Update for MMEWG – Meeting between MPP Lisa Thompson & Bill Palmer 2024-02-16

This note will give an update of a (virtual) meeting on Friday Feb. 16 held with MPP Lisa Thompson to discuss issues relevant to Huron Bruce residents and my recent correspondence with Minister Todd Smith and Andrea Khanjin.

The meeting itself took quite a while to happen. I had written Lisa's office in November requesting a meeting to bring her up to date with what has been going on in the situations of Huron Bruce residents impacted by wind turbines (alternately nothing, or lots, depending on how you choose to see it.) It was only on Thursday last week, just after the virtual meeting between MMEWG Chair Tom Allwood and IESO staff in which I participated that I heard back from Lisa's scheduling person to offer the opportunity for me to meet with Lisa "virtually" the next day so I was quick to say yes.

We spoke for about 45 minutes. I began by updating Lisa on letters I had sent to the Energy Minister (Todd Smith) and the Environment Minister (Amanda Khanjin) in January to give her the opportunity to advise those Ministers of the key points of the letters. I suspect that the actual letters never get into the Minister's hands, but get dealt with by a clerk somewhere to send out the usual "boiler plate" response to thank me for writing, and advising me that the Ministry will carefully consider my views. That is usually the last ever heard, unless one gets to the Minister, hence why I approached through Lisa.

In both cases, the letters led in with my concern that the IESO issued in December several documents identifying their plan to add some 2000 MW of new and "repowered" wind turbines generation, to result in 5000 TWh of new generation, "on the existing footprint" of current turbines. This gave me the opportunity to point out to Lisa that in the Enbridge Underwood array for example, 41 of the 110 turbines are already located closer than the regulatory limit of 550 metres to the nearest home, and were causing problems, as she and I have discussed many times. To replace these with new larger turbines at least 168% larger (so as to achieve the desired additional generation) would mean bigger turbines, even closer to homes, and also closer to each other, for example in the Enbridge array it would mean turbine blade tips as close as 42 metres between adjacent turbines. I have to keep the points fairly high level when talking to Lisa. I showed Lisa a simple curve (Attachment 1) in which actual Ontario experience shows the futility of adding more wind turbines to produce needed generation. Wind is not there during the peaks. No amount of battery storage with 4-hour capacity was going to shift the generation to the time it was needed. I also pointed out that the IESO assumption that new wind turbines were going to be cheaper than old ones was badly flawed, as world experience is showing wind turbine manufacturers and installers everywhere reneging on contracts saying they needed more money to install turbines due to economic conditions. (Lisa often likes to reduce issues to the cost, so it is an avenue to approach her on.)

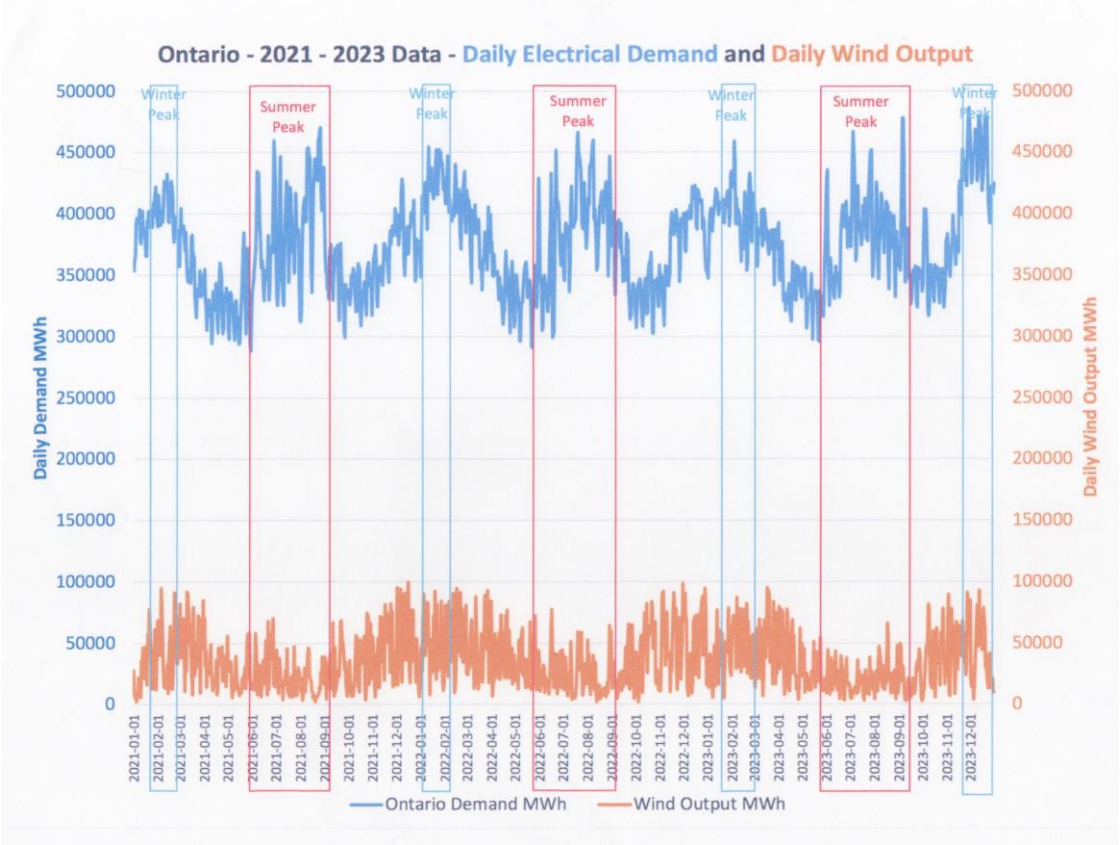
I went on to advise Lisa that my letter to the Minister of the Environment pointed out the absolute essential need of revising the Ontario regulation 359/09 for wind turbine siting, and the wind turbine noise guidelines, before there are more turbines. I had already identified the need in detail to the Ministry staff over 2 years ago after the Minister of the Environment of the time (Jeff Yurek) had asked me to brief the Ministry staff after the meeting I had with Minister Yurek, Minister Thompson and Minister Bill Walker that had been arranged by Minister Bill Walker. Yes, Lisa remembered that meeting. I pointed out that only the day before (Feb. 15) the MMEWG Chair along with myself and Santo Giano had met virtually with IESO staff, and that the IESO had pointed out quite explicitly that there would be NO changes to the wind turbine regulations before new turbines were

installed. This definitely got Lisa's attention as she said that in her conversations with the Energy Minister he had assured her that any new wind turbines would be sited further from homes. We'll see if my point gets conveyed by Lisa to Minister Todd Smith and Minister Amanda Khanjin.

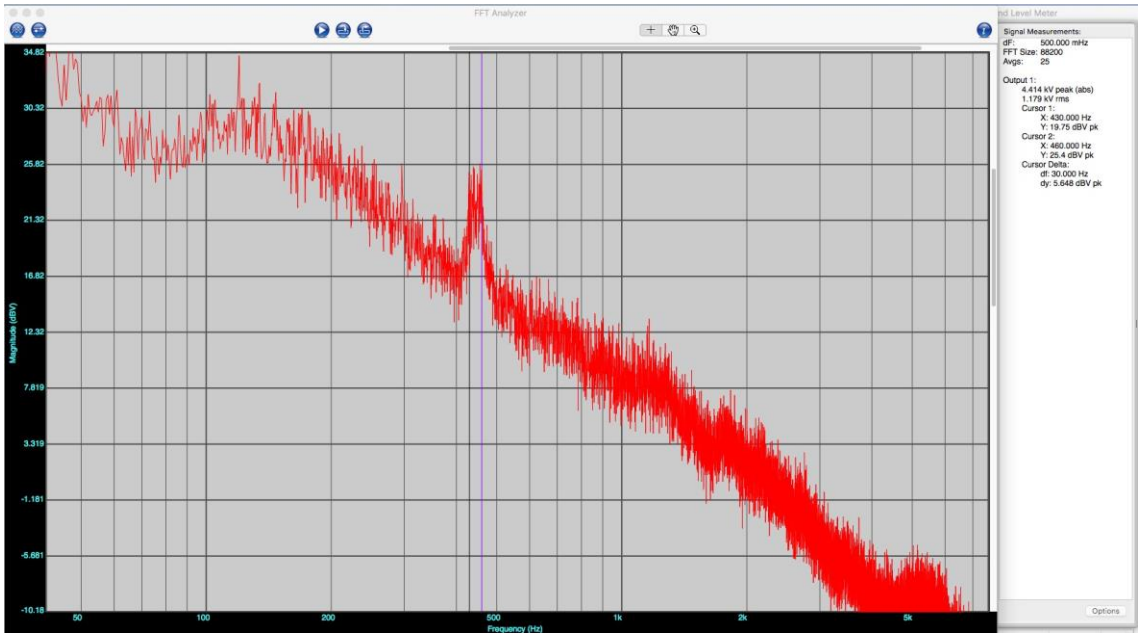
This gave me the opportunity to lead into the "new information" that has been developed from the monitoring of conditions at a home in the Enbridge Underwood array. I pointed out that a positive link has been shown between the acoustic conditions arising from wind turbines, and annoyance. Information that has been presented to the International Wind Turbine Noise Conference, to the Canadian Acoustical Association annual meeting, and published in the journal WindTech - International. The evidence shows that it is the sound from the wind turbines, not the wind, or the visual appearance of the wind turbines, or attitude that drives annoyance. I told Lisa that I had hoped to meet her in person to give her copies of the Journal to present to each of Minister Smith and Minister Khanjin, but given only a virtual meeting, I would send her an authorized copy of the journal. I am attaching a copy for which rights to distribute have been purchased from the publisher (I'll admit they gave me a deal) so you have permission to use, circulate, or post as you wish. The copy attached is a low-res copy suitable for web posting but a higher resolution copy is also available if you'd like.

I pointed out how the annoyance criterion presented in the article had been shown to exist in the data taken at the Enbridge Underwood wind power development. That gave me the opportunity to discuss how I have now been able to test the criteria against the audit sound files that the Ministry had accepted to show that the situation in the K2 array is "acceptable and not tonal". I pointed out that residents in the K2 array had only obtained the sound files through paying for them via a Freedom of Information request after several years of trying. However, it gave me the opportunity to show Lisa that by analyzing the MOE accepted files, it is clear that tonality does exist. See attachment 2. That permitted me to show the ~ 10 dB tonal peaks seen between 429 and 460 Hz in the example. It also gave me the opportunity to discuss how it was possible to "play games" with the data and say that since the definition of tonality calls for a single frequency peak to exist, that this case of a peak existing over perhaps a 30 Hz range would let a somewhat blind purist to say, "yup, no single tone exists here." I think I was able to convince her that in fact this narrow a peak does have all the annoying characteristics of a single peak, and is a problem. I was able to tell Lisa that I have already issued an abstract to present a further paper at the "joint congress" of the Acoustical Society of American and Canadian Acoustical Association to be held in May. Hopefully they accept the abstract. If nothing else I am going to continue to be a thorn in the side of the Ontario regulators for ignoring published work. I continue in hope that they will eventually get the message, and I closed my presentation to Lisa, "We need to do what is right." She nodded, and I'm sure she gets the message. Now if only she can and will bring the case forward. There is no doubt there is a political cost to do so, so I'm keeping my fingers crossed.

One thing that Lisa mentioned is that Minister Khanjin (current Minister of the Environment) is coming to Huron Bruce riding "soon". She invited me to meet her then. I pointed out that Jean and I are going to be away in April (going solar eclipse watching in the ocean via Holland America) but have confirmed with the impacted residents in Huron and Bruce counties they are willing for me to put their names forward to potentially meet with that Minister. I would like to invite Chairman Tom Allwood of the MMEWG if he'd also be willing to have his name put forward to meet with Minister Thompson and Minister Khanjin during their visit to Huron Bruce.



Attachment 1: Chart of 3 Years of IESO daily data for Ontario Electrical Demand and Wind Turbine Output – Demonstrates adding more wind turbines is futile to meet summer peaks



Attachment 2 – Analysis of K2 Wind Audit Data Submitted to MoECP - demonstrates tonality (See peak in curve showing 10 dB tonal peak from 430 to 460 Hz)