

From: [REDACTED]
Date: 6 August, 2013 2:26:26 PM EDT
To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Subject: Re: Questions about NRWC wind project

Dear Ms. Johnson,

Thank you for your email of February 14th regarding the NRWC wind project. I apologize for the delay in providing you a response to this specific email.

Sound Data – Noise data for the turbines has been provided as part of the Draft REA reports and is included in the Final REA Reports as part of the REA Application to the MOE. This information is a required component of a Noise Assessment as per the guidelines of the MOE.

Turbine Separation – NRWC has conducted internal wind turbine performance tests to ensure the layout results in efficient operation of the turbines while more importantly being designed in accordance with the setback provisions of O. Reg. 359/09 including those to noise receptors, property lines, and natural features.

Sound Power Level - Turbine manufacturers are able to change operational characteristics (e.g. power curve) of the same model of turbine including those which influence the sound levels produced. As such, the operational characteristics and sound output of the proposed model may differ from those used in other locations or as documented in the material you provided.

Worst Case Scenario - The noise assessment was completed in accordance with the MOE Noise Guideline "Noise Guidelines for Windfarms", October 2008 (PIBS 4709e). This guideline requires that the noise assessment utilize the principle of predictable worst case. Therefore, the noise model uses downwind propagation from each source to each receptor which is very conservative as it represents an extremely unlikely worst case scenario. Also the wind turbine noise emissions have been modeled at maximum levels regardless of wind speed/output power which is again a very conservative and unlikely scenario. The level of conservatism inherent in the NRWC modeling approach meets the requirements of the principle of predictable worst case and accounts for the maximum environmental noise levels regardless of normal environmental variations.

Greater Setbacks - A Noise Assessment has been completed to ensure that noise levels at non-participating receptors do not exceed 40dBA, and where necessary, setbacks have been increased to meet this noise level requirement.

Additional Open Houses – NRWC has met the public consultation requirements for the Project including hosting the required number of public meetings.

No additional meetings are planned. However, as previously indicated to you, a Community Liaison Committee will be established which can serve as a means to raise your concerns regarding the Project.

Sincerely,

Randi Rahamim
Director of Communications

On Thu, February 14, 2013 3:00 pm, [REDACTED] wrote:

NRWC:

These are the first 3 MW turbines in Ontario. To date, you have not supplied us with the sound data that we have been requesting. Since these are large turbines, new to Ontario, and the largest in North America, we need comprehensive sound data. We are not your guinea pigs for a lab experiment. Once we have been provided the data, we need to have another open house so that the public can view the data. The leaked documents from the MOE indicate that there have been adverse health effects from turbines much smaller than the IWT's proposed in West Lincoln.

You are not following the recommendations about the distances between turbines. The newest wind farms typically use turbines with rotor diameters of about 100 m. In other parts of the world, turbines are spaced about seven rotor diameters apart. The new spacing model developed by Meneveau and Johan Meyers, an assistant professor at Katholieke Universiteit Leuven in Belgium, suggests that placing the wind turbines 15 rotor diameters apart -- more than twice as far apart as in the current layouts -- results in more cost-efficient power generation. You are not following the current practice, let alone the recommended practice. Why is that? What is the manufacturer's recommended distance between turbines?

You have stated in your draft report that the sound power level for an Enercon E-101 is 105 dBA. The attached documents indicate that the sound power level for an Enercon E-101 is 106 dBA. Please explain this difference. One

document indicates that the sound level is 106 ± 1 dBA. Clearly if it is 105 dBA, then you can shoe horn more wind turbines into a smaller area. If it is 106 dB or 107 dBA, then the minimum setback distance needs to be increased. The Ministry of the Environment has asked for the "predictable worst case scenario". NRWC has not used the worst case scenario. You have used the best case scenario which in turn allows you to install more turbines and "make them fit" regardless of the sound levels and therefore no consideration for the health of the public.

The Jones report indicates that you will supply information later. This is not acceptable. The public needs to see and evaluate this information now. The article in the Niagara This Week states that the government knew about health problem as far as back as 2006. We need the information now – not after we become sick.

"While some local residents claim Enercon suggests a greater setback distance for the model being used by NRWC, a company spokesperson said she was unaware of it." This is a quote written in the article Niagara This Week. The greater setback distance because of the 106 dBA rating was brought forward at the open house. How can NRWC be unaware of it?

NRWC – we are not your lab monkeys. These are the biggest turbines in North America and you have not supplied the required information. I am requesting comprehensive sound data and an open house so the public can view the data. I would like an explanation why you stated the turbines have a sound level of 105 dBA.

I am waiting for your reply.

Yours truly,

Lois Johnson

[REDACTED]