

October 3, 2022

Hon. Michelle L. Phillips

Secretary to the Commission

NYS Department of Public Service

3 Empire State Plaza

Albany, New York 12223

Re: Case # 15-F-0122 Baron Winds Certificate with Conditions –Re Condition 68e and Sound Propagation Modeling-Motion to Reject as written.

Dear Secretary Phillips,

Please accept this as a Motion to reject as written the filing of Condition 68e for Phase I and require correction of the Sound Propagation Modeling and REVISED COMPLIANCE FILING OF CERTIFICATE CONDITION NO. 68 UPDATED REVISED SOUND MODELING by RSG filed on Sept 26.

1. On September 6, 2022, Baron Winds II submitted a Sound Propagation Modeling to support an amendment instead of a Revision.

09/06/2022 Maps and Figures fig_19-1_SoundPropagation Baron Winds II LLC, Baron Winds, LLC fig_19-1_SoundPropagation.pdf pdf 22.47 MB

Please note that in the legend, it states that the Sound Propagation was prepared by GC on August 31, 2022 AND reviewed by RBG on the same date.

Look to the left side margin and you will see that the Sound Propagation was REVISED ON SEPT. 1, 2022; AFTER the preparation by GC and REVIEW by SBG. Explanations are in order.

LEGEND

Project Location
Steuben County
New York

Prepared by GC on 2022-08-31
Reviewed by SBG on 2022-08-31

Client/Project
Baron Winds 2 LLC

195602390

Left Margin

Sound Propagation.mxd Revised: 2022-09-01



All 19 Maps have the same.

2. On Sept 26,2022, Baron Winds filed a REVISED COMPLIANCE FILING OF CERTIFICATE CONDITION NO. 68

UPDATED REVISED SOUND MODELING by RSG on Sept 23,2022.

RSG modeled incorrect turbines. They modeled ClipperC96 Wind Turbines for Cohocton and VESTAS 4.3 MW while Vestas 4.2 MWs were being used.

This has resulted in different NRO requirements at these wind speeds to reduce low frequency sound levels. The goal should be to ELIMINATE low frequency. Further studies must be done. Turbines moved.

Shutting down is not an option. See Cassadaga Wind comment below.

The report states:

The final sound modeling indicated that BW1 would include 32 wind turbines, which consists of eight Gamesa G114 and 24 Vestas V150-4.2/4.3 MW wind turbines. The 4.2 MW and 4.3 MW versions of the Vestas V150-4.2/4.3 MW are the same physical wind turbine but have different available operating parameters. The final sound modeling used the operating parameters and sound power for the 4.3 MW version of the wind turbine. However, the turbine being constructed in Phase 1 is the 4.2 MW version not the 4.3 MW version, as the 4.3 MW version was subsequently determined to be not suitable for the site based on wind speeds and other technical factors.

While the two versions of the wind turbine have the same overall A-weighted sound power, there are differences in the spectral sound power levels when operating at high wind speeds in its base mode (that is, without noise-reduced operations (NRO)). The base mode for the 4.3 MW version is PO2 and for the 4.2 MW version is Mode 0

As noted above, the change in Phase 1 from the 4.3 to 4.2 MW version of the Vestas V150 does not result in a change to A-weighted sound power, but does change spectral characteristics, particularly at high wind speeds. This has resulted in different NRO requirements at these wind speeds to reduce low frequency sound levels. NROs used to reduce low frequency sound emissions at higher wind speeds are applied by wind speed, but for all wind directions. NROs used for both Phase 1 and Phase 2 have changed from previous modeling

Footnote page 22

4.

*The table shows **the worst-case NRO mode at 13 m/s, which is what is assumed for the L1h modeling in this report. NRO's vary by wind speed and direction.** The NRO schedule is provided electronically under separate cover. With hub-height wind speeds above about 15 m/s to 16 m/s, low frequency sound power levels increase, and thus wind turbines are put into additional NRO modes to reduce low-frequency noise.*

This will result in an accompanying decrease in the overall A-weighted sound level, as well, as reflected in the long-term modeling results.

Proof not ASSUMPTIONS!

3. Cumulative Scenario

The report continues:

*This updated report addresses Condition 68e of the Baron Winds Certificate which requires updated modeling to be submitted with the final array and equipment specifications. It summarizes the Baron Winds Certificate conditions related to noise, compares current sound modeling procedures with the Supplemental PNIA and supplemental modeling from August 2021, and presents sound modeling results from the entire proposed 58-turbine array (BW1 and BW2), and **a cumulative scenario considering the adjacent Cohocton/Dutch Hill Wind Project.***

As to a cumulative scenario considering the adjacent Cohocton/Dutch Hill Wind Project

Clipper Turbines have been removed. The RECOMMISSIONING was completed as announced in April 2022. The Town of Cohocton is expecting a Post construction Noise Study soon.

THEREFORE the Cohocton alone and Cumulative modeling are dependent upon the wrong turbines and are not correct nor are the Tables and data after page 22. Conclusions are not based on correct data. Cohocton has a mechanism under Special Use to regulate noise.

3.2 LOW-FREQUENCY OCTAVE BANDS

Full octave band modeling results are shown for the mitigated turbine array in Table 13 and for the mitigated turbine array with the addition of Cohocton/Dutch Hill turbines in Table 14.

Similar to the Supplemental PNIA, the 16 Hz octave band was not directly modeled. Instead, the slope between the 16 Hz and 31.5 Hz 1/1 octave band was added to the modeled 31.5 Hz 1/1 octave band sound level. The slope used was 5 dB for the Gamesa G114 and Clipper C96 (used at the Cohocton/Dutch Hill project), and the particular slope for a given mode, ...

Repowering of Cohocton Project April 2022

<https://brookfieldrenewableus.com/news-press/brookfield-renewable-u-s-announces-completion-of-wind-repowering-projects-in-new-york-first-in-states-history/>

Town of Cohocton is awaiting a post construction Sound Study.

The SEA, and Sound Propagation Modeling for the turbines are available. You will need to ask permission from Brookfield Renewables. What was public under a Supplemental EIS, the SEA notebooks, may be available in the Town of Cohocton and other public places for 18 months post construction.

I supplied them to the DPS for Case # 07-E-0138 last year since the web link was not functioning.

4. Baron Winds-

The Supplemental PNIA was not modeled.

The 16 Hz octave Band was not modeled.

Proof not ASSUMPTIONS!

Similar to the Supplemental PNIA, the 16 Hz octave band was **not directly modeled. Instead,** the slope between the 16 Hz and 31.5 Hz 1/1 octave band was added to the modeled 31.5 Hz 1/1 octave band sound level. The slope used was 5 dB for the Gamesa G114 and **Clipper C96** (used at the Cohocton/Dutch Hill project), and the particular slope for a given mode, as published by Vestas for the V150 4.2 and 4.5 MW. The 5 dB slope used for the other turbines is higher than what was assumed in the PNIA from research of Tachibana, et. al., and higher than that found in the MassCEC study.

5. Cassadaga Wind

6/30/22 - 72a Condition Certification Filing

<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b6457E353-A475-46D8-A7C7-F94919603F43%7d>

“Cassadaga Wind is developing a plan to minimize sound levels during icing. This plan will be submitted under separate cover in accordance with Certificate Condition 73.”

The TURBINES should not be run during icing condition especially with inadequate setbacks. Sound modeling intolerances cannot be excused especially at over 10 dB above condition =61dB!!

NY DEC Assessing and Mitigating Noise

https://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf

This should not be tolerated at Cassadaga Wind, nor Baron Winds, nor Baron Winds I nor any project. There are errors in modeling, SCADA and/or compliance issues. Either way, the people suffer!

As the turbines used become larger, their cut in speed decreases and run time increases without the old “assumed masking” of wind on the ground. So the DEC Assessing and Mitigating Noise becomes more applicable as shown in Cassadaga.

NY Constitution Bill of Rights

§19. Environmental rights. Each person shall have a right to clean air and water, and a healthful environment. November 2, 2021.

Respectfully,

Alice Sokolow