SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: PROPOSAL NAME: CLASS OF DEVELOPMENT: TYPE OF DEVELOPMENT: CLIENT FILE NO.: Pembina Hills Wind Energy Ltd. Partnership Pembina Hills Wind Energy Project 2 Energy Production

Energy Production 5153.00

OVERVIEW:

The Proposal was dated November 23, 2005 and was received on November 25, 2005. The advertisement of the Proposal read as follows:

"A Proposal for the Pembina Hills Wind Energy Project has been filed by Bison Wind Inc. for the construction and operation of a 99 megawatt (MW) net electrical generation capacity commercial wind energy facility. The development consists of 35 to 70 wind turbine generators and ancillary facilities located on 35 sections of privately owned land across a 37,632 ha Project Area within the Pembina Hills of south-central Manitoba, west and south of the community of Deerwood. An Environmental Impact Assessment (EIA) prepared by Tetr*ES* Consultants Inc has been filed in support of the Environment Act Proposal. Site preparations and initial construction is expected to begin in March 2006 with the final in-service date targeted for March 2007."

The Proposal was advertised in the following newspapers: The Carman Valley Leader – Friday, December 9, 2005; The Morden Times – Friday, December 9, 2005; The Manitou Western Canadian – Tuesday, December 13, 2005

The Proposal was made available for public review at the following locations: Main Registry/Winnipeg Public Library/Manitoba Eco-Network(Wpg); South Central Regional Library (Morden) Municipal Offices of the R. M.'s of Lorne (Somerset), Pembina (Manitou) and Thompson (Miami)

It was also distributed to the "Energy Production" TAC members for comment. All comments were requested by January 16, 2006.

PUBLIC RESPONSE

Comments received in response to the advertisement supportive of the proposal are as follows:

e-mails Scott Snowdon, Altamont, MB – sent December 30, 2005

Cam Stockford, Alamont, MB – January 2, 2006 Gilbert and Germaine Brunel, Alamont, MB – January 8, 2006 Ray and Marilyn Brunel – January 8, 2006 Alex and Anna Brunel, St. Leon, MB – Janaury 9, 2006 Edward and Darlene Genier, and family, St. Leon, MB.- January 12, 2006 Rodney Crampton, Manitou, MB – January 15, 2006 Christopher Grenier, St. Leon, MB. January 13, 2006 Perry Zilkey, January 14, 2006 Hubert Boulet (Boulet Brothers Concrete) - January 16, 2006 Dale and Pat Pearson, Miami, MB – January 16, 2006 Darrin and Wendy Pearson, Miami, MB – January 16, 2006

Letters

Dale Pouteau General Manager, Pembina Co-op P.O. Box 5007 St. Leon, MB R0G 2E0 - dated January 10, 2006

Gordon Orchard Secretary Deerwood Soil and Water Management Association – fax sent Jan. 11/06

Al Thorleifson Box 557 Manitou, MB R0G 1G0

- dated January 8, 2006

Robert Rondeau General Delivery St. Leon, MB R0G 2E0

Nadia Kolly General Delivery St. Leon, MB R0G 2E0

Fernand & Bonnie Rondeau Rondeau Enterprises Ltd. Box 5026, 23 Main St. St. Leon, MB R0G 2E0

Patrick and Linda Rondeau Box 5067 St. Leon, MB R0G 2E0 - faxed letter dated January 11, 2006

- faxed letter dated January 11, 2006

- faxed letter dated January 11, 2006

- faxed letters dated January 11, 2006

Linda and Richard Genier St. Leon Drapery Services and Variety General Delivery, St. Leon, MB -faxed letter dated January 13, 2006 Stephane Deschambault (Electrical General Foreman, White Construction Canada Corp.) and Guy Deschambault (Electrical Foreman, White Construction Canada Corp.) 12 Place Vermette Ste. Anne, MB R5H 1E9 - letter undated

Paul Waldner Evergreen Colony Box 340 Somerset, MB R0G 2L0

- letter dated January14, 2006

Gilbert Comte President Lourdeon Community Development Corporation P.O. Box 336 Notre Dame de Lourdes, MB. R0G 1M0 - faxed letter sent Jan. 16/06

Paul Grenier President Table Ronde de Saint-Leon General Delivery St. Leon, MB R0G 2E0

Judy Young, CMMA Chief Administrative Officer Rural Municipality of Pembina Box 189 315 Main Street Manitou, MB R0G1G0

Val Turner, CMMA Chief Administrative Officer Rural Municipality of Lorne Box 10 Somerset, MB R0G 2L0

Dianne Chatwin Chief Administrative Officer Rural Municipality of Thompson P.O. Box 190 Miami, MB R0G 1H0

Allan & Annette Charbonneau P.O. Box 343 Manitou, MB R0G 1G0 - faxed letter sent Jan. 16/06

-faxed letter sent Jan 16, 2005

- faxed letter sent Jan. 16/06

- faxed letter sent Jan. 16/06

- faxed letter sent Jan. 16/06

Robert Turner General Delivery Altamont, MB R0G 0A0

Dan Steppler Dale Steppler Pat Steppler Alexandria Steppler Edward Orchard Catherine Orchard Gordon Orchard Karen Orchard Gordon Docking Miami, MB - undated letter received Jan.19/06

- letter sent by fax dated Jan. 16/06

Comments received which express concerns with respect to the proposal are as follows:

David Kerr Executive Director St. Leon Wind Energy GP Inc. 2845 Bristol Circle Oakville, Ontario Canada L6H 7H7

Concerned that the Pembina Hills Wind Energy Project (PHWE) project area overlaps with the existing St. Leon Wind Energy Project (SLWE). The PHWE EIA does not address the cumulative effect of the PHWE project on the SLWE project. Specifically:

- Cumulative noise impacts
- Lower energy production due to wake losses
- Conflicts with respect to wind energy rights
- Buffer zones between projects were recommended in the SLWE EIA but are not mentioned in the PHWE project.
- No formal communications with SLWE were made during the development of the PHWE project EIA. Given that the same environmental consultant completed both EIA's underlines the significance of the error in the EA process.

Disposition:

- The Licence will require that wind turbine generators are sited in consideration of Manitoba's Guidelines for Sound Pollution.
- Issues concerning energy production, wind energy rights, buffer zones and formalizing communications between competing developers are outside the scope of the Environment Act process

C. Fitzgerald - e-mail sent January 16, 2006

EIA does not address the cumulative effects of the project in accordance with the Canadian Environmental Assessment Act in the following areas:

- "wind shadow" on a local and regional scale
- wind turbine blade "flicker" effects on people on a local scale
- cumulative effects (economic and environmental) of the project on Manitoba Hyrdo's electric grid and system operations.
- Request Clean Environment Commission hearing.

Disposition: The Canadian Environmental Assessment Act process provides for an assessment of cumulative effects and can be considered during the federal environmental screening of the project by Natural Resources Canada. A CEC hearing is not recommended on the basis of one request.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

<u>Historic Resources</u> Request that the proponent contract an archaeological consultant to conduct a heritage resources survey of the proposed wind turbine locations and access roads.

Disposition: Comment can be accommodated as a condition in the Licence.

Intergovernmental Affairs (Community Planning Services Offices – Morden) No concerns or objections. Note that wind farms are a permitted use in the agricultural zones of the RM of Pembina. The RM of Thompson intends to initiate a formal process for a zoning by-law amendment. Local municipal officials will have to address specifics through the permitting process.

Energy, Science and Technology No concerns

Agriculture No concerns.

Transportation and Government Services Comments are as follows:

• Permits are required from T&GS under The Highways and Transportation Act to construct or modify access driveways onto Provincial roadways and for the placement of any structures within adjacent control areas (125' from the edge of Provincial road rights-of-way)

- Permits are required from the Highway Traffic Board (under The Highways Protection Act) for any accesses or structures within the Provincial Trunk Highway (PTH) 23 (125' from PTH 23 right-of-way).
- All proposed overhead and buried power lines will be reviewed to ensure their location meets T&GS guidelines.
- existing drainage patterns along Provincial highway right-of-way should be maintained.
- detailed design drawings should be forwarded to Departmental staff for review and approval once they become available.
- provide MT&GS staff to be contacted with regard to T&GS requirements.

Disposition: This information will be forwarded to the proponent for direct follow up with T&GS.

Conservation (Policy Coordination Branch) Recommend the following:

- Rare plant surveys should be carried out in any wooded areas disturbed by the project
- Migratory routes should be determined and avoided when locating wind turbines.
- Underground cables and wind turbines should avoid wetlands.
- Post-construction bat and avian surveys including ingress and egress from wetlands should be conducted during the spring migration, breeding period and summer and fall migrations.
- Leks (dancing or display ground) on or adjacent to native prairie areas should be identified and avoided when locating wind turbines and access roads.
- Any work undertaken on Crown land including removal of merchantable timber requires a Work Permit (Sprague District Office)
- The Provincial Guidelines for Sound Pollution, Environmental Sound Objectives, Schedule A should be observed.
- The Emergency Response Plan referred to in the Proposal should be provided to the Environment Officer responsible for the Licence.
- The following environmental regulations should apply;
 - Storage and Handling of Petroleum Products and Allied Products, MR 188/2001
 - Waste Disposal Ground Regulation, MR 150/91
 - Onsite Waste Management Systems Regulation, MR 83/2003
 - Environmental Accident Reporting, MR 439/87

Disposition: The Proposal EIA states that the proponent intends to develop an Environmental Protection Plan (EPP) for the development. The requirement to provide an EPP will be included as a condition of the Licence. The recommendations to undertake a rare plant and bat surveys in affected wooded areas and the avian surveys including identification of migratory routes and leks can be accommodated as specific requirements of the EPP.

With respect to sound the Licence will require that siting of WTG's be carried out in accordance with the Provincial Guidelines for Sound Pollution. It is also recommended that the Licence contain a separate clause to address noise nuisance issues during operation of the Development.

The remaining requirements can be accommodated as separate conditions in the Licence.

Water Stewardship Recommend the following:

• adherence to the Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat during construction including:

- consultation with the Brandon Regional Fisheries Manager in the selection of crossing locations and types.

- no instream work between April 1 and June 15

- scheduling any instream work after June 15 in erosion prone areas during dry periods.

- Metal pylons should be used in wetland areas.
- Any boreholes and test pits should be filled and sealed to prevent downward migration of surface contaminants.
- Any dewatering required during construction of the wind turbine generator foundations requires authorization by the Water Licensing Branch.
- The Environmental Protection Plan (EPP) should describe the proposed environmental practices to be employed to mitigate adverse effects on groundwater and local wells in the event of accidental contamination during construction and a description of the methods to be used to collect baseline data to assess changes to water quality during operation.

Disposition: Comments can be accommodated as conditions of licencing.

Canadian Environmental Assessment Agency (CCEA)

Fisheries and Oceans Canada requests a complete and separate description of the activities occurring at each watercourse access road crossings and transmission line crossings including a description of the waterbody name and location, existing habitat, construction details/mitigation measures and site restoration/compensation/monitoring techniques. After the information has been submitted, DFO will determine whether it will become a Responsible Authority or provide specialist advice.

Disposition: The proponent is responsible to meet DFO requirements pursuant to the Fisheries Act irrespective of The Environment Act licencing process.

Environment Canada recommends that:

- a baseline study be undertaken of bird use in the project area and the effects of bird use of the various habitats affected by WTG structures.
- the proponent implement a two year migratory bird mortality study to monitor mortality of birds due to strikes with WTG structures.
- construction activities in areas where birds may be nesting or rearing their young, such as native grasslands, wetlands, lake or pond edges be avoided between April 15 to July 30.
- retain a field biologist to provide advice on minimizing potential short term adverse effects on wildlife during construction and on locating WGT structures away from sensitive habitats.

Disposition: Specifics regarding the design of the avian survey/study can be detailed within the Environment Protection Plan which will be required as a condition of the licence. The remaining requirements can be accommodated as other separate conditions of licencing.

PUBLIC HEARING

A public hearing is not recommended for this project on the basis that the majority of responses received in response to the Environment Act advertisement of the Proposal were supportive. Only one request for a public hearing was received.

CONCLUSION AND RECOMMENDATION:

The comments received from the technical review of the Proposal can be accommodated as conditions of licencing. It is recommended that the project be licenced pursuant to the Environment Act in accordance with the terms and conditions described in the attached draft Environment Act Licence.

PREPARED BY:

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