

# Summary Report

## Open House & Information Session Skyway 8 Wind Farm Project Environmental Screening Review

Held on June 18<sup>th</sup>, 2008

Prepared by  
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The meeting was held at Shelburne District High School in the Cafeteria from 7:00 pm until 8:30 pm.

### **Notice of Public Meeting**

Local residents were mailed notices about the open house. It was also advertised in the local paper, the *Dundalk Herald*, distributed for free to residents of Southgate Township

The direct mailing of the invitation included landowners and adjacent landowners. Also receiving notices of the open house were elected government officials (federal, provincial, and municipal), representatives from federal and provincial departments and ministries, staff from the Southgate Township, and representatives from various agencies and organizations. In all, over 50 direct mailings were sent out notifying stakeholders about the Open House.

### **Attendance**

The meeting was attended by 12 individuals. Each attendee was asked to sign in.

### **Open House Format**

The Open House was conducted in order to introduce the project to the community and ensure early consultation and feedback.

The location of the meeting was the Shelburne District High School in the Cafeteria. The room was set up with a number of table top displays. Experts stood in front of each display and were available to answer any questions or concerns. The stations were as follows:

- Location of Project
- Noise and Infrasond
- Archaeological
- Wildlife

- Property Values
- Safety and Structures
- Magnetism

Below is a list of experts that were available at the open house to address questions and concerns. A brief biography is also provided for each of the experts.

**J. C. Pennie, C.I.M.**

**Chairman & CEO, Windrush Energy**

Bio: Founder of Windrush Energy with 12 years expertise in managing 2,000 employees in fabrication and field services to the North American energy sector. Former Chairman, President & CEO of American Eco Corporation who built and commissioned the Sable Island offshore gas platforms.

**Adi Rabadi, M.A.Sc., P.Eng.**

**President, LandAir Engineering**

Bio: Graduate in mechanical engineering from the University of Toronto with 13 years of experience in robotics and systems controls and 2 years in electrical engineering for renewable generating facilities with Windrush Energy. Previously project manager for advanced manufacturing at Husky Systems.

**John Nicholson, B.Sc., M.Sc., P.Eng.**

**President, Environmental Business Consultants**

Bio: Masters degree in environmental engineering and over 15 years of direct experience in the environmental sector. Involved in high-profile environmental assessments including a hazardous waste rotary kiln incinerator and the re-start of the Pickering Nuclear power facility. Formerly at the Environmental Assessment and Approvals Branch of the Ontario Ministry of the Environment.

**Caroline Walmsley, F.W.T.**

**Terrestrial / Wetland Biologist**

Caroline is a professional biological consultant and specializes in natural resource inventories and evaluations, management, research and impact studies. Caroline has worked on several EAs for wind farm developments. Her experience on these EAs includes background collection and review, report generation, data analysis, ecological surveys, rare species management, and impact mitigation.

**Ian Bonsma, B.A.Sc, EIT**

**HGC Engineering**

Bio: Ian has an engineering degree from the Universities of Waterloo. At HGC, he conducts noise and vibration studies and modelling. He has experience performing acoustic assessments at several wind farms.

**Jacqueline Fisher, M.A.**

**Archaeologist, Fisher Archaeological Consulting**

Bio: Licensed member of the Association of Professional Archaeologists and has been doing archaeological assessment for over 15 years.

## **Questions and Answers**

### **General Issues**

Q. What is the output of the turbines?

A. The proposal is for 5 turbines at 2.0-MW each.

Q. Would the power be used locally as compared to the CHD project which goes into the transmission grid to Toronto?

A. The electricity generated would be connected to the 44-kv lines the feed into Orangeville means it will be used within the County.

Q. What percentage of time do wind turbines run compared to a nuclear facility?

A. Based on preliminary wind data, the turbines will run approximately 36% of the time. Based on our knowledge, Bruce A & Pickering A nuclear facilities ran 39% of the time over a 14 year timeframe.

Q. How long does it take to put them up?

A. The entire construction, including building roads and the foundations will take less than two months. It takes about two days to erect a wind turbine.

Q. When will they be installed?

A. Construction depends on when the proponent gets approval. Ideally it would be in the summer 2009.

Q. Why would anybody be against them?

A. There are various reasons for people opposing them. Most prevalent is NIMBYISM. Also, some people do not like the site of them.

### **Archaeological Q&A**

Q. What does archaeology have to do with the wind turbine project?

As part of the Environmental Assessment, archaeology must be conducted along routes and turbine areas that have been determined to have high potential. This led to a discussion of what would be the potential for finding sites, and how do we go about doing it? We explained the field work aspect and shovel testing.

Q. When will the survey be conducted?

A. There was no set schedule as of yet, but the survey would be conducted well in advance of any construction.

Q. What about Aboriginal claims to the wind, and were we aware of this?

A. This issue stemmed from a B.C. court case and the proponent is aware of the claims. Discussions have been held by the proponent with Ontario-based First Nation groups.

### **Safety and Structures Q&A**

Q. What is the composition of the wind turbine foundation?

A. The turbine base is constructed of concrete and steel. It is a cylindrical structure - virtually the same diameter as the turbine base - approximately 10m or 30 ft in diameter. The depth of the foundation is roughly 1.5 times the diameter. A hole will be excavated, the concrete ring with re-enforcements will be poured and the centre of the concrete cylinder will be backfilled.

Q. Can the wind turbine can fall down?

A. There are tens of thousands of wind turbines in the world and only a handful have fallen down. There is a chance that a wind turbine will fall down in the event of a direct hit from a tornado. At the same time, everything in the path of the tornado would also be destroyed.

Q. If there is a fire, who is liable?

A. In event that there is a fire in the wind turbine it would be contained within the nacelle. The nacelle has a built-in fire suppression system. The turbine will be located about 400 m from buildings and homes. In the event that the fire would spread from the turbine, the wind farm owner would be liable if negligence can be attributed to the owner.

Q. Where will the power be connected?

A: The lines will run along road 260 to 2nd Line SW in Melancthon.

### **Acoustic Impacts Q&A**

Q. There are some receptors missing on the sound map.

A: Some receptors may not be on the map, but all the receptors which are close to the wind turbines are on the map and included in the acoustic report.

Q. What will happen to the sound level if the turbine height is increased to 100m?

A: A minor change < 1 dBA decrease may occur because of the increased distance.

### **Wildlife, Birds, and Bats Q&A**

Q. What type of studies have you conducted on the Skyway 8 Wind Farm project?

A. To date NRSI has conducted a variety of biological studies on the proposed project, including bird behaviour and breeding bird surveys, acoustic bat monitoring, amphibian surveys, vegetation mapping, aquatic habitat and creek surveys, as well as mammal surveys. All of which are requirements of Environment Canada and the Ministry of Natural Resources.

Q. Why do these studies have to be done?

A: These studies are required as part of the Environment Assessment process, to insure that the wind farm will not cause any dramatic impact on the biological features and wildlife in the proposed area.

Q. Why aren't the turbines built in wetlands?

A. The wetlands are regulated by the Grand River Conservation Authority (GRCA) and according to their policies, developments may not occur within wetlands. Additionally, developing in the wetland would entail more work (eg. Land clearing and potentially more work to create stable footings / foundations in organic soils).

Q. How will this affect bird migration?

A. Every indication is that it will not affect bird migration. While it is possible that some birds will be killed as a result of flying into the tower or being struck by the blade, the numbers of birds killed per turbine per year are typically very low (< 5). Further, because this site is located well away from either of the Great Lakes and is not along a feature that would attract birds (e.g., a forested ridge) it is likely that the impacts would be even less. Also, birds typically migrate between 300 and 600m above ground which is well above the blade sphere. The only times they would be within the blade sphere heights is during take-off and landing or if there was inclement weather such as a strong head wind that resulted in them modifying their flight heights.

Q. How does this affect bats? Don't they have radar?

A. Bats have sonar or the ability to echolocate which suggests that they should be able to avoid the tower and large blades moving at slow rpms (ave. 17rpm), however the results that are being reported from various wind farms and northeastern United States suggests that bats may be much more susceptible to turbine mortality than birds. The reasons for this are unclear; however it appears as though the migrating bats (red bats, hoary bats, and silver-haired bats) are most prone and resident bats (eg. little brown bats and big brown bats) are least affected. At this time, the affects of wind farms on bats unclear; review agencies in the US and Canada are trying to get a handle on this issues by requiring pre and post construction monitoring for bats.

### **Property Values**

Q. I am selling my farm. Will the existence of turbines lower the property value?

A. A report commissioned by Windrush Energy and researched by a real estate appraiser indicates that property values are not affected by the presence of wind turbines in a local township. The study compared property values in Grand Valley to Melancthon (nearby townships, one with turbines and one without).