

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of **REPUBLIC
WIND, LLC** for a Certificate of
Environmental Compatibility and Public Need)
for a Wind-Powered Electric Generating) Case No. 17-2295-EL-BGN
Facility in Seneca and Sandusky Counties,)
Ohio.)

DIRECT TESTIMONY OF

**Chris Leftwich
Copperhead Environmental Consulting, Inc.**

on behalf of

Republic Wind, LLC

October 21, 2019

Q-1. Please state your name, current title, and business address.

A-1. My name is Chris Leftwich. I am the Chief Operating Officer of Copperhead Environmental Consulting, Inc. (“Copperhead”). My business address is 471 Main Street, Paint Lick, Kentucky 40461.

Q-2. What is your educational background?

A-2. In 1997, I received a Bachelor of Science degree in Environmental Policy from the University of Tulsa, Tulsa, Oklahoma; and a Master of Science degree in Biology from Eastern Kentucky University, Richmond, Kentucky, in 2003.

Q-3. What is your professional background?

A-3. I am a wildlife biologist with broad experience in completing wildlife and bat studies/surveys, including for proposed wind projects. I have served as project manager on over 100 threatened and endangered species surveys and have extensive experience working with agency personnel to develop and implement field studies. I have conducted and/or managed wildlife surveys designed to be used in addressing or estimating bat impacts due to wind energy and other utility development in the Midwest and Southeast regions. I have extensive regulatory expertise in the Endangered Species Act, National Environmental Policy Act, and US Fish & Wildlife Service (USFWS) Based Wind Energy Guidelines. I am a USFWS-permitted bat biologist with extensive experience working with bat species in the Midwest and eastern US. I am currently permitted for these federally listed bat species: Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), gray bat (*Myotis grisescens*), Virginia big-eared bat (*Corynorhinus townsendii virginianus*), and Ozark big-eared bat (*Corynorhinus townsendii ingens*); and these additional Ohio state-listed bat species: big brown bat (*Eptesicus fuscus*), Rafinesque’s big-eared bat (*Corynorhinus rafinesquii*), tri-colored bat (*Perimyotis subflavus*), little brown bat (*Myotis lucifugus*), and eastern small-footed bat (*Myotis liebii*). I am a past member of the Southeastern Bat Diversity Network and Western Bat Working Group, and current member of The Wildlife Society, the Kentucky Chapter of The Wildlife Society, and KY Bat Working Group.

Q-4. On whose behalf are you offering testimony?

A-4. I am testifying on behalf of the Applicant, Republic Wind, LLC (“Applicant” or “Republic Wind”).

Q-5. What is the purpose of your testimony?

A-5. The purpose of my testimony is to support the portions of the Application for Certificate of Environmental Compatibility and Public Need (“Application”) regarding ecological information addressing the potential presence of bat species in the project area. I am also sponsoring Exhibits P, Q, R, and J-App. E to the Application, which contain the various bat studies/surveys and reports that were produced by my firm, Copperhead Environmental Consulting, Inc. (“Copperhead”), or other entities, all of which I have reviewed and am personally familiar with.

Q-6. Please describe the history of your involvement with the Republic Wind project?

A-6. On July 6, 2015, I was asked by the Applicant to design and manage a bat mist-net survey for the proposed Republic Wind Project, a portion of which later became part of the Emerson West Wind Project. The survey was completed between July 23-31, 2015. Data collected during field work was summarized in a final report that was submitted to the Ohio Department of Natural Resources (ODNR), USFWS, and the Applicant.

On May 9, 2016 the Applicant asked me to design and manage a bat presence/probable absence mist-net survey for additional areas under consideration as part of the Emerson West Wind project, a portion of which (nine of the sites surveyed) currently fall within the current Republic Wind Project boundary. The survey was completed between July 11-22, 2016. Data collected during field work was summarized in a final report that was submitted to ODNR, USFWS, and the Applicant.

On July 1, 2016 the Applicant asked me to design and manage a bat presence/probable absence mist-net survey to cover an additional area of the proposed Republic Wind Project. The survey was completed between July 19-22, 2016. Data collected during field work was summarized in a final report that was submitted to ODNR, USFWS, and the Applicant.

Also see my answer to Q-5.

1 **Q-7. Please generally describe the studies that you are sponsoring.**

2 **A-7. I am sponsoring the following studies:**

- 3 • Tetra Tech. Bat Acoustic Monitoring Survey Report – 2011 (Dec. 2011) – Exhibit
4 P/Exhibit J-App. E of the Application: The goal of the bat acoustic monitoring
5 survey was to assess bat phenology within the project area, for an extended period,
6 between March 16 and November 16, 2011. The objectives of the bat survey were
7 to: 1) identify the peak activity periods for bats; 2) determine the bat species
8 composition in the project area (near the bat detectors); and 3) determine an index
9 of bat activity at different heights above ground level.
- 10 • Environmental Solutions & Innovations, Inc. (ESI). Final Report Mist Net Surveys
11 of Summer Bats On The Proposed Republic Wind Farm Seneca and Sandusky
12 Counties, Ohio (Oct. 2011) – Exhibit Q/Exhibit J-App. E of the Application: The
13 survey was designed in accordance with the “On-Shore Bird and Bat Pre- and Post-
14 Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio”
15 (ODNR 2008). The survey was also designed to comply with guidelines outlined
16 in the “2007 Indiana Bat Draft Recovery Plan (First Revision)” (USFWS 2007) to
17 determine presence/probable absence of Indiana bats and document other species
18 of bats present in the project area.
- 19 • Copperhead. Revised: Summer 2015 Bat Surveys for the Proposed Republic Wind
20 Project, Seneca and Sandusky Counties, Ohio. (August. 2016) – Exhibit R/Exhibit
21 J-App. E of the Application: The survey goals were to document bat species
22 diversity and abundance within the project area, and identify roosting habitat,
23 foraging range, and spatial distribution of federally listed Indiana bats and northern
24 long-eared bats, and state listed Rafinesque’s big-eared bats and eastern small-
25 footed bats, if captured. Mist-net surveys were implemented in accordance with
26 guidelines outlined in the “2015 Range-wide Indiana Bat Summer Survey
27 Guidelines” (USFWS 2015), “2009 ODNR On-Shore Bird and Bat Pre- and Post-
28 Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio”
29 (ODNR 2009), and the “Ohio Division of Wildlife Guidance for Bat Permitted
30 Biologist” (ODNR-DOW 2015). A study plan was submitted to the USFWS and
31 the ODNR on 7 July 2015 and concurrence was received on 13 July (USFWS) and
32 22 July (ODNR).
- 33 • Copperhead. Summer 2016 Bat Survey for the Proposed Republic Wind Project,
34 Seneca and Sandusky Counties, Ohio. (Nov. 2016) – Exhibit J-App. E of the
35 Application: In 2015, Copperhead completed a bat mist-net and telemetry survey
36 for the wind-powered electric generating facility in Seneca and Sandusky Counties,
37 Ohio. Since completion of the 2015 survey, the project area boundary changed to
38 include an additional area (~7,882 acres) along the northern and western edges of
39 the original project area. Therefore, Copperhead completed a mist-net survey of the
40 expansion area. The survey goals were to determine presence or probable absence
41 of federally listed species, and identify roosting habitat, foraging range, and spatial
42 distribution of federally listed Indiana bats and northern long-eared bats, and state-
43 listed Rafinesque’s big-eared bats and eastern small-footed bats, if captured. Mist-

net surveys were implemented in accordance with guidelines outlined in the “2016 Range-wide Indiana Bat Summer Survey Guidelines” (USFWS 2016), “2009 ODNR On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio” (ODNR 2009), and the “Ohio Division of Wildlife Guidance for Bat Permitted Biologist (ODNR-DOW 2015). A study plan was submitted to the USFWS and the ODNR on 6 July 2016 and concurrence was received on 6 July (USFWS) and 17 July (ODNR).

- Copperhead. Summer 2015 and 2016 Bat Surveys for the Emerson West Wind Project – Exhibit J-App. E of the Application: Copperhead conducted a bat mist-net and telemetry survey for the proposed wind-powered electric generating facility in Seneca County in 2015 and 2016. The survey covered areas where proposed boundaries for the Project shifted. The goals of this survey were to determine presence or probable absence of federally listed species, and identify roosting habitat, foraging range, and spatial distribution of federally listed Indiana bats and northern long-eared bats, and state listed Rafinesque’s big-eared bats and eastern small-footed bats, if captured. Both 2015 and 2016 survey efforts are included in this report. Mist-net surveys were implemented in accordance with guidelines outlined in the “2015 and 2016 Range-wide Indiana Bat Summer Survey Guidelines” (USFWS 2015, 2016), “2009 ODNR On-Shore Bird and Bat Pre- and Post- Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio” (ODNR 2009), and the “Ohio Division of Wildlife Guidance for Bat Permitted Biologist” (ODNR-DOW 2015). The 2015 study plan was submitted to USFWS and ODNR on 7 July 2015; concurrence was received on 13 July 2015 (USFWS) and 22 July 2015 (ODNR). The 2016 study plan was submitted to USFWS and ODNR on 25 May 2016 and concurrence was received on 27 May 2016 (USFWS) and 3 June 2016 (ODNR).

Q-8. What was your role in the above studies conducted for the Applicant?

A-8. My role for all Copperhead-prepared documents/studies was that of the Project Manager. I coordinated with the ODNR and USFWS about study protocols and ensured that field staff knew the objectives of each study and how data collection should be completed. I discussed findings with field staff and reviewed deliverables prior to submission to Republic Wind and resource agencies. For non-Copperhead documents/studies, I have reviewed and become familiar with the studies and confirmed they were consistent with ODNR and/or USFWS survey protocols applicable at the time the studies were conducted for the target species.

Q-9. Please discuss the standards that were followed when these various studies and reports were prepared.

A-9. These studies and reports were performed in accordance with ODNR On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocols for Commercial Wind Energy Facilities in Ohio, Ohio Division of Wildlife Guidance for Bat Permitted Biologist, the USFWS Land-Based Wind Energy Guidelines, and USFWS Indiana Bat Summer Survey Guidelines.

Q-10. The Board has established rules that require applicants to analyze the potential impacts to bats from the project, and also discuss methods of mitigating these potential impacts. Please generally discuss your understanding of these rules.

A-10. It is my understanding from reviewing the Application that the Board has rules that require the applicant to analyze potential impacts to ecological resources located within the project area. This analysis by Republic Wind involves various species, including bats. These rules require Republic Wind to provide information such as:

- O.A.C. 4906-4-08(B)(1)(e) –Studies performed that address the ecological impact of the proposed facility;
- O.A.C. 4906-4-08(B)(3) – Evaluation of operational and maintenance impacts on ecological resources from the proposed facility;
- O.A.C. 4906-4-08(B)(3)(b) – Description of procedures to be utilized to mitigate both the short- and long-term impacts of operation and maintenance of the proposed facility, procedures to be utilized to avoid, minimize and/or mitigate both the short- and long-term impacts of operation and maintenance of the proposed facility, and description any plans for post-construction monitoring of wildlife impacts.

The Application contains information that addresses Republic Wind’s analyses/reports relating to these provisions.

Q-11. Please discuss the process of consulting with ODNR and USFWS when preparing the various studies and reports you are sponsoring.

A-11. Throughout the Project timeline, ODNR and USFWS have been consulted as part of bat study/survey planning. Study plans were developed in accordance with ODNR and USFWS guidelines and were discussed with ODNR and/or USFWS, as applicable. Each study plan outlined how the surveys were to be conducted in accordance with the respective agency’s guidance. If updates were needed to a study plan, the appropriate update was made and submitted to the resource agencies for review and approval. Study plans were

1 submitted to ODNR and USFWS as required, and approvals were received. After field
2 surveys were completed, a survey report was prepared and submitted to the ODNR and
3 USFWS, as required.

4 **Q-12. Does this conclude your testimony?**

5 **A-12.** Yes, it does, except that I reserve the right to update this testimony to respond to any further
6 testimony, reports, and/or evidence submitted in this case.

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Testimony was served upon the following parties of record via regular or electronic mail this 21st day of October 2019.



Devin D. Parram

cendsley@ofbf.org

lcurtis@ofbf.org

amilam@ofbf.org

mleppla@theoec.org

tdougherty@theoec.org

ctavenor@theoec.org

jvankley@vankleywalker.com

cwalker@vankleywalker.com

dwd@senecapros.org

jclark@senecapros.org

mulligan_mark@co.sandusky.oh.us

jodi.bair@ohioattorneygeneral.gov

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

10/21/2019 4:59:15 PM

in

Case No(s). 17-2295-EL-BGN

Summary: Testimony of Chris Leftwich on behalf of Republic Wind, LLC electronically filed by
Teresa Orahod on behalf of Devin D. Parram