

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Aim PowerGen Corporation  
**PROPOSAL NAME:** Oakland Wind Energy Project  
**CLASS OF DEVELOPMENT:** 2  
**TYPE OF DEVELOPMENT:** Energy Production  
**CLIENT FILE NO.:** 5277.00

### **OVERVIEW:**

The Proposal was dated July 9, 2007 and was received on July 12, 2007. The advertisement of the Proposal read as follows:

“A Proposal for the Oakland Wind Energy Project has been filed by AIM PowerGen Corporation for the construction and operation of a 99 megawatt (MW of net electrical generation capacity) commercial wind energy facility located within the Rural Municipality of Oakland, approximately 17 km south of Brandon, Manitoba. Sixty-six (66) wind turbine generators are proposed to be installed within a 2,480 hectare project construction area. An Environmental Impact Assessment (EIA) Report has been filed in support of the Environment Act Proposal. The EIA included information regarding the environmental assessment and public consultation. Construction is tentatively targeted to begin in March 2009, subject to regulatory approvals and a Power Purchase Agreement with Manitoba Hydro, and be completed November 2009.”

The Proposal was advertised in the following newspapers:

Souris Plaindealer – July 28, 2007;

Brandon Sun – July 28, 2007

The Proposal was made available for public review at the following locations:

Main Registry/Winnipeg Public Library/Manitoba Eco-Network/

Western Regional Library/ RM of Oakland (as registry)

It was also distributed to the "Energy Production" TAC members for comment. All comments were initially requested by September 5, 2007 and extended to September 24, 2007.

### **PUBLIC RESPONSE**

An e-mail was received on September 5, 2007 in response to the advertisement from:

Laura Eberling

Comment as follows: Farm at Carroll and is opposed to the wind farm on the basis that it would depreciate property values and is concerned about effects on birds and wildlife.

Disposition: EA&LB acknowledged receipt of the comment by e-mail on September 7, 2007 advising the respondent that her comments will be taken into consideration during the Environment Act review of the proposal.

### **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

**Historic Resources** Section 6.4.2.7 of the proposal outlines the proposed avoidance and mitigation regarding potential impacts to archaeological resources which satisfies Historic Resources concerns.

**Mines Branch** Comments as follows:

- Mineral access rights must be decided prior to concluding surface leases to avoid land use conflicts.
- Lands containing high mineral potential as noted in the local Municipal Development Plan are generally not available for wind farm development.
- Mines Branch can mediate potential land use conflicts associated with mineral extraction and tenure.

Disposition: This information will be forwarded to the proponent for consideration in developing surface lease agreements with landowners.

**Intergovernmental Affairs** (Community Planning Branch) Comments as follows:

The land use planning requirements that have been identified by Community Planning Services staff during the departmental review of the proposal will need to be addressed by the applicant prior to construction, in accordance with the Planning Act and the requirements of the local planning by-laws. From a land use planning perspective, we have no concerns if your office would like to proceed with an Environment Act Licence for the project.

Disposition: Comments have been forwarded to the proponent for direct follow-up with the Council of the RM of Oakland.

**Infrastructure and Transportation (MIT)** Comments are as follows:

- MIT is planning to four lane PTH 10 south of Brandon and require 90 meters east and 30 meters west of additional right-of-way. Recommend that the transmission line be placed outside of this corridor to accommodate the future PTH 10 upgrade.

- Permits are required from MIT under The Highways and Transportation Act to construct or modify access driveways onto Provincial roadways and for the placement of any structures within the control area adjacent to Provincial Road 348 and 453 (125 feet from the edge of the road right-of-way).
- Permits are required from the Highway Traffic Board (under The Highways Protection Act) for any proposed transmission line crossing or adjacent to PTH 10 (within 250 feet from the edge of the right-of-way), PTH 2 (within 125 feet from the edge of the right-of-way) and at the PTH 10/2 intersection (304.8 meter control circle).
- Agreements will be required from MIT the proposed transmission lines crossing and/or adjacent to a Provincial Highway/Road.
- Provide MIT Guidelines for Wind Energy Projects adjacent to Provincial Highways and staff contacts with regard to MIT requirements.

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

**Health** Note that the environmental monitoring and mitigation described in the Proposal should prevent or mitigate potential impacts.

Disposition: No follow-up by EA&LB required.

### **Water Stewardship**

Manitoba Water Stewardship has reviewed the above noted proposal and submits the following comments for your consideration:

- There must be no net increase in nutrients (nitrogen and phosphorus) and sediment to waterways as a result of the construction or operation of the wind turbines.
- Removal of vegetation and soil should be kept to a minimum during the construction and the placement of the wind turbines, road crossings and burying of transmission cables.
- Setback distances from Black Creek, the Little Souris River, the Souris River, their tributaries, drains, potholes and marshes are only 200m although the Dominion City proposal indicates a 400m set back from the Roseau River and a 1 km setback for the Red River. Water Stewardship recommends that the Souris River, the Little Souris River and Black Creek also have a 400m set back distance.
- If any vegetation is removed during the construction and the placement of the wind turbines, road crossing and burying of transmission cables, the proponent should revegetate exposed areas along banks of rivers and surface drainage.
- There will be the need to cross streams within the project area for roads and the electrical collection system including transformer installation and transmission lines. Where crossings are required the proponent indicates the construction will coincide with dry, low flow or frozen conditions to minimize erosion. For the electrical collection system they plan on trenching but may include horizontal directional drilling as a mitigation measure for sensitive areas. This will be identified in the Environmental Protection Plan. They will also adhere to the Federal Provincial

Manitoba Stream Crossing Guidelines, implement appropriate temporary and permanent erosion and sediment control measures and follow up to ensure sites are stabilized.

- Overall, these measures should mitigate potential concerns. It is preferred, however, based on regional experience, crossings with a defined channel and water throughout the year or enough water during spring runoff to provide spawning and nursery habitat, be directional drilled. This is due to the difficulty in stabilizing sites that are trenched and the ongoing erosion and sedimentation that result. Water Stewardship would like to ensure that the proponent consult with the regional fisheries manager (Bruno Bruederlin) in the final determination of crossing locations and types of crossings, particularly if the proponent plans to trench the crossings.
- As the components of this wind energy project are habitat related, which falls under Federal jurisdiction, Water Stewardship's comments do not take precedent over DFO's review. As long as DFO is involved and manage fish habitat to meet the intent of their no net loss policy, provincial fisheries management interests should be met.
- Construction dewatering will require and authorization under The Water Rights Act.
- *The Water Rights Act* suggests that no person shall control water or construct, establish or maintain any water control works unless he or she holds a valid license to do so. Water control works are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage.
  - If the proposal advocates any of these activities a Water Rights License to Construct Water Control Works may be required. Application forms are available from any office of Manitoba Water Stewardship.

Disposition: The proponent advised EA&LB that the 400 m setback distance proposed for along the Roseau River for the Dominion City Project was not proposed for the Souris River, Little Souris River and Black Creek in the Oakland project because:

- only tributaries of the Souris River and Little Souris River occur within the project area. The mainstems of those two rivers fall outside the Oakland area
- the Black Creek channel is typically ephemeral and dry; and
- tributaries of the two rivers that reach into the Oakland Project area are often ephemeral, as is Black Creek and these tributaries and the creek do not have the same extent and maturity of wooded riparian habitat along the shorelines as the Roseau River in the Dominion City project area.

Therefore, it was determined that there was not a need to propose a setback distance of 400m from these waterbodies (and Black Creek) to reduce the risk of erosion and/or collision to birds and bats or as a mitigative measure for any other purpose.

The remaining comments can be accommodated as licencing conditions.

## **Conservation (Policy Coordination Branch)**

The following comments are provided by Manitoba Conservation regarding the above mentioned proposal:

- Approval is subject to necessary Crown Lands Act allocation where applicable. In respect of Crown Land, no land tenure is granted by way of an environmental approval. Applicant must apply for applicable Crown Lands Act Permit/Lease which will be subject to the standard Crown Land & Property Agency review process.
- The proponent refers to Section 6.1.6 of the proposal to “hazardous materials” and in Section 9.1.2 to “dangerous goods or hazardous wastes” but does not specifically identify these materials. The proponent’s Environmental Protection Plan should clearly identify and address these materials.
- Figure 2-1 indicates that the underground electrical collector cables will run in straight lines taking the shortest possible route between turbines and collector substations. The power cables should be placed on high ground traveling around wetlands and not through wetlands. Directional drilling under wetlands is not an option since any disturbance in the bottom of a wetland could penetrate the impermeable layer, increasing percolation into the subsoil and reducing the time that the wetland holds surface water. This would cause serious impacts to the wetland ecosystem.
- Given the tentative locations for the turbines (Figure 2-1) there appears to be considerable encroachment of the turbines on wetlands. The proposed minimum setback distance of 200 m is not enough for wetlands or riparian areas. The Wildlife & Ecosystem Protection Branch recommends that turbines be a minimum of one km away from any large wetland, particularly any permanent wetlands and 0.5 km from smaller wetlands to mitigate strikes by water birds
- The setback distance from forested habitats, native grasslands, shrub dominated land, and other sensitive habitats should be a minimum of 200 m. One turbine immediately north of Hwy # 2 in the center of the study area appears to be situated immediately adjacent to extensive forested habitat and there may be others situated near sensitive habitats.
- The preamble for Chapter 3 indicates that the development zone is located in a predominantly flat topography. However, much of this development area is within the Brandon Hills complex which is very rolling and hilly.
- In Section 3.3.4, line 4, the word “likely” degrades the importance of wetlands and should not be used. Ephemeral and seasonal ponds provide the most diverse aquatic ecosystems providing habitat for a wide variety of flora and fauna.
- Although the report states that most of the project area has been converted to agricultural production with native vegetation restricted to remnant patches, it seems that there is still considerable forested and wetland habitat. Unfortunately, the only map that should show these habitats (Figure A-5) has lumped fields and meadows in one category and is not at a scale that

adequately portrays the habitat of this development zone. Any areas with natural vegetation cover need to be identified on maps and in tables in the report.

A better vegetation cover map should be included in the main report.

- Although Section 3.4.2.1 deals with bats, field surveys have not been done to determine whether forested habitat in the study area might offer breeding habitat for bats or how much bat migration occurs in the development area. These surveys must be done.
- In Section 3.4.2.2, most of the productive bird habitats (wooded riparian areas, ditches, shelterbelts, field margins, and farmyards) are identified, but the bird or wildlife surveys did not target these areas to determine their importance as habitats supporting biodiversity.
- The report states that landscape features in the development zone have little potential to concentrate birds during migration (i.e., no large tracts of forest, ridges or valleys). Is there data to support this? Given that the area is considerably more diverse in habitat features and elevations than most surrounding habitat, the development zone may support significant concentrations of birds and bats during migration.
- The report does not say if post-construction collections of avian and bat mortalities are planned. These must be conducted during the spring migration period, breeding period, and summer and fall migration periods and should be done for a minimum of 2 years after the project begins operating. An area from the tower with a radius equal to at least 1.5 diameters of the blades must be searched through the entire summer preferably assisted by retrievers. To assist with the searching, the area should be left in summer fallow.
- There is no information on fall (or spring) staging of waterfowl for this area. Surveys must be conducted as soon as possible, to determine ingress and egress from wetlands in the area during the spring and fall migration period. This information is needed to mitigate impacts by appropriate placement of turbines and transmission lines.
- Surveys must also be conducted at potential turbine sites to determine site specific use by wildlife such as sharp-tailed grouse. These data are imperative to determining the best possible turbine locations to minimize impacts on grouse and other species. It is highly probable that there are undetected leks in the project area. Before construction takes place, leks must be identified and turbines relocated to avoid them. Since grouse generally nest within 0.4 to 1.8 km from a lek, turbines must be a minimum of 500 m away, but preferably farther. If leks are identified, long-term monitoring (at least six years) must be carried out to determine if their use pattern changes. An approved lek monitoring method is available from the Wildlife and Ecosystem Protection Branch.
- The habitat features map (A-6) outlines one patch of mixed-grass prairie, two sizable wetlands, and two Ducks Unlimited wetlands. Sections 3.3 and 3.4 mention numerous poorly drained meadows, marshes and a small number of potholes, some remnant native prairie patches, woodlands and wetlands scattered throughout the project area but they are not shown on the

map. The consultants should document the location and size of these habitats and assess their importance as wildlife habitat.

- The consultants conducted only one roadside bird survey in late May and a few reconnaissance visits to the study area in April and May. This does not meet the requirements of a breeding bird survey which should be done in mid to late June once all species have returned from migration. Also, there was no attempt to integrate the results of several long-term breeding bird surveys that are done on an annual basis in the area. The long-term results of two local routes, Brandon Hills and Croll, would have provided much better information about breeding bird abundance and diversity in the area.
- Raptors are inadequately dealt with in this report. The potential impact of turbines on bats and some birds is highlighted in Section 6.3.3, but there is no mention of similar concerns regarding raptors. In all likelihood, the area may support healthy numbers of breeding, migrant and wintering raptors but there is no discussion about raptors wintering or concentrating in the area during the nonbreeding season. Even though the report states otherwise, there are land features (e.g., riparian corridors, valley or ridges) in the project development zone that could potentially concentrate large numbers of raptor species during breeding or migration seasons. Eagles and several owl species are probably attracted to the relatively abundant forested habitat nearby and in the area. The proponent should have consulted the local Christmas Bird Counts to see what raptors may be present in the area. Raptors are more susceptible to collisions with wind turbines than most other birds, and they will probably relocate from areas with turbines to avoid them. More monitoring is needed to determine which species nest, migrate and winter in the area, and what habitats they prefer, so impacts can be mitigated by establishing minimum set-back distances from areas regularly utilized by raptors.
- Some attempt was made to assess potential for bird collisions with turbines and the report concluded that observations of bird flight heights during spring breeding bird surveys indicated that the majority of breeding birds in the area are not flying within the wind-turbine blade zone. However, since no surveys were conducted during the period when most of the raptor and migrant bird flights occur, there is no evidence to support this conclusion. Surveys need to be done during the spring migration.
- Section 3.4.3.2 indicates that in response to a query for historic observations of species at risk, the Manitoba Conservation Data Centre (MB CDC) reported historical observations of three species, the burrowing owl (*Athene cunicularia*), Baird's sparrow (*Ammodramus bairdii*), and Sprague's pipit (*Anthus spragueii*), in the area. Since many areas of the province have never been thoroughly surveyed, the absence of data in the MB CDC database in any particular geographic area does not provide assurance that species or ecological communities of concern are not present. The information should therefore not be regarded as a final statement on the occurrence of any species of concern nor can it substitute for on-site surveys for species that will be affected by this wind energy project. It is the responsibility of the proponent to inspect the project area prior to and during

construction to determine if any rare or endangered species may be impacted. The proponent needs to be aware that if rare or endangered species are present, removal or destruction of individuals or their habitat may be in contravention of Subsection 10(1) “Prohibition” of *The Endangered Species Act* (Manitoba). In addition, the federal Species at Risk Act prohibits any activities that kill or otherwise harm COSEWIC-listed plant or animal species and prohibits destruction of habitat for these species. If species of concern are present, the proponent must contact the Biodiversity Conservation Section of the Wildlife and Ecosystem Protection Branch (Ronald Hempel at 945-6998) to discuss possible mitigation options well in advance of any disturbance.

- The proponent should also be aware that killing or harming migratory birds and disturbance, destruction or taking of their nests or eggs is prohibited under the Migratory Birds Convention Act. The proponent is responsible for ensuring that no migratory birds will be harmed and no active nests of migratory birds will be destroyed as a result of the development. If migratory birds or their nests may be harmed by this development, the proponent must contact the Canadian Wildlife Service for further direction.
- The Wildlife & Ecosystem Protection Branch must have the opportunity to review and approve the Environmental Protection Plan prior to start of any construction. The purpose is to ensure that concerns about impacts to wildlife and habitat are mitigated.

Disposition: The Proposal EIA states that an Environmental Protection Plan (EPP) with an adaptive survey and impact management approach will be implemented during the pre-construction, construction and operation phases of the development. The requirement to provide an EPP will be included as a condition of the Licence. The request for additional information, including detailed mapping and the recommendation to provide additional information specific to pre-construction bat survey and avian surveys on the species identified including identification of migratory routes and post construction mortality surveys, can be accommodated as requirements of the EPP. A copy of the detailed comments has been provided to the consultant for consideration in developing appropriate survey methodology and mitigation in the EPP. The Wildlife & Ecosystem Protection Branch and the Canadian Wildlife Service will have an opportunity to input and review the EPP.

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

### **Canadian Environmental Assessment Agency (CEAA)**

Based on responses to the federal survey, the application of the Canadian Environmental Assessment Act will be required for this project. Fisheries and Oceans requires additional information before it can determine whether an EA under the CEAA is required. Transport Canada requires an application for “Aeronautical Obstruction Clearance.” The Canadian Broadcasting Corporation wishes to review implications on their broadcasting facilities in accordance with their guideline document developed for that purpose. Health Canada and Environment Canada are willing to provide specialist advice as required.

Natural Resources Canada has confirmed that Notice of Project Applications has been approved and therefore the project will be subject to environmental assessment under CEAA.

Disposition: Federal comments have been forwarded to the project proponent for follow-up, as appropriate, and in accordance with the requirements of the Canada – Manitoba Agreement on Environmental Assessment Cooperation.

### **PUBLIC HEARING**

A public hearing is not recommended for this project on the basis that only one response in opposition to the proposal was filed in response to the Environment Act advertisement of the Proposal.

### **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. The public respondent will be notified that the Director's decision to licence the development is appealable to the Minister of Conservation within 30 days of the date of the Licence.

#### **PREPARED BY:**

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