

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: PPM Energy Canada Ltd.
PROPOSAL NAME: Mountain Winds Energy Project
CLASS OF DEVELOPMENT: Three
TYPE OF DEVELOPMENT: Energy Production
CLIENT FILE NO.: 5284.00

OVERVIEW:

The Proposal was received on July 31, 2007. It was dated July 31, 2007. The advertisement of the Proposal was as follows:

“A Proposal for the Mountain Winds Energy Project has been filed by PPM Energy Canada Ltd. for the construction and operation of a 300 megawatt (MW of net electrical generation capacity) commercial wind energy facility. The facility would be located within the rural municipalities of Lorne and South Norfolk, approximately 110 km southwest of Winnipeg. Up to 200 wind turbine generators are proposed to be installed within a 18,355 hectare project construction area. An Environmental Impact Assessment (EIA) Report has been filed in support of the Environment Act Proposal. Construction is tentatively targeted to begin in 2009, with operation anticipated to commence in 2010.”

The Proposal was advertised in the Morden Times and in the Carman Valley Leader on Friday, August 17, 2007, and in the Treherne Times on Monday, August 20, 2007. It was placed in the Main, Millenium Public Library (Winnipeg), Manitoba Eco-Network and South Central Regional Library (Morden) registries, as well as in the offices of the rural municipalities of Lorne and South Norfolk as registry locations. It was distributed to TAC members on August 15, 2007. The closing date for comments from members of the public and TAC members was October 8, 2007.

COMMENTS FROM THE PUBLIC:

Ken Theule I have perused the Mountain Winds Energy Project Environmental Impact Assessment and found it to be rather one sided and biased. Unfortunately, I do not have the resources of PPM Energy Canada Ltd. to present a more realistic and unbiased environmental impact assessment. The Environmental Impact Assessment as written by PPM seems to be more about money than the environment and has omissions and inaccuracies.

I own and live on the property located at NW 9-6-8W, and, as such, will be impacted heavily if the Mountain Winds Energy Project is approved as proposed. I bought my property approximately 15 years ago in part because of the scenic view from the property. To the east I have a clear unobstructed view overlooking the Snow Valley as well as beyond into the Red River Valley. The view in the other 3 directions is priceless as well, with views of fields and trees. The drive from my place to Notre Dame De Lourdes also has wonderful views of hills, fields, and trees.

The area in the proposed energy project which lies East of highway 244 and South of highway 245 is very special. If one looks at the maps in the Impact Assessment, one can see that there is physiography, topography, slopes, hydrology, and land cover in that area which is not the same as in the rest of the project. No where, that I've seen, does the Impact Assessment address the caved-in land in the area.

The visual landscape in that area is also different. When compared to the St. Leon Project, the scenic value and quality of the landscape is unique, primarily due to the differences in terrain and vegetation.

The sensitivity level to the visual impact of wind generators in this area is NOT low, as the Impact Assessment states, and the area is travelled by more than local residents. Many people from outside of the area come here. One only needs to take a look at the guest registries of the two Bed and Breakfast establishments in the area to find that many people enjoy the local scenery as it currently is.

In addition, if I understand section 7.2.1.8 of the Impact Assessment correctly, when it comes to noise, I find the night time limit of 45 dBA to be totally unacceptable. When I'm able to sleep with the windows open (wind permitting if the smell from the Intensive Livestock Operations isn't too strong) I would find 45 dBA to be a detriment to a good nights sleep.

Also, the ground water contamination referred to in Section 7.3.1 is not acceptable. The water here is already at risk from too much pig manure.

In short, I request that Manitoba Conservation not add to the problems created here from its past decisions and policies. I request that the Mountain Winds Energy Project not be allowed to construct any wind generators or to have any operations as proposed, East of Highway 244 and South of Highway 245.

I also have a concern that my property value will be effected negatively if the project is allowed to go ahead. If I am surrounded by wind generators, who would want to buy my house? Who will compensate me for my losses? In a way, I see the issues of wind generators to be much the same as Intensive Livestock operations. Many people are/will be making money at the expense of my environment. I feel that if the Mountain Winds Energy Project is approved in it's present form, I should be awarded compensation by the government body that approves it.

Disposition:

The writer's property, and most of the project land south of PR 245 and west of PR 244, is within designated buffer areas due to the proximity of waterbodies, the Pembina Hills, residences and unsigned lands. Noise issues can be addressed through buffer areas both in an Environment Act Licence and in municipal zoning requirements. Groundwater impacts are satisfactorily addressed in the Proposal. The writer's comments respecting the exclusion of land from the project area were forwarded to the proponent for consideration.

Murray and Lynette Stow Thank you for providing us with the requested electronic version of the PPM Energy Environmental Impact & Assessment, your file #5284.00, and for allowing us to comment on this proposal. We own Leary Valley Farm, and our farm property is contained within the legal land descriptions NE 13-6-8 W, NW 13-6-8 W, SW 13-6-8 W, NW 12-6-8 W, and NE 11-6-8 W.

Concern #1: As land and home owners in an area adjacent to the proposed building sites, we have immediate concerns regarding the project's **impact on existing gravelled roads and on the existing bridges on these roads leading to proposed windmill sites**. This concern is not only for the period of construction when traffic for the construction materials, machinery, and crews will peak, but also during the post-construction phase for the anticipated on-going increase in traffic for servicing, sightseeing, and recreation.

It is not clear from this environmental impact & assessment document that **adequate provision has been made for enhancing budgets to improve local road surfacing and to increase the maintenance of local gravelled roads**.

It is also not clear whether **provision has been made to increase signage regarding local road and bridge weight restrictions**. Nor is it clear that there is a **plan in place for increased monitoring of the truck traffic violating provincial road restrictions** by using the local gravelled roads in the vicinity of the proposed sites.

Concern #2: Will there be any **changes required to the power transmission structures that Manitoba Hydro now has in place on it's Right-Of-Way** running through our property in order to service the projected output of this proposed wind energy project?

Description of the existing situation: A gravelled secondary road runs directly west of Roseisle along the valley floor through the site designated as Learys on the maps used in this proposal. This road then forks at the site designated as Babcock on these maps. One fork rises out of the valley leading to St Lupicin, and the other fork rises out of the valley to eventually intersect with PH #245.

This same road has an old bridge at Learys, as well as a concrete pad with a culvert at Babcock of more recent vintage. **Neither were engineered or built to withstand the onslaught of heavy commercial traffic.** At the time of their respective constructions, there was anticipated to be a very low density of local & recreational traffic in the area.

There are also grid roads (very lightly gravelled) that lead up out of the valley at steep degrees of incline to the north (NW 13-6-8), and to the south (SW 13-6-8 & NW 12-6-8). There is a very high clay content to the local soil, (the reason why the Leary brick mill was located here), and **the road surfaces are frequently and easily eroded.** Road usage in wet conditions, and road maintenance with the currently inadequate levels of gravel in the road surfaces, is already very problematic on all these roads.

There is already a problem with **commercial truck traffic that consistently circumvents existing provincial regulations restricting the weight of loads on PH #245** by travelling on the gravelled roads of the valley. This misuse of these roads occurs seasonally, **precisely when these gravelled roads are most vulnerable to erosion, rutting, and deterioration.**

There has been a **significant increase in the truck traffic violating provincial road regulations** that has **coincided with the proliferation of local Intensive Livestock Units**, as these ILU's require both trucks loaded with in-bound feed and trucks loaded with out-bound livestock.

Thank you for this opportunity to advise you of our concerns, and to provide input on this significant development proposal. We look forward to your department's timely response.

Disposition:

These comments were forwarded to the proponent for information in developing detailed plans for project access. The assessment report notes that provincial trunk highways and roads will be primary access routes for the project. Roads in the vicinity of the writers' property are undesirable access routes due to their condition and alignment. With respect to hydro line upgrading, the proposal indicates that a new transmission line will be required to connect the project's collector station with Manitoba Hydro's designated connection point. Upgrading of the existing Manitoba Hydro line in the vicinity of the writers' property would not be required as part of the project.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation – Sustainable Resource and Policy Management Branch

The following comments are provided by Manitoba Conservation regarding the 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 and Property Agency review process.
- The proposed minimum setback distance of 100 m is not enough for wetlands or riparian areas. It is recommended that the 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 distances for wetlands must be from the functional edge of the riparian area. This varies from year to year because of differing precipitation, making it necessary to use other tools such as air photos to make this determination.
- In addition to the 400 m setback from the Pembina Hills habitat, other smaller wooded areas, natural grasslands and other sensitive habitats require a minimum setback distance of 200 m. These smaller naturally vegetated remnants are very important wildlife habitat and impacts must be avoided.
- There is no indication when the spring bird survey reported in Table 4.4-1 was conducted.
- Although the proponent did not observe any sharp-tailed grouse in the project area they may be there. Pre-construction surveys must be conducted in the vicinity of the proposed turbine sites to determine if there are any leks nearby and if any are present, turbines must be 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 Wildlife and Ecosystem Protection Branch requests the opportunity to review the results from the Breeding Bird Surveys that were not completed at the time this report was submitted. Instead of transect surveys, surveys focused on potentially sensitive habitats in the area should have been done as it would have provided more relevant data on birds and their habitats.
- The fixed point surveys in the spring and fall have too few points to provide sufficient data for this 18,354.5 ha project area.
- The North American Waterfowl Breeding Bird Survey results for a nearby transect should have been used as a data source. These data should also be used to check the accuracy of the data collected in the spring of 2007.
- Although historically mule deer, elk and pronghorn antelope were in this area, none of these mammals occur in the project area today. White-tailed deer do occur in the project area and should have been mentioned in the impact assessment. It is also unlikely that some of the species in the list of endangered species, especially piping plover, great plains toad, and prairie skink, will occur in the project area because it is out of their range or there is no suitable habitat in the area. Similarly, smooth green snakes probably do not occur in the project area although garter snakes do and should have been mentioned.

- Ground surveys are needed to identify local terrestrial fauna habitat use, so that significant habitat can be avoided. Ground surveys must be done prior to construction not during the early construction stages as stated in the report.
- Raptor use and composition during the non-breeding season is discussed in the biological site evaluation and sensitivity analysis in Appendix B3 but is not addressed in the report. More raptor monitoring is needed to determine which species nest and migrate in the area, and what habitats they prefer. Such data will enable impacts to be mitigated by establishing minimum set-back distances from areas regularly utilized by raptors.
- Collections of avian and bat mortalities must be done for a minimum of two years once the turbines are operating and must include the spring migration period, breeding period, summer and fall migration periods. An area from the tower with a radius of at least 80 m (Recommended Protocols for Monitoring Impacts of Wind Turbines on Birds, 2006) must be searched preferably assisted by retrievers. To assist with the searching, the area should be left in summer fallow or mowed regularly. Turbine sites for these surveys should not be selected at random, but rather according to their proximity to important habitat types. The surveys should be conducted more intensively (minimum weekly) during the spring and fall migration. Regular surveys should be staggered with half the sites one day and the other half three or four days later since such scheduling will decrease the chance of missing a migration event. The turbine area should be surveyed immediately for carcasses after a climate event such as high winds, fog or low clouds.
- Since many areas of the province have never been thoroughly surveyed, the absence of data in the Manitoba Conservation Data Centre 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 affected. 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 and Ecosystem Protection Branch must have the opportunity to review and approve the Environmental Protection Plan prior to the start of any construction. The purpose is to ensure that concerns about impacts to wildlife and habitat are mitigated.

Disposition:

These comments were provided to the proponent's consultant for information in designing further monitoring and an Environmental Protection Plan. Most of the comments can be addressed through licence conditions.

Manitoba Water Stewardship – Planning and Coordination

Manitoba Water Stewardship has reviewed the above 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 Cypress River, Boyne River, Roseisle Creek, Lyles Creek, their tributaries, drains, potholes and marshes are only 100 m which is significantly less than the proposed set back distances in the Dominion City and Oakland proposal. It is recommended that the set back distance for wind turbines from all water bodies be consistent and be at least 200 m.
- 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.
- The proponent has identified the surface water features within the project area and has indicated that the following buffers will apply: 50 m intermittent streams, 100 meters Class 1 and 2 streams and 100 m for Class 3, 4, and 5 wetlands. They indicate adherence to the Federal Provincial Manitoba Stream Crossing Guidelines, implementing appropriate temporary and permanent erosion and sediment control measures and follow up to ensure sites are stabilized. In those regions where there are steep valleys and high erosion potential we would expect the buffers to be from the top of the bank to maintain bank integrity.
- We would also like to ensure that the proponent consult with the regional fisheries manager (Warren Coughlin) and particularly Department of Fisheries and Oceans, in the final determination of crossing locations and types of crossings, particularly if the proponent plans to trench them. Based on regional experience it is Fisheries Branch preference that at minimum those 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 these sites and the ongoing erosion and sedimentation that result.

- We would also request that no instream work is to occur between April 1 – June 15th. Outside of these timeframes it is preferable that work is done when it is dry, particularly in those areas prone to erosion.
- Erosion control methodologies should be used on road crossings according to the Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat. Our comments regarding in stream timing windows and construction works that could result in the addition of sediment to the creek do not take precedent over DFO’s review. As long as they are involved in reviewing this proposal and manage fish habitat to meet the intent of their no net loss policy, provincial fisheries management interests should be met.
- Please note that construction dewatering would require an authorization under The Water Rights Act.

Disposition:

Most of these comments can be addressed through licence conditions. The comments were also provided to the proponent for information.

Historic Resources Branch The Historic Resources Branch has no concerns with regard to this project’s potential to impact heritage resources.

Section 7.2.1.3 of the document outlines the potential impacts to archaeological resources during the Preconstruction Phase. The prescription for a Heritage Resource Impact Assessment will satisfy Historic Resources Branch concerns.

Mines Branch Mines Branch has reviewed the above referenced Environment Act Proposal and offers the following comments:

1. Manitoba has a dual system of land tenure where a parcel of land ownership rights may be split/separate where surface rights and mineral underrights are owned by different parties. Mineral titles typically convey “mineral access rights” and need to be effectively dealt with as part of the development process.
2. There may be lands which are designated for mineral extraction with the context of the local Municipal Development Plans. These designated lands are generally not available for development that will sterilize the resource.

Disposition:

This information was provided to the proponent for information.

Intergovernmental Affairs – Community Planning Services Branch

I have reviewed the above noted proposal and offer the following comments.

- 1) Permitted vs Conditional Use: The project proposal does acknowledge in Section 4.5.3.4 the zoning by-laws of the R.M.s of Lorne and South Norfolk. It would be important to also note that while Wind Energy Generators (turbines) are a Permitted Use in the Agricultural General Zone, they are a Conditional Use in Agricultural Limited (AL) Zones. The AL Zones are generally situated around the

peripheries of settlement centres. Any turbines sited within this zone will be subject to a conditional use process.

- 2) Accessory Structures: Table 2.2-2 Mtn Wind Energy Project Setbacks and Buffers does not address the separation distance requirement of Performance Standard 4. of the R.M. of Lorne's and South Norfolk's Zoning By-laws. In this case a distance of "not less than twice" the height of a turbine is called for between a turbine and an "accessory building not belonging to the owners of the land on which the WEGS is to be situated".
- 3) Setbacks: According to Table 2.2-2, the proposal appears to meet all of the remaining setback requirements. Please note however that Performance Standard 6. of each of the respective Zoning By-laws indicates that setbacks for turbines may be increased from the minimum setback requirements in the "AG" Zone by the R.M. Council, depending on the number and density of the turbines in a group and their proximity to existing residences.

Disposition:

These comments were provided to the proponent for information.

Medical Officer of Health – Assiniboine and Brandon Regional Health Authorities

I have reviewed the proposal and have the following comments:

Concerns regarding potential health hazards from air, groundwater and surface water contamination include:

- i) any dust generated during construction
- ii) noise levels during construction
- iii) solid waste disposal
- iv) accidental fuel or chemical spills onto land or water, particularly potable water sources
- v) appropriate setbacks for prevention of shadow-flicker

However, inclusion in the Environment License of the environmental management and mitigation outlined in the proposal should prevent or mitigate the above potential impacts.

Canadian Environmental Assessment Agency I have undertaken a survey of federal departments with respect to determining interest in the project noted above. I can confirm that the project information provided has been distributed to all federal departments with a potential interest. I am enclosing copies of the relevant responses for your file.

Based on the responses to the federal survey, the application of the *Canadian Environmental Assessment Act* (the Act) will be required for this project. Indian and Northern Affairs Canada (INAC) has indicated that they will require an environmental assessment for this project.

In addition to INAC, other federal authorities may also have responsibilities under the Act. Fisheries and Oceans Canada (DFO) is continuing to examine the project information and will forward any additional information requirements or decisions when their review is complete. As well, although the project information notes that funding will be requested under the ecoENERGY for Renewable Power (ERP) program, at present, Natural Resources Canada (NRCan) has not received sufficient information to confirm their environmental assessment requirements. Please also note that the Canadian Broadcasting Corporation has now developed guidelines (attached) for the assessment of impacts of wind energy projects on broadcasting facilities.

Health Canada and Environment Canada have provided specialist advice for the current review, and will continue to participate in the review upon request.

Disposition:

Federal TAC comments were provided to the proponent for information. Any additional DFO comments will be address upon receipt. Health Canada offered a number of suggestions concerning noise and setback distances, and identified several potential areas of impact that were not fully addressed in the environmental assessment report. Noise and buffer distances can be addressed through licence conditions. The remaining comments can be considered by the proponent in developing additional information and in the siting and detailed design of project components. Environment Canada provided comments on the lack of site specific information, setbacks and buffers, bat and bird impacts, habitat loss, SARA species, transmission lines, navigation lighting, and monitoring. Many of these comments can be addressed through licence conditions concerning buffer distances and monitoring. The comments provided by EC will also be useful to the proponent in developing detailed monitoring plans as part of an Environmental Protection Plan.

ADDITIONAL INFORMATION:

No additional information was required to address public and TAC comments.

PUBLIC HEARING:

No requests were received for a public hearing. Accordingly, a public hearing is not recommended.

RECOMMENDATION:

All comments received on the Proposal have been provided to the proponent for information or can be addressed as licence conditions. Therefore, it is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the Central Region.

PREPARED BY:

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