

December 14, 2021

Mayor and Council
Municipality of XXXXXXXX
Address line
City Province Postal Code
By e-mail –

Dear Mayor and Council:

RE: Wind Turbine Failures

I am writing to share information compiled by the Multi-Municipal Wind Turbine Group (MMWTWG) on some recent catastrophic failures of wind turbines. Because you are a municipality with an operating wind turbine project, we expect this information will be of interest to you.

The MMWTWG was initially created in 2009 by municipalities in Bruce, Grey and Huron Counties to share information on wind turbine projects being proposed or operating in our municipalities. The organization is a joint committee with elected and citizen representatives from the member municipalities. Since its formation, we have been monitoring the operation of wind turbines and advocating on behalf of our residents adversely affected by the wind turbines.

The group has seen the number of catastrophic wind turbine failures increase, and is deeply concerned about the associated implications. While the wind power industry reports that each is an isolated incident, there are now too many incidents for this response to be credible. A total of 10 turbines failures have happened in Ontario since first industrial-scale wind turbines were installed in 2006.

At the same time, there has been no public response from the provincial government that indicates these serious workplace accidents are being investigated. To date, there has been no information shared with MMWTWG member municipalities.

As a result, we have been working with several people that have technical experience with industrial applications of power and rotating equipment. We have developed our own assessment of the failures based on statements from project operators, pictures and other available information. This assessment of the following events points to different causes in these situations:

- **Bow River** – Pictures suggest that tower collapse was linked to a bolt failure of tower sections.
- **Skyway 8** – Rotor failure occurred shortly after the installation of an experimental device.
- **Raleigh Wind** – Published information from the project owner indicates that the tower collapse is related to a single blade failure. Marks on the tower suggest that the blade struck the tower.
- **Huron Wind** – Blade failure with the location of the debris thrown by this failure highlighting the inadequacy of current setbacks from property lines.

Another recent incident in New Brunswick adds to our concerns:

- **Kent Hills, NB** – Project operator linked the collapse of tower to a foundation failure.

Collectively, the assessments of these situations increased our concern that action is required to formally investigate these incidents. We believe they demonstrate that the current setback distances are inadequate to protect the public and the magnitude of these risks will increase as wind turbines have gotten larger.

Faced with continued public inaction by the provincial government, the MMWTWG decided to share the following summary of their findings relative to these failures along with other summary information with other municipalities that host wind turbine projects.

The MMWTWG recommends that the provincial government needs to:

1. **Establish a formal public process for investigations of wind turbine failures** so that the cause can be firmly determined. These would involve third-party independent engineers starting with initial inspection procedures through to the public release of the final report;
2. **Complete comprehensive inspections of existing projects** to identify any project that shows signs of similar weaknesses¹;
3. **Establish requirements** for on-board predictive maintenance equipment for operating wind turbines to allow early identification of problems and establish protocols for information transfer to the MECP for review and sharing with the host municipality.
4. **Review the emergency response procedures** submitted by the proponents of wind turbine projects as part of the approval process to ensure that the plans are current and responsive to the types of failures being experienced; and
5. **Increase the setbacks** from property lines to a minimum of tower height plus blade length for new towers or repowering of existing sites to at least reflect the impact of a complete tower collapse with additional distances required to protect against ice throw and debris scatter like that seen in the Huron Wind failure.

We suggest that Council review these attached summaries to see if any apply to the wind turbine project(s) in your municipality. It may be possible for the municipality to review the situations with each project that appropriate activities are underway to ensure public safety.

If you agree with the recommendations for action by the provincial government we ask that you communicate your support to David Piccini, Ontario Minister of Environment, Conservation and Parks.

When these projects were approved and built, provincial regulations limited municipal input into the projects and the supervision of their construction. This self-regulation process led to some serious problems for the municipalities. Now that further gaps in this process are becoming evident, the province needs to take responsibility for addressing the mistakes that were made.

Yours truly,

Tom Allwood,
Chair, Multi-Municipal Wind Turbine Working Group
Councillor, Municipality of Grey Highlands

c.c.

Honourable David Piccini, Minister of Environment, Conservation and Parks, minister.mecp@ontario.ca

Honourable Monte McNaughton, Minister of Labour, Training and Skills Development,
minister.mltsd@ontario.ca

Local MPP

¹ This request parallels the October 2017 call from Lisa Thompson, then the PC Environment Critic for safety audits in response to reports of parts being shed by wind turbines. See <https://www.cbc.ca/news/canada/windsor/pcs-demand-ontario-liberals-conduct-safety-audits-on-all-industrial-wind-turbines-1.3282315>