

May 28, 2015

Mr. Douglas Fine, Assistant Commissioner  
 Department of Environmental Protection  
 One Winter Street, Boston, MA 02108

Reference: Kingston Wind Independence Turbine Acoustical Monitoring Study  
 Technical Report, HMMH Report No. 305270.001, April 16, 2015, Draft for Public Comment

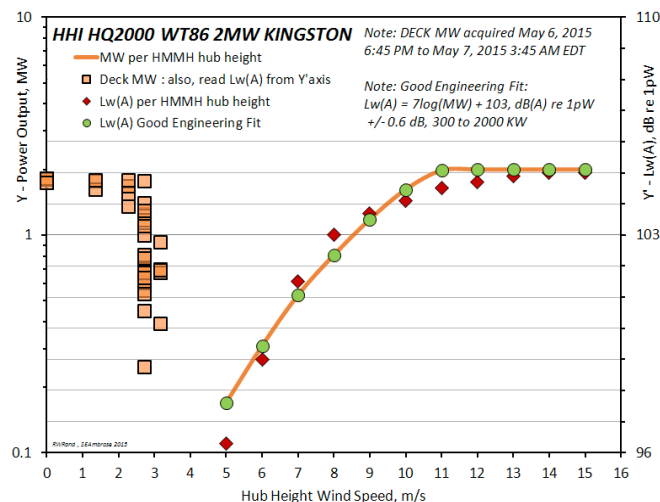
Response: Part 1 of 10

Dear Assistant Commissioner Fine,

Thank you for releasing the KWI Technical Report (KWI-TR), publically confirming KWI exceeds the MassDEP noise policy. KWI-TR relied heavily on SCADA data for assessing noise levels, yet without merit, the study centered on wind speed rather than electric power output. This is a needless distraction since sound power level is directly related to electric power output.

The KWI Deck SCADA system was observed on the night of May 6-7, 2015 from 6:45 PM to 3:45 AM. SCADA reported electric power output and wind speed, which were logged and plotted. The following chart shows there is no connection between KWI wind speed and electric power output ... HMMH and MassCEC need to explain. Some points display seemingly contradictory concepts - for example "Power output remains high when wind speed drops to zero."

- KWI operating data (squares) are from the SCADA reported wind speed and electric power output.
- Electric power output started at 0.4 MW with a wind speed of 3 m/s.
- Electric power output steadily increases to essentially full power output at 3 m/s.
- Power output remains high when wind speed drops to zero.
- Full power produces the maximum sound power level,  $L_{max} = 105 \text{ dBA}$ .
- Zero wind speed represents the lowest ambient noise level:  $L_{90} = 33 \text{ dBA}$  without KWI operating.



Does this chart support the KWI-TR study's ability to survive a qualified independent peer-review? Alternatively, are there more nighttime exceedances that start earlier and last longer?

Respectfully submitted,

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