

IN THE SUPREME COURT OF OHIO

In the Matter of the Application of)
Buckeye Wind, LLC for a Certificate)
to Install Numerous Electricity)
Generating Wind Turbines in)
Champaign County to be Collected at)
an Electrical Substation in Union)
Township, Champaign County, Ohio)

Case No. 10-1554

On Appeal from the Ohio Power Siting
Board, Case No. 08-666-EL-BGN

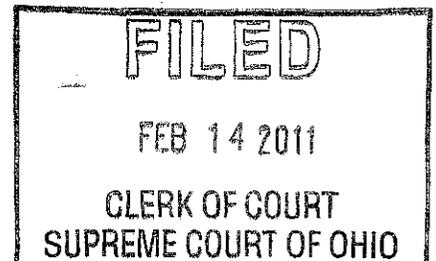
REPLY BRIEF OF APPELLANTS UNION NEIGHBORS UNITED (UNU),
ROBERT McCONNELL, DIANE McCONNELL, AND JULIA F. JOHNSON

Jack A. Van Kley (0016961) (Counsel of Record)
Van Kley & Walker, LLC
132 Northwoods Blvd., Suite C-1
Columbus, OH 43235
Telephone: (614) 431-8900
Facsimile: (614) 431-8905
jvankley@vankleywalker.com
Attorney for Appellants UNU, Robert &
Diane McConnell, and Julia Johnson

Christopher A. Walker (0040696)
Van Kley & Walker, LLC
137 North Main Street
Suite 316
Dayton, OH 45402-1772
Telephone: (937) 226-9000
Facsimile: (937) 226-9002
cwalker@vankleywalker.com
Attorney for Appellants UNU, Robert &
Diane McConnell, and Julia Johnson

Werner L. Margard (Counsel of Record)
John H. Jones
Assistant Attorneys General
Office of the Attorney General
General Public Utilities Section
180 East Broad Street, 9th Floor
Columbus, OH 43215
Telephone: (614) 466-4397
Facsimile: (614) 644-8764
Werner.margard@puc.state.oh.us
john.jones@puc.state.oh.us
Attorneys for Ohio Power Siting Board

M. Howard Petricoff (0008287)
(Counsel of Record)
Stephen M. Howard (0022421)
Michael J. Settineri (0073369)
Vorys, Sater, Seymour and Pease LLP
52 East Gay Street
Columbus, Ohio 43216-1008
Telephone: (614) 464-5414
Facsimile: (614) 719-4904
mhpetricoff@vorys.com
smhoward@vorys.com
mjsettineri@vorys.com
Attorneys for Buckeye Wind LLC



Nick A. Selvaggio, Prosecuting Attorney (0055607) Larry Gearhardt (0023315)

Jane A. Napier, Ass't Prosecuting Att'y (0061426) (Counsel of Record)

(0055607) (Counsel of Record)

Champaign County Prosecutor's Office

200 North High Street

Urbana, OH 43078

Telephone: (937) 484-1900

Facsimile: (937) 484-1901

janccpo@ctcn.net

Attorneys for Champaign County, and Goshen,
Salem, Union, Urbana, and Wayne Townships

Chad A. Endsley (0080648)

Leah F. Finney (0086257)

Ohio Farm Bureau Federation

P.O. Box 182383

Columbus, OH 43218-2383

Telephone: (614) 246-8256

Facsimile: (614) 246-8656

lgearhardt@ofbf.org

cendsley@ofbf.org

lfinney@ofbf.org

Attorneys for Ohio Farm Bureau Federation

TABLE OF CONTENTS

TABLE OF AUTHORITIES.....	iii
ARGUMENT	1
<u>First Proposition of Law: A Wind Energy Utility Authorized By A Power Siting Board Certificate That Lacks The Enforceable Noise Limits Necessary To Prevent High Noise Levels From Causing Serious Discomfort, Annoyance, And Sleep Deprivation Among The Utility’s Neighbors Does Not Represent The Minimum Adverse Impact As Required By R.C. 4906.10(A)(3).....</u>	3
<u>Third Proposition of Law: A Wind Energy Utility Authorized By A Power Siting Board Certificate That Lacks The Setbacks Necessary To Prevent High Noise Levels From Causing Discomfort, Annoyance, And Sleep Deprivation Among The Utility’s Neighbors Does Not Represent The Minimum Adverse Impact As Required By R.C. 4906.10(A)(3)</u>	3
<u>Second Proposition of Law: A Power Siting Board Certificate Issued Without Requiring A Wind Energy Utility’s Application To Include Modeling Or Similar Data Identifying The Level Of Low Frequency Noise At Neighboring Property Lines Violates Ohio Adm. Code 4906-17-08(A)(2)(b)</u>	13
<u>Fourth Proposition Of Law: An OPSB Certificate For A Wind Energy Utility Must Require The Setbacks Between Wind Turbines And Neighboring Residences And Properties Necessary To Ensure The Health, Safety, And Well-Being Of the Utility’s Neighbors In Compliance With The Board’s Certification Criteria In R.C. 4906.10(A)(6)</u>	14
<u>Fifth Proposition of Law: The Power Siting Board May Not Base Its Issuance Of A Certificate On Expert Opinions From A Lay Witness Concerning Information Not Within The Witness’ Personal Knowledge.....</u>	16
<u>Sixth Proposition of Law: The Power Siting Board Abuses Its Discretion By Allowing One Party To Introduce Evidence Without Producing A Sponsoring Witness At The Hearing With Personal Knowledge Of This Evidence, While Denying Other Parties Leave To Do The Same</u>	16

Seventh Proposition of Law: A Power Siting Board Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Erroneously Relieves The Applicant Of Its Mandatory Burden Of Proof To Demonstrate Its Entitlement To The Certificate 18

Eighth Proposition of Law: A Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Erroneously Circumvents The Board’s Certification Criteria In R.C. 4906.10(A) 18

Ninth Proposition of Law: A Power Siting Board Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Unlawfully Deprives The Appellants Of Their Statutory Rights Of Participation Under R.C. 4906.08..... 18

Tenth Proposition of Law: A Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Without A Hearing Deprives The Appellants Of Procedural Due Process 18

CERTIFICATE OF SERVICE..... 21

TABLE OF AUTHORITIES

COURT DECISIONS

City of Akron v. PUCO (1966), 5 Ohio St.2d 237, 215 N.E.2d 366..... 16

Egbert v. Ohio Dep't of Agriculture (2008), 2008-Ohio-5309 20

Indus. Energy Users-Ohio v. PUCO, 117 Ohio St.3d 486, 2008-Ohio-990,
885 N.E.2d 195 15

LTV Steel Co. v. Indus. Comm'n (2000), 140 Ohio App.3d 680..... 20

Mathews v. Eldridge (1976), 424 U.S. 319 20

State ex rel. Ormet v. Ind. Comm'n (1990), 54 Ohio St.3d 102, 104 20

STATUTES

R.C. 4906.06..... 2

R.C. 4906.10..... 2, 3, 13, 18

R.C. 4906.20..... 14

R.C. 4906.10..... 15

RULES AND ADMINISTRATIVE MATERIALS

*Matter of Adoption of Ohio Adm. Code Chapter 4906-17, OPSB Case No.
08-1024-EL-ORD*..... 15

Ohio Adm. Code 4906-17-08 13, 14

Ohio Adm. Code 4906-7-07 17, 18

Ohio R. Civ. P. 32(A)(3)..... 17

ARGUMENT

While the Ohio Power Siting Board (“OPSB”) and Buckeye Wind (“BW”) portray this case as a clash between the UNU members’ public welfare objectives and new jobs and energy sources, this case does not require the Court to choose between fiscal progress and public protection. OPSB’s Certificate can serve both purposes with reasonable, objective standards.

The wind project appears to be motivated more by the government-offered, taxpayer-funded subsidies to BW, the ultimate subsidiary of a British holding company, than it is by energy production. (Tr. 18-19, 170-75) While OPSB asserts that the project will help the State meet its renewable energy goals, Mr. Shears’ responses about the project’s capacity to produce electricity were vague and evasive. (Tr. 78-99) His direct testimony touted the taxes to be paid to the community, but cross-examination exposed this promise as illusory due to tax subsidies. (Tr. 170-75) Other than fleeting construction jobs, the project will generate only 12 jobs -- and not all of them will be based in Champaign County or even in Ohio. (Tr. 62 (Supp. 55))

Nevertheless, even these slight economic benefits need not be sacrificed to protect the public against annoying noise, flying turbine blades, strobe-like shadow flicker, property devaluation, and other injuries. BW does not dispute that turbines near residential areas will expose 1004 homes to noise above 34 dBA, which is more than five dBA louder than the levels to which their residents are accustomed. Instead, it quibbles with UNU’s reasonable assumption that an average of four persons resides in these homes, when the average could be higher. Not surprisingly, the majority of public opinion has turned against the project since BW revealed the irresponsibly selected locations for some of its turbines. (Tr. 1189-91)

OPSB even charges (at pg. 9 of its brief) that UNU’s members are feigning concern about environmental injuries as a ploy to protect their ability to economically develop their properties.

Although UNU members have as much right to develop their properties as BW, no UNU member testified about any plans to do so. This gratuitous attack on the UNU members' honesty makes no sense: the same environmental impacts that threaten the quality of life of 1004 families would also discourage any new use of these families' land for business, residential, or recreational purposes. Thus, the project as designed threatens both the environment and the economy of the neighborhood. UNU's members simply want reasonable setbacks to protect them, their land, and their homes. (Tr. 1187-88) OPSB's one-sided Certificate favoring BW has done nothing to dispel the project's threats.

BW chose to site its project in crowded townships that have experienced significant residential growth. (UNU Exh. 1A at 2 (Supp. 505)). As the applicant, BW has the duty to establish that its chosen sites are "best suited for the facility." R.C. 4906.06. BW is entitled to a certificate only if its facility represents the minimum adverse environmental impact, considering the "nature and economics of the various alternatives." R.C. 4906.10(A)(3). BW blocked inquiries about other feasible sites during every step of the proceeding below. BW obtained an OPSB waiver of its obligation to submit an analysis of alternative sites available for its facility. (ICN 9, 33 at pp. 10-12) Nevertheless, Mr. Shears admitted at the hearing that BW has secured "additional lease positions" on which it has not yet sited wind turbines. (Tr. 106, 182 (Supp. 62, 72)) While BW argues (at 22) that this leased land is "outside the project area," Mr. Shears revealed that these additional leases are in the townships included in the application. (Tr. 182 (Supp. 72)) OPSB's administrative law judge ("ALJ"), at BW's request, prevented UNU from inquiring more specifically into the lease locations. (Tr. 106 (Supp. 62)) Thus, the only record evidence shows that substitute turbine sites are available if any of the current sites pose unacceptable risks. BW, having blocked inquiry about alternatives, cannot now claim otherwise.

OPSB need not sacrifice the welfare of more than 1000 families to enable the profits of one foreign corporation. The public can be protected, and the project can be developed, by incorporating some simple standards into the project's Certificate requiring BW to design its project responsibly. These standards must be objective and enforceable, not nebulous, unenforceable "design goals" that can be ignored at BW's whim.

First Proposition of Law: A Wind Energy Utility Authorized By A Certificate That Lacks The Enforceable Noise Limits Necessary To Prevent High Noise Levels From Causing Serious Discomfort, Annoyance, And Sleep Deprivation Among The Utility's Neighbors Does Not Represent The Minimum Adverse Impact As Required By R.C. 4906.10(A)(3).

Third Proposition of Law: A Wind Energy Utility Authorized By A Power Siting Board Certificate That Lacks The Setbacks Necessary To Prevent High Noise Levels From Causing Discomfort, Annoyance, And Sleep Deprivation Among The Utility's Neighbors Does Not Represent The Minimum Adverse Impact As Required By R.C. 4906.10(A)(3).

Since Appellees apply the same arguments against UNU's First and Third Propositions, UNU is combining its reply supporting these propositions. OPSB's failure to establish standards and setbacks to protect the neighborhood from noise shirks its duty under R.C. 4906.10(A)(3) to ensure that BW's wind project poses the minimum adverse environmental impact.

The parties' dispute over noise is not just a simple factual disagreement over competing noise standards: the actual issue is whether the certificate will have any noise limit whatsoever. OPSB argues that the Certificate need contain only "design goals." And even the "design goals" are based on BW's errors in estimating noise levels that OPSB has ignored.

Part of this failure stems from OPSB's lack of noise expertise – and its reluctance to acquire any such expertise. OPSB entrusted its oversight of the project's acoustics to Raymond Strom, a Staff member with botany and zoology degrees. (Tr. 1844, 1856) While OPSB asks the Court (at 6) to defer to OPSB's "specialized expertise and discretion" on noise issues, Mr. Strom had no training in acoustics or noise modeling. (Tr. 1856, 1878) Instead, he read some

internet noise articles he could not remember. (Tr. 1850, 1872-73). He knew nothing about acoustical standards for noise measurement, so he did not utilize them to check BW's work. (Tr. 1879) OPSB has no modeling software to test an applicant's noise model. (Tr. 1856)

Compounding its acoustical ignorance, the Staff did not consult with other state employees with acoustical expertise to review BW's noise study. (Tr. 1846-47, 1872) Mr. Strom did not discuss BW's noise study with BW's noise consultant. (Tr. 1912) The Staff refused to meet with UNU's members (who had an acoustics expert) despite their request for an opportunity to discuss the application. (Tr. 1816) Instead, OPSB merely rubber stamped BW's "design goals" of 34 dBA at neighboring residences (five dBA above the background level of 29 dBA) and 50 dBA at neighboring property lines (an astounding 22 dBA above background).

The Staff knew that entire subdivisions will be exposed to noise levels more than five dBA over background. (Tr. 1898) At least 1004 homes will be exposed to more than 34 dBA even if BW's noise model is accurate and enforceable under the certificate. Unfortunately, the application's noise levels are neither accurate nor enforceable.

The Staff did nothing to correct even the obvious errors in the study. Even before the hearing, the Staff knew that the noise study had ignored the noisiest of its three proposed turbine models, the Nordex N100, but did nothing about this error. (Tr. 1900-01 (Supp. 243-44)) At hearing, BW's noise consultant, David Hessler, declared that, "[i]f that model were being considered, this whole analysis would have to be rerun." (Tr. 2365) Nevertheless, the Certificate allows BW to use the noisiest of these models without revising the noise estimates at neighboring homes and land. (Opinion, Order, and Certificate ("Certif."), ICN 146 at 92, Cond. 49 (Appx. 145)) While BW argues (at 24) that Certificate Condition 49 requires BW to show that no additional impacts will occur "regardless of the type of turbine it selects," this applies

only if BW selects a model *other than* the Nordex N100 or the other two models listed in its application.

OPSB (at 14, 20) and BW (at 19-20) argue that Certificate Condition 6 compensates for this failure by requiring BW to operate the turbines “within the noise parameters as set forth in its noise study and presented in its application.” (Certif. at 83 (Appx. 136)) But the application refers to its noise parameters as “design goals,” and BW surely would argue that goals are not limits if OPSB ever tried to enforce them. (ICN 5, Applic. Exh. K at 22 (Supp. 16)) Not surprisingly, then, OPSB’s brief concedes (at 7, 13) that the certificate does not set “a specific absolute decibel level” but only presents “design goals” that are “almost like a target” “that Buckeye is attempting to achieve, but not necessarily achieve.” For that reason, OPSB states (at 14), exceeding the certificate’s noise contours by one decibel on one occasion a year would not violate the Certificate. Unfortunately, the same principle applies if BW constantly exceeds the noise contours by many decibels. Mr. Strom’s statement that only exceedances of the design goals for “extended periods of time” would violate the Certificate is analogous to the ambiguous position that speeding is allowed unless it happens too often. Thus, the Certificate’s “goals” do not limit the noise from the non-modeled Nordex N100 or any other BW turbine.

Besides admitting the two to three decibel error caused by studying the wrong turbine model (Tr. 773 (Supp. 165)), BW’s consultant admitted that turbine noise can be more than three decibels higher than predicted by his ISO 9613-2 noise model due to its “uncertainty factor.” (Tr. 751-52, 759; UNU Exh. 57 at 14) This is in addition to the extra five decibels that can result from varying atmospheric conditions as admitted by OPSB’s brief (at 20) and Mr. Hessler’s testimony (BW Exh. 8 at 10 (Supp. 359)). UNU’s acoustical engineer, Richard James, confirmed the three decibel margin of error for ISO 9613-2 and identified another two decibel

margin of error in vendors' measurements of their turbines' noise levels. (UNU Exh. 31A at 16, Ans. 54, points 1, 4; Tr. 1396-97) Thus, BW's model could understate noise by as much as 13 decibels. In fact, Mr. James has measured noise levels inside a home near a New York wind project that were far higher than predicted by Mr. Hessler's model for that project. (Tr. 1461)

Richard James testified that the acoustical engineering profession has found that a new sound more than five dBA above the L90 level is intrusive and prevents sleep, because normal background sound does not mask a significantly louder new noise. (UNU Exh. 31A at Ans. 25-26 (Supp. 561-62)) He is superbly qualified to offer this conclusion, since his 40-year acoustics career includes a balanced representation of government, citizens, and industrial companies such as General Motors, Ford, Chrysler, Toyota, Mazda, John Deere, Navistar, Anheuser-Busch, Mitsubishi, and Goodyear, and he invented the very computer modeling concept that Mr. Hessler used for BW's project. (Id. at 2-7, 15-16) As described in UNU's opening brief (at 21), even Mr. Hessler acknowledges the acoustic profession's widespread acceptance of the L90 plus five dBA benchmark. BW's application pays lip service to this standard notwithstanding its failure to comply with it. (ICN 2, Applic. at 25 (Supp. 4); ICN 5, Applic. Exh. K at 22 (Supp. 16))

OPSB characterizes the L90 level as "worst-case" because it measures the background sound level exceeded 90% of the time. However, Mr. Hessler admitted that background sound can dip below the L90 as many as 10 times in 10 minutes. (Tr. 827) On some nights during Mr. Hessler's study in Champaign County, the background sound stayed under the L90 for the entire night. (Tr. 2339-40) Thus, even at the L90 plus five dBA noise level, a turbine can disturb the neighbors 10 times every 10 minutes or keep them awake for the entire night.

Appellees further seek to excuse the Certificate's lack of an enforceable noise standard by arguing that Dr. Kenneth Mundt testified that noise has not been proven to damage health.

This argument misses the objective of noise standards to prevent discomfort, annoyance, and sleep deprivation. Preventing these injuries, including obstacles to sleeping or relaxing in one's own home or yard, is important whether or not health damage occurs. While OPSB points out (at 19) that Richard James is not a medical doctor qualified to make medical judgments, UNU has not cited his testimony for any medical opinions. However, identifying the appropriate level of noise control to avoid discomfort, annoyance, and sleep deprivation is the province of acoustical engineers such as Mr. James. (UNU Exh. 31A at Ans. 23, 25 (Supp. 561))

In contrast, Dr. Mundt is an epidemiologist with no acoustic training. (Tr. 452 (Supp.104)) Dr. Mundt also is not a medical doctor (id.), but Appellees rely heavily on his uninformed medical opinions about the direct health effects of noise as a straw man to divert attention from the discomfort, annoyance, and sleep deprivation caused by intrusive noise.

The crux of Dr. Mundt's testimony was that not enough studies meeting his epidemiological standards link health damage to turbine noise. (BW Exh. 6, Ans. 22 (Supp. 329-30)) As a tobacco industry expert, Dr. Mundt admitted that this was the same ploy that other tobacco industry epidemiologists once used to argue that there were "no demonstrative adverse health effects caused by smoking tobacco in the epidemiological studies." (Tr. 548-49)

But Dr. Mundt entirely missed the point of UNU's concerns. UNU has expressed no opinion about a direct link between turbine noise and health damage, even though some medical researchers have concluded that turbine noise directly causes nausea, vomiting, cardiac arrhythmia, and other health effects by invading a person's vestibular system. (UNU Exh. 49 at 8) Instead, UNU seeks to avoid annoyance, discomfort, and sleep disturbance, whether or not it damages health. In addition, sleep deprivation from noisy turbines indirectly, but undeniably, breaks down the body and causes health problems. Dr. Mundt does not classify sleep

deprivation as a health effect, so he ignored its health impacts. (Tr. 460 (Supp. 102))

Nevertheless, Appellees juxtapose their arguments about direct health impacts and the indirect bodily damage induced by sleep deprivation in an attempt to apply Dr. Mundt's opinion to both.

Similarly, the 2009 WHO guide of 40 dBA cited by BW (at 5) pertains to health effects and does not prevent sleep disturbance. This paper also specifies that noise should not exceed 30 dBA in homes to avoid negative effects on sleep. (BW Exh. 18 at XVIII (Supp. 380)) WHO's 2009 publication states that its 1999 guidelines are still "valid and relevant" (id.), and the 1999 guidelines recommend 30 dBA as the limit for "a good night's sleep." (UNU Exh. 49 at 22)

According to a study utilized in Dr. Mundt's opinion, restricting sleep below a person's optimal time in bed can cause neurobehavioral deficits such as lapses of attention, slowed working memory, reduced cognitive throughput, and depressed mood. (Tr. 471-72 (Supp. 113-14); UNU Exh. 46 at 519 (abstract) (Supp. 584)) Consistently sleeping less than seven hours nightly may cause significant daytime cognitive dysfunction. (Id. at Supp. 584, 591); Tr. 473) Reduced sleep is associated with cardiovascular morbidity, traffic accidents, and death. (UNU Exh. 46 at 526 (Supp. 591); Tr. 476 (Supp. 118)) Dr. Mundt agreed with the foregoing conclusions. (Tr. 471-73, 476 (Supp. 113-15, 118))

OPSB even asserts (at 17) that turbine noise has not been proven to cause sleep disturbance, but admits that even the Pedersen study it selectively cites concluded that sleep deprivation is probable. A later Pedersen study found that 64% of respondents reporting annoyance from turbine noise also reported sleep disturbance. (UNU Exh. 49 at 17 (Supp. 615)) Dr. Amanda Harry reported sleep disturbance in 28 of 42 respondents (67%) living within 1.2 miles of a turbine, and she concluded that sleep disturbances are "the most deleterious effects of noise." (UNU Exh. 44 at 5-15, 27) Dr. Nissenbaum found 14 of 15 people living within 3400

feet of a turbine had sleep disturbance, 12 of whom experienced problems so severe that their physicians offered prescriptions for sleeping aids. (UNU Exh. 51) A recent university study in Europe found sleep disturbance in 25% of persons exposed to turbine noise as low as 30 to 35 dBA. (UNU Exh. 31A at 12, Ans. 35 (Supp. 564))

As UNU opening brief predicted (at 25), BW tries (at 9) to minimize Pedersen's findings by comparing the number of turbine-annoyed persons to a larger population pool that included hundreds of persons living too far away to be affected. This is like saying that the 1004 families who BW will expose to more than 34 dBA are few if compared to the entire county's population.

These studies support 35 dBA as the threshold at which unacceptable noise impacts begin. While BW notes (at 11) that the Minnesota Department of Health recommended estimates of noise above 40 dBA, that department also observed that complaints appear to rise with increasing outside noise levels above 35 dBA. (UNU Exh. 49 at 25 (Supp. 616))

OPSB further contends (at 15) that conventional speech is between 50 and 60 dBA, implying that equivalent turbine noise levels are not objectionable. As UNU's opening brief explained (at 22-23), turbine noise has disturbing amplitude modulations not contained in normal conversation. Furthermore, few people can sleep with someone talking in the bedroom.

BW notes (at 5, 8) that some U.S. jurisdictions employ a 50 dBA standard, citing Mr. Hessler's testimony. (BW Exh. 26 at Ans. 10, 13 (Supp. 383-84)) But the same testimony stated that this limit has led to "justified complaints." (Id.) Mr. Hessler also described a wind project whose use of a 50 dBA standard had caused "serious complaints" about noise levels of 45 to 50 dBA by "pretty upset" people. (Tr. 882-85) In contrast, UNU's opening brief cites (at 21-22) five countries, as well as U.S. local governments, that use a limit of five dBA above background.

While BW's noise study utilizes a design goal of 34 dBA for nearby residences, OPSB attempts (at 13) to justify a 50 dBA design goal for neighboring property lines by citing Mr. Hessler's testimony that usually no persons are present at the fringe of their land. This allows between 34 dBA and 50 dBA between the neighbors' homes and their property lines. Thus, new homes or businesses cannot be built on neighboring land without exposure to up to 50 dBA of noise. Moreover, BW's neighbors can be exposed to noise up to 50 dBA if they venture outside their homes into their yards, gardens, and fields. Thus, OPSB's refusal to adopt a reasonable noise limit at the property line sacrifices the neighbors' enjoyment of their land.

BW argues (at 5) that Mr. Hessler's evaluation of complaints at some wind projects show that 45 dBA are okay. But he heard these complaints secondhand from the accused wind developers who had ample incentive to hide the seriousness of the noise. (Tr. 2347, 2363) He may not have been aware of all neighbors upset by the noise. (Tr. 2365 (Supp. 282)) And BW would have used 45 dBA as its design goal instead of 34 dBA if 45 dBA were defensible.

OPSB also notes (at 19) that Larry Wunsch did not testify about any sleep deprivation or health problems. That is true, but pointless. Not everyone exposed to loud noise is affected the same way. That is why Pederson found that 16% of the persons exposed to noise over 35 dBA were afflicted by sleep disturbance, while the rest were not. (UNU Exh. 47 at 3467 (Supp. 601)) Consequently, it is not surprising that BW's witnesses do not object to turbine noise. But some persons' tolerance for loud noise is not an excuse to impose it on the entire population.

BW misrepresents Cyr's and Barce's testimony as referring (at 16) to "475 turbines operating in Benton County, Indiana with 1,000 foot setbacks from residences." Mr. Cyr mentioned only two turbines within 1000 feet of a home (BW Exh. 28 at 2, 4 (Supp. 388, 390)), and Mr. Barce mentioned only one (BW Exh. 27 at 2). Importantly, while BW seeks to impose

its wind project on a county with a growing population density of 93.4 persons per square mile (Applic. Exh. R at 4), Benton County has only 23 residents per square mile (Tr. 2482). The low rate of complaints in Benton County can be explained not only by low population density, but also because 90% of all landowners participate in the wind projects. (Tr. 2449-50)

OPSB also mischaracterizes (at 19-20) Rene Taylor's testimony to say that she and her family were already experiencing "many health problems" before the wind turbines arrived. Ms. Taylor actually said that she, like everyone, had occasional headaches or sleepless nights before the turbines arrived. (Tr. 1089 (Supp. 196)) OPSB implies (at 19-20) that her opposition to the turbines caused her to imagine the turbine impacts. But the wind developer found her so credible that it offered cash to stop her testimony against that project. (Tr. 1078, 1080 (Supp. 193))

OPSB also contends (at 14) that a home's walls reduce noise by 10 to 20 dBA. However, UNU's opening brief explains (at 26-27) that walls do not reduce the low frequency component of turbine noise. Moreover, rural residents often sleep with open windows. (Tr. 1489)

As OPSB states (at 22), UNU did not sponsor a witness to support its request for a low frequency noise (dBC) limit; BW's own Mr. Hessler provided all of the information UNU needed for this purpose. OPSB contends (at 21-22) that today's upwind turbine blades do not create low frequency noise, so no low frequency noise limit is necessary. However, upwind blades produce a "swishing" low frequency noise about once per second that can disturb sleep. (Tr. 1475-76) Unlike a constant, steady noise, turbine noises rise and fall in a pulsing, sleep-disturbing pattern akin to an annoying dripping water faucet in the quiet of night. (Tr. 1478-79; UNU Exh. 49 at 9 (Supp. 613)) Turbines in high winds make low frequency thumps that penetrate walls, resonate off objects, and grow louder in the home. (Tr. 1484-85)

If upwind blades produced little dBC noise, Mr. James would not have been able to record his high dBC readings from upwind turbines. (UNU Exh. 31A, Ans. 62 (Supp. 567)) David Hessler admitted that BW's noise may reach 60 dBC at nearby homes. (Tr. 2323 (Supp. 271); BW Exh. 26, Ans. 5 (Supp. 382)) George Hessler's paper urges dBC limits for wind turbines in the United States, even though all American turbines except "some old ones out in North Palm Spring" use upwind blades. (UNU Exh. 69 at 180 (Supp. 632); Tr. 805 (Supp. 173))

While OPSB posits (at 23) that low frequency noise can be regulated as shown in the application, it provides no data for dBC noise whatsoever. The noise plots on which OPSB relies provide only dBA estimates and, in any event, are just "design goals." (ICN 5, Applic. Exh. K noise plots (BW Supp. 53-62)) George Hessler noted that a dBC limit "is an excellent metric for regulation" (UNU Exh. 69 at 180 (Supp. 632)), and the neighborhood needs this protection.

While Certificate Condition 8(j) and R.C. 4906.97 provide procedures for processing noise complaints (Certif. at 85 (Appx. 138)), allowing the neighborhood to complain about loud noise is not an adequate substitute for enforceable standards to prevent the noise. A complaint's merits cannot be judged without a decibel limit. Moreover, BW could argue that the Certificate's lack of standards precludes its enforcement to address even a justified complaint.

Continuing their theme that only the project's current design is viable, Appellees argue that Mr. Hessler found that a five dBA above background standard (i.e., 34 dBA) would require a 1.25 mile setback that would prevent any wind projects east of the Mississippi River. Mr. Hessler's written testimony actually opined that a limit of 25 dBA, not 34 dBA, would require a setback of 2.05 miles precluding development east of the Mississippi. (BW Exh. 8 at 6-7 (Supp. 355-56)) During the hearing, Mr. Hessler mistakenly re-characterized his written opinion as a 1.25 mile setback. (Tr. 886) But he presented no studies, no maps, no reports, or any other

documentation to support this allegation. (BW Exh. 8 at 6- 7 (Supp. 355-56)) Mr. Hessler did not even know that prominent wind farms existed in nearby Benton County, Indiana, exposing his limited knowledge of the wind power potential east of the Mississippi. (Tr. 2344-45)

Regardless of what standard or setback is justified, the Certificate's lack of enforceable noise constraints violates OPSB's duty under R.C. 4906.10(A)(3) to ensure that BW's wind project poses the minimum adverse environmental impact. Accordingly, the Certificate is unlawful under that statute, as well as an unreasonable disregard of the evidence establishing the need for enforceable noise limits to prevent discomfort, annoyance, and sleep disturbance.

Second Proposition of Law: A Power Siting Board Certificate Issued Without Requiring A Wind Energy Utility's Application To Include Modeling Or Similar Data Identifying The Level Of Low Frequency Noise At Neighboring Property Lines Violates Ohio Adm. Code 4906-17-08(A)(2)(b).

The purpose of Ohio Adm. Code 4906-17-08(A)(2)(b) is to "evaluate and describe" the wind project's noise impacts so OPSB can make an informed decision about protective noise measures. But BW's application fails to quantify its turbines' low frequency noise with "computer modeling software . . . or similar wind turbine noise methodology" as required by the rule. Instead, the application disguised the issue by providing generic data about noise from other projects. (ICN 5, Applic. Exh. K at 29-30 (BW Supp. 46-47)) If BW's dBC noise is hidden in its dBA data as stated by OPSB (at 22), this practice conceals the project's low frequency noise and is the genesis of OPSB's mistaken belief that no dBC limit is needed.

BW argues (at 13, 21) that this rule does not apply because it became effective after BW submitted the application. But the rule became effective on May 7, 2009, just 15 days after BW filed its application and six months before the hearing started on November 9, 2009. (ICN 2, Applic.; Tr. 1) While BW may have intended to avoid OPSB's new wind rules by applying just before their effective date, the enabling statute for wind farm certificates makes them contingent

on compliance with the new wind rules. R.C. 4906.20(C). BW must supplement its application with a dBC model and OPSB must reopen its hearing to evaluate it.

Fourth Proposition Of Law: An OPSB Certificate For A Wind Energy Utility Must Require The Setbacks Between Wind Turbines And Neighboring Residences And Properties Necessary To Ensure The Health, Safety, And Well-Being Of the Utility's Neighbors In Compliance With The Board's Certification Criteria In R.C. 4906.10(A)(6).

Both OPSB's brief (at 24) and Certificate (at 40) concede that OPSB has only required BW to meet the minimum statutory setbacks. Thus, OPSB rejected turbine site 70 only because it was closer than the minimal 914 foot setback from a residence (Certif. at 35, 91(Appx. 88, 144)), while not questioning any other BW setback. BW (at 26) contradicts OPSB's admission, arguing that OPSB "did not resort to the minimum setbacks" required by law because the average distance from turbine to nearest residence is 2,059 feet. However, R.C. 4906.20 and Ohio Adm. Code 4906-17-08 do not define the setbacks as averages. BW cannot excuse its inadequate setbacks from some homes by averaging them with longer setbacks for other homes.

Although OPSB acknowledges that blade shear is "an important issue" (Certif. at 42 (Appx. 95)), its Opinion's treatment of that issue illustrates the Board's cavalier attitude about public safety. OPSB notes BW's admission that, despite technical advances in turbine design, blade shear does occur and can be dangerous. (Id. at 41 (Appx. 94)) Yet the record does not establish the potential distance that a blade can be thrown from a turbine of the size proposed for the Facility. Consequently, OPSB adopted Certificate Condition 33 requiring BW -- *after issuance of the Certificate* -- to provide the Staff with "the maximum potential distance for a blade shear event from the three turbine models under consideration and the formula used to calculate the distance." (Certif. at 42, 90 (Appx. 95, 143))

Even without the necessary data on the blades' travel distance, OPSB summarily concluded that BW "sufficiently demonstrated" that the minimum statutory setbacks will protect

residents from blade throw. (Id. at 42) OPSB asserted that “with [Condition 33] in place, the Board finds that the risk of blade throw has been adequately addressed.” (Id. at 43) But OPSB could not logically conclude that the minimum setback is large enough without knowing how far a blade can fly. Furthermore, the Certificate does not provide for relocating or eliminating turbines if later information shows that blade throw endangers the public.

While OPSB also notes that three turbine manufacturers recommend setbacks greater than the minimum statutory setbacks, the Board does not explain its disregard for those setbacks. (Id. at 36 (Appx. 89)) Although BW (at 30) and OPSB (at 24) allude to Mr. Shears’ self-serving testimony dismissing the manufacturers’ recommendations as “general guidance,” not once does the Board’s Opinion rely on or even mention that testimony.

Appellees argue that R.C. 4906.20(B)(2) is the General Assembly’s oracular proclamation on setbacks. Yet that statute simply defines *minimum* setbacks. OPSB has an independent statutory obligation to protect the public on a case-by-case basis. R.C. 4906.10(A); *Matter of Adoption of Ohio Adm.Code Chapter 4906-17*, OPSB Case No. 08-1024-EL-ORD at 48 (Supp. 641) (wherein OPSB admits its duty to separately evaluate setbacks for each facility).

OPSB did not satisfy that obligation in this case. OPSB’s findings on setbacks are manifestly against the weight of the evidence and show the misapprehension, mistake, or willful disregard of its duties under R.C. 4906(A). Furthermore, OPSB abused its discretion by providing insufficient detail about the factual basis of its findings. *Indus. Energy Users-Ohio v. PUCO*, 117 Ohio St.3d 486, 2008-Ohio-990, 885 N.E.2d 195, ¶30.

Fifth Proposition of Law: The Power Siting Board May Not Base Its Issuance Of A Certificate On Expert Opinions From A Lay Witness Concerning Information Not Within The Witness’ Personal Knowledge.

Sixth Proposition of Law: The Power Siting Board Abuses Its Discretion By Allowing One Party To Introduce Evidence Without Producing A Sponsoring Witness At The Hearing

With Personal Knowledge Of This Evidence, While Denying Other Parties Leave To Do The Same.

OPSB unfairly and arbitrarily allowed BW to introduce reams of technical evidence through a “sponsoring witness” rather than through expert witnesses, while prohibiting intervenors from doing the same. In hearings of the Public Utilities Commission and, by analogy, OPSB, an expert must be qualified to express the opinions being offered. *City of Akron v. PUCO* (1966), 5 Ohio St.2d 237, 215 N.E.2d 366. OPSB’s rulings on an expert’s qualifications will be reversed if the Board abused its discretion. *Id.*

Mr. Shears’ experience with wind power development does not make him an expert on property values (BW Exh. 4 at 12 (Supp. 293)), shadow flicker (BW Exh. 4 at 13 (Supp. 327)), Ohio taxation (ICN 8), cultural resources (*id.*), or telecommunications (*id.*). Nor does it make him an expert on the health impacts of wind turbines, though BW’s brief pretends he is (at 28). Although Mr. Shears testified about the project’s air pollutant offsets and socioeconomic impacts (e.g., BW Exh. 4 at 4 (Supp. 293); BW Exh. 4 at 8 (Supp. 297)), that testimony was based on work done by BW’s consultants, not Mr. Shears. (Tr. 31 (Supp. 25); Tr. 53-54 (Supp. 47-48)) Cross-examination betrayed his ignorance of the fundamental assumptions underlying his consultants’ claims. (Tr. 32-33, 36 (Supp. 26-27, 30); Tr. 53-57 (Supp. 47-51))

Yet the ALJs admitted Mr. Shears’ testimony on all those subjects, and the Board upheld that ruling. (Tr. 364-374 (Supp. 91-101); Certif. at 12 (Appx. 65)) OPSB also admitted volumes of technical information in Application Exhibits L, R, T, U, V, and W into evidence, despite BW’s failure to offer a sponsoring witness with expertise or personal knowledge for cross-examination on the reports’ subject matter. (*Id.*)

Intervenors, however, were held to a very different standard. The ALJ’s rulings against the admissibility of Dr. Nissenbaum’s deposition transcript, expert report, and affidavit made it

abundantly clear that expert testimony would be accepted only if the witnesses attended the hearing for cross-examination. (ICN 83, Entry of Oct. 21, 2009 at 3; Tr. 1633-34) OPSB affirmed this ruling even though its own rule states that “[d]epositions may be used in board hearings to the same extent permitted in civil actions in courts of record.” (Ohio Adm. Code 4906-7-07(E)(13); Certif. at 9 (Appx. 58)). Under the civil rules, a deposition is admissible where the witness resides outside the county in which the action is pending. Ohio R. Civ. P. 32(A)(3). Nor was Dr. Nissenbaum permitted to testify telephonically at the hearing. (Tr. 1633-34) The ALJ even denied a UNU member’s request to “sponsor” Dr. Nissenbaum’s affidavit for the public hearing record. (Tr. 10/27/09 40-41; Tr. 1636-38) Instead, his affidavit was merely “included in the correspondence docket, like any other interested person who submits correspondence to the Board.” (Tr. 1638; Certif. at 9 (Appx. 62)).

UNU was prejudiced by this double standard in numerous respects. First, it relieved BW of its burden of proof. For example, BW submitted no evidence about socioeconomic impacts and shadow flicker other than Mr. Shears’ unqualified testimony and the hearsay exhibits that he “sponsored.” Second, as explained in UNU’s merit brief (at 39-40), OPSB based its decision in part on evidence admitted under this lax standard. Third, UNU was deprived of the opportunity for meaningful cross-examination during BW’s case in chief. Though OPSB justifies its denial of the UNU members’ motion to strike on the basis that Mr. Shears was extensively cross-examined (Certif. at 13 (Appx. 66), Mr. Shears’ ignorance of the relevant subjects thwarted that cross-examination. Fourth, while OPSB admitted BW’s evidence without requiring a knowledgeable witness for cross-exam, the Board refused to admit either the deposition transcript or the affidavit of Dr. Nissenbaum on the grounds that he was not “available for cross-examination.” (Certif. at 9 (Appx. 62)). Thus, OPSB arbitrarily prevented UNU from presenting

testimony by a medical expert regarding the health effects of wind turbine noise. Although OPSB noted that UNU presented the testimony of other witnesses on that subject (*id.* at 10 (Supp. 63), both BW (at 6, 11-12) and the Board (at 19) have since disputed that testimony on the grounds that the witnesses are not medical experts.

While OPSB enjoys some discretion in the manner it conducts its hearings, it may not do so in a manner that is arbitrary or contrary to its own rules. Ohio Adm. Code 4906-7-07(E)(13). OPSB's double standard concerning witnesses Christopher Shears and Michael Nissenbaum, M.D., is unlawful, unreasonable, and an abuse of discretion.

Seventh Proposition of Law: A Power Siting Board Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Erroneously Relieves The Applicant Of Its Mandatory Burden Of Proof To Demonstrate Its Entitlement To The Certificate.

Eighth Proposition of Law: A Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Erroneously Circumvents The Board's Certification Criteria In R.C. 4906.10(A).

Ninth Proposition of Law: A Power Siting Board Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Unlawfully Deprives The Appellants Of Their Statutory Rights Of Participation Under R.C. 4906.08.

Tenth Proposition of Law: A Certificate That Allows The Applicant To Make Post-Certificate Alterations, Information Submissions, And Other Changes To A Wind Energy Utility Without A Hearing Deprives The Appellants Of Procedural Due Process.

Certificate Conditions 33, 40, 45, 46, and 49 call for after-the-fact submissions of information material to the Facility's design and community impact. These conditions circumvent BW's burden of proof and the OPSB's duties under R.C. 4906.10(A). They are not, as OPSB (at 33) and BW (at 39) suggest, mere delegations of the Board's enforcement authority to "ensure that the Facility is constructed in accordance with what the Board approved." (*Id.*) Indeed, Conditions 33 and 40 request information about topics for which there are no

corresponding conditions to enforce. Although Condition 33 calls for the submission of the maximum potential distance for blade shear and the formula upon which it is calculated (Certif. at 90 (Appx. 143)), the Certificate prescribes no enforcement criteria or consequences if subsequent information shows that the minimum statutory setbacks are inadequate. The same is true of Condition 40 (Certif. at 91 (Appx. 144)), as the Certificate provides no criteria for determining whether microwave communication interference warrants relocation of Turbine 37. Without any conditions or criteria to enforce, the Staff's discretion is unbounded.

Similarly, Conditions 45, 46, and 49 excuse BW from its burden to show that the Facility meets the certification criteria of R.C. 4906.10(A). These conditions permit BW to "bait and switch" after the hearing by allowing BW to change the locations of Turbines 59 and 70 and the turbine model for all of its turbines. Although OPSB argues (at 34-35) that BW's latitude in that regard is ostensibly limited by other Certificate conditions, this assurance is meaningless where the Certificate's conditions on noise are vague and unenforceable and the minimum statutory setback has not been shown to be adequately protective. Furthermore, to allow BW to change turbine model based upon vague "assurances" of no additional negative impacts (Certif. at 92 (Appx. 145)) is no limitation at all, since the Staff admitted that it does not have the necessary software to confirm BW's claims about noise and shadow flicker modeling. (Tr. 1853, 1856, 1871-73, 1878-79, 2079-2080 (Supp. 229, 230, 232-34, 237-38, 259-260) Thus, Condition 49 shields BW's choice of turbine from the scrutiny of UNU and its experts.

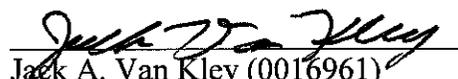
If, as BW states (at 39), the post-Certificate submission of information does not amend the Certificate, then UNU and other intervenors will be unable to obtain a hearing to challenge that information. These conditions defer consideration of relevant evidence that should have been presented at the hearing, subject to intervenors' cross-examination. When evidence so

central to the siting process is deferred until after the project is approved, the hearing required by R.C. 4906.07 is pointless and fundamentally unfair.

The test in *Mathews v. Eldridge* (1976), 424 U.S. 319, applies to the evaluation of due process in administrative cases. *State ex rel. Ormet v. Ind. Comm'n* (1990), 54 Ohio St.3d 102, 104; *LTV Steel Co. v. Indus. Comm'n* (2000), 140 Ohio App.3d 680, 689-690; *Egbert v. Ohio Dep't of Agriculture* (2008), 2008-Ohio-5309 at ¶ 33 (citing *Ormet*). Thus, BW's assertion (at 39-40) that these cases are "not applicable to the matter at bar" is clearly erroneous, as is its analysis of the three criteria of *Mathews*. UNU indeed is deprived of its liberty interest when the Board's post-Certificate conditions bypass UNU's right to test the project's setbacks and noise modeling, among other things. BW could, and should, submit that information as evidence at the hearing, consistent with its burden of proof, and the OPSB must consider that information pursuant to R.C. 4906.10(A). Although BW complains (at 42) that requiring an evidentiary hearing on this information would "impose significant fiscal and administrative burdens on the Board and Staff," OPSB itself makes no such claim in its Certificate or its merit brief.

For these reasons, Certificate Conditions 33, 40, 45, 46, and 49 unlawfully relieve BW of its burden of proof, circumvent OPSB's duties under R.C. 4906.10(A), divest UNU's members of their rights of participation under R.C. 4906.08, and deprive UNU's members of due process. The Court should remand the Certificate to correct these and the other errors described above.

Respectfully submitted,


Jack A. Van Kley (0016961)
Counsel of Record
Christopher Walker (0040696)
Van Kley & Walker, LLC
132 Northwoods Blvd., Suite C-1
Columbus, Ohio 43235
(614) 431-8900

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Reply Brief was served by regular U.S. mail on the following counsel of record on February 14, 2011.


Jack A. Van Kley

Werner L. Margard III (0024858)
Counsel of Record
John H. Jones (0051913)
Thomas G. Lindgren (0039210)
Assistant Attorneys General
Public Utilities Section
180 East Broad Street, 6th Fl
Columbus, OH 43215-3793

Attorneys for Appellee,
Ohio Power Siting Board

Nick A. Selvaggio (0055607)
Champaign County Prosecutor
Jane A. Napier (0061426)
Assistant Prosecuting Attorney
Counsel of Record
200 N. Main Street
Urbana, OH 43078

Attorneys for Appellants Champaign County
and Goshen, Salem, and Union Townships

M. Howard Petricoff (0008287)
Counsel of Record
Stephen M. Howard (002241)
Michael J. Settineri (0073369)
Vorys, Sater, Seymour and Pease LLP
52 East Gay Street
Columbus, OH 43215

Attorneys for Intervening Appellee Buckeye
Wind LLC

Larry Gearhardt (00223315)
Counsel of Record
Chad A. Endsley (0080648)
Leah F. Finney (0086257)
Ohio Farm Bureau Federation
P.O. Box 182383
Columbus, OH 43218-2383

Attorneys for Amicus Curiae
Ohio Farm Bureau Federation