDE	LONGITUDE	
Turbine	901	2010-WTE- 8525-OE	41.06635833	-84.58293889	7283.69563
Turbine	925	2010-WTE- 8526-OE	41.05613889	-84.59864722	6472.990946
Turbine	902	2010-WTE- 8526-OE	41.05613889	-84.59864722	8248.315202
Turbine	904	2010-WTE- 8526-OE	41.05613889	-84.59864722	9384.735388
Turbine	903	2010-WTE- 8526-OE	41.05613889	-84.59864722	9054.577317
Turbine	907	2010-WTE- 8534-OE	41.02482222	-84.65790278	4671.220956

Blue Creek Amendment Turbine		Closest Horizon Turbines (Based on FAA data)			Distance (m)
STRUCT_TYP	STRUCT_NUM	STUDY_ASN_	LATITUDE	LONGITUDE	
Turbine	906	2010-WTE- 8534-OE	41.02482222	-84.65790278	4945.837901
Turbine	908	2010-WTE- 8626-OE	40.98310278	-84.69753889	167.3167646



Issued Date: 03/24/2011

Tina Bartunek IBERDROLA RENEWABLES 1125 NW Couch St Portland, OR 97209

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:

Wind Turbine 904

Location:

Scott, OH

Latitude:

40-59-38.50N NAD 83

Longitude:

84-31-23.16W

Heights:

485 feet above ground level (AGL)

1215 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part I)	
X	Within 5 days after the construction reaches its greatest height (7460-2, Part	: II)

This determination expires on 09/24/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-WTE-2975-OE.

Signature Control No: 138427206-139359932

Michael Blaich Specialist (DNE-WT)

This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

6/2/2011 11:51:30 AM

in

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

Summary: Response to OPSB Staff Data Request electronically filed by Teresa Orahood on behalf of Blue Creek Wind Farm, LLC