Warwick Township – Report/Memo

TO: Mayor Case & Warwick Township Council
CC: Brad Goodhill, Warwick Fire Chief and Amanda Gubbels, Clerk/Deputy Administrator

FROM: Amanda Gubbels, Clerk/Deputy Administrator

SUBJECT: Update on Installation of Fire Suppression in Wind Turbines in Warwick Township

Report Number: FIRE-04-16    Date to Council: March 21, 2016

In Camera: NO

For Council’s Direction

Background

On June 30, 2015 Warwick Township Council approved By-law 69 of 2015 – To establish a fire safety and emergency plan and install fire detection and suppression systems for industrial wind turbines. Since that time Nextera and staff have been in discussion over the type of suppression system required to be installed on industrial wind turbines in Warwick.

Compliance with Warwick’s By-law 69 of 2015 was required as of October 25, 2015. Nextera was informed in writing of this deadline.

The Warwick Fire Chief has requested fire suppression in the nacelle and Nextera wishes to install fire suppression in the electrical cabinets at the base of the turbine.

Staff met with Nextera representatives on March 4, 2016 to discuss the matter further. Attachment A outlines correspondence from Nextera to the Township in follow up to that meeting.

Discussion

A number of previous reports and verbal updates have been provided to Council regarding the background of this matter. Nextera is required by Warwick’s By-laws to install fire suppression in wind turbines, the by-law does not specifically state what sort of system is required, but will meet the satisfaction of the Fire Chief.

Considerations for Council related to next steps:

- According to research conducted by the Fire Chief of the Warwick Fire Department, 6 municipalities in Ontario require fire suppression systems to be
installed in wind turbines. Of these 6 none have fire suppression in the nacelle of the turbine, nor do their by-laws require this type of installation.

- There have been very few wind turbine fires/explosions from the nacelle in Ontario resulting in injury or harm. There is no known legal requirement for wind companies to report any fire/explosions to the general public.

- Nextera’s position is that installation of fire suppression systems in the nacelle presents a risk to workers and is a health and safety issue.

- Nextera is willing to cover costs associated with installing a cabinet fire suppression system (in electrical cabinet at base of the turbine and in the nacelle of the turbine) but is not willing to cover costs associated with the installation of a nacelle fire suppression system.

- Nextera has informed the Township that all costs associated with installation of wind suppression in the nacelle would be borne by the municipality under the Community Vibrancy Agreement under clause 9 - ‘additional development charges’. According to Nextera, relevant charges for the system are $416,275 and require Warwick to forgo all revenue expected to be collected by the annual amenity fee until March 31, 2021. The section of the agreement reads as follows:

  9. The Wind Project shall be exempt from payment of any other development changes under any by-law enacted by Council. In the event Jericho is not exempt from the payment of development charges in respect of the Wind Project, or is required to pay any increased amount of property or other taxes with respect of the Jericho Wind Project, any such payments or increased amounts shall be set off against and deducted from the other payments or contributions required under this Agreement.

- Nextera may not own the wind turbines in question throughout their entire lifecycle, thus the current maintenance and monitoring program (i.e. preventative procedures) is not guaranteed to be continued indefinitely.

- Warwick Fire Chief argues that the installation of fire suppression in the nacelle could suppress any fire, to allow more time for response teams to get to the site, which could assist with evacuation of homes or livestock from adjacent buildings. Nextera contends that the fire would not be detected until visual and therefore, the fire suppression in the nacelle would actually delay the response time.

- Nextera compliance with the fire suppression installation in wind turbines was required as of October 25, 2015. NextEra did not raise its concern regarding employee health and safety with the installation of fire suppression in the nacelle until the letter dated February 19, 2016. The concern was not fully explained until the meeting with staff on March 4, 2016, 4 months after compliance was required. Prior to this the technical requirements and necessity of the system
were debated with staff but the position that they are a risk to human health was not made.

- In compliance with Warwick By-law 69 of 2015, Nextera has provided a $1,000 deposit for each wind turbines in Warwick Township. This deposit was provided before the compliance deadline of October 25, 2015.

- Warwick Township’s by-law 69 of 2015 does contemplate penalties for non-compliance as follows:

**Penalties**

18. Every Owner who contravenes any of the provisions of this by-law is guilty of an offence and pursuant to section 429 of the Municipal Act, 2001 all contraventions of this by-law are designated as continuing offences.

19. Every person, excluding a corporation, who is convicted of this offence, is liable:

   (a) to a minimum fine of Three Hundred Dollars ($300.00) and a maximum fine of Twenty-Five Thousand Dollars ($25,000.00) for the first offence; and

   (b) to a maximum fine of Fifty Thousand Dollars ($50,000.00) for a subsequent offence.

20. Every corporation which is convicted of an offence is liable:

   (a) to a minimum fine of Five Hundred Dollars ($500.00) and a maximum fine of One Hundred Thousand Dollars ($100,000.00) for the first offence; and

   (b) to a maximum fine of One Hundred Thousand Dollars ($100,000.00) for a subsequent offence.

21. In addition to the fine amounts set out in sections 19 and 20 of this by-law, for each day or part of the day that an offence continues, the minimum fine shall be Four Hundred Fifty Dollars ($450.00) and the maximum fine shall be Ten Thousand Dollars ($10,000.00). The total of all daily fines for the offence is not limited to One Hundred Thousand Dollars ($100,000.00).

*Council direction is sought on this matter/next steps.*
Financial Implications

Financial implications depend on actions of Council. All costs are unbudgeted and will represent a new cost item to the budget. The revenue expected from Nextera’s amenity fee under the CVA has been included in the draft 2016 budget as revenue.

Attachments

Attachment A – Letter from Nextera dated March 11, 2016
Attachment B – By-law 69 of 2015 – Installation of Fire Suppression in Industrial Wind Turbines

Respectfully submitted,
Amanda Gubbels – Clerk/Deputy Administrator