BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF CROWNED RIDGE WIND, LLC FOR A FACILITIES PERMIT TO CONSTRUCTION 300 MEGAWATT WIND FACILITY

Docket No. EL19-027

REBUTTAL TESTIMONY

OF RICHARD LAMPETER

January 8, 2020

INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Richard Lampeter. My business address is 3 Mill & Main Place, Suite 250, Maynard, MA 01754.

Q. **BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed at Epsilon Associates, Inc. ("Epsilon"). I am an Associate at the company and manage the Acoustics Group.

Q. **WHAT ARE YOUR RESPONSIBILITIES?**

A. My responsibility is to provide advice on sound issues, including post construction sound protocols, for Crowned Ridge Wind, II LLC ("CRW II").

Q. ARE YOU THE SAME RICHARD LAMPETER WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING ON JULY 9, 2019

A. Yes.

Q. HAS THIS REBUTTAL TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?

A. Yes.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The purpose of my supplemental testimony is to address concerns raised by Staff witness David Hessler.

Q. STAFF WITNESS HESSLER CLAIMS THAT "WIND TURBINE SOUND LEVELS ARE HIGHLY VARIABLE WITH WIND AND ATMOSPHERIC CONDITIONS AND COMMONLY FLUCTUATE BY +/- 5 DBA OR MORE

AROUND THE MODELED SOUND LEVEL, WHICH MAY BE REGARDED AS THE LONG-TERM MEAN LEVEL." DO YOU AGREE WITH THIS TESTIMONY?

A. I disagree with this testimony. The modeling parameters used by EAPC Wind Energy for the CRW II sound study mitigates the fluctuation referred to by Mr. Hessler, because it uses reasonable and conservative assumptions, including: (1) a ground attenuation factor of 0.5; (2) an uncertainty factor of two decibels for all wind turbines; (3) all modeled sound sources are assumed to be operating simultaneously and at the design wind speed corresponding to the greatest sound level impacts; (4) the selection of meteorological conditions to minimize atmospheric attenuation in the 500 Hz and 1 kHz octave bands where the human ear is most sensitive; and (5) pursuant to the ISO 9613-2 standard, the use of favorable conditions for sound propagation (a moderate, well developed ground-based temperature inversion as might occur on a calm clear night or equivalently downwind propagation). Based on the combination of these modeling assumptions and parameters, the model yields conservative results which reflect the short-term sound levels for evaluation of the proposed conditions identified in the Proposed Post-Construction Sound Protocol and not a long-term mean level. As such, actual sound levels for an operational wind project are not expected to be +5 dBA as compared to the modeled sound levels. This conclusion is supported by post-construction measurement programs conducted by Epsilon for other wind projects which have found that measured sound levels have met similar regulatory limits for projects and were not +5 dBA compared to the modeled sound levels where the pre-construction modeling analysis followed a similar modeling methodology.

Q. STAFF WITNESS HESSLER (PAGES 7-8; EXHIBIT DMH-2) RECOMMENDS CERTAIN CHANGES TO THE POST CONSTRUCTION SOUND PROTOCOL THAT YOU PROPOSED IN YOUR DIRECT TESTIMONY. DO YOU AGREE WITH THE PROPOSED CHANGES?

A. I have no objection to Mr. Hessler's recommended changes to the post-construction sound protocol I proposed in my Direct Testimony.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

STATE OF MASSACHUSETTS)
) ss
COUNTY OF MIDDLESEX)

I, Richard Lampeter, 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.

Richard Lampeter

Subscribed and sworn to before me this 8th day of January, 2020.

SEAL

Notary Public

My Commission Expires

KAREN LYN ROTH
Notary Public
Commonwealth of Massachusetts
My Commission Expires
April 10, 2026