NOTICE OF A PROPOSAL TO ENGAGE IN A PROJECT AND NOTICE OF PUBLIC OPEN HOUSE HAF Wind Energy Project Published in accordance with S.15(1)(a)(b) of Ontario Regulation 359/09

Vineland Power Inc. is planning to develop and construct a wind energy project in the Township of West Lincoln, in Niagara Region, Ontario. Vineland Power Inc. has retained IPC Energy Inc. (IPC Energy) to develop the project. IPC Energy has retained Morrison Hershfield Limited to perform the necessary environmental studies and consultation. The distribution of this notice of a proposal to engage in this wind energy project and the project itself are subject to the provisions of the *Environmental Protection Act of Ontario* ("the Act") Part V.0.1. and Ontario Regulation 359/09 ("the Regulation") which addresses Renewable Energy Approvals ("REA"). This notice is being distributed in accordance with section 15 of the Regulation.

MH is currently preparing studies of the environmental effects of the development and operation of the proposed project in accordance with the requirements of the Act and Regulation. Where applicable, MH will work with the appropriate federal and provincial agencies to ensure that the project meets the requirements for federal and/or provincial permits or approvals. This may include an approval under the *Canadian Environmental Assessment Act* ("CEAA").



Project Description: The proposed HAF Wind Energy Project is located in south-western Ontario, in the Township of West Lincoln, in Niagara Region. The project area is located south of the community of Tweedside, west of the community of Smithville, and east of the community of Woodburn (please see map for location). Pursuant to the Act and Regulation, the project is considered to be a Class 4 wind facility. If approved, this project would have a total name plate capacity of approximately 10 megawatts (MW) of renewable energy. Environmental studies will be conducted over an area of approximately 48 km², with between 4 to 5 wind turbines proposed, depending upon the turbine manufacturer and model selected. All wind turbines are to be placed in open agricultural fields within the required setbacks from residences, natural heritage, water, and other features required under the REA.

A draft Project Description Report titled *HAF Wind Energy Project Renewable Energy Approval Project Description Report* has been prepared, which provides additional project information and details. This document is available to anyone interested. A copy has been made available for public review at the Township of West Lincoln Clerk's Office (318 Canborough Street, P.O. Box 400, Smithville, Ontario, LOR 2A0). The draft Project Description Report can also be viewed on the project website at www.ipcenergy.ca.

Public Open House #1: If you are interested, and would like to learn more about any aspect of this project, please attend our Public Open House. Your participation is an important part of our consultation process. We are interested in incorporating your input in to the project's design, where technically and economically feasible. Public Open Houses provide you with the opportunity to meet the project team, learn about the REA process, and provide comments and questions regarding the project. This will be the first of two Public Open Houses for this project; the next will be scheduled in the fall of 2010. We appreciate your input and welcome your attendance at our first Public Open Houses scheduled for:

Date: August 25, 2010 Time: 3:00 p.m. to 7:00 p.m. Location: Township of West Lincoln, Caistor Community Centre 9184 Regional Road 65 Silver Street RR 2 Caistor Centre, Ontario, LOR 1E0

For More Information: If you are unable to attend the Public Open House or wish to learn more about the proposed project, public meetings, or to communicate questions or comments, please contact:

Mr. Sunny Galia Project Manager, IPC Energy HAF Wind Energy Project 2550 Argentia Road, Suite 105 Mississauga, Ontario, L5N 5R1 Office: 905-607-1016 Fax: 905-607-5995 E-mail: Sunny@ipcenergy.ca Mr. Jonathan Veale Environmental Planner, MH HAF Wind Energy Project 235 Yorkland Boulevard, Suite 600 Toronto, Ontario, M2J 1T1 Office: 416-499-3110 Fax: 416-499-3110 Fax: 416-499-9658 E-mail: jveale@morrisonhershfield.com









Welcome To The Public Open House For The HAF Wind Energy Project August 25, 2010



Objectives of Open House:

- Introduce Vineland Power Inc. and IPC Energy.
- Present an overview of HAF Wind Energy Project.
- Share status of ongoing project environmental studies and outline future work required.
- Receive public input and feedback to incorporate into the project's design, where economically feasible.







PROJECT OVERVIEW FOR THE HAF WIND ENERGY PROJECT

- Vineland Power Inc. is proposing to develop a 10 MW wind farm located in the Township of West Lincoln, in the Niagara Region.
- The project is subject to Ontario Regulation 359/09 Renewable Energy Approvals (REA) under Part V.0.1 of the Ontario Environmental Protection Act.
- Vineland Power Inc. is seeking *Renewable Energy Approval* from the Ministry of the Environment (MOE).
- Required studies and documents will be submitted to MOE by December 2010. If approved, the project proceeds to construction in 2011.
- The Project would include up to five (5) wind turbines, with all project components installed on privately-owned agricultural lots within the study area.









HAF STUDY AREA



- The study area consists of approximately 4808 hectares of primarily agricultural fields.
- The land inside the study area is mostly flat,

with an elevation of 190m to 197m above mean sea level.





HAF WIND ENERGY - PROJECT SCOPE

The project would provide electricity to over 2500 homes by feeding into the Hydro One distribution system. Currently there are three turbine models under consideration for this project.

Project Capacity: 10 Megawatts **Project Type:** Class 4 Wind Facility (under REA) **Number of Turbines:** Up to five (5) Technology: Gamesa G90, 2.0 Megawatt Samsung, 2.5 Megawatt Vestas V100, 1.8 Megawatt Hub Height: Gamesa 78m and 100m Samsung 80m Vestas 80m and 95m Rotor Diameter: Gamesa 90m Samsung 90m Vestas 100m **Annual Energy Production:** 26 Million kWh











ABOUT VINELAND POWER INC.

- Vineland Power Inc., the proponent of the HAF Wind Energy Project was established in 2009.
- It is promoted by local residents and entrepreneurs, Martin Langbroek, Larry Dykstra, and Darrell Boer.
- Vineland Power Inc. is focused on developing renewable and environmentally friendly sources of energy including wind energy development.









ABOUT IPC ENERGY

- IPC Energy (IPC), developer of the HAF Wind Energy Project, was established in 2005.
- We offer an experienced and qualified team for developing wind projects.
- We deliver efficient and cost competitive energy in an environmentally responsible manner.
- We believe wind energy will provide a safe, viable and economic alternative to other forms of electrical generation.
- Wind power is already an important component of energy in Europe, and is becoming a major industry in Canada.









MAKING ONTARIO A GLOBAL LEADER IN RENEWABLE ENERGY



- Ontario's *Green Energy and Green Economy Act* was passed in May, 2009, to promote the development of a sustainable energy economy and to regulate the province's renewable energy practices.
- Strategy seeks to phase out coal-fired generation by 2014 and assist the province with meeting its greenhouse gas reduction targets.
- The Act includes the *Renewable Energy Approval*

(*REA*) regulation, ensuring that developers continue to have high safety standards, protect environmentally valued features and engage communities.







ABOUT THE RENEWABLE ENERGY APPROVAL

 The Renewable Energy Approval (REA) is a streamlined government approvals process which provides service guarantees for renewable energy projects.



 The REA is issued by the Ministry of the Environment, and is used by the provincial government for most renewable energy

projects.

 The Ontario Power Authority (OPA) issues contracts under the province's new Feed In Tariff (FIT) program to purchase power at guaranteed rates over 20 years from wind, solar and bio-energy facilities.















WIND ENERGY - HOW THE TECHNOLOGY WORKS

- A computer turns the rotor to face the wind.
- The blades begin to rotate when winds reach approximately 8 km/h.
- Inside the nacelle, the blades propel a shaft that drives a generator through a gearbox and converts the mechanical power to electrical power.
- The electricity is carried down the cables inside the tower.
- Underground distribution lines carry the power to the electrical grid.











PROJECT FACILITIES, **EQUIPMENT AND TECHNOLOGY**



The major components of the project are as follows:

- Meteorological Tower
- Wind Turbines
- Collector Systems
- Pad Mount Transformers
- **Distribution Systems**
- **Turbine Access Roads**
- Supervision Control and Data Acquisition (SCADA)/Operations

Building







PROJECT LIFE CYCLE

The Project includes four main phases:

1. Development Phase



3. Operations Phase



2. Construction Phase



4. Decommissioning Phase









DEVELOPMENT PHASE

The Development Phase of the project includes all the assessments and plans stipulated under the *Renewable Energy Approval (REA)* requirements and best management practices. These generally include:

- Land Acquisition
- Site Prospecting
- Wind Resource Assessment
- Feasibility Study
- Preliminary Records Review
- Community Relations
- Permitting
- Project Description
- Public and Agency Consultation
- Natural Heritage Assessment
- Cultural Heritage Assessment
- Archaeological Assessment
- Noise Assessment
- Environmental Impact
 Assessment
- Wind Turbine Specification Report
- Construction Plan
- Design and Operations Report
- Decommissioning Plan









CONSTRUCTION PHASE



The Construction Phase of the project includes all the activities from initial work planning, to testing of the wind energy project before commissioning.

The main activities during this phase include:

- Transportation
- New Road Building
- Installation of Wind Turbines
- Installation of Electrical Networks and Switch Stations

Further details on the Construction Phase will be presented in the Construction Plan Report.







OPERATIONS PHASE

The Operations Phase involves activities including regular maintenance, operation and examination of the project's facilities.

During the operations phase:

- Regular planned maintenance will occur on a quarterly basis
- Additional visits will occur as required
- More significant operations and maintenance tasks are planned at 5, 10, and 15 year intervals

Further details on the Operations Phase will be presented in the Design and Operations Report.









DECOMMISSIONING PHASE

The Decommissioning Phase includes the disassembly, dismantling, and restoration of each wind turbine location. This will take place once the life cycle of the facility has expired.

The decommissioning of this Project may require the dismantling of facility components such as:

- Turbines
- Concrete foundations
- Switching station
- Overhead and/or underground electrical network



Further details on the Decommissioning Phase will be presented in the Decommissioning Plan

Report.







PRELIMINARY RECORDS REVIEW AND PRE-CONSULTATION

During the Development Phase of the project, a Preliminary Records Review and Pre-Consultation with Agencies was undertaken. The purpose of this was to obtain preliminary information about the potential environmental effects that may result from the project.

Data has been obtained on the locations of environmental features and the geography of the project location and is presented on the "Environmental Components Map" display board.

















GENERAL SUMMARY OF ENVIRONMENTAL EFFECTS



The potential environmental effects of a wind energy project can typically be mitigated through known and accepted practices.

Required REA documents will describe how this project will reduce or mitigate potential environmental concerns.

The potential environmental impact concerns that may result from this project generally relate to three environmental components:

- Natural Heritage
- Socio-Economic Environment
- Cultural Heritage and Archaeological Resources





ENVIRONMENTAL COMPONEN		
NATURAL HERITAGE RESOURCES	SOCIO-ECONOMIC ENVIRONMENT	CULT AR
 Wetlands Waterbodies Woodlots Valleylands Wildlife Habitat Provincial Parks Conservation Areas 	 Land Use and Resources Areas Protected under Provincial Plans and Policies Air, Odor, Dust Provincial and Local Infrastructure Public Health and Safety Aesthetics and Landscape Economy and Livelihood Social Justice 	 Archae History Heritag



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ENVIRONMENTAL STUDIES

In order to determine the potential environment effects that the project may have on the environmental components, the following environmental assessments are being conducted:

- Natural Heritage Assessment
- Archaeological Assessment
- Cultural Heritage Assessment
- Noise Assessment

The results of these studies will be available for public review in the fall of 2010.









STAKEHOLDER CONSULTATION

IPC is working with the following stakeholders:

- Township of West Lincoln
- Niagara Region
- Niagara Region Public and Catholic School Boards
- Mississaugas of the New Credit First Nation
- Six Nations of the Grand River Territory
- Niagara Region Métis Council
- Niagara Peninsula Conservation Authority
- Ontario Heritage Trust
- Ministry of the Environment
- Ministry of Natural Resources
- Ministry of Tourism and Culture
- Ministry of Agriculture, Food and Rural Affairs
- Ministry of Energy and Infrastructure
- Ministry of Aboriginal Affairs
- Ministry of Transportation
- Ministry of Health
- Natural Resources Canada
- Environment Canada
- Indian and Northern Affairs Canada
- Industry Canada
- Department of National Defense
- NAV Canada
- Radio Advisory Board of Canada



- Ontario Power Authority
- Hydro One Inc.
- Union Gas
- Royal Canadian Mounted Police
- John C. Munro Hamilton International Airport
- Local Businesses and Interest Groups
- Landowners within 300m of the Study Area

The stakeholder consultation is ongoing; new stakeholders may be identified.







ROLE OF CONSULTATION

Consultations with stakeholders are taking place to inform, describe and mitigate any potential environmental effects.

Consultation with the public and local municipality is an essential tool in establishing a two-way exchange of information.



Consultation will:

- Give you a better understanding of the project
- Allow IPC to obtain and use local knowledge in project designs and assessment of environmental concerns
- Establish an ongoing dialog with all stakeholders







COMMUNITY BENEFITS

This is a community-based power project initiated by local landowners and residents. It will:

- Provide energy that will power approximately 2500 homes
- Create local job opportunities during construction, operation, and decommissioning phases
- Generate tax revenue for the municipality
- Ensure a sustainable income for participating landowners in support of their ongoing agricultural operations
- Assist Ontario's efforts to create renewable sources of energy
- Produce a sustainable source of electricity that is clean and reliable, and emits no greenhouse gas emissions or waste by-products









HEALTH AND SAFETY

- Public safety measures are being incorporated into all phases of the Project, which includes the preparation of an Emergency Response Plan.
- All project facilities and components will be maintained and operated in accordance with applicable codes and regulations.
- Wind Energy is a safe and reliable source of energy.
- A May 2010 report prepared by the Chief Medical Officer of Health for Ontario, titled "*The Potential Health Impact of Wind Turbines*" concluded:
 - Vibration from low frequency wind turbines at residential setbacks does not cause adverse health effects.
 - Low frequency sound and infrasound from current turbine models are well below the pressure sound levels at which known health effects occur.
 - Setback distances for wind turbine noise control takes into account potential risk of injury from ice

throw and structural failure of wind turbines.





- A Noise Assessment Study is being completed for the project and will be used to:
 - Predict sound levels at receptors within a 1500 metre radius of a wind turbine generator.
 - Demonstrate compliance with all applicable sound level limits.
- To comply with the MOE sound level limits the project will adhere to:
 - A <u>minimum</u> 550m setback from the nearest noise receptor.
 - A receptor sound limit of 40dBA at non-participating receptors.
- Mandatory setback distances were designed using a conservative approach to ensure the protection of local residents' health and lifestyle.
- Sound from wind turbines is often masked by the surrounding environment (e.g. rustling leaves, local traffic, insects, etc.).







PROPERTY VALUES



- A recent property value study entitled, "Wind Energy Study-Effect on Read Estate Values in the Municipality of Chatham-Kent, Ontario" found:
 - No evidence to indicate that rural residential properties had lower sales prices as a result of being within the viewshed of a wind turbine.
 - The study did not find any evidence that wind farms negatively affect residential market values in Chatham-Kent.
- A 2009 U.S. Department of Energy Study entitled "The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis" concluded:
 - There is no conclusive evidence of the existence

of any widespread property value impacts that might be present in communities surrounding wind energy facilities.

 Neither the view of the wind facilities nor the distance of the home to those facilities is found to have any consistent, measurable, and statistically significant effect on home sales prices.







PROJECT REPORTS

As a part of the project's REA application the following supporting documents are required:

- Project Description Report
- Construction Plan Report
- Consultation Plan Report
- Decommissioning Plan Report
- Design and Operations Report
- Wind Turbine Specifications Report
- Natural Heritage Assessment Report
- Archaeology Assessment Report
- Cultural Heritage Assessment Report
- Noise Assessment Report

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NEXT STEPS

- Complete All Reports and Environmental Assessments
- Continue Consultation with Stakeholders
- Finalize Site Layout
- Draft Documents for Public Review
- Undertake Second Public Open House
- Submit REA Package to the Ministry of the Environment for Approval









PROJECT FEEDBACK

Your input is a valued part of the HAF Wind Energy Project and we encourage you to share your comments with us by completing a Comment Form.

or

You may also contact:

Sunny Galia Project Manager

IPC Energy HAF Wind Energy Project 2550 Argentia Road, Suite 105 Mississauga, ON L5N 5R1

Tel.: (905) 607-1016 Fax: (905) 607-5995 Email: sunny@ipcenergy.ca Jonathan Veale Environmental Planner

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Additional information about the HAF Wind Energy Project, including the Draft Project Description Report, is available at this Public Open House or at:

www.ipcenergy.ca









Thank You for Attending this Public Open House for THE HAF WIND ENERGY PROJECT If you have any questions, please

speak to any Project Team representatives in attendance.

We also encourage you to fill out a Comment Form.

