Thank you for providing us with your comments, questions, and concerns. We have prepared this document based on those received to date, and will continue to update it as we continue through the regulatory approvals process. Questions and responses are organized by topic, as below:

Contents

1.0 GENERAL

1. **I ask you, why are you trying to tear our community apart?**

2. **What would it take to get you out of the community? Cost – buy out?**

3. **What is your goal?**

Answer to questions 1 through 3 above.

St. Columban Energy LP has been working with the community on the St. Columban Wind Project ("the Project") since 2006, conducting numerous meetings and opportunities for communication and feedback in order to have stakeholder comments addressed and questions answered.

We intend to develop, construct, own and operate the Project and are not considering selling the Project. The Project will bring numerous benefits to the community including:

- Financial benefits in the form of new additional tax revenue to the municipality, new additional revenue to members of the community, support for local shops and businesses primarily during construction but also during the Project's subsequent and ongoing operation.
- The generation of clean, emission-free electricity from a renewable resource.
- Reduced dependence on fossil fuel fired electricity generation.

Our goals are as follows:

i. to obtain a power purchase agreement under the Ontario Power Authority Feed-In Tariff program which is designed to encourage renewable energy projects.

ii. to develop, construct, and operate the 33 MW St. Columban Wind Project ("the Project") in the Municipality of Huron East, County of Huron, in response to the Government of Ontario's initiatives to promote the development of renewable electricity in the province.

iii. to ensure that all stakeholders are informed with accurate facts about the Project and the required O. Reg. 359/09 environmental approval process (Renewable Energy Approval (REA) process), in order to dispel some of the confusion and fear surrounding the Project specifically and the wind industry in general.

iv. to be a good neighbour, protecting the natural environment and working with stakeholders to develop a safe, clean project.

4. **What are your concerns?**

Our concerns are ensuring throughout the development, construction and operation of the Project that all stakeholders are informed with accurate facts about ongoing Project activities including the REA process currently under way, in order to dispel some of the confusion and fear surrounding the Project specifically and the wind industry in general.

5. What are your questions?
Through the REA process we have and will continue to solicit input/questions from stakeholders about the Project.

2.0 COMPANY DETAILS

1. **The company started out as CASA Engineering. Then it became known as St. Columban Energy LP. Pristine Power's name is on the website (http://www.pristinepower.ca/index.php). Then when you look up Pristine Power, it refers to Fort Chicago LP which is now owned by Veresen Inc. In the interests of transparency, how was this company formed?**

2. **Who is involved in the "limited partnership"?**

3. **Why has your company's name been changed three times?**

Veresen Inc. (formerly Fort Chicago Energy Partners L.P.), through its acquisition of Pristine Power Inc. (Pristine), obtained the majority interest in the St. Columban Wind Project ("the Project") in late 2010. Pristine obtained the majority interest in the Project in late 2009 from the original Project developer, CASA Engineering & Construction / José Menéndez, P. Eng., who continues to lead the Project's development as Vice President Business Development, East for Veresen Inc.

4. Is it made up of leaseholders or shareholders or both?

Veresen Inc. is a shareholder-based corporation with a Board of Directors traded on the Toronto Stock Exchange under the trading symbol VSN. Their stakeholder rights document can be found at: http://www.vereseninc.com/upload/media_element/49/01/shareholder-rights-plan-agreement-conformed-copy.pdf.

Leaseholders are those private property owners with whom the Project has entered into agreements to have Project components (turbines, access roads, collector lines, etc.) located on their properties.

5. Who are the principals?

Stephen H. White - President and Chief Executive Officer
Keith O'Regan - Senior Vice President, Chief Operating Officer
David I. Holm - Executive Vice President, Corporate and Business Development
Richard G. Weech - Vice President, Finance, and Chief Financial Officer
Kevan S. King - Vice President, General Counsel and Secretary
More details can be found at http://vereseninc.com/corporate-governance/executive-management.html.

6. Who do people deal with? Who is accountable?

José Menéndez of St. Columban Energy LP/Veresen Inc. is the main contact for the Project.

7. **Would you be able to send me a list of the employees present at the public meeting? I would like to know:**
   -Names;
   -What company they represented (i.e. Stantec, Veresen Inc., etc.);
   -Their area of skill/knowledge/expertise. *(For example-I spoke with a person that had knowledge about the natural environment and the studies conducted. However, I was directed to someone else for a question about telecommunication*);

Attendees at the open house included:

- José Menéndez – Veresen Inc./St. Columban Energy LP - Vice President Business Development, East, expertise in wind project development
- Mike Dunn – Veresen Inc. – Director, Project Management, expertise in engineering, construction management
- Chris Matthieu – Veresen Inc. - Project Coordinator, expertise in engineering, construction management
- Shawna Peddle – Stantec Consulting Ltd. – Senior Project Manager, expertise in environmental assessment, project management and consultation
- Kendra Feit – Stantec Consulting Ltd. – administrative support
- Kerrie Skillen – Stantec Consulting Ltd. – Project Manager, expertise in environmental assessment, project management and consultation
- Shannon Catton – Stantec Consulting Ltd. – Ecologist/Project Manager, expertise in terrestrial ecology
- Loren Knopper – Stantec Consulting Ltd. – Senior Environmental Health Scientist, expertise in risk assessment (human health and ecological)
- Jim Salmon – Zephyr North Ltd. – President, expertise in noise assessment

3.0 PROJECT SPECIFICATIONS

1. **What will be the exact size/MW's of the turbines?**

2. **What is the sound power level associated with the technology selected?**

3. **What is the complete product specification of the wind turbine technology selected? Include all test and/or field results prepared by, for, or in the possession of the company with respect to the proposed technology?**

Answer to questions 1 through 3 above.

The initially proposed wind turbine generators (WTGs) to be used for the Project were the Siemens 2.3-101 WTGs. The specifications for this WTG can be found under Section 3.3.1 of the Draft Project Description Report (PDR) and on page 6 of the St. Columban Wind Project Open House display panels. Both documents can be found on the project website at: http://www.pristinepower.ca/projects/st_columban_wind_project.php

At present, the Project is also considering the use of Siemens 2.3-113 WTGs. Further, information about this alternate WTG technology will be made available once confirmed. In the interim,

information about this WTG technology can be found at:
http://www.energy.siemens.com/hq/en/power-generation/renewables/wind-power/

All information regarding the turbines will be included in the Wind Turbine Specifications Report as part of the complete REA application package, and will be made available for public review and comment and minimum of 60 days before the final open house.

4. **Where is the transformer located?**

5. **Where is the substation? You say 'anticipated' in the draft report. What do you mean by "anticipated"? What conditions would make a change in the "anticipated" situation?**

6. **Where is the operations building located?**

7. **Will all the lines be buried? Are the transmission lines buried that take the power away from the turbines to the power stations?**

8. **Are collector lines along public roads above ground or below ground?**

9. **Where does the connection happen to enter the grid? Where in terms of land coordinates do these transmission lines go?**

10. **Where is that connection and what lines do you use to get it there?**

11. **Are there any lands where adjustments need to be made to accommodate transmission to other connections? This is asking for a description of the path followed by transmission lines from turbines to connection points?**

12. **Could you describe the path of connection that is followed from each of the turbines to the access point on the main grid – the Bruce to Milton Line? How does the connection access the Bruce to Milton line?**

Answer to questions 4 through 12 above.

Details of the Project's electrical interconnection and required electrical equipment are provided under Section 3.3 of the Project Description Report (PDR). The document can be found on the Project website at: http://www.pristinepower.ca/projects/st_columban_wind_project.php.

The draft reports are updated throughout the REA process, and will not be finalize until submission to the Ministry of the Environment. Wording like 'anticipated' is typically used early in the process; as studies and information become available; the layout and Project specifics are confirmed.

As a result of recent changes to the capacity of the electrical interconnection system where the Project was originally intended to interconnect (the Seaforth transformer station (TS)), the Project has altered its two points of interconnection to the electrical system. The Project's updated electrical interconnection and required electrical equipment have been updated under Section 3.3

of the PDR. The principal change is a change in the point of interconnection for the St. Columban 1 (18 MW) project from Seaforth TS at 27.6 kV to Wingham TS at 44 kV. For ease of reference, the updated information contained in the PDR is as follows:

"The Project is made up of St. Columban 1 (18 MW) and St. Columban 2 (15 MW) which in aggregate combines 15, Siemens SWT-2.3-113 direct drive wind turbine generators with a maximum installed nameplate capacity of 33 MW.

A step-up transformer adjacent to the wind turbine at the base of each tower is required to transform the electricity created in the nacelle to 27.6 kV. From each step-up transformer, a high voltage cable runs to the switchgear located at the bottom of the respective tower. From the switchgear, underground 27.6 kV collector lines will be constructed parallel to the turbine access roads, along municipal road allowances, to the Substation in the case of St. Columban 1 and to the operations and maintenance building in the case of St. Columban 2.

St. Columban 1

Includes 8, Siemens SWT-2.3-113 direct drive wind turbine generators with a maximum installed nameplate capacity of 18 MW, a 27.6 kV underground collector system, a 44 kV/27.6 kV 18 MVA transformer substation with an operations and maintenance building (the "Substation"), turbine access roads, and an offsite 'point of connection' to the Hydro One Networks Inc. (HONI) distribution system.

The 27.6 kV collector lines will connect to a 44 kV/27.6 kV 18 MVA transformer located at the Substation. The Substation will be occupy an area approximately 30m X 30m in size and will be situated within the construction area at the base of wind turbine T2. The 44 kV line emanating from the Substation will connect to the HONI 'point of common coupling' (PCC) for St. Columban 1 located in the vicinity of the intersection of Manley Line and Bridge Road (43.547°N, -81.280°W). From this PCC it is anticipated that HONI will construct a 35-40 km overhead 44 kV line north to the 'point of connection' (located at approximately 43.835°N, -81.152°W) on HONI's existing distribution system originating from the Wingham Transformer Station (TS). The development of this line falls within the jurisdiction of HONI and is not discussed as part of this assessment.

For St. Columban 1, approximately 11,600 m of 27.6 kV underground collection lines will connect 8 wind turbines (T1, T2, T3, T11, T12, T13, T14, and T15) from their respective switchgear to the Substation and then onto the PCC located in the vicinity of the intersection of Manley Line and Bridge Road.

St. Columban 2

Includes 7, Siemens SWT-2.3-113 direct drive wind turbine generators with a maximum installed nameplate capacity of 15 MW, a 27.6 kV underground collector system, turbine access roads, an operations and maintenance building and an additional offsite 'point of connection' to the HONI distribution system.

The 27.6 kV collector lines will connect to an unserviced operations and maintenance building. The building will measure approximately 6m X 12m, and will be situated within the construction area at the base of wind turbine T9. The 27.6 kV line emanating from the building will connect to the HONI 'point of common coupling' (PCC) for St. Columban 2 located in the vicinity of the intersection of Beechwood Line and Bridge Road (43.557°N, -81.301°W). From this PCC it is anticipated that HONI will construct a 2-4 km overhead 27.6 kV line to the 'point of connection' (located at approximately 43.541°N, -81.315°W) on HONI's existing distribution system located on Hydro Line Road originating from the Seaforth TS. The development of this line falls within the jurisdiction of HONI and is not discussed as part of this assessment.

For St. Columban 2, approximately 9,500 m of 27.6 kV underground collection lines will connect 7 wind turbines (T4, T5, T6, T7, T8, T9, and T10) from their respective switchgear to the PCC located in the vicinity of the intersection of Beechwood Line and Bridge Road.

The underground collector lines will be constructed on leased lands and within the municipal road right-of-way (ROW). Underground collector lines have been incorporated into the design of the access roads to reduce the area required for construction and minimize potential construction impacts. The cables will be installed immediately to one side of the access road, just off the graveled surface. In the municipal road ROW the cables will be installed just off the grass gravel interface. Typically the collector lines will be buried at a minimum of 1.0 m depth.

Overhead lines are not anticipated to be required for the project with the exception of: the overhead lines to be constructed by HONI from the St. Columban 1 and St. Columban 2 PCCs to their respective 'point of connection' as described above; and, a 30 m section of overhead line on private lands at each of the respective PCCs for St. Columban 1 and St. Columban 2. As noted, the development of the lines to be constructed by HONI falls within their jurisdiction and is not discussed as part of this assessment."

13. **Will heavy equipment damage roads, drain tiles in fields?**

14. **The plowing of collector lines cannot be tolerated because of the presence of subsurface drainage on most farms. Only open trench methods can be used with the presence of a drainage contractor to repair severed drains. Drainage headers must be used along farm roadways where possible. Does the applicant consent to these requirements?**

15. **It is identified that large heavy equipment will be used during construction. Does the applicant consent to indemnify the municipality for road damage caused during construction by its contractors?**

16. **Will traffic be interrupted?**

Answer to questions 13 to 16 above.

During the estimated 6 month construction phase of the Project approximately 2% of the leased lands will be disturbed. Following the completion of construction, the area will be restored to as close to pre-existing condition as possible. The location of artificial tile drains has been confirmed for all leased properties, and the location of Project infrastructure has been designed to avoid impacts to tile drains. If any tiles are damaged, St. Columban Energy LP will restore any tiles and drains affected by construction activities.

St. Columban Energy LP will work with the Township of Huron East and Huron County to identify potential impacts to local roads including any necessary upgrades. Pre and post construction surveys of local roads used for the construction phase of the Project will be undertaken. Any damage caused to local roads as a result of the Project will be repaired by the Project.

Truck traffic will increase on some roads during turbine and other component deliveries, however this traffic will be restricted to predetermined routes and times to the greatest extent possible. The effect of constructing the various Project components is anticipated to have a limited, short term effect on traffic during construction.

17. Concerned regarding the depletion of gravel in our area due to building of access roads and bases for turbines.

Gravel and other aggregate materials required for construction will be sourced from local suppliers only when available in sufficient quality and quantity at competitive prices. If supplies in the local area are unavailable in sufficient quality and quantity at competitive prices, other resources will be used.

18. What is the exact distance from turbine # 8 to the two closest receptors located to the west?

The distance from T8 to participating receptor #30 (P30) on the same parcel is 587m. The distance from T8 to participating receptor # 31 (P31) on the participating parcel on the west side of Beechwood Line is 608 m.

NOTE: The distances from Wind Turbine Generators to the closest receptor will be contained in the Noise Assessment Report for the Project. A draft of the Noise Assessment Report will be made available to all stakeholders for review and comment for a minimum of 60 days prior to the final open house for the Project.

19. What is the exact distance from turbine # 9 to the closest receptor located to the north, and the closest receptor located to the east?

The distance from T9 to the closest non-participating receptor to the north, Non-participating Receptor # 3 (R3), is 553 m. The distance from T9 to the closest non-participating receptor to the east, Non-participating Receptor # 9 (R9), is 551 m.

See note under question #14.

20. What is the exact distance from turbine # 10 to the closest receptor located to the north, and the closest receptor located to the west?

The distance from T10 to the closest non-participating receptor to the north, Non-participating Receptor # 3 (R3), is 572 m. The distance from T10 to the closest non-participating receptor to the west, Non-participating Receptor # 5 (R5), is 561 m.

See note under question #14.

21. What is the distance from turbine # 11 to the most westerly point of the St. Columban soccer fields and the St. Columban School?

The distance from T11 to the most westerly point of the soccer field is approximately 766 m. The distance from T11 to the school is 945 m.

22. What is the distance from turbine # 14 from the most northerly point of the St. Columban soccer field?

The distance from T14 to the most northerly point of the soccer field is approximately 845 m.

23. A recent study by American & Belgian scientists demonstrates that the most efficient spacing for wind turbines is 15 rotor diameters apart. The Siemens SWT 23-101 turbine that you are planning to use has a blade length of 49 m, so a rotor diameter of about 100 m. However, in your Project plan, some turbines are closer than 1500 apart. Why is this so?

The layout of the wind turbine generators has been completed to maximize the project's total energy output while still satisfying all of the required regulatory requirements such as noise levels at non-participating receptors and setbacks from roads, property lines, etc. We have also ensured that the layout meets the equipment manufacturer's technical requirements.

24. How is the safety light on the top of the turbine powered? If the light burns out or fails – what is in place for back up? What type of light is it? (i.e. watt? LED, Halogen, etc.).

The type and number of lights to be installed on individual WTGs (the lighting plan) is submitted to Transport Canada and NAV CANADA for review and/or approval. The lighting plan approved will be required to meet the standards contained within Transport Canada publication, TP 382E, Standard Obstruction Markings Manual.

The turbines would undergo regular maintenance and monitoring by operational staff.

25. The forecasted life of a turbine is approximately 2 decades. Where does upgrading technology fit into the "grand plan"? Will the public be advised of any upgrades?

Upgrades and improvements to equipment such as wind turbine generators and other project components are relatively common and part of a continuous operational effort to improve the equipment's performance and reliability. However, the scope of these improvements are generally minor and do not change the fundamental design of the equipment concerned or the basis upon which the project will be originally permitted under.

At present St. Columban Energy LP has no plan to make any upgrades or improvements to the project or any of its sub components (e.g. wind turbine generators) that would change the basis upon which the project will be originally permitted under.

4.0 CONSULTATION PROCESS

1. **Wondering why I was not consulted on area of study investigation when property owned by family was in the shown investigation area?**

As per the Renewable Energy Approval (REA) process, the area of study investigation is identified for collection of data from provincial authorities, conservation authorities, and municipalities. The community is not consulted on the extent of the study area.

2. **When is the municipal consultation anticipated to start?**

The Draft Project Description Report (PDR) and Municipal Consultation Form as required under O. Reg. 359/09 was provided to the Municipality of Huron East and Huron County in April, 2011.

Draft copies of the following reports were provided to the Municipality of Huron East and Huron County in May, 2011:

- Draft Project Description Report
- Draft Wind Turbine Specifications Report
- Draft Construction Plan Report
- Draft Design and Operations Report
- Draft Decommissioning Plan Report
- Draft Natural Heritage Assessment Report and Environmental Impact Study
- Draft Stage 1 and Stage 2 Archaeological Assessment Reports
- Draft Heritage and Protected Properties Reports

St. Columban Energy LP has met numerous times with Huron East Council and staff, and will meet with staff during the municipal consultation process to consult on matters relating to municipal or local infrastructure and servicing, as required under O. Reg. 359/09.

3. **When is the proposed consultation elements expected, including the proposed form of notice?**

The consultation activities for the Project have included an initial Notice of Proposal to Engage in a Renewable Energy Project, published in the Huron Expositor and the Mitchell Advocate on March 2 and 9, 2011. A Notice of Public Open House and Notice of Draft Site Plan was published in the same newspapers on April 20 and 27, 2011. Both Notices were also sent by mail to all assessed landowners within 550 m of the Project Location, every assessed owner of land abutting a parcel of land on which the project location is situated, anyone on the mailing list for the original Environmental Screening Report, and government and regulatory stakeholders and Aboriginal communities identified by the MOE as having an interest in the Project.

O. Reg. 359/09 requires notification of every assessed landowner within 550 m of the project location, and every assessed owner of land abutting a parcel of land on which the project location is situated. This information was obtained using the municipal tax roll information at the Municipality of Huron East, and is accurate to November 22, 2010.

The municipal consultation process under O. Reg. 359/09 requires providing municipalities with reports a minimum of 90 days before the second public meeting – packages were provided to the Municipality of Huron East and Huron County in May, 2011. Meetings will be held with the municipalities to discuss potential effects and mitigation, as well as topics related to municipal permits and infrastructure.

Throughout the consultation process, invitations have been extended for stakeholders to provide comments through email, regular mail, or telephone. In addition, an offer of meeting has been extended to Huron East Against Turbines (HEAT).

When the REA documents are complete, the application will be provided to the Ministry of the Environment for a determination of completeness. Once complete, the MOE will place the application on the Environmental Registry for a 30 day public review and comment period within the 6-month service window for completion of their review of the application.

4. **When is the second public meeting expected?**

At present, the target to host the second public open house is sometime in fall 2011, a minimum of 60 days after making all draft reports available to all stakeholders for review and comment.

5.0 APPROVAL PROCESS

1. **In June 09, there were concerns with several aspects and there was a bump up request that HEAT made to the Minister of the Environment with respect to the St. Columban Project. What were the items and issues raised in the bump up request?**

Letters were received from members of the public and HEAT's legal counsel requesting that the proponent be required to elevate the project to an individual environmental assessment (EA) and/or environmental review. Issues raised included noise, setbacks, health effects, tundra swans, municipal planning, bats, woodlots and wildlife habitat, and consultation requirements.

On September 22, 2009, the Director of the Environmental Assessment and Approvals Branch, Agatha Garcia-Wright, notified all participants that a decision had been made that an individual EA was not required. The letter from the Director stated "This decision was made after giving careful consideration to the issues raised in the requests, Project documentation, the provisions of the Environmental Screening Process (ESP), and other relevant matters required to be considered under subsection 16(4) of the *Environmental Assessment Act* (EAA)".

2. **You said in your document that "The current renewable energy project will draw heavily on information included in the ESR, to fulfill current regulatory requirements under O. Reg. 359/09." What does "draw heavily" mean? Can you clarify and be specific? What exact parts are you "drawing heavily" upon?**

The natural environment work conducted for the 2009 Environmental Screening Report (2009 ESR) was accepted and approved by both the Ministry of Natural Resources and the Ministry of the Environment upon their acceptance of the 2009 ESR package. This is the information that was used as a basis for development of the 2010/2011 field programs for the Natural Heritage Assessment portions of the REA application. Mitigation measures, construction specifics, and commitments made in the 2009 ESR were also carried forward into the REA reports.

3. **The draft map has errors and omissions. When will these be corrected?**

The reports and mapping are updated throughout the process, and we intend to revise any errors and omissions as they become known, and before the second open house. If you are aware of any errors that could improve the process, please let us know, and we will update our information.

4. **What is the precise location and height of each proposed wind turbine? Is it guaranteed that the latitude and longitude points in the draft report will be those that are used?**

The coordinates for the turbines provided to the MOE are those to be used for the Project, with allowance for small movements of less than 20 m for adjustments due to surface conditions. We will provide updated coordinates in the reports are we move through the process.

5. **What is the expected timelines for the completion of the environmental approvals process and what are the proposed construction timelines?**

The currently contemplated timelines for the project are as follows:

- Final open house for the Project: fall, 2011.
- Submission of the application to the MOE for a Renewable Energy Approval for the Project: November/December, 2011.
- Receipt of Renewable Energy Approval for the Project: June/July, 2012.
- Start of Project construction: spring/summer, 2013.
- Project Commercial Operation: December, 2013.

6.0 GREEN ENERGY ACT

1. ***Green Energy Act* – after consultation 2 changes – distance from road, sound studies – who changed the law?**

The *Green Energy Act*, and its associated setbacks and requirements, was developed after extensive public, government, and industry consultation. St. Columban Energy LP was not involved in changing the Act, and is not able to speak to the specifics of any changes that may have occurred during the process.

7.0 STUDIES & REPORTS

1. **Did you do a noise study? What did you pay for a noise study – cost?**

A Noise Assessment was conducted by Zephyr North Inc. in 2011 in compliance with the Ontario Ministry of Environment requirements published in the "Noise Guidelines for Wind Farms (October 2008)" and the requirements of the REA regulation O. Reg. 359/09. The study was used for siting the Wind Turbine Generators, and will be reviewed by noise specialists at the MOE as part of the REA application review process. It will also be made available for public review for a minimum of 60 days prior to the final open house for the Project.

2. **How do you conduct a noise impact assessment?**

Specifics for conducting a noise assessment are provided in the Ontario Ministry of Environment requirements published in the "Noise Guidelines for Wind Farms (October 2008)"

3. **Will an epidemiology study take place? Who could conduct one and when could it take place?**

To date, no epidemiological assessment has been conducted as part of an environmental assessment for a wind project in Ontario or Canada, and is not a requirement under O. Reg. 359/09. There will not be an epidemiological assessment conducted as part of this Project.

4. **What is the quantity of oil in the gearbox? What type of oil is used? Please provide a detailed list and diagram of the mechanical parts included in the turbine. How often is the turbine serviced? What does a typical servicing include?**

Details on the turbine servicing and requirements for oil and other materials is detailed in both the Construction Plan Report and the Design and Operations Report; both reports will be part of the complete REA application package that will be available for public review at least 60 days before the final open house for the Project.

5. **Please provide all other reports and studies (draft and final) conducted respecting the Project, including but not limited to:**
   - **Noise**
   - **Low Frequency Sound and Vibration Studies**
   - **Human health risk assessment**
   - **Agrology and livestock impact assessment**
   - **Wildlife and bat impact assessment**
   - **Cultural and heritage impact assessment**
   - **Economic impact assessment**
   - **Aviation impacts**
   - **And any other report or study that may be required to properly assess the Project or that is required under the Renewable Energy Approvals regulation**

These reports will be made available for public review and comment a minimum of 60 days before the final open house for the project, at the local library and Municipality of Huron East offices, and on the Project website at http://www.pristinepower.ca/projects/st_columban_wind_project.php

1. Project Description Report
2. Wind Turbine Specifications Report
3. Construction Plan Report
4. Design and Operations Report

5. Decommissioning Plan Report
6. Natural Heritage Assessment and Environmental Impact Study
7. Water Assessment and Water Body Report
8. Stage 1 and Stage 2 Archaeological Assessment Reports
9. Heritage Assessment Report
10. Protected Properties Report
11. Consultation Report

6. **What are the parameters of the wind study that was done?**
    a. **What was the length of time that data was collected?**
    b. **What were the results of the wind study?**
    c. **What was the name of the firm which will be carrying out the ongoing wind tests?**

The wind monitoring program at the site that has been ongoing since August 2005 has been and continues to be overseen by Zephyr North Ltd., a wind resource assessment consultant based in southern Ontario. The results of the wind study are used to help develop the layout of the wind turbine generators. The layout of the wind turbine generators is available in the Project Description Report which is available on the Project website at http://www.pristinepower.ca/projects/st_columban_wind_project.php

At present there is no plan to conduct ongoing wind monitoring / testing at the Project site for any significant period post the commercial operation of the Project.

8.0 COMMUNICATION SYSTEMS

1. **What happens if there is interference with communication systems for emergency vehicles and for GPS systems?**

2. **To avoid any potential difficulties with assessment of Potential impact of wind turbines on Radio communication, Radar & Seismoacoustic system, please see the FORWARD, page 4, found in "technical Information Guideline" of the Radio Advisory Board of Canada (RABC) guidelines drafted up with CanWEA, April 2007. "In certain circumstances wind turbines, whether as single units, or grouped together in a wind farm, can negatively affect radio, telecommunications, radar or seismoacoustic systems within a certain distance of the turbine(s). Four (4) steps are listed. What is the certain distance?**

3. **A resident's internet signal will have to go through 5 turbines for the signal. Will high speed connection work?**

4. **What about high speed internet signal? Will the signal be lost if it goes through 2 to 5 turbines?**

5. **Will cell phones work efficiently 100% of the time?**

6. **Will I lose my digital dish signal along with everyone else?**

7. **Will digital dish signal work efficiently 100% of the time?**

8. **What percentage guarantee can residents of the study area expect from your company after a project is up and running?**

9. **Does the applicant consent to conduct reception studies for Television, Radio and Internet for residents one (1) mile around each turbine before construction? Does the applicant consent to be responsible to remedy any problems arising after turbine start up?**

10. **What mitigation process do you plan to undertake if there are problems with the previous three communications mentioned?**

11. **Under section 6.10 telecommunications network, you state that there is potential to interfere with the telecommunications networks. What is the solution if the turbines interfere with satellite signals to TV, internet, cell phones and radar GPS systems in farm equipment?**

12. **I had asked a question about "telecommunications network" at the meeting.
You had mentioned that you had some information you would give to me regarding "line of site", "interference with radar systems" and also Roger/Bell cell towers. Would you please forward the information to me!**

Answer to questions 1 through 12 above.

The *Technical Information and Guidelines on the Assessment of the potential Impact of Wind Turbines on Radiocommunication, Radar and Seismoacoustic Systems* (RABC/CanWEA, 2007) document describes a suggested four-step protocol for dealing with the potential impact of wind turbines on these types of systems.

The assessment of the potential impact of wind turbines on these types of systems is not a requirement under the REA process. However, the impact of the Project on radio communications including AM / FM signals has been considered using the four-step protocol contained in the RABC/CanWEA, 2007 document with either:

- No impacts noted (e.g. cell phone coverage); or,
- Impact mitigated by Project design (e.g. point-to-point systems); or,
- In the case of Direct-to-Home Television Broadcast Systems (satellite receivers) for example; impacts mitigated through the relocation of antenna or replacement of system components with one of higher quality and better signal capture.

Specific details of the work undertaken in this regard will be contained in the Project Design and Operations Report. The section dealing with point-to-point systems is contained below:

> *"Point-to-point radiocommunications links relay data in a straight line directly from tower to tower. Typically, because they are unidirectional, they operate in the high frequency (microwave) range to avoid spreading and diffusion of the signal. Typically, in cellular telecommunications for example, point-to-point links can relay data between cell towers and the system base. In*

television systems, a point-to-point link could send programming from the studio to the (multi-directional) broadcast tower(s).

Identification

A cellular telephone system tower belonging to the Bell Mobility Network was identified near the project. Two point-to-point microwave paths to this tower were also identified by Bell Mobility. These paths transect the Project properties (one from the tower toward the northeast, and one toward the southeast).

Consultation Zone

For this type of radiocommunications a consultation zone of 1 km around the communications tower is recommended in RABC/CanWEA (2007). In addition, Bell Mobility recommended that no turbine be within 100 m of the communications path. This is consistent with the point-to-point consultation zone recommended in Table 2 of RABC /CanWEA (2007).

Mitigation Measure

For design purposes, exclusion zones of 100 m were designated along these paths and no turbines were placed within the area defined by the exclusion zone. In addition, no turbines were placed within 1,000 m of the transmission tower. The nearest turbine (T3) is located about 1,250 m away."

With respect to radar systems, the Department of National Defence (DND) and NavCanada have been contacted again to confirm the Project in combination with any potential mitigating measures that may require implementing will have no impact on the radar systems employed by these respective departments. DND has responded that they have no concerns with the Project as currently sited.

9.0 PROPERTY VALUES

1. **Concerned regarding property devaluation.**

2. **If the turbines are built and my property value goes down, whose responsibility is it to reimburse me of my losses because of the turbines that are close to my property/retirement savings?**

3. **Please don't tell me that our farm land is going to be devalued. We know people are moving out, and away for health reasons.**

4. **Who will reimburse us for our house and property when the property value decreases because of the locations of wind turbines in Huron East? Will it be the government of Ontario? – Carol Mitchell (MP)? The wind turbine companies? The farmers with wind turbines? All three?**

5. How will you compensate a home owner for loss of property value?

Answer to questions 1 through 5 above.

Property evaluation studies carried out in the U.S., Australia and Europe where wind turbines are more common generally indicate that the installation of such facilities has no material adverse effect on property values. A publicly funded study on this subject conducted in the U.S. and presented in 2008 by Ben Hoen and Ryan Wiser of the Lawrence Berkeley National Laboratory found:

- No statistical evidence that homes near wind facilities are stigmatized by those facilities as compared to other homes in the region.
- No statistical evidence that homes with a view of wind turbines have different values than homes without such views.
- No statistical evidence that homes within ¼, ½ and 1 mile of turbines sell for different values than those further away.

In addition, an Ontario based review was completed by professional appraisal company, Blake, Matlock and Marshal Ltd. in 2006. Real estate values were reviewed to determine if the recent development of wind projects in the Township of Melancthon had any impact on the growth of property values when compared to the neighbouring Township of East Luther Grand Valley and to average prices found in the County of Dufferin. The study concluded:

> "The Township of Melancthon and the Township of East Luther Grand Valley are neighbouring communities located in Dufferin County which are noticeably similar in many ways. The most notable difference between these communities is the existence of windmill development. The Township of Melancthon has demonstrated consistent patterns of growth on most accounts despite being the topic of windmill development and similar growth to Dufferin County as a whole which included communities absent of this energy characteristic. The Township of Melancthon has further demonstrated superior growth to the Township of East Luther Grand Valley which is devoid of windmill development and which produced inferior growth to Dufferin County statistics. The economics and environmental circumstances surrounding this large scale energy initiative therefore are not seen to have diminished property value but rather to have arguably nourished property value by its presence. Annualized growth figures provide concise and self-evident findings as added testimony to the positive conclusions drawn regarding the relationship of windmill development on property values."

The study is available online at: http://www.windrush-energy.com/Update%2015-1-08/Grand%20Valley%20II%20Projects/Environmental%20Screening%20Report/Appendix%20E%20%20Real%20Estate%20Values/Dufferin%20County%20Property%20Values%202002-2006.pdf

Finally, a study was conducted in the vicinity of an existing wind farm in Ontario by Canning Consultants and John Simmons Realty Services in accordance with the Canadian *Uniform Standards of Professional Appraisal Practice* for the Appraisal Institute of Canada. The study found that *" In the study area, where wind farms were clearly visible, there was no empirical evidence to indicate that rural residential properties realized lower sale prices than similar residential properties within the same area that were outside the view shed of the wind turbine."* The study can be found at *http://www.canwea.ca/pdf/talkwind/PropertyValuesConsultingReportFebruary42010.pdf*

These studies, and others conducted in the US, determine that there is no negative relationship between home values and wind turbines. There are many factors that go into selling a home, and all must be equally considered.

10.0 PROJECT LOCATION AND LAND USE

1. **Concerned regarding the loss of agricultural land.**

2. **Why are these wind turbines going up on prime agricultural farmland that is used to feed the human population?**

3. **According to the St. Columban project of the 15 turbines there is going to be at least 5 to 6 kilometres of access roads x 3 metres wide in total covering valuable farm land. We farmers are here to produce food; surely you are not fool enough to sign a go ahead project of this magnitude of non efficiency?**

4. **Are wind turbines disruptive to land stewardship and to communities?**

Answer to questions 1 through 4 above. Also, please see answers to questions in the 'General' section of this document as well.

The amount of land to be removed from active agricultural use for the Project infrastructure is estimated to be as follows:

- Access Roads – 4.65 hectares (11.5 acres)
- Turbine Bases – 0.38 hectares (0.94 acres)

During operations, the Project is estimated to take out of agricultural production approximately 12.5 acres of land, which is equivalent to less than 1% of the total land options for the Project. Most of this land will be used to provide road access to the wind turbines, and these roads have been designed in such a manner as to reduce their overall length, and in consultation with the landowners, to assist with and improve the current and future cultivation of the agricultural lands.

5. **Why would you consider building turbines in such a populated area?**

There are many factors that drive the selection of a site to locate a wind project, including:

- Good wind regime
- Compatible land use

- Landowner interest
- Available and low-impact electrical interconnection
- Low environmental impact
- Good site access

The Project has all of the attributes listed above.

6. What would it take to get you out of the community? Cost – buy out?

St. Columban Energy LP intends to develop, construct, own and operate the Project and is not considering selling the Project.

The Project will bring numerous benefits to the community including:

- Financial benefits in the form of new additional tax revenue to the municipality, new additional revenue to members of the community, support for local shops and businesses primarily during the Project's construction but also during the Project's subsequent and ongoing operation.
- The generation of clean, emission-free electricity from a renewable resource.
- Reduced dependence on fossil fuel fired electricity generation.

7. These turbines should be installed in the water – away from buildings and productive farmland, or install them outside large cities where the high power usage is in high demand and leave our rural properties for crop production.

The Provincial government currently has a moratorium on off-shore wind development in Ontario. There are many options for off-shore development, and if the government eventually decided this is feasible and appropriate, developers will undertake wind projects in water.

8. How long are the leases?

The term of the leases with the property owners on whose private property the Project's Wind Turbine Generators are being located is as a minimum designed to be compatible with the requirements of the FIT contracts for the Project.

9. Can 2 farmers share a turbine? i.e. locate it on the shared property line? Does it comply with REA and property line setback requirements?

At present, none of the Project's 15 Wind Turbine Generators are located on a shared property line. All of the Project's 15 Wind Turbine Generators are located to comply with the required setbacks under O. Reg. 359/09.

10. During construction of roadways and turbine sites what measures does the applicant propose to prevent the destruction and possible contaminating of dug water wells and aquifers at neighbouring farms?

It is not anticipated that the construction of the Project will adversely affect groundwater quality, quantity, or movement. Existing water wells are not located near the foundation excavation areas. As a result, it is anticipated that private wells will not be affected by construction activities.

11. **Under the *Drainage Act* it is illegal to build a building or a road on a Municipal Drain. Since you have chosen to ignore the existence of drains in your report what proposals do you suggest to prevent the destruction of any Municipal Drains (paid for by the community), Common drains and mutual drains and water lines in the community?**

Municipal drains have been identified in the Project Study Area and considered during the completion of the Project. Potential effects and mitigation measures to municipal infrastructure such as municipal drains will be discussed in the Construction Plan Report.

11.0 HUMAN HEALTH & SAFETY

1. **National Research Council – Wind energy projects create negative impacts on human health and well being, the impacts are experiences mainly by people living near wind turbines that are affected by noise and shadow flickers.**

2. **Health Canada Advises – That there are peer reviewed scientific articles indicating that wind turbines may have an adverse impact on human health.**

3. **I ask of you to have some compassion and have some regard for our community. We have a blind boy that lives within the turbines – we know he is highly sensitive to hearing and has every right to have a good life just as much as you or I. We have at least 160 pupils which attend St. Columban School along with a soccer field within the turbines. They come from across Ontario. Do you have any regard for these? We have one person who is only 50 years of age who took a heart attack along with many older people who live within the turbines. One only has to ask a mechanic who fixes alternators – just how dangerous it is to live within the turbines. There has been no scientific study to prove any safety factors on health issues – only those done by those known as "Quacks". We all know the "Golden Rule" – Do unto others as you would have them do unto you."**

4. **How will individuals/families be compensated if their health is negatively impacted by this project? – both Dr. Jeff Leventhal and Dr. Hazel Lynn have reported that 10% of a population will be negatively impacted by IWT's.**

5. **Under section 8.1 of your draft project description report, it is stated that there is no scientific evidence to demonstrate a causal association between wind turbine noise and adverse health effects. Do you have any scientific evidence to date that wind turbine noise does not cause adverse health effects?**

6. **Will you guarantee that there will be no negative health effects from this project?**

7. **Could people with pacemakers and defibrillators be affected by the turbines? Will they have to move?**

8. **Who will reimburse the cost of our decreased health, sleeplessness and stress that will be a result of the wind turbines in Huron East? The government of Ontario? – Carol Mitchell (MP)? The wind turbine companies? The farmers with wind turbines? All of them!**

9. **When did profit (to farmers with wind turbines and wind energy companies) become more important that the livelihoods (health and homes) of the taxpayers and neighbours? Why are wind turbines being allowed to destroy our health and make our home worthless? Are the politicians not voted in to protect the people? Not the profit of people who feel the need for more and more and more money?**

10. **It is estimated that as many as 10 to 15% of the population will have negative health effects from poorly sited wind turbines. There are soccer fields and an elementary school very close to the St. Columban turbine project. How are you going to address the health concerns related to this 10 to 15% of the population?**

Answers to questions 1 to 10 above.

St. Columban Energy LP has the utmost regard for all stakeholders in the Project.

At present, there are well over 10,000 wind turbines installed and operating in North America, and tens of thousands of people who live and work in proximity to these turbines. Of these individuals, a very small number have asserted that their health has been negatively impacted by wind turbines. However, surveys of peer-reviewed scientific literature have consistently found no evidence linking wind turbines to human health concerns.

This is backed by Ontario's chief medical officer of health as well as the National Public Health Institute in Quebec. The Ontario Chief Medical Officer of Health, supported by the Council of Ontario Medical Officers of Health, has concluded that "…the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects." The report examined available evidence on both sides of the health concerns debate, including wind energy opposition groups calling for further studies on health issues. The report can be found at http://www.health.gov.on.ca/en/public/publications/ministry_reports/wind_turbine/wind_turbine.pdf.

Recently, as well, both the Ontario College of Family Physicians (10,000 members) and the Registered Nurses' Association of Ontario (31,000 members) have come out in support of wind and solar power as an alternative to coal-fired generation.

A recent (June, 2011) peer review conducted by the health experts at Stantec reviewed all of the available peer-reviewed scientific and popular literature available on health effects and wind turbines. The scientists determined that the conclusions of the peer reviewed literature differ in some ways from the conclusions of the studies published in the popular literature.

In the peer reviewed studies, wind turbine annoyance has been statistically associated with wind turbine noise, but found to be more strongly related to subjective factors like visual impact, attitude to wind turbines in general and sensitivity to noise. To date, no peer reviewed scientific journal articles have identified a causal link between people living in proximity to modern wind turbines, the noise (audible, low frequency noise, or infrasound) they emit and resulting physiological health effects.

In the popular literature, self-reported health outcomes are related to distance from turbines and the claim is made that infrasound is the causative factor for the reported effects, even though sound pressure levels are not measured.

What both types of studies have in common is the conclusion that wind turbines can be a source of annoyance for some people. The literature suggests that annoyance-related effects can be managed and mitigated though behavioural and cognitive behavioural interventions.

This report is currently being peer-reviewed for publication in a scientific journal.

Further, the recent Ontario Environmental Review Tribunal decision regarding the appeal of Suncor's Kent Breeze Wind Farm Project found the appellants were not able "to prove that the Ontario standards are wrong in the context of the specific Project under appeal" (i.e. the Ontario standards do not cause harm to human health). These Ontario standards (O. Reg. 359/09) are the same ones that the St. Columban Wind Project ("the Project") must comply with in order to obtain its environmental approvals.

This Project will follow the guidelines in place for sound levels and minimum setback distances for wind turbines put in place by the Ontario government to be protective of Ontario residents. As there has been no causal link between health effects and wind turbines, we do not anticipate negative health effects from this project.

Please find answers to questions in the 'Property Values' section of this document.

11. World Health Organization – Acknowledges that in addition to noise pollution wind turbines also have visual burdens.

See answer to questions 12 and 13 below with respect to noise.

The positive or negative visual impact of the project is a subjective consideration that does not form part of REA process.

12. Dr. Hazel Lynn Quote – She said European Research is ahead of that being done in Canada and minimum setbacks there are between 1.2 and 1.5 kilometres.

13. I ask you to extend the setbacks from 550 metres to at least 1 kilometre and half from the closest turbine.

Answers to questions 12 and 13 above.

The noise generated by the wind turbines has to meet the requirements of Ontario Regulation 359/09 under the *Environmental Protection Act*. The minimum 550 m setback developed by the Ministry of the Environment (MOE) through noise modeling under worst-case conditions was developed to give a conservative estimate of the required distance to attain a sound level of 40 dBA, which the World Health Organization (WHO) Europe Region has stated corresponds to the sound from a quiet street in a residential area. The MOE has determined, therefore, that the maximum

sound level 550m from a turbine is 40 dBA, which corresponds to a quiet residential street. The 550m setback was determined by the MOE, and is outside of the current project.

While the minimum setback of 550 m must be met in all cases, a noise study must also be prepared in accordance with the MOE's 2008 "Noise Guidelines for Wind Farms" demonstrating that the project complies with these guidelines. In general, these guidelines require that sound levels at noise receptors do not exceed 40 dBA at wind speeds below 22 km/hr, rising to 49 dBA at 32 km/hr wind speeds.

The Project has been sited to comply with the requirements of O. Reg. 359/09. Once the Noise Assessment Report for the Project is completed, it, and other Project documents and studies will be made available for public review for a minimum 60 day period prior to the final open house and submission of the application to the MOE for a Renewable Energy Approval for the Project.

14. What liability insurance do you have if any home/family is affected?

15. What liability insurance do you have? Does this insurance cover just one person, or a busload of children?

16. What amount of liability insurance does the applicant propose they are going to carry and how do they propose to ensure it will be kept valid for road allowance lines and proximity of towers to public roads and unleased neighbours?

Answers to questions 14 to 16 above.

Details of the Project's setbacks from property lines, will be provided in a Property Line Setback Assessment Report which will be submitted as part of the REA application. The section dealing with preventative measures to minimize the effect to public road right-of-ways is contained below: All turbines meet the setback distance from public road right-of-ways, 59 metres, as prescribed in s. 53 of O. Reg. 359/09.

The following is a general summary of each of the types of insurance that the Project is anticipated to have in place.

Workers' Compensation Insurance:

Provides benefits to employees in the event of a workplace injury.

All Risks' Property Damage Insurance:

Insures the interest in the Project from "All Risks" physical loss or damage to the Project from perils such as fire, explosion, storms, boiler & machinery risks, etc .

Business Interruption Insurance:

Insures against the loss of revenue suffered as a result of an insured peril (covered under the All Risks' Property Damage Insurance).

Primary and Excess General Liability Insurance:

Protects the Project's legal liability for bodily injury or property damage suffered by a third party as a result of the Owner's interest in the Wind Farm.

Automobile Liability Insurance:

Protects the Project for its' liability to a third party for bodily injury or property damage arising out of the Project's use of motor vehicles it owns. Similar insurance is provided by the General Liability Insurance for non-owned or hired vehicles that are used or operated by theProject.

17. School buses and other vehicles pass by many of the proposed turbines daily. How are you prepared to deal with the liability of malfunctions?

Modern wind turbines must meet rigorous international engineering standards, including the ability to withstand a Level 2 tornado. The occurrence of structural manufacturing defects in rotor blades has diminished significantly due to experience and improved quality control in the industry. The Chatham Kent Public Health Unit (2008) reviewed all available information, and did not find any recorded evidence of injury to the public as a result of turbine blade or structural failure.

Details of the Project's setbacks from property lines, will be provided in a Property Line Setback Assessment Report which will be submitted as part of the REA application. The section dealing with preventative measures to minimize the effect to public road right-of-ways is contained below: All turbines meet the setback distance from public road right-of-ways, 59 metres, as prescribed in s. 53 of O. Reg. 359/09. In addition, the turbines would be constructed and designed by professional engineers, undergo regular maintenance and monitoring by operational staff, and contain automatic shutdown mechanisms in instances such as extreme weather.

18. The expanding soccer fields in St. Columban host visiting teams as well as their own on a daily basis all spring and summer. [Proper name]'s turbines will be just on the other side of the bush. Is there not setback rules for sports facilities?

Outdoor sports facilities are not considered to be a noise receptor under O. Reg. 359/09, which defines a noise receptor as:

- The centre of a building or structure that contains one or more dwellings
- The centre of a building used for an institutional purpose, including an educational facility, a day nursery, a health care facility, a community centre, or a place or worship
- If the construction of a building or structure mentioned in paragraph 1 or 2 has not been commenced but an approval under section 41 of the Planning Act of a building permit under section 8 of the Building Code Act 1992 has been issued in respect of a building or structure mentioned in paragraph 1 or 2, the centre of the proposed building.
- A location on a vacant lot, other than an inaccessible vacant lot, that has been zoned to permit a building mentioned in paragraph 1 or 2 and in respect of which no approval or building permit mentioned in paragraph 3 has been issued and at which a building would reasonably be expected to be located, having regard to the existing zoning by-law and the typical building pattern in the area.

- A portion of the property that is used as a campsite or campground at which overnight accommodation is provided by or on behalf of a public agency or as part of a commercial operation.

19. How far can ice throw travel from the turbines?

The meteorological conditions that would cause the formation of ice on wind turbine blades in the Project area is a rare occurrence. Even under those conditions however, ice throw is controlled in modern wind turbines through the use of sophisticated controls that stop the operation of the wind turbine under such conditions.

Garrad Hassan Canada (2007)[1] estimated that only very high winds may cause ice fragments of any significant mass to be blown beyond 50 m of the base of a modern, stationary 2 MW turbine. The critical ice shed distance would be approximately 220 m from a turbine. At distances greater than 220 m, the probability of ice shed reaching ground level at a mass that would cause injury decreases rapidly. The critical distance can effectively be regarded as a "safe" distance, beyond which there is a negligible risk of injury from ice shed (Garrad Hassan Canada, 2007[1]).

Example calculations were presented in the Garrad Hassan Canada (2007)[1] report, using data representative of a typical wind farm Project in rural southern Ontario. These conditions would be considered representative of the Project. Risk to a fixed dwelling, vehicle travelling on a road, and individual person from being struck by an ice fragment thrown from an operating wind turbine were modeled, with the following results:

- Fixed dwelling: equivalent to 1 strike per 500,000 years;
- Vehicle travelling on a road: equivalent to 1 strike per 260,000 years; and
- Individual person: equivalent to 1 strike in 137,500,000 years.

These predictions seem markedly low; however, it is due to the fact that icing events are limited to only a few days per year. For example, Vestas Canada, which maintains turbines across Canada, has experienced no incidents related to falling ice in Canada (Jacques Whitford, 2006)[2].

20. Identify actions to mitigate stray voltage and static electricity from igniting possible gas leaks and affecting the cathodic protection of gas lines.

21. When the Hydro One grid goes down due to ice storms or blackouts what measures does the applicant have to stop the wind turbines from turning and creating stray voltage?

The Project would be designed and constructed with appropriate grounding devices and wiring practices and be in accordance with the current standards set by Hydro One and the Electrical Safety

[1] Garrad Hassan Canada. 2007. Recommendations For Risk Assessments Of Ice Throw And Blade Failure In Ontario. 38079/OR/01.

[2] Jacques Whitford Limited. 2006. Health, Safety and Nuisance Concerns Associated with Wind Energy Development. Prepared for EPCOR Utilities Inc.

Authority (ESA). Hydro One will be responsible for the design, construction and operation of the distribution line that will connect the Project to the provincial grid.

The turbines would be constructed and designed by professional engineers, undergo regular maintenance and monitoring by operational staff, and contain automatic shutdown mechanisms in instances such as extreme weather.

22. **What proposals do you have to handle lightning strikes and fires since local fire departments don't have the equipment to put out fires at the height of current wind turbines? Also, workers have been known to have health problems at extreme heights. List proposals for recovery of victims.**

The turbines are equipped with sophisticated lightning protection. Lightning strikes are safely absorbed by lightning conductors and the lightning current is conducted via a spark gap and cables into the ground surrounding the foundation. If a turbine is damaged sufficiently to affect the operation of the turbine, the control system will force an orderly shutdown.

During pre-operational mobilization St. Columban Energy LP and/or the Operation and Maintenance Contractor would finalize an Emergency Response and Communications Plan for the operational activities in collaboration with Huron County's Emergency Medical Services and Huron East's fire department.

12.0 NATURAL ENVIRONMENT

1. **Concerned about livestock health.**

2. **Concerned about pets (e.g. dogs that hear much more (LFN) than humans!).**

3. **This is the typical scene at lot Six Concession 2 of McKillop Twp, Huron East (photo of flooded field included with comments, Manley Side Rd). According to the St. Columban project map, there is going to be 2 turbines, one on each side of this pond as shown in this picture. The Tundra swans fly north each year about the end of March and this is proof, and their right to land and feel safe for at least 2 weeks. Surely you don't want to be remembered as the "Swan Killer".**

4. **Bird and bat population / dairy herds in area!**

5. **In relation to wildlife populations? What species will be impacted? Short term? Long term?**

6. **Our bat population is already in decline and it is a known fact that they "implode" when they get too close to turbines. The literature we have read says that the owners who host turbines are supposed to record bird kill? Could we check for bird kill at the adjacent turbines or would that be trespassing?**

7. **Does the applicant propose to report bird and bat kills to the proper authorities?**

Answer to questions 1 through 7 above.

The natural environment work conducted for the 2009 Environmental Screening Report (ESR) was accepted and approved by both the Ministry of Natural Resources and the Ministry of the Environment upon their acceptance of the 2009 ESR package. This is part of the information that is being used as a basis for the Natural Heritage Assessment portions of the REA application.

With respect to tundra swans and bats specifically, the natural environment work noted above also included work to address the possible presence of these particular wildlife in the Project area. The work conducted and the proposed post-construction monitoring were deemed to be an acceptable mitigation measure.

Consistent with the findings of the 2009 ESR and as part of the environmental effects monitoring plan (EEMP) required for the Project, post-construction mortality monitoring will be undertaken, in conjunction with the Ministry of Natural Resources. Monitoring would occur twice weekly at all turbines from May 1 to October 31, with raptor mortality surveys once per week from November 1-30, for three years following start of operations.

These surveys are conducted by trained observers, and their search efficiency is tested by field biologists throughout the search season. If a landowner observes dead birds, they can provide this information to the search team, but the protocols in place by the MNR are very specific as to the qualifications, timing, and requirements of the bird mortality surveys. A similar protocol is in place for bat mortality surveys.

Entering private property would require the consent of the property owner.

Details regarding the potential effects to Natural Heritage features will be available in the Natural Heritage Assessment Report.

8. Since Soybean Cyst Nematode is a recognized pest in southern Ontario, what measures does the applicant propose to prevent it being spread from farm to farm by their contractors and how they propose to ensure these measures are carried out?

If soybean cyst nematode (SCN) is identified in agricultural fields in the region, the pre-construction program will include soil analysis for each agricultural row crop field to determine the extent of SCN infestation. Any field identified to contain SCN will be recorded and the location provided to the Construction Contractor. Additionally, any imported topsoil will have a composite sample analyzed for SCN before it is used during construction. If SCN fields are identified, appropriate mitigation measures will be developed. Examples of mitigation measures may include washing stations for equipment, and/or restricted access to fields.

9. List proposals to prevent the spread of noxious weeds in fill and gravel?

When needed, the Project will use stockpiled subsoil and/or clean fill, and clean gravel.

10. Seven watercourses are present within 120 m of the Project location. ..Project infrastructure could impact these water courses." How will they impact the watercourses? What is the cost of this impact?

Watercourse crossings are required for T4, T6, T14, and T15 for underground collector lines and access roads. Watercourse crossing for T14 and T15 will require resizing of an existing culvert. Details regarding the potential effects to water bodies and mitigation measures will be available in the Water Body Assessment report.

11. My parents farm is treed with a stream running through it. So many birds live there including Baltimore Orioles and Blue Herons often land as well. Two deer were there last week. Will the turbines scare these all away? We have heard that wildlife often leave!

Sensory disturbance of wildlife may occur during all phases of the Project as a result of increased on-site human activities (e.g., site preparation, turbine assembly, maintenance activities). However, a certain level of sensory disturbance to wildlife resources in the Project Study Area already exists from ongoing agricultural, rural, and domestic activities. Studies related to the sensory effects of constructing and operating wind farms on big game resources, carried out in the Western U.S., have shown that there is no significant effect and no reduction in use of the area immediately within wind project locations (Arnett et al., 2007)[3]. These studies indicate that species are either unaffected by this type of development, given their small footprint and preservation of the existing land-use, or that they can readily adapt to the presence of the wind plant.

12. What biosecurity measures does the applicant propose to prevent the spread of various livestock diseases from farm to farm by construction personnel and their own maintenance personnel and how do they propose to ensure these proposals are carried out?

Bio security protocols developed for livestock operations (including poultry, cattle and hogs) by industry associations and regulators including the Canadian Food Inspection Agency and the Ontario Ministry of Agriculture, Food and Rural Affairs will be followed during construction.

13. "The Project study Area does not contain wood lands or grasslands of "sufficient size" to the host populations of area-sensitize species." What does "sufficient size" mean? Explain how this is measured.

Sufficient size for grasslands and woodlands is a minimum of 10 ha and 30 ha in size, respectively. These sizes are based on provincial guidelines provided in the Significant Wildlife Habitat Technical Guide (MNR, 2000)[4].

[3] Arnett, E. B., D. B. Inkley, D. H. Johnson, R. P. Larkin, S. Manes, A. M. Manville, R. Mason, M. Morrison, M. D. Strickland and R. Thresher. 2007. Impacts of Wind Energy Facilties on Wildlife and Wildlife Habitat. Wildlife Society Technical Review 07-2. The Wildlife Society, Bethesda, Maryland, USA

[4] Ontario Ministry of Natural Resources. 2000. Significant Wildlife Habitat Technical Guide. 151 pp.

13.0 ECONOMICS

1. **"According to the agency charged with overseeing Ontario's power grid, the province paid more than $2.1 million in subsidies to utilities in neighbouring provinces and U.S. states just four days ago, NDP critic Peter Tabuns said Friday." That's on top of the nearly $1.5 million it paid to Quebec and the U.S. to rid itself of surplus power on Jan. 1. (www.globaltoronto.com). Why would consumers want to build such controversial Wind Turbines if the above statement is true?**

2. **How much does each turbine cost the consumer?**

3. **What is the payback time for each turbine? How long does it take for a turbine to "payback" the electricity used to manufacture it?**

4. **Is it fair for the consumer to prop up wind turbines economically in order to subsidize a few farmers and landowners?**

5. **From a consumer's standpoint – how productive is this wind turbine project or is it a make-work project?**

6. **How much does it cost to make electricity from wind?**

7. **Are wind turbines cost effective?**

8. **Do I, as a taxpayer cover the cost of erecting wind turbines either directly or indirectly and can we, in these economical times, survive these costs when more and more people have the need for soup kitchens and Food Banks?**

9. **According to the system – wind gets 13.5 cents/kW hour, for the wind generated, whether the turbines are turning or not, based only on an anometer reading in certain areas. If the turbines aren't turning, are we paying? How is the Company going to be compensated for the power they produce?**

Answer to questions 1 through 9 above.

The Project has never received a subsidy of any kind and St. Columban Energy LP is not aware of any subsidies that will be available in the future.

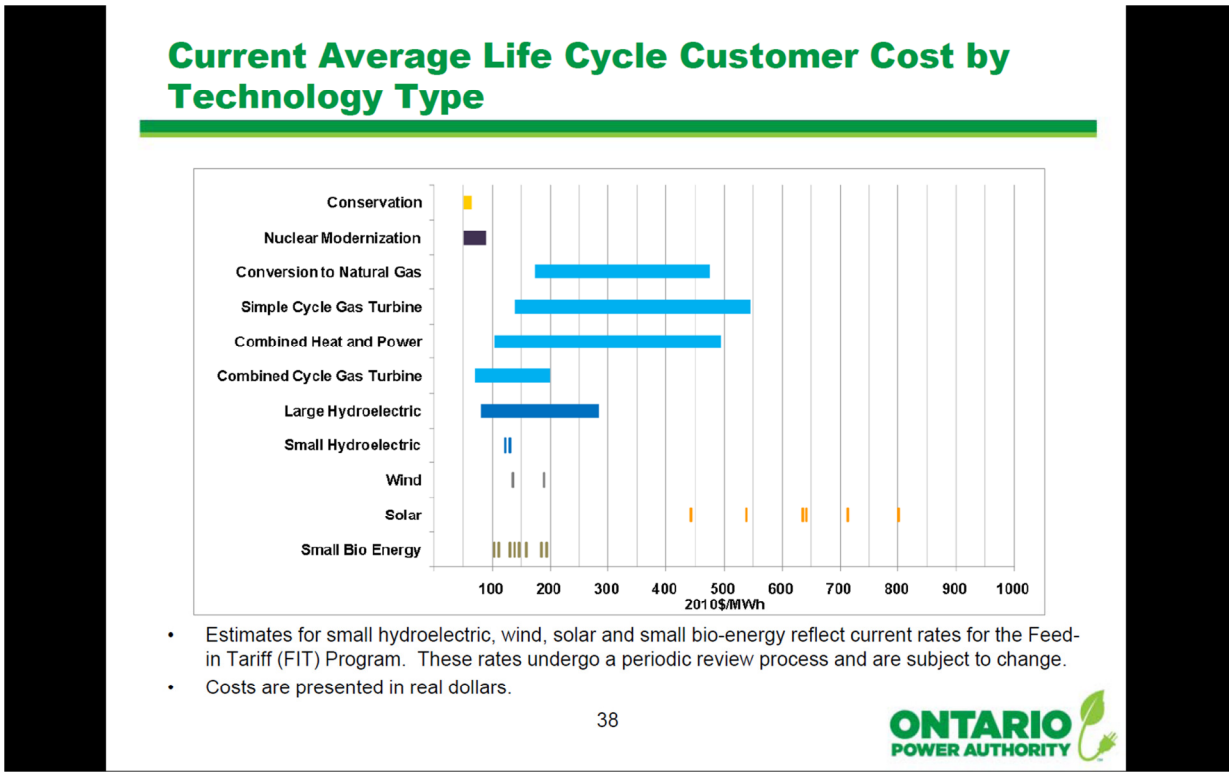
St. Columban Energy LP, as the developer and owner of the Project, intends to obtain power purchase agreements (Feed-In Tariff (FIT) contracts) for the Project from the Ontario Power Authority (OPA). The term of a FIT contract is 20 years from the date of commercial operation. Under the FIT contract(s) the Project will receive contract payments for electricity equivalent to the contract price multiplied by the electricity generated and successfully injected into the applicable distribution system which the Project is connecting to. The payments for electricity are based on the base contract price of $135/MWh. Further details pertaining to the OPA's FIT contract

specifically and program in general may be found at http://fit.powerauthority.on.ca/what-feed-tariff-program.

The OPA characterizes the FIT program as complementary to the Green Energy Act passed on May 14, 2009 by the Ontario Legislature. The Green Energy Act is designed to ensure Ontario's place as North America's renewable energy leader, to create a culture of conservation and build on the government's earlier initiatives on the province's power supply, including a plan to eliminate coal-fired power by 2014, the single largest climate change initiative in Canada.

It should be noted that the costs of environmental and health impacts of conventional technologies (such as coal generation) are not currently factored into their price. Wind projects do not create any emissions, and help provincial and federal governments meet green house gas emission reduction targets. Further, unlike conventional energy plants, the price of power produced by renewable energies like wind does not fluctuate relative to commodity prices like coal, oil or natural gas, and hence is more predictable and stable over the long term. This is one of the many reasons that utilities all over the world are either building wind energy projects themselves, or welcoming them onto their grids.

As part of the OPA's 2011 Independent Power System Plan (IPSP) stakeholder consultation process the OPA on May 31, 2011, provided the chart below showing the current average life cycle cost by technology type showing the cost of wind power to be very competitive with other generation technology types.



10. **How much of the time do wind turbines produce electricity?**

11. **How efficient is a turbine in windy conditions?**

Answer to questions 10 and 11 above.

Modern wind turbine reliability allows them to operate 95% of the time if there is sufficient wind speed. A turbine's power output is proportional to the wind speed, and the wind at the St. Columban site does not blow at sufficient speeds for maximum output 100% of the time. As such, the power produced by the Project will on average be equivalent to the project running approximately 30-40% of the time at 100% capacity. This level of energy production by a wind turbine is typical for areas with similar wind resources.

12. **How much will you be contributing to the municipality in taxes?**
The Project is anticipated to contribute approximately $45,000 per year to municipal taxes.

13. **Is Ontario in a power emergency?**
The Independent Electricity System Operator (IESO) monitors Ontario's power system and identifies what is required to maintain reliability in the future, reporting on these recommendations through regular publications. In its quarterly 18-month forecasts of the growth in demand for electricity, the IESO assesses whether there will be adequate generation and transmission facilities. In addition, the IESO prepares the semi-annual Ontario Reliability Outlook, which reports on the progress of interrelated generation, transmission and demand-side projects underway to meet Ontario's reliability requirements.

In its most recent outlook for electricity supply in Ontario the IESO concluded that the period from June 2011 to November 2012 poses no new reliability or adequacy concerns for Ontario's power system

14. **The media reports that properties are being bought up by wind developers in order to push these turbines on to those that are opposed to them. Setbacks set by local municipalities for building new homes on bare land are such that you have to pay for roadways into that property up to a 625 meter radius from existing animal-producing structures to allow those farmers to expand their operations if they so wish. ("The location of all existing buildings and structures within a 625 metre radius of the proposed farm building or structure, the separation distance and the use of the proposed farm building(s)." (By-law of Lake Huron East). Something similar will be put into place should turbines be in our municipality. What is this going to do to our property value as a neighbor to wind turbines?**

We are not aware of any impending by-law by Huron East; however, all new building permit applications for anything defined as a 'receptor' under O. Reg. 359/09 will have to consider the locations of the turbines, and cannot be constructed within 550 m of the base of any turbine.

Also please see answers to questions in the 'Property Values' section of this document.

15. **Are land owners investors?**
The leaseholders, on whose private property the Project has entered into agreements to have Project components (Wind Turbine Generators, access roads, collector lines, etc.) located, do not hold any interest in St. Columban Energy LP.

14.0 HONI CONTACT INFORMATION

1. **What is the contact information for Hydro one regarding Class EA for Minor Transmission Facilities?**

Please contact the following to obtain the requested information:
Hydro One Networks, Inc.
483 Bay Street
North Tower, 15th Floor Reception
Toronto, Ontario M5G 2P5
1-877-955-1155
Additional contact information for Hydro One may be found at
http://www.hydroone.com/OurCompany/Pages/Contacts.aspx

15.0 DECOMMISSIONING

1. **Whose responsibility is it to remove the concrete pad that the wind turbines sit on after they're out of operation?**

The turbine foundations will be removed to a depth of 2m below grade, to enable normal agricultural activities to resume over the foundations. Responsibility for removal of the turbines and foundations will be the responsibility of the owner of the Project, St. Columban Energy LP.

2. **What is in place for decommissioning?**

3. **What bond or surety have you arranged for decommissioning in the event that company is no longer operational (witness multiple changes of ownership already)?**

4. **Are you willing to establish a trust fund to ensure that funds will be available for decommissioning?**

5. **How can you guarantee that in 20 years, if necessary, the wind turbines will be properly decommissioned?**

Answer to questions 2 to 5 above.

A Decommissioning Plan Report is required as part of the Renewable Energy Approval application package, and will be made available for public review a minimum of 60 days prior to the final open house for the Project.

16.0 OTHER

1. What measures does the applicant propose to remove garbage and litter?

Waste materials expected to be generated will be temporarily stored on-site and will require reuse, recycling, and/or disposal at an appropriate MOE-approved off-site facility. Details regarding the management of waste will be described in the Construction Plan Report and Design and Operations Report.